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## 1.0 Introduction

This purpose of this document is to provide definition for the protocol interface used to command and interact with an R8000 Series Communications System Analyzer. The field description section of this document is subject to change and may vary between system versions.

## 2.0 Conventions

The following conventions are used herein:

Command strings are **bold** text

Response strings are ***bold italicized green*** text.

## 3.0 Requirements

The monitor and control (M&C) connection requires a cross-over Ethernet cable connected over a direct local network via TCP port **4000**. The interface is not currently available over a routed connection.

## 4.0 Network Security Issues

In order to enable the use of the monitor and control protocol, the R8000 must have its network settings configured. **The user should be aware that external security measures are required to protect the R8000 from unauthorized access.**

## 5.0 Other Warnings and Recommendations


While there are access restrictions when using this protocol to monitor and control the R8000, it is highly recommended that programmers be cautious and aware that this equipment is capable of generating and receiving high power signals through its configuration. **The protocol does not protect the user from improper physical connections or signal routing.** It is also recommended that programmers use the equipment ID command (\*IDN?) to identify the equipment being controlled upon the initiation of a connection or following local control of the equipment.

## 6.0 General Usage

The M&C consists of a set of proprietary commands as well as supporting the IEEE standard equipment ID query. These various commands are used to access the menus and fields that control and report R8000 operation. Commands take the form of:

**CMD[ Tag[=data]]**

If applicable, the Tag consists of the required region, also called the owner, of the field along with a specifier. Some fields require that the region is active in order to query or control the data. The specifier identifies the specific field or code being queried or controlled. The region and specifier are joined together with a colon ":"; e.g. DISPLAY:Span. The data is only used with write access controls and must be in the appropriate format per the field definition. The square

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brackets ([ ]) illustrate these options and are not part of the actual command to be sent. All commands must be terminated by a carriage-return (CR) and line-feed (LF) character.

## 6.1 Commands

1. **NOOP**: This command has no affect on the R8000 but provides a mechanism for a prompt query. Programmers may use this command to poll for response of code **2** (Busy) to determine if a previous new command may still be being applied; see the field description section, Typical Completion Time.

Usage : **NOOP**

2. **GET**: Use this command to retrieve monitored information or current control settings

Usage: **GET <Tag>**

3. **SET**: Use this command to set a control to a new value

Usage: **SET <Tag>=<value>**

NOTE: If a field of Data Type BOOLEAN has no List Values then value is **F** or **T**.

4. **DO**: Use this command to have the R8000 perform a function.

Usage: **DO <Tag>**

5. **GO**: Use this command to navigate the R8000 menu tree. Some fields are only accessible if the field's required menu is active. In order to monitor or control these fields, use the **GO** command to navigate to the menu first.


Usage: **GO <Tag>**

6. **\*IDN?**: Equipment ID command. Use this command to return the following formatted response:

Usage: **\*IDN?**

*Freedom Communication Technologies, Inc. Communications System Analyzer  
 Model:<model number>, S/N:<serial number>, System Version:<version>*

7. **ERR?** and **CLEAR**: Use these commands together to manage the error notification system of the R8000. **ERR?** queries the R8000 for error information and **CLEAR** is used to acknowledge error messages and popups. There are two usages based on the response to **ERR?**.

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Usage : **ERR?**

Usage 1(Popup): **CLEAR <Tag>[Response]**

If a popup is active, **ERR?** will return with the popup tag, a list of valid responses, and the text message of the popup. For example:

**ERR?**

*0:SYSTEM:6045[POP\_CONTINUE,POP\_CANCEL] WARNING!  
Access to USB device Press Continue to save screen capture to device  
Or Press Cancel to abort*

**CLEAR SYSTEM:6045[POP\_CONTINUE]**

*0:*

Usage 2(Messages): **CLEAR**

If no popup is active, the **ERR?** will respond with the number of active messages and a list of the message codes. For example:

**ERR?**

*0:2[6040,7001]*

**CLEAR**

*0:*

**ERR?**

*0:0[]*

- HELP:** Use this command to obtain limited help information. This command can return help for a command, a specific field, or a brief explanation of a prompt or message code.

Usage 1(Command help): **HELP <Command>**

Usage 2(Field help): **HELP <Tag>**

The field help is formatted to allow users to format the response into a readable body. It contains the pipe-bar character “|” at each location where a carriage return/line feed (CRLF) should be placed. For example,


**HELP SYSTEM:RF**

will respond with the following string:

*0:Name:RF Zone|Tag:SYSTEM:RF|Commands:GO|Data Type:SUBMENU|Typical Completion Time:250 ms|*

By replacing all pipe-bar characters with a CRLF, the result is this:

*0:Name:RF Zone*

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*Tag:SYSTEM:RF*  
*Commands:GO*  
*Data Type:SUBMENU*  
*Typical Completion Time:250 ms*

Usage 3(Prompt\Message code): **HELP <code>**

## 6.2 Responses

Each command sent to the R8000 via the M&C protocol shall return a single response. The response consists of a prompt code and colon followed by any returned data. The returned data format depends on the field's data type.

1. Prompt codes
  - a. **0**: Okay – command was successful
  - b. **1**: Ranged – command was accepted but the data had to be coerced into the valid data range or format.
  - c. **2**: Busy – command was accepted (i.e. code would have been Okay) but previous command was not confirmed complete based on Typical Completion Time.
  - d. **3**: Denied – Access to the requested field was denied. Check field Commands property.
  - e. **4**: N/A – Not available at this time. Check availability requirements.
  - f. **5**: Option – Option not installed. Contact Sales to purchase options.
  - g. **6**: Error – Unexpected error.
  - h. **7**: Invalid – Command not valid for field. Check field Commands property.
  - i. **8**: Unknown – Tag is unknown. Check Region and Tag
  - j. **9**: Format – Data is in the wrong format. For example, the field is an INTEGER type but a character string was sent. Check field data type.


## 7.0 Field Properties

Fields are described by their set of properties. This section describes the field properties, valid commands for them, type of data, availability conditions, typical command completion times, etc.

1. Name: This is the name of the field. It is unused in the protocol but valuable for reference as this name corresponds to the name found on soft keys for controls on the R8000. It is also may be slightly more descriptive than the tag.
2. Tag: The tag consists of two parts; the Region, or owner, categorizes the scope of the tag reference; the tag itself specifies the particular field within the region.

The format of the Tag is always Region:Tag

3. Commands: this property is a list of valid M&C commands that may be used with the field.

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4. Data Type: This describes the type of data expected in the **SET** command string or the data returned from a **GET** query. All data is passed in text string format, however the string is processed by the R8000 according to the data type.
  - a. Format: Some STRING and Numeric data fields have a specialized format for the data. See 10.0 Custom Formats.
  - b. Char set: Some STRING data fields are restricted to the character set that can be used. For example, the DTMF Code has a defined character set:
 

**0,1,2,3,4,5,6,7,8,9,A,B,C,D,#,\***
  - c. List Values: Both LIST and BOOLEAN data type fields have aliased text strings to make the command/response more readable. These aliases correspond to the horizontal soft key position or position in the list box in the R8000 editing system.

Some LIST and BOOLEAN data type values are dynamically available based on the condition of the system at the time of the command. These conditions are documented in brackets immediately following the list value and describe the run-time conditions necessary to set the field to the specific list value. For example, the following field description indicates availability conditions for both list values:


Name:Select Audio Measurement  
 Tag:METER:Audio Meter  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: SINAD/Ext Distortion [Test Mode<>P25 Trunk and Test Mode<>NXDN Trunk], Internal Distortion [Test Mode=Standard]  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:METER:Subzone=SINAD/Distortion  
 Typical Completion Time:100 ms

The **SINAD/Ext Distortion** value is available in all test modes except trunking modes.

The **Internal Distortion** is only available in Standard test mode.

**NOTE: Do not include the condition when setting a value; the correct command for this example is: SET METER:Audio Meter=SINAD/Ext Distortion**

- d. Range: Numeric values may have limited ranges that will be accepted. If the number has settable units (See Units), the range is always defined in the base units. If the data set into the field is outside the range, the R8000 will coerce the

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new value into the range at either the minimum or maximum value. The command will be accepted and return with a prompt code of **I** (Ranged)

- e. Units: Some floating point values have settable units that the value can be set in. If the field has settable units, this property will list the valid entries. To set a floating point value with its units, format the data as “value units”; for example:

**SET RF:Monitor Frequency=1.2 GHz**  
***0:1.20000000 GHz***

However, sending the units is not a requirement. If units are not sent, the system will apply the currently configured units to the data. For example, if the following two commands are sent, the second will be assumed to be in MHz.


**SET RF:Monitor Frequency=403 MHz**  
***0:403.000000 MHz***  
**SET RF:Monitor Frequency=405**  
***0:405.000000 MHz***

#### 5. Availability

Because the R8000 disables sub-systems to provide the most efficient use of processing, certain fields may not be available at all times. Fields that have availability requirements are denoted under this property.

- a. Synth Format: Field is only accessible when the specified Audio Format is selected. This availability requirement is unique to fields in the Audio Zone and used to configure specific audio formats such as PL, DPL, etc.
- b. Operating Mode: Field is only accessible when the R8000 is in the mode(s) indicated. If this property is not present, the field is available in any/all modes unless otherwise unavailable.
- c. Options: Field is only accessible when the specified option has been purchased. If this property is not present, the field is standard. Contact to purchase new options for your R8000.
- d. Menu: Field is only accessible when the R8000 menu system has the given condition active. This condition may specify a region or a region and a subzone (Region ->Subzone). Use the **GO** and **SET** commands to navigate to and/or select the appropriate region. If this property is not present, the field is available regardless of region.

- 6. Typical Completion Time: This property provides the typical processing time for the field in milliseconds. Most commands take very little time to complete; however some commands take more time to apply the desired condition to the system. This is particularly important when creating automated control software. The M&C is designed for immediate command response. However if the previous command has not had time to complete, there is no guarantee that data will be ready to retrieve following a change in

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configuration. For example, the following commands if sent without delay would most likely result in an inaccurate Input Level reading:

```

SET RF:Monitor Frequency=403 MHz
0:403.000000 MHz
GET MONITOR:Input Level
2:-32.3

```

The prompt will be returned with code **2** (Busy) if the previous command was not given enough time to complete its transaction.

## 8.0 Examples

There are a few examples of how to use different types of commands with fields within the following section. These examples assume the R8000 is starting from the main zone screen and call specific commands to activate the required regions necessary to command the field. These examples are given as if executed from a terminal with a connection to the remote monitor and control interface. Expected command responses are provided for reference.

1. Tune to local radio station with the highest signal. From a terminal program execute the following commands in sequence.


```

SET SYSTEM:Mode Request=Monitor
0:Monitor
GO SYSTEM:RF
0:
SET RF:Monitor Port=Antenna
0:Antenna
SET RF:Bandwidth=200 kHz (Wide)
0: 200 kHz (Wide)
GO SYSTEM:DISPLAY
0:
SET DISPLAY:Subzone=Spec An
0:Spec An
SET DISPLAY:Start Frequency=75 MHz
0:75.000000 MHz
SET DISPLAY:Stop Frequency=110 MHz
0:110.000000 MHz
DO DISPLAY:Center Peak
0:
SET DISPLAY:Span=158 kHz
0:158.000 kHz

```

2. Generate a DTMF tone and view it on the modulation scope. From a terminal program execute the following commands in sequence.



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**SET SYSTEM:Mode Request=Generate**

*0:Generate*

**GO SYSTEM:DISPLAY**

*0:*

**SET DISPLAY:Subzone=Mod Scope**

*0:Mod Scope*

**SET DISPLAY:FM Vertical Scale=5 kHz**

*0:5 kHz*

**GO SYSTEM:AUDIO**

*0:*

**SET AUDIO:Gen DTMF=12**

*0:12*

**SET AUDIO:DTMF Code=123ABC#**

*0:123ABC#-----*

**SET AUDIO:DTMF Mode=Continuous**

*0:Continuous*

## 9.0 Local/Remote Control

The R8000 will temporarily lock out local users when the unit is remotely controlled. When the R8000 is in lock-out, the Operating Mode indicator on the lower-left part of the screen will flash between the operating mode and "Remote". To regain local control the Esc key must be pressed from the front panel.

## 10.0 Custom Formats

Some fields use a custom formatting that is required for data entry. This section describes each format type.

### 10.1 Format symbols


- \$ Alphabetic characters only (A-Z)
- # Decimal digits only (0-9)
- 0 Hexadecimal characters only (0-9, A-F)
- x Any/all characters are valid
- : Location in string must be a colon
- . Location in string must be a period.

### 10.2 Format templates

**0x0000** – Hexadecimal format. This field is a string containing a hexadecimal value the length of the number of digits to the right of the 0x prefix. If the data is shorter than the format, add leading zeros to ensure the appropriate value is set.

Examples:

Format=0x0000

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Setting => 0A3F

Format=0x00

Setting => 3F

Format=0x00000000

Setting => 0000A3F

**#.#####** – Floating point format. This field contains a floating point number with the precision defined by the number of digits to the right of the decimal point.

Examples:

Format=#.##

Setting => 4.02

Format=#.#####

Setting => 1.10031

**(POCSAGCustom)** – Used for blank formatting and the POCSAG text messaging, no particular formatting required.

**(56Tone)** - Used specifically for the 5/6 Tone code formatting. The 5/6 tone must be formatted as #-#####c where c is either empty or 'X' indicating the 6-tone. The valid character set for the digital format (#) is [0123456789R] where the 'R' character indicates a repeat tone.

Examples:

0-12345

2-12R45


0-12346X

**(DTMFCode)** – Used specifically for the DTMF Tone code formatting. The DTMF code field must be at exactly 16 characters long. Strings less than 16 characters will be appended with dashes "-" to extend the string to 16 characters. Strings longer than 16 characters will be truncated to 16 characters. The valid character set for DTMF code is [0123456789ABCD#\*]

**(GENSEQCode)** - Used specifically for the General Sequence tone code, delay, and duration sequence formatting. These fields must be at exactly 20 characters long. Strings less than 20 characters will be appended with dashes "-" to extend the string to 20 characters. Strings longer than 20 characters will be truncated to 20 characters. The valid character set for the General Sequence format is [0123456789ABCDEFGHIJ]

**(HH:MM)** – Used for time entry where HH is 24-hour notation; MM is minutes. This field must have a colon in the 3<sup>rd</sup> character position.

**(MM.DD.YYYY)** – Used for date entry where MM is month, DD is day, and YYYY is year. This field must have a period in the 3<sup>rd</sup> and 6<sup>th</sup> character positions.

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## 11.0 Field Descriptions

This section provides the specific properties for each field accessible through the R8000 Monitor and Control interface for R8000 system version 4.2.0.0.

Name:RF Zone  
 Tag:SYSTEM:RF  
 Commands:GO  
 Data Type:SUBMENU  
 Typical Completion Time:1000 ms

Name:AUDIO Zone  
 Tag:SYSTEM:AUDIO  
 Commands:GO  
 Data Type:SUBMENU  
 Typical Completion Time:1000 ms

Name:DMR  
 Tag:SYSTEM:DMR  
 Commands:GO  
 Data Type:SUBMENU  
 Availability:  
     Option:R8-DMR  
 Typical Completion Time:2000 ms


Name:PROJECT 25  
 Tag:SYSTEM:P25  
 Commands:GO  
 Data Type:SUBMENU  
 Availability:  
     Option:R8-P25  
 Typical Completion Time:2000 ms

Name:P25 II  
 Tag:SYSTEM:P25\_II  
 Commands:GO  
 Data Type:SUBMENU  
 Availability:  
     Option:R8-P25\_II  
 Typical Completion Time:2000 ms

Name:NXDN™  
 Tag:SYSTEM:NXDN  
 Commands:GO  
 Data Type:SUBMENU  
 Availability:  
     Option:R8-NXDN  
 Typical Completion Time:2000 ms

Name:dPMR  
 Tag:SYSTEM:DPMR

Revision - Change	Requested By	Released By	Date	ECO#
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Commands:GO  
 Data Type:SUBMENU  
 Availability:  
     Option:R8-DPMR  
 Typical Completion Time:2000 ms

Name:P25 Trunk  
 Tag:SYSTEM:P25\_TRUNK  
 Commands:GO  
 Data Type:SUBMENU  
 Availability:  
     Option:R8-P25TRNK  
 Typical Completion Time:2000 ms

Name:PTC-ACSES  
 Tag:SYSTEM:PTC\_ACSES  
 Commands:GO  
 Data Type:SUBMENU  
 Availability:  
     Option:R8-PTC\_ACSES  
 Typical Completion Time:2000 ms


Name:PTC-ITCR  
 Tag:SYSTEM:PTC\_ITCR  
 Commands:GO  
 Data Type:SUBMENU  
 Availability:  
     Option:R8-PTC\_ITCR  
 Typical Completion Time:2000 ms

Name:TETRA  
 Tag:SYSTEM:TETRA  
 Commands:GO  
 Data Type:SUBMENU  
 Availability:  
     Option:R8-TETRA\_BSM, R8-TETRA\_DMO  
 Typical Completion Time:2000 ms

Name:TETRA TMO  
 Tag:SYSTEM:TETRA\_TMO  
 Commands:GO  
 Data Type:SUBMENU  
 Availability:  
     Option:R8-TETRA\_TMO  
 Typical Completion Time:2000 ms

Name:TETRA Base Station  
 Tag:SYSTEM:TETRA\_BST  
 Commands:GO  
 Data Type:SUBMENU  
 Availability:  
     Option:R8-TETRA\_BSM  
 Typical Completion Time:2000 ms

Name:NXDN™ Trunk

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Tag:SYSTEM:NXDN\_TRUNK

Commands:GO

Data Type:SUBMENU

Availability:

Option:R8-NXDNTYPC

Typical Completion Time:2000 ms

Name:Continue to Avionics

Tag:SYSTEM:AVIONICS

Commands:GO

Data Type:SUBMENU

Availability:

Option:R8-AVIONICS

Typical Completion Time:2000 ms

Name:DISPLAY Zone

Tag:SYSTEM:DISPLAY

Commands:GO

Data Type:SUBMENU

Typical Completion Time:1000 ms

Name:METER Zone

Tag:SYSTEM:METER

Commands:GO

Data Type:SUBMENU

Typical Completion Time:1000 ms

Name:State

Tag:SYSTEM:State

Commands:GET

Data Type:LIST

List Values: INIT, RUN, LOAD, CALIBRATE

Typical Completion Time:0 ms

Name:Mode

Tag:SYSTEM:Mode

Commands:GET

Data Type:LIST

List Values: Monitor, Generate, Duplex, Track Gen, Cable Fault, VNA

Typical Completion Time:0 ms

Name:Mode

Tag:SYSTEM:Mode Request

Commands:GET, SET

Data Type:LIST

List Values: Monitor, Generate, Duplex

Typical Completion Time:2000 ms

Name:Squelch Position

Tag:SYSTEM:Squelch Position

Commands:GET

Data Type:FLOAT

Typical Completion Time:0 ms

Name:Squelch State

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Tag:SYSTEM:Squelch State  
 Commands:GET  
 Data Type:BOOLEAN  
 List Values: Squelched - Low Signal, Not Squelched  
 Typical Completion Time:0 ms


Name:Serial Number  
 Tag:SYSTEM:UNITID  
 Commands:GET  
 Data Type:STRING  
 Typical Completion Time:0 ms

Name:  
 Tag:SYSTEM:BaseModel  
 Commands:GET  
 Data Type:STRING  
 Typical Completion Time:0 ms

Name:External Drives  
 Tag:SYSTEM:External Drives  
 Commands:GET  
 Data Type:LIST  
 List Values:  
 Typical Completion Time:0 ms

Name:Select Display  
 Tag:DISPLAY:Subzone  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Spec An, Mod Scope [Test Mode=Standard or Test Mode=DPMR or Test Mode=NXDN or Test Mode=NXDN Trunk], Oscilloscope [Test Mode=Standard or Test Mode=DPMR or Test Mode=NXDN or Test Mode=NXDN Trunk or Test Mode=PROJECT 25 or Test Mode=P25 Trunk or Test Mode=P25 II], Bar Graphs [Test Mode=Standard or Test Mode=DPMR or Test Mode=NXDN or Test Mode=PROJECT 25 or Test Mode=P25 II], Eye Diagram [Test Mode=DPMR or Test Mode=NXDN or Test Mode=NXDN Trunk or Test Mode=PROJECT 25 or Test Mode=P25 Trunk or Test Mode=P25 II or Test Mode=PTC-ACSES or Test Mode=PTC-ITCR or Test Mode=DMR], Power Profile [Test Mode=DMR or Test Mode=P25 II and P25\_II:Mon Mod Type=HCPM or Test Mode=PTC-ACSES or Test Mode=PTC-ITCR or Test Mode=TETRA BST or Test Mode=TETRA DMO], General Sequence [METER:Decoder=General Sequence], Voice Frame Decode [Test Mode=PROJECT 25], Mod Spec / Constellation [Test Mode=TETRA BST or Test Mode=TETRA DMO], Constellation Plot [Test Mode=PTC-ITCR or Test Mode=PROJECT 25], Distribution Plot [Test Mode=PROJECT 25 or Test Mode=P25 Trunk or Test Mode=P25 II or Test Mode=PTC-ITCR or Test Mode=DMR], Slot Map [Test Mode=PTC-ACSES], Analysis Details [Test Mode=DMR], Protocol Details [Test Mode=DMR]  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
 Typical Completion Time:500 ms

Name:Reset Meter Fields  
 Tag:DISPLAY:ResetAnalysisDetails  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex

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Menu:DISPLAY:Subzone=Analysis Details  
 Typical Completion Time:500 ms

Name:Samples  
 Tag:DISPLAY:Spectral Data  
 Commands:GET  
 Data Type:ARRAY  
 Availability:  
     Operating Mode:Monitor, Duplex, Track Gen  
 Typical Completion Time:100 ms


Name:Samples  
 Tag:DISPLAY:Demodulation Data  
 Commands:GET  
 Data Type:ARRAY  
 Availability:  
     Operating Mode:Monitor, Duplex  
 Typical Completion Time:100 ms

Name:Samples  
 Tag:DISPLAY:Modulation Data  
 Commands:GET  
 Data Type:ARRAY  
 Availability:  
     Operating Mode:Generate, Duplex  
 Typical Completion Time:100 ms

Name:Samples  
 Tag:DISPLAY:External Data  
 Commands:GET  
 Data Type:ARRAY  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
 Typical Completion Time:100 ms

Name:Center Frequency  
 Tag:DISPLAY:Monitor Frequency  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 250000 Hz to 1000000000 Hz  
 Units: Hz, kHz, MHz, GHz  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:DISPLAY:Subzone=Spec An  
 Typical Completion Time:5000 ms

Name:Span  
 Tag:DISPLAY:Span  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 9751 Hz to 1000000000 Hz  
 Units: Hz, kHz, MHz, GHz  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:DISPLAY:Subzone=Spec An

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Typical Completion Time:5000 ms

Name:Start Frequency  
 Tag:DISPLAY:Start Frequency  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 250000 Hz to 1000000000 Hz  
 Units: Hz, kHz, MHz, GHz  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:DISPLAY:Subzone=Spec An  
 Typical Completion Time:5000 ms

Name:Stop Frequency  
 Tag:DISPLAY:Stop Frequency  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 250000 Hz to 1000000000 Hz  
 Units: Hz, kHz, MHz, GHz  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:DISPLAY:Subzone=Spec An  
 Typical Completion Time:5000 ms


Name:See and Hear Active  
 Tag:DISPLAY:SNH Active  
 Commands:GET  
 Data Type:BOOLEAN  
 List Values:  
 Availability:  
     Menu:DISPLAY:Subzone=Spec An  
 Typical Completion Time:0 ms

Name:Resolution Bandwidth  
 Tag:DISPLAY:Resolution Bandwidth  
 Commands:GET  
 Data Type:FLOAT  
 Availability:  
     Menu:DISPLAY:Subzone=Spec An  
 Typical Completion Time:0 ms

Name:Reference Level (dBm)  
 Tag:DISPLAY:Reference Level  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 90  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:DISPLAY:Subzone=Spec An  
 Typical Completion Time:100 ms

Name:Vertical Scale  
 Tag:DISPLAY:Vertical Scale  
 Commands:GET, SET  
 Data Type:LIST



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List Values: 10 dB/div, 5 dB/div, 2 dB/div, 1 dB/div

Availability:

Operating Mode:Monitor, Duplex

Option:R8-ESA

Menu:DISPLAY:Subzone=Spec An

Typical Completion Time:100 ms

Name:Display Mode

Tag:DISPLAY:Display Mode

Commands:GET, SET

Data Type:LIST

List Values: Normal, Freeze, Max Hold, Average

Availability:

Operating Mode:Monitor, Duplex

Menu:DISPLAY:Subzone=Spec An

Typical Completion Time:100 ms

Name:Trace Math

Tag:DISPLAY:Trace Math

Commands:GET, SET

Data Type:LIST

List Values: None, Spec-Ref (log),

Spec-Ref

(lin), Spec+Ref (lin)

Availability:

Operating Mode:Monitor, Duplex

Menu:DISPLAY:Subzone=Spec An

Typical Completion Time:100 ms

Name:Set Reference Trace

Tag:DISPLAY:Set Reference Trace

Commands:DO

Data Type:FUNCTION

Availability:

Operating Mode:Monitor, Duplex

Menu:DISPLAY:Subzone=Spec An

Typical Completion Time:100 ms

Name:Detector

Tag:DISPLAY:Detector

Commands:GET, SET

Data Type:LIST

List Values: Power, Peak, Sample, Mean, Valley

Availability:

Operating Mode:Monitor, Duplex

Menu:DISPLAY:Subzone=Spec An

Typical Completion Time:200 ms

Name:Coupling

Tag:DISPLAY:Coupling


Commands:GET, SET

Data Type:BOOLEAN

List Values: DC, AC

Availability:

Operating Mode:Monitor, Generate, Duplex

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Menu:DISPLAY:Subzone=Oscilloscope  
 Typical Completion Time:500 ms


Name:Horizontal Scale  
 Tag:DISPLAY:Horizontal Scale  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 20 us, 50 us, 100 us, 200 us, 500 us, 1 ms, 2 ms, 5 ms, 10 ms, 20 ms, 50 ms, 100 ms, 200 ms, 500 ms, 1 s  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:DISPLAY:Subzone=Mod Scope  
 Typical Completion Time:100 ms

Name:Horizontal Scale  
 Tag:DISPLAY:Ext Horizontal Scale  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 20 us (Max 50 kHz In), 50 us (Max 20 kHz In), 100 us (Max 10 kHz In), 200 us (Max 5 kHz In), 500 us (Max 2 kHz In), 1 ms (Max 1 kHz In), 2 ms (Max 500 Hz In), 5 ms (Max 200 Hz In), 10 ms (Max 100 Hz In), 20 ms (Max 50 Hz In), 50 ms (Max 20 Hz In), 100 ms (Max 10 Hz In), 200 ms (Max 5 Hz In), 500 ms (Max 2 Hz In), 1 s (Max 1 Hz In)  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:DISPLAY:Subzone=Oscilloscope  
 Typical Completion Time:500 ms

Name:Vertical Scale  
 Tag:DISPLAY:AM Vertical Scale  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 1%, 2%, 5%, 10%, 20%, 50%  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:DISPLAY:Subzone=Mod Scope  
 Typical Completion Time:100 ms

Name:Vertical Scale  
 Tag:DISPLAY:FM Vertical Scale  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 100 Hz, 200 Hz, 500 Hz, 1 kHz, 2 kHz, 5 kHz, 10 kHz, 20 kHz, 50 kHz  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:DISPLAY:Subzone=Mod Scope  
 Typical Completion Time:100 ms

Name:Vertical Scale  
 Tag:DISPLAY:Ext Vertical Scale  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 50 mV, 100 mV, 200 mV, 500 mV, 1 V, 2 V, 5 V, 10 V, 15 V, 20 V, 25 V

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Availability:

Operating Mode:Monitor, Generate, Duplex  
 Menu:DISPLAY:Subzone=Oscilloscope

Typical Completion Time:500 ms

Name:Select View

Tag:DISPLAY:Select View

Commands:GET, SET

Data Type:LIST

List Values: Current [Test Mode=DMR], Alternate [Test Mode=DMR], Both [Test Mode=DMR], Frame [Test Mode=P25 II or Test Mode=TETRA DMO], Slot 1 [Test Mode=P25 II or Test Mode=TETRA DMO], Slot 2 [Test Mode=P25 II]

Availability:

Operating Mode:Monitor, Duplex  
 Menu:DISPLAY:Subzone=Power Profile

Typical Completion Time:100 ms

Name:Select Frame

Tag:DISPLAY:Frame

Commands:GET, SET

Data Type:LIST

List Values: 1, 2, 3, 4, 5, 6

Availability:

Operating Mode:Monitor, Duplex  
 Menu:DISPLAY:Subzone=Power Profile

Typical Completion Time:100 ms

Name:Vertical Maximum (dBm)

Tag:DISPLAY:PP Vertical Maximum

Commands:GET, SET

Data Type:INTEGER

Range: 0 to 60

Availability:

Operating Mode:Monitor, Duplex  
 Menu:DISPLAY:Subzone=Power Profile

Typical Completion Time:100 ms

Name:Vertical Scale

Tag:DISPLAY:PP Vertical Scale

Commands:GET, SET

Data Type:LIST

List Values: 10 dB/div, 5 dB/div, 2 dB/div, 1 dB/div

Availability:

Operating Mode:Monitor, Duplex  
 Menu:DISPLAY:Subzone=Power Profile

Typical Completion Time:100 ms

Name:Horizontal Start (ms)

Tag:DISPLAY:PP Horizontal Start


Commands:GET, SET

Data Type:INTEGER

Range: 0 to 4000

Availability:

Operating Mode:Monitor, Duplex  
 Option:R8-PTC\_ITCR

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Menu:DISPLAY:Subzone=Power Profile  
 Typical Completion Time:100 ms


Name:Horizontal Start (ms)  
 Tag:DISPLAY:PP Horizontal Start Wide  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 6000  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Option:R8-PTC ACSES  
     Menu:DISPLAY:Subzone=Power Profile  
 Typical Completion Time:100 ms

Name:Horizontal Maximum (ms)  
 Tag:DISPLAY:PP Horizontal Maximum  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 4000  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Option:R8-PTC\_ITCR  
     Menu:DISPLAY:Subzone=Power Profile  
 Typical Completion Time:100 ms

Name:Horizontal Maximum (ms)  
 Tag:DISPLAY:PP Horizontal Maximum Wide  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 6000  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Option:R8-PTC\_ACSES  
     Menu:DISPLAY:Subzone=Power Profile  
 Typical Completion Time:100 ms

Name:Power Profile before Display Mode  
 Tag:DISPLAY:Power Profile Data  
 Commands:GET  
 Data Type:ARRAY  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:DISPLAY:Subzone=Power Profile  
 Typical Completion Time:100 ms

Name:Display Mode  
 Tag:DISPLAY:PP Display Mode  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Normal, Freeze, Max Hold, Average  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:DISPLAY:Subzone=Power Profile  
 Typical Completion Time:100 ms

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Name:Power Profile after Display Mode  
 Tag:DISPLAY:Power Profile  
 Commands:GET  
 Data Type:ARRAY  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:DISPLAY:Subzone=Power Profile  
 Typical Completion Time:100 ms


Name:Update Power Profile  
 Tag:DISPLAY:Power Profile Request  
 Commands:  
 Data Type:BOOLEAN  
 List Values: F, T  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:DISPLAY:Subzone=Power Profile  
 Typical Completion Time:100 ms

Name:Find Peak  
 Tag:DISPLAY:Find Peak  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:DISPLAY:Subzone=Spec An  
 Typical Completion Time:100 ms

Name:Center Peak  
 Tag:DISPLAY:Center Peak  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:DISPLAY:Subzone=Spec An  
 Typical Completion Time:5000 ms

Name:Trigger Mode  
 Tag:DISPLAY:Trigger  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Auto, Normal, Single  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:DISPLAY:Subzone=Mod Scope  
 Typical Completion Time:100 ms

Name:Trigger Level  
 Tag:DISPLAY:Trigger Level  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 200000  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:DISPLAY:Subzone=Mod Scope

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Typical Completion Time:100 ms

Name:Trigger Level (%)  
 Tag:DISPLAY:AM Trigger Level  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 99  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:DISPLAY:Subzone=Mod Scope  
 Typical Completion Time:100 ms


Name:Trigger Position  
 Tag:DISPLAY:Trigger Position  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 10%, 50%, 90%  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:DISPLAY:Subzone=Mod Scope  
 Typical Completion Time:0 ms

Name:Trigger Edge  
 Tag:DISPLAY:Trigger Edge  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Rising, Falling, Either  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:DISPLAY:Subzone=Mod Scope  
 Typical Completion Time:100 ms

Name:Scope Mode  
 Tag:DISPLAY:Mod Scope Select  
 Commands:GET, SET  
 Data Type:BOOLEAN  
 List Values: Monitor, Generate  
 Availability:  
     Operating Mode:Duplex  
     Menu:DISPLAY:Subzone=Mod Scope  
 Typical Completion Time:100 ms

Name:Trigger Mode  
 Tag:DISPLAY:Ext Trigger  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Auto, Normal, Single, Freeze  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:DISPLAY:Subzone=Oscilloscope  
 Typical Completion Time:500 ms

Name:Trigger Level  
 Tag:DISPLAY:Ext Trigger Level  
 Commands:GET, SET

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Data Type:FLOAT  
 Range: 0 to 100  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:DISPLAY:Subzone=Oscilloscope  
 Typical Completion Time:500 ms


Name:Trigger Position  
 Tag:DISPLAY:Ext Trigger Position  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 10%, 50%, 90%  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:DISPLAY:Subzone=Oscilloscope  
 Typical Completion Time:500 ms

Name:Trigger Edge  
 Tag:DISPLAY:Ext Trigger Edge  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Rising, Falling, Either  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:DISPLAY:Subzone=Oscilloscope  
 Typical Completion Time:500 ms

Name:Deviation Average  
 Tag:DISPLAY:Deviation Average  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Normal, Peak Average [Test Mode=Standard], Pwr-Weight Average [Test Mode=Standard], RMS Average [Test Mode=Standard], +/-Peak / 2 [Test Mode=Standard]  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:DISPLAY:Subzone=Bar Graphs  
 Typical Completion Time:100 ms

Name:Display Mode  
 Tag:DISPLAY:Eye Display Mode  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Normal, Fade Away  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:DISPLAY:Subzone=Eye Diagram  
 Typical Completion Time:100 ms

Name:Decode to Standard  
 Tag:DISPLAY:Standard  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: None, CCIR1, CCIR2, PCCIR, CCITT, EEA, EIA, Euro, NATEL, MODAT, ZVEI1, ZVEI2, ZVEI3, PZVEI, DZVEI, PDZVEI

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Availability:  
 Menu:DISPLAY:Subzone=General Sequence  
 Typical Completion Time:100 ms

Name:  
 Tag:DISPLAY:Distribution Data  
 Commands:GET  
 Data Type:ARRAY  
 Availability:  
 Operating Mode:Monitor, Duplex  
 Typical Completion Time:1100 ms

Name:Constellation Data  
 Tag:DISPLAY:Constellation Data  
 Commands:GET  
 Data Type:ARRAY  
 Availability:  
 Operating Mode:Monitor, Duplex  
 Typical Completion Time:100 ms

Name:  
 Tag:DISPLAY:SymbolDeviations  
 Commands:GET  
 Data Type:ARRAY  
 Availability:  
 Operating Mode:Monitor, Duplex  
 Typical Completion Time:1100 ms


Name:  
 Tag:DISPLAY:MagnitudeErrors  
 Commands:GET  
 Data Type:ARRAY  
 Availability:  
 Operating Mode:Monitor, Duplex  
 Typical Completion Time:1100 ms

Name:  
 Tag:DISPLAY:MaxDeviationErrors  
 Commands:GET  
 Data Type:ARRAY  
 Availability:  
 Operating Mode:Monitor, Duplex  
 Typical Completion Time:1100 ms

Name:  
 Tag:DISPLAY:SymbolDeviationErrors  
 Commands:GET  
 Data Type:ARRAY  
 Availability:  
 Operating Mode:Monitor, Duplex  
 Typical Completion Time:1100 ms

Name:  
 Tag:DISPLAY:MaxSymbolDeviationErrors  
 Commands:GET



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Data Type:ARRAY

Availability:

Operating Mode:Monitor, Duplex

Typical Completion Time:1100 ms

Name:

Tag:DISPLAY:ProtocolDetails

Commands:GET

Data Type:ARRAY

Availability:

Operating Mode:Monitor, Duplex

Typical Completion Time:1100 ms

Name:Select Meter

Tag:METER:Subzone

Commands:GET, SET

Data Type:LIST

List Values: Power Meter [Test Mode=Standard or Test Mode=DMR or Test Mode=DPMR or Test Mode=NXDN or Test Mode=PROJECT 25 or Test Mode=P25 II], Voltmeter [Test Mode=Standard or Test Mode=DMR or Test Mode=DPMR or Test Mode=NXDN or Test Mode=PROJECT 25 or Test Mode=P25 II or Test Mode=TETRA DMO], SINAD/Distortion [Test Mode=Standard], Decoder [Test Mode=Standard or Test Mode=PROJECT 25], Frequency Counter [Test Mode=Standard], P25 Trunking [Test Mode=P25 Trunk], Constellation [Test Mode=DMR or Test Mode=P25 II or Test Mode=PTC-ACSES or Test Mode=PTC-ITCR], RF Scan [Test Mode=Standard or Test Mode=DPMR or Test Mode=NXDN or Test Mode=PROJECT 25], NXDN™ Trunking [Test Mode=NXDN Trunk], SNRMeter [Test Mode=Standard]

Availability:

Operating Mode:Monitor, Generate, Duplex

Typical Completion Time:100 ms

Name:Reset Meter Fields

Tag:METER:Reset Meter Fields

Commands:DO

Data Type:FUNCTION

Availability:

Operating Mode:Duplex

Menu:METER:Subzone=P25 Trunking

Typical Completion Time:100 ms

Name:Range

Tag:METER:PWR Meter Range

Commands:GET, SET

Data Type:LIST

List Values: 5W, 10W, 50W, 150W

Availability:

Operating Mode:Monitor, Generate, Duplex

Menu:METER:Subzone=Power Meter

Typical Completion Time:100 ms


Name:Measured Power

Tag:METER:Measured Power

Commands:GET

Data Type:FLOAT

Availability:

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Operating Mode:Monitor, Duplex  
 Menu:METER:Subzone=Power Meter  
 Typical Completion Time:0 ms

Name:Select Voltmeter Mode  
 Tag:METER:Voltmeter  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: AC Volts, DC Volts  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:METER:Subzone=Voltmeter  
 Typical Completion Time:100 ms


Name:Select SNRMeter Mode  
 Tag:METER:SNRMeter  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: SNR  
 Availability:  
     Operating Mode:Monitor, Generate  
     Menu:METER:Subzone=SNRMeter  
 Typical Completion Time:100 ms

Name:Coupling  
 Tag:METER:Coupling  
 Commands:GET, SET  
 Data Type:BOOLEAN  
 List Values: DC, AC  
 Availability:  
     Menu:METER:Subzone=Voltmeter  
 Typical Completion Time:500 ms

Name:AC Range  
 Tag:METER:AC Range  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Auto, 1 V, 10 V, 70 V  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:METER:Subzone=Voltmeter  
 Typical Completion Time:100 ms

Name:Set dBr Reference  
 Tag:METER:Set Reference  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:METER:Subzone=Voltmeter  
 Typical Completion Time:100 ms

Name:Clear dBr Reference  
 Tag:METER:Clear Reference  
 Commands:DO

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Data Type:FUNCTION

Availability:

Operating Mode:Monitor, Generate, Duplex

Menu:METER:Subzone=Voltmeter

Typical Completion Time:100 ms

Name:DC Range

Tag:METER:DC Range

Commands:GET, SET

Data Type:LIST

List Values: Auto, 1 V, 10 V, 100 V

Availability:

Operating Mode:Monitor, Generate, Duplex

Menu:METER:Subzone=Voltmeter

Typical Completion Time:100 ms

Name:Voltage Units

Tag:METER:Voltage Units

Commands:GET, SET

Data Type:LIST

List Values: Volts (V), Millivolts (mV), Decibel Volts (dBV)

Availability:

Operating Mode:Monitor, Generate, Duplex

Menu:METER:Subzone=Voltmeter

Typical Completion Time:100 ms

Name:AC Volts

Tag:METER:AC Volts

Commands:GET

Data Type:FLOAT

Availability:

Operating Mode:Monitor, Generate, Duplex

Menu:METER:Subzone=Voltmeter

Typical Completion Time:0 ms

Name:DC Volts

Tag:METER:DC Volts

Commands:GET

Data Type:FLOAT

Availability:

Operating Mode:Monitor, Generate, Duplex

Menu:METER:Subzone=Voltmeter

Typical Completion Time:0 ms

Name:Audio SNR (dB)

Tag:METER:SNR

Commands:GET

Data Type:FLOAT

Availability:


Operating Mode:Monitor, Generate

Menu:METER:Subzone=SNRMeter

Typical Completion Time:0 ms

Name:External Current (A)

Tag:METER:Ext Amps

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Commands:GET  
 Data Type:FLOAT  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:METER:Subzone=SNRMeter  
 Typical Completion Time:0 ms

Name:External Current Status  
 Tag:METER:Ext Error  
 Commands:GET  
 Data Type:INTEGER  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:METER:Subzone=SNRMeter  
 Typical Completion Time:0 ms


Name>Select Audio Measurement  
 Tag:METER:Audio Meter  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: SINAD/Ext Distortion [Test Mode=Standard], Internal Distortion [Test Mode=Standard]  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:METER:Subzone=SINAD/Distortion  
 Typical Completion Time:100 ms

Name:SINAD  
 Tag:METER:SINAD  
 Commands:GET  
 Data Type:FLOAT  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:METER:Subzone=SINAD/Distortion  
 Typical Completion Time:0 ms

Name:External Distortion  
 Tag:METER:External Distortion  
 Commands:GET  
 Data Type:FLOAT  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:METER:Subzone=SINAD/Distortion  
 Typical Completion Time:0 ms

Name:Internal Distortion  
 Tag:METER:Internal Distortion  
 Commands:GET  
 Data Type:FLOAT  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:METER:Subzone=SINAD/Distortion  
 Typical Completion Time:0 ms

Name>Select Decoder Type

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Tag:METER:Decoder  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: PL/Period Counter [Test Mode=Standard], DPL Decode [Test Mode=Standard], DTMF Decode [Test Mode=Standard], 2-Tone Decode [Test Mode=Standard], 5/6 Tone Decode [Test Mode=Standard], General Sequence [Test Mode=Standard], Voice Frame Decode [Test Mode=PROJECT 25]

Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:METER:Subzone=Decoder  
 Typical Completion Time:100 ms


Name:Reset  
 Tag:METER:Reset  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:METER:Subzone=Decoder, Frequency Counter  
 Typical Completion Time:100 ms

Name:PL Freq  
 Tag:METER:PL Frequency  
 Commands:GET  
 Data Type:FLOAT  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:METER:Subzone=Decoder  
 Typical Completion Time:0 ms

Name:PL Code  
 Tag:METER:PL Code  
 Commands:GET  
 Data Type:STRING  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:METER:Subzone=Decoder  
 Typical Completion Time:0 ms

Name:DPL Code  
 Tag:METER:DPL Code  
 Commands:GET  
 Data Type:STRING  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:METER:Subzone=Decoder  
 Typical Completion Time:0 ms

Name:DTMF Code  
 Tag:METER:DTMF Code  
 Commands:GET  
 Data Type:STRING  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:METER:Subzone=Decoder

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Typical Completion Time:0 ms

Name:General Sequence Decodes

Tag:METER:GenSeqDecodes

Commands:GET

Data Type:ARRAY

Availability:

Operating Mode:Monitor, Duplex

Menu:METER:Subzone=Decoder

Typical Completion Time:0 ms

Name:Decode

Tag:METER:Decode

Commands:GET, SET

Data Type:LIST

List Values: Stop, Start

Availability:

Operating Mode:Monitor, Generate, Duplex

Menu:METER:Subzone=Decoder

Typical Completion Time:500 ms

Name:Code Sequence

Tag:METER:Code Sequence

Commands:GET, SET

Data Type:STRING

Format:(GENSEQCode)

char set:0, 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, E, F, G, H, I, J

Availability:

Operating Mode:Duplex

Typical Completion Time:100 ms

Name:Decode Burst

Tag:METER:Decode Burst

Commands:DO

Data Type:FUNCTION

Availability:

Operating Mode:Duplex

Typical Completion Time:500 ms

Name:Tone1 Freq.

Tag:METER:Tone1 Freq

Commands:GET

Data Type:FLOAT

Availability:

Operating Mode:Monitor, Duplex

Menu:METER:Subzone=Decoder

Typical Completion Time:0 ms

Name:Tone1 Duration

Tag:METER:Tone1 Duration


Commands:GET

Data Type:FLOAT

Availability:

Operating Mode:Monitor, Duplex

Menu:METER:Subzone=Decoder

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Typical Completion Time:0 ms

Name:Tone2 Freq.  
 Tag:METER:Tone2 Freq  
 Commands:GET  
 Data Type:FLOAT  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:METER:Subzone=Decoder  
 Typical Completion Time:0 ms


Name:Tone2 Duration  
 Tag:METER:Tone2 Duration  
 Commands:GET  
 Data Type:FLOAT  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:METER:Subzone=Decoder  
 Typical Completion Time:0 ms

Name:5/6 Codes  
 Tag:METER:56\_Codes  
 Commands:GET  
 Data Type:STRING  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:METER:Subzone=Decoder  
 Typical Completion Time:0 ms

Name:5/6 Freqs  
 Tag:METER:56\_Freqs  
 Commands:GET  
 Data Type:ARRAY  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:METER:Subzone=Decoder  
 Typical Completion Time:100 ms

Name:5/6 Durations  
 Tag:METER:56\_Durs  
 Commands:GET  
 Data Type:ARRAY  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:METER:Subzone=Decoder  
 Typical Completion Time:100 ms

Name:Decode to Standard  
 Tag:METER:Standard  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: None, CCIR1, CCIR2, PCCIR, CCITT, EEA, EIA, Euro, NATEL, MODAT, ZVEI1, ZVEI2, ZVEI3, PZVEI, DZVEI, PDZVEI  
 Availability:  
     Menu:METER:Subzone=Decoder

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Typical Completion Time:500 ms

Name:High Pass Filter  
 Tag:METER:High Pass Filter  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 1 Hz, 300 Hz, 3 kHz  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:METER:Subzone=Decoder  
 Typical Completion Time:100 ms

Name:Low Pass Filter  
 Tag:METER:Low Pass Filter  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 300 Hz, 3 kHz, 20 kHz  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:METER:Subzone=Decoder  
 Typical Completion Time:100 ms


Name:Input Decoding  
 Tag:METER:Input Decoding  
 Commands:GET, SET  
 Data Type:BOOLEAN  
 List Values: Internal, External  
 Availability:  
     Menu:METER:Subzone=Decoder, Frequency Counter  
 Typical Completion Time:100 ms

Name:Frequency Counter  
 Tag:METER:Frequency Counter  
 Commands:GET  
 Data Type:FLOAT  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:METER:Subzone=Frequency Counter  
 Typical Completion Time:0 ms

Name:Resolution  
 Tag:METER:Resolution  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 0.001 Hz, 0.01 Hz, 0.1 Hz, 1.0 Hz, 10 Hz  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:METER:Subzone=Frequency Counter  
 Typical Completion Time:100 ms

Name:Test Status  
 Tag:METER:Trunk Status  
 Commands:GET  
 Data Type:STRING  
 Availability:



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Operating Mode:Monitor, Duplex  
 Menu:METER:Subzone=P25 Trunking  
 Typical Completion Time:0 ms

Name:Deviations  
 Tag:METER:Constellation  
 Commands:GET  
 Data Type:ARRAY  
 Availability:

Operating Mode:Monitor, Duplex  
 Typical Completion Time:100 ms

Name:Start Frequency (MHz)  
 Tag:METER:Start Frequency  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 1 to 3000  
 Availability:

Operating Mode:Monitor, Duplex  
 Menu:METER:Subzone=RF Scan  
 Typical Completion Time:5000 ms

Name:Stop Frequency (MHz)  
 Tag:METER:Stop Frequency  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 1 to 3000  
 Availability:

Operating Mode:Monitor, Duplex  
 Menu:METER:Subzone=RF Scan  
 Typical Completion Time:5000 ms


Name:Scan  
 Tag:METER:Run RF Scan  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Off, Single, Auto  
 Availability:

Operating Mode:Monitor, Duplex  
 Menu:METER:Subzone=RF Scan  
 Typical Completion Time:100 ms

Name:RF Scan State  
 Tag:METER:RF Scan State  
 Commands:GET  
 Data Type:LIST  
 List Values: Disabled, Scanning, Locked, Inactive  
 Availability:

Operating Mode:Monitor, Duplex  
 Menu:METER:Subzone=RF Scan  
 Typical Completion Time:0 ms

Name:Spectrum  
 Tag:METER:RF Scan Data  
 Commands:GET

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Data Type:ARRAY

Availability:

Operating Mode:Monitor, Duplex

Menu:METER:Subzone=RF Scan

Typical Completion Time:0 ms

Name:Test Status

Tag:METER:NXDN Trunk Status

Commands:GET

Data Type:STRING

Availability:

Operating Mode:Duplex

Menu:METER:Subzone=NXDN™ Trunking

Typical Completion Time:0 ms

Name:Toggle with DO RF:RF Power

Tag:RF:RF Power

Commands:GET, SET

Data Type:BOOLEAN

List Values: Off, On

Availability:

Operating Mode:Generate, Duplex

Typical Completion Time:100 ms

Name:Monitor Frequency

Tag:RF:Monitor Frequency

Commands:GET, SET

Data Type:FLOAT

Range: 250000 Hz to 1000000000 Hz

Units: Hz, kHz, MHz, GHz

Availability:

Operating Mode:Monitor, Duplex

Typical Completion Time:5000 ms

Name:Copy Frequency to Generator

Tag:RF:Copy Mon to Gen

Commands:DO

Data Type:FUNCTION

Availability:

Operating Mode:Monitor

Typical Completion Time:5000 ms

Name:Duplex Offset

Tag:RF:Duplex Offset

Commands:GET, SET

Data Type:FLOAT

Range: 0 Hz to 1000000000 Hz

Units: Hz, kHz, MHz, GHz

Availability:


Operating Mode:Duplex

Typical Completion Time:5000 ms

Name:Generate Frequency

Tag:RF:Generate Frequency

Commands:GET, SET

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Data Type:FLOAT  
 Range: 250000 Hz to 1000000000 Hz  
 Units: Hz, kHz, MHz, GHz  
 Availability:  
     Operating Mode:Generate, Duplex  
 Typical Completion Time:5000 ms


Name:Copy Frequency to Monitor  
 Tag:RF:Copy Gen to Mon  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:Generate  
 Typical Completion Time:5000 ms

Name:Modulation Type  
 Tag:RF:Modulation Type  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: FM [Test Mode=Standard], AM [Test Mode=Standard], USB [Test Mode=Standard and Option=R8-SSB], LSB [Test Mode=Standard and Option=R8-SSB], 4FSK [Test Mode=DMR or Test Mode=DPMR or Test Mode=NXDN], GMSK~ [Test Mode=PTC-ACSES], C4FM [Test Mode=PROJECT 25 or Test Mode=P25 Trunk], LSM [Test Mode=PROJECT 25 or Test Mode=P25 Trunk], WCQPSK [Test Mode=PROJECT 25 or Test Mode=P25 Trunk], pi/4 DQPSK [Test Mode=PTC-ITCR or Test Mode=TETRA DMO or Test Mode=TETRA TMO or Test Mode=TETRA BST], HCPM [Test Mode=P25 II], HDQPSK [Test Mode=P25 II and Operating Mode=Monitor or Test Mode=P25 II and Operating Mode=Generate]  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
 Typical Completion Time:100 ms

Name:Output Level (dBm)  
 Tag:RF:Output Level  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 5  
 Availability:  
     Operating Mode:Generate, Duplex  
 Typical Completion Time:500 ms

Name:Output Level (dBm)  
 Tag:RF:Output Lvl  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 5  
 Availability:  
     Operating Mode:Generate, Duplex  
 Typical Completion Time:500 ms

Name:Output Units  
 Tag:RF:Output Lvl Units  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: dBm, Volts, mV,  $\mu$ V, Watts, mW,  $\mu$ W

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Availability:

Operating Mode:Generate, Duplex  
 Typical Completion Time:500 ms

Name:Gen Port

Tag:RF:Generate Port

Commands:GET, SET

Data Type:BOOLEAN

List Values: RF In/Out, Gen Out

Availability:

Operating Mode:Generate, Duplex  
 Typical Completion Time:500 ms

Name:Bandwidth

Tag:RF:Bandwidth

Commands:GET, SET

Data Type:LIST

List Values: 6.25 kHz (Narrow), 8.33 kHz (Narrow), 10 kHz (Narrow), 12.5 kHz (Narrow), 25 kHz (Wide), 50 kHz (Wide), 100 kHz (Wide), 200 kHz (Wide)

Availability:

Operating Mode:Monitor, Generate, Duplex  
 Typical Completion Time:100 ms

Name:Attenuation

Tag:RF:Attenuation

Commands:GET, SET

Data Type:LIST

List Values: 0 dB, 2 dB, 4 dB, 6 dB, 8 dB, 10 dB, 12 dB, 14 dB, 16 dB, 18 dB, 20 dB, 22 dB, 24 dB, 26 dB, 28 dB, 30 dB, 32 dB, 34 dB, 36 dB, 38 dB, 40 dB, 42 dB, 44 dB, 46 dB, 48 dB, 50 dB, 52 dB, 54 dB, 56 dB, 58 dB, 60 dB, 62 dB

Availability:

Operating Mode:Monitor, Duplex  
 Typical Completion Time:500 ms

Name:Pre-Amplifier

Tag:RF:PreAmp On

Commands:GET, SET

Data Type:BOOLEAN

List Values: Off, On

Availability:

Operating Mode:Monitor, Duplex  
 Typical Completion Time:500 ms

Name:Mon Port

Tag:RF:Monitor Port

Commands:GET, SET

Data Type:BOOLEAN

List Values: RF In/Out, Antenna


Availability:

Operating Mode:Monitor, Duplex  
 Typical Completion Time:500 ms

Name:Input Source

Tag:RF:Input Source

Commands:GET, SET

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Data Type:LIST  
 List Values: Auto, Input Level, Power Meter  
 Availability:  
     Operating Mode:Monitor, Duplex  
 Typical Completion Time:100 ms

Name:Input Units  
 Tag:RF:Input Lvl Units  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: dBm, Volts, mV,  $\mu$ V, Watts, mW,  $\mu$ W  
 Availability:  
     Operating Mode:Monitor, Duplex  
 Typical Completion Time:100 ms


Name:Freq Error Units  
 Tag:RF:Frequency Error Units  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Hertz, PPM  
 Availability:  
     Operating Mode:Monitor, Duplex  
 Typical Completion Time:100 ms

Name:Receiver Overload  
 Tag:RF:RX Overload  
 Commands:GET  
 Data Type:BOOLEAN  
 List Values: Okay, Receiver Overload - Increase Attenuation  
 Typical Completion Time:0 ms

Name:Mod Port Mode  
 Tag:AUDIO:Mod Port  
 Commands:GET, SET  
 Data Type:BOOLEAN  
 List Values: In, Out  
 Availability:  
     Operating Mode:Generate, Duplex  
     Menu:AUDIO  
 Typical Completion Time:100 ms

Name:Fixed 1kHz Level (V)  
 Tag:AUDIO:Fixed 1kHz  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 8  
 Availability:  
     Operating Mode:Monitor  
     Menu:AUDIO  
 Typical Completion Time:100 ms

Name:Fixed 1kHz Level (kHz)  
 Tag:AUDIO:Gen Fixed 1kHz  
 Commands:GET, SET  
 Data Type:FLOAT

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Range: 0 to 100

Availability:

Operating Mode:Generate, Duplex

Menu:AUDIO

Typical Completion Time:100 ms

Name:Fixed 1kHz Level (%AM)

Tag:AUDIO:Gen AM Fixed 1kHz

Commands:GET, SET

Data Type:INTEGER

Range: 0 to 99

Availability:

Operating Mode:Generate, Duplex

Menu:AUDIO

Typical Completion Time:100 ms

Name:Fixed 1kHz Mode

Tag:AUDIO:Fixed 1kHz Mode

Commands:GET, SET

Data Type:LIST

List Values: Off, Continuous

Availability:

Operating Mode:Monitor, Generate, Duplex

Menu:AUDIO

Typical Completion Time:100 ms

Name:Synth Level (V)

Tag:AUDIO:Synth

Commands:GET, SET

Data Type:FLOAT

Range: 0 to 8

Availability:

Operating Mode:Monitor

Menu:AUDIO

Typical Completion Time:100 ms

Name:Synth Level (kHz)

Tag:AUDIO:Gen Synth

Commands:GET, SET

Data Type:FLOAT

Range: 0 to 100

Availability:

Operating Mode:Generate, Duplex

Menu:AUDIO

Typical Completion Time:100 ms

Name:Synth Level (%AM)

Tag:AUDIO:Gen AM Synth

Commands:GET, SET

Data Type:INTEGER


Range: 0 to 99

Availability:

Operating Mode:Generate, Duplex

Menu:AUDIO

Typical Completion Time:100 ms

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Name:Format  
 Tag:AUDIO:Format  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: PL, DPL, DPL Invert, A/B Sequence, 5/6 Tone, POCSAG, General Sequence  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:AUDIO  
 Typical Completion Time:1000 ms

Name:Synth Mode  
 Tag:AUDIO:Synth Mode  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Off, Continuous, Burst [AUDIO:Format=A/B Sequence or AUDIO:Format=5/6 Tone or AUDIO:Format=POCSAG or AUDIO:Format=General Sequence], Disconnect Tone [AUDIO:Format=DPL or AUDIO:Format=DPL Invert]  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:AUDIO  
 Typical Completion Time:500 ms

Name:PL Code  
 Tag:AUDIO:PL Code  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: XZ, WZ, XA, WA, XB, WB, YZ, YA, YB, ZZ, ZA, ZB, 1Z, 1A, 1B, 2Z, 2A, 2B, 3Z, 3A, 3B, 4Z, 4A, 4B, 5Z, 5A, 5B, 6Z, 6A, 6B, 7Z, 7A, M1, 8Z, M2, M3, M4, 9Z, M5, M6, M7  
 Availability:  
     Synth Format:PL  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:AUDIO  
 Typical Completion Time:100 ms

Name:PL Frequency (Hz)  
 Tag:AUDIO:PL Frequency  
 Commands:GET  
 Data Type:FLOAT  
 Range: 0 to 999  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:AUDIO  
 Typical Completion Time:100 ms

Name:PL Table  
 Tag:AUDIO:PL Table  
 Commands:GO  
 Data Type:SUBMENU  
 Availability:  
     Synth Format:PL  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:AUDIO

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Typical Completion Time:2000 ms

Name:DPL Code

Tag:AUDIO:DPL Code

Commands:GET, SET

Data Type:LIST

List Values: 000, 001, 002, 003, 004, 005, 006, 007, 010, 011, 012, 013, 014, 015, 016, 017, 020, 021, 022, 023, 024, 025, 026, 027, 030, 031, 032, 033, 034, 035, 036, 037, 040, 041, 042, 043, 044, 045, 046, 047, 050, 051, 052, 053, 054, 055, 056, 057, 060, 061, 062, 063, 064, 065, 066, 067, 070, 071, 072, 073, 074, 075, 076, 077, 100, 101, 102, 103, 104, 105, 106, 107, 110, 111, 112, 113, 114, 115, 116, 117, 120, 121, 122, 123, 124, 125, 126, 127, 130, 131, 132, 133, 134, 135, 136, 137, 140, 141, 142, 143, 144, 145, 146, 147, 150, 151, 152, 153, 154, 155, 156, 157, 160, 161, 162, 163, 164, 165, 166, 167, 170, 171, 172, 173, 174, 175, 176, 177, 200, 201, 202, 203, 204, 205, 206, 207, 210, 211, 212, 213, 214, 215, 216, 217, 220, 221, 222, 223, 224, 225, 226, 227, 230, 231, 232, 233, 234, 235, 236, 237, 240, 241, 242, 243, 244, 245, 246, 247, 250, 251, 252, 253, 254, 255, 256, 257, 260, 261, 262, 263, 264, 265, 266, 267, 270, 271, 272, 273, 274, 275, 276, 277, 300, 301, 302, 303, 304, 305, 306, 307, 310, 311, 312, 313, 314, 315, 316, 317, 320, 321, 322, 323, 324, 325, 326, 327, 330, 331, 332, 333, 334, 335, 336, 337, 340, 341, 342, 343, 344, 345, 346, 347, 350, 351, 352, 353, 354, 355, 356, 357, 360, 361, 362, 363, 364, 365, 366, 367, 370, 371, 372, 373, 374, 375, 376, 377, 400, 401, 402, 403, 404, 405, 406, 407, 410, 411, 412, 413, 414, 415, 416, 417, 420, 421, 422, 423, 424, 425, 426, 427, 430, 431, 432, 433, 434, 435, 436, 437, 440, 441, 442, 443, 444, 445, 446, 447, 450, 451, 452, 453, 454, 455, 456, 457, 460, 461, 462, 463, 464, 465, 466, 467, 470, 471, 472, 473, 474, 475, 476, 477, 500, 501, 502, 503, 504, 505, 506, 507, 510, 511, 512, 513, 514, 515, 516, 517, 520, 521, 522, 523, 524, 525, 526, 527, 530, 531, 532, 533, 534, 535, 536, 537, 540, 541, 542, 543, 544, 545, 546, 547, 550, 551, 552, 553, 554, 555, 556, 557, 560, 561, 562, 563, 564, 565, 566, 567, 570, 571, 572, 573, 574, 575, 576, 577, 600, 601, 602, 603, 604, 605, 606, 607, 610, 611, 612, 613, 614, 615, 616, 617, 620, 621, 622, 623, 624, 625, 626, 627, 630, 631, 632, 633, 634, 635, 636, 637, 640, 641, 642, 643, 644, 645, 646, 647, 650, 651, 652, 653, 654, 655, 656, 657, 660, 661, 662, 663, 664, 665, 666, 667, 670, 671, 672, 673, 674, 675, 676, 677, 700, 701, 702, 703, 704, 705, 706, 707, 710, 711, 712, 713, 714, 715, 716, 717, 720, 721, 722, 723, 724, 725, 726, 727, 730, 731, 732, 733, 734, 735, 736, 737, 740, 741, 742, 743, 744, 745, 746, 747, 750, 751, 752, 753, 754, 755, 756, 757, 760, 761, 762, 763, 764, 765, 766, 767, 770, 771, 772, 773, 774, 775, 776, 777

Availability:

Synth Format:DPL, DPL Invert

Operating Mode:Monitor, Generate, Duplex

Menu:AUDIO

Typical Completion Time:100 ms

Name:A/B Sequence

Tag:AUDIO:Sequence

Commands:GET, SET

Data Type:LIST


List Values: 1, 2, 3, 4

Availability:

Synth Format:A/B Sequence

Operating Mode:Monitor, Generate, Duplex



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Menu:AUDIO  
 Typical Completion Time:100 ms


Name:Code Sequence  
 Tag:AUDIO:Code Sequence  
 Commands:GET, SET  
 Data Type:STRING  
 Format:(GENSEQCode)  
 char set:0, 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, E, F, G, H, I, J  
 Availability:  
     Synth Format:General Sequence  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:AUDIO  
 Typical Completion Time:100 ms

Name:A/B Sequence Table  
 Tag:AUDIO:SEQUENCE Table  
 Commands:GO  
 Data Type:SUBMENU  
 Availability:  
     Synth Format:A/B Sequence  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:AUDIO  
 Typical Completion Time:2000 ms

Name:General Sequence Table  
 Tag:AUDIO:GENSEQ Table  
 Commands:GO  
 Data Type:SUBMENU  
 Availability:  
     Synth Format:General Sequence  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:AUDIO  
 Typical Completion Time:2000 ms

Name:5/6 Tone  
 Tag:AUDIO:5/6 Tone  
 Commands:GET, SET  
 Data Type:STRING  
 Format:(56Tone)  
 char set:0, 1, 2, 3, 4, 5, 6, 7, 8, 9  
 Availability:  
     Synth Format:5/6 Tone  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:AUDIO  
 Typical Completion Time:100 ms

Name:POCSAG Message  
 Tag:AUDIO:POCSAG Message  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Tone Only, NumericNum, NumericSet, AlphaNumUC, AlphaNumLC, AlphaNumSP, NumericCust, AlphaNumCust  
 Availability:  
     Synth Format:POCSAG

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Operating Mode:Monitor, Generate, Duplex  
 Menu:AUDIO  
 Typical Completion Time:100 ms

Name:POCSAG Table  
 Tag:AUDIO:POCSAG Table  
 Commands:GO  
 Data Type:SUBMENU  
 Availability:  
     Synth Format:POCSAG  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:AUDIO  
 Typical Completion Time:2000 ms


Name:Tone A Level (V)  
 Tag:AUDIO:Tone A  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 8  
 Availability:  
     Operating Mode:Monitor  
     Menu:AUDIO  
 Typical Completion Time:100 ms

Name:Tone A Level (kHz)  
 Tag:AUDIO:Gen Tone A  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 100  
 Availability:  
     Operating Mode:Generate, Duplex  
     Menu:AUDIO  
 Typical Completion Time:100 ms

Name:Tone A Level (%AM)  
 Tag:AUDIO:Gen AM Tone A  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 99  
 Availability:  
     Operating Mode:Generate, Duplex  
     Menu:AUDIO  
 Typical Completion Time:100 ms

Name:Tone A Frequency (Hz)  
 Tag:AUDIO:Tone A Frequency  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 20000  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:AUDIO  
 Typical Completion Time:100 ms

Name:Tone A Mode

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Tag:AUDIO:Tone A Mode  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Off, Continuous, Burst  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:AUDIO  
 Typical Completion Time:100 ms


Name:Tone B Level (V)  
 Tag:AUDIO:Tone B  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 8  
 Availability:  
     Operating Mode:Monitor  
     Menu:AUDIO  
 Typical Completion Time:100 ms

Name:Tone B Level (kHz)  
 Tag:AUDIO:Gen Tone B  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 100  
 Availability:  
     Operating Mode:Generate, Duplex  
     Menu:AUDIO  
 Typical Completion Time:100 ms

Name:Tone B Level (%AM)  
 Tag:AUDIO:Gen AM Tone B  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 99  
 Availability:  
     Operating Mode:Generate, Duplex  
     Menu:AUDIO  
 Typical Completion Time:100 ms

Name:Tone B Frequency (Hz)  
 Tag:AUDIO:Tone B Frequency  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 20000  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:AUDIO  
 Typical Completion Time:100 ms

Name:Tone B Mode  
 Tag:AUDIO:Tone B Mode  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Off, Continuous, Burst  
 Availability:

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Operating Mode:Monitor, Generate, Duplex  
 Menu:AUDIO  
 Typical Completion Time:100 ms

Name:Tone C Level (kHz)  
 Tag:AUDIO:Gen Tone C  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 100  
 Availability:  
     Operating Mode:Generate, Duplex  
     Menu:AUDIO  
 Typical Completion Time:100 ms


Name:Tone C Level (%AM)  
 Tag:AUDIO:Gen AM Tone C  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 99  
 Availability:  
     Operating Mode:Generate, Duplex  
     Menu:AUDIO  
 Typical Completion Time:100 ms

Name:Tone C Frequency (Hz)  
 Tag:AUDIO:Tone C Frequency  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 100000  
 Availability:  
     Operating Mode:Generate, Duplex  
     Menu:AUDIO  
 Typical Completion Time:100 ms

Name:Tone C Mode  
 Tag:AUDIO:Tone C Mode  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Off, Continuous  
 Availability:  
     Operating Mode:Generate, Duplex  
     Menu:AUDIO  
 Typical Completion Time:100 ms

Name:DTMF Level (V)  
 Tag:AUDIO:DTMF  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 8  
 Availability:  
     Operating Mode:Monitor  
     Menu:AUDIO  
 Typical Completion Time:100 ms

Name:DTMF Level (kHz)

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Tag:AUDIO:Gen DTMF  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 100  
 Availability:  
     Operating Mode:Generate, Duplex  
     Menu:AUDIO  
 Typical Completion Time:100 ms


Name:DTMF Level (%AM)  
 Tag:AUDIO:Gen AM DTMF  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 99  
 Availability:  
     Operating Mode:Generate, Duplex  
     Menu:AUDIO  
 Typical Completion Time:100 ms

Name:DTMF Mode  
 Tag:AUDIO:DTMF Mode  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Off, Continuous, Burst  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:AUDIO  
 Typical Completion Time:500 ms

Name:DTMF Code  
 Tag:AUDIO:DTMF Code  
 Commands:GET, SET  
 Data Type:STRING  
 Format:(DTMFCode)  
 char set:0, 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, #, \*  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:AUDIO  
 Typical Completion Time:100 ms

Name:DTMF Table  
 Tag:AUDIO:DTMF Table  
 Commands:GO  
 Data Type:SUBMENU  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:AUDIO  
 Typical Completion Time:2000 ms

Name:Microphone Level (V)  
 Tag:AUDIO:Microphone  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 8  
 Availability:

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Operating Mode:Monitor  
 Menu:AUDIO  
 Typical Completion Time:100 ms

Name:Microphone Level (kHz)  
 Tag:AUDIO:Gen Microphone  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 100  
 Availability:  
     Operating Mode:Generate, Duplex  
     Menu:AUDIO  
 Typical Completion Time:100 ms


Name:Microphone Level (%AM)  
 Tag:AUDIO:Gen AM Microphone  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 99  
 Availability:  
     Operating Mode:Generate, Duplex  
     Menu:AUDIO  
 Typical Completion Time:100 ms

Name:Microphone Mode  
 Tag:AUDIO:Microphone Mode  
 Commands:GET, SET  
 Data Type:BOOLEAN  
 List Values: Off, Continuous  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:AUDIO  
 Typical Completion Time:500 ms

Name:Mod In Port Level (kHz)  
 Tag:AUDIO:Gen Mod In Level  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 100  
 Availability:  
     Operating Mode:Generate, Duplex  
     Menu:AUDIO  
 Typical Completion Time:100 ms

Name:Mod In Port Level (%AM)  
 Tag:AUDIO:Gen AM Mod In Level  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 99  
 Availability:  
     Operating Mode:Generate, Duplex  
     Menu:AUDIO  
 Typical Completion Time:100 ms

Name:Mod In Port Mode

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Tag:AUDIO:Mod In Mode

Commands:GET, SET

Data Type:LIST

List Values: Off, Continuous

Availability:

Operating Mode:Generate, Duplex

Menu:AUDIO

Typical Completion Time:100 ms

Name:High Pass Filter

Tag:AUDIO:High Pass Filter

Commands:GET, SET

Data Type:LIST

List Values: 1 Hz, 300 Hz, 3 kHz

Availability:

Operating Mode:Monitor, Generate, Duplex

Menu:AUDIO

Typical Completion Time:100 ms

Name:Low Pass Filter

Tag:AUDIO:Low Pass Filter

Commands:GET, SET

Data Type:LIST

List Values: 300 Hz, 3 kHz, 20 kHz

Availability:

Operating Mode:Monitor, Generate, Duplex

Menu:AUDIO

Typical Completion Time:100 ms

Name:Voltage Units

Tag:AUDIO:Voltage Units

Commands:GET, SET

Data Type:LIST

List Values: Volts (V), Millivolts (mV), Decibel Volts (dBV)

Availability:

Operating Mode:Monitor

Menu:AUDIO

Typical Completion Time:100 ms

Name:Audio Sum

Tag:AUDIO:Audio Sum

Commands:GET

Data Type:FLOAT

Availability:

Operating Mode:Monitor

Menu:AUDIO

Typical Completion Time:0 ms

Name:Mod Sum

Tag:AUDIO:Mod Sum


Commands:GET

Data Type:FLOAT

Availability:

Operating Mode:Generate, Duplex

Menu:AUDIO

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Typical Completion Time:0 ms

Name:AM Mod Sum

Tag:AUDIO:AM Mod Sum

Commands:GET

Data Type:FLOAT

Availability:

Operating Mode:Generate, Duplex

Menu:AUDIO

Typical Completion Time:0 ms

Name:PL Code

Tag:PL:PL Code

Commands:GET, SET

Data Type:LIST

List Values: XZ, WZ, XA, WA, XB, WB, YZ, YA, YB, ZZ, ZA, ZB, 1Z, 1A, 1B, 2Z, 2A, 2B, 3Z, 3A, 3B, 4Z, 4A, 4B, 5Z, 5A, 5B, 6Z, 6A, 6B, 7Z, 7A, M1, 8Z, M2, M3, M4, 9Z, M5, M6, M7

Availability:

Operating Mode:Monitor, Generate, Duplex

Menu:PL

Typical Completion Time:100 ms

Name:DTMF Code

Tag:DTMF:DTMF Code

Commands:GET, SET

Data Type:STRING

Format:(DTMFCode)

char set:0, 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, #, \*

Availability:

Menu:DTMF

Typical Completion Time:100 ms

Name:Tone Duration (ms)

Tag:DTMF:Duration

Commands:GET, SET

Data Type:INTEGER

Range: 40 to 9999

Availability:

Menu:DTMF

Typical Completion Time:100 ms

Name:Inter-digit Delay (ms)

Tag:DTMF:Delay

Commands:GET, SET

Data Type:INTEGER

Range: 20 to 9999

Availability:

Menu:DTMF

Typical Completion Time:100 ms


Name:Sequence

Tag:SEQUENCE:Sequence

Commands:GET, SET

Data Type:LIST



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List Values: 1, 2, 3, 4

Availability:

Menu:SEQUENCE

Typical Completion Time:100 ms

Name:Sequence 3 Tone A Duration (sec)

Tag:SEQUENCE:S3 Tone A Duration

Commands:GET, SET

Data Type:FLOAT

Range: 0 to 10

Availability:

Menu:SEQUENCE

Typical Completion Time:100 ms

Name:Sequence 3 Tone A Delay (sec)

Tag:SEQUENCE:S3 Tone A Delay

Commands:GET, SET

Data Type:FLOAT

Range: 0 to 10

Availability:

Menu:SEQUENCE

Typical Completion Time:100 ms

Name:Sequence 3 Tone B Duration (sec)

Tag:SEQUENCE:S3 Tone B Duration

Commands:GET, SET

Data Type:FLOAT

Range: 0 to 10

Availability:

Menu:SEQUENCE

Typical Completion Time:100 ms

Name:Sequence 3 Tone B Delay (sec)

Tag:SEQUENCE:S3 Tone B Delay

Commands:GET, SET

Data Type:FLOAT

Range: 0 to 10

Availability:

Menu:SEQUENCE

Typical Completion Time:100 ms

Name:Sequence 4 Tone A Duration (sec)

Tag:SEQUENCE:S4 Tone A Duration

Commands:GET, SET

Data Type:FLOAT

Range: 0 to 10

Availability:

Menu:SEQUENCE

Typical Completion Time:100 ms

Name:Sequence 4 Tone A Delay (sec)

Tag:SEQUENCE:S4 Tone A Delay

Commands:GET, SET

Data Type:FLOAT

Range: 0 to 10

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Availability:

Menu:SEQUENCE

Typical Completion Time:100 ms

Name:Sequence 4 Tone B Duration (sec)

Tag:SEQUENCE:S4 Tone B Duration

Commands:GET, SET

Data Type:FLOAT

Range: 0 to 10

Availability:

Menu:SEQUENCE

Typical Completion Time:100 ms

Name:Sequence 4 Tone B Delay (sec)

Tag:SEQUENCE:S4 Tone B Delay

Commands:GET, SET

Data Type:FLOAT

Range: 0 to 10

Availability:

Menu:SEQUENCE

Typical Completion Time:100 ms

Name:Tone A Frequency (Hz)

Tag:SEQUENCE:Tone A Frequency

Commands:GET, SET

Data Type:FLOAT

Range: 0 to 20000

Availability:

Menu:SEQUENCE

Typical Completion Time:100 ms

Name:Tone B Frequency (Hz)

Tag:SEQUENCE:Tone B Frequency

Commands:GET, SET

Data Type:FLOAT

Range: 0 to 20000

Availability:

Menu:SEQUENCE

Typical Completion Time:100 ms

Name:Code Sequence

Tag:GENSEQ:Code Sequence

Commands:GET, SET

Data Type:STRING

Format:(GENSEQCode)

char set:0, 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, E, F, G, H, I, J

Availability:

Menu:GENSEQ


Typical Completion Time:100 ms

Name>Select Tone Standard

Tag:GENSEQ:Standard

Commands:GET, SET

Data Type:LIST

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List Values: None, CCIR1, CCIR2, PCCIR, CCITT, EEA, EIA, Euro, NATEL, MODAT, ZVEI1, ZVEI2, ZVEI3, PZVEI, DZVEI, PDZVEI

Availability:

Menu:GENSEQ

Typical Completion Time:500 ms

Name:Synth Mode

Tag:GENSEQ:Synth Mode

Commands:GET, SET

Data Type:LIST

List Values: Off, Continuous, Burst [AUDIO:Format=A/B Sequence or AUDIO:Format=5/6 Tone or AUDIO:Format=POCSAG or AUDIO:Format=General Sequence], Disconnect Tone [AUDIO:Format=DPL or AUDIO:Format=DPL Invert]

Availability:

Operating Mode:Monitor, Generate, Duplex

Menu:GENSEQ

Typical Completion Time:500 ms

Name:Select Symbol to Edit

Tag:GENSEQ:Select Tone

Commands:GET, SET

Data Type:LIST

List Values: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, E, F, G, H, I, J

Availability:

Menu:GENSEQ

Typical Completion Time:100 ms

Name:Tone Frequency(Hz)

Tag:GENSEQ>Edit Frequency

Commands:GET, SET

Data Type:FLOAT

Range: 0 to 20000

Availability:

Menu:GENSEQ

Typical Completion Time:100 ms

Name:Tone Duration(sec)

Tag:GENSEQ>Edit Duration

Commands:GET, SET

Data Type:FLOAT

Range: 0 to 0

Availability:

Menu:GENSEQ

Typical Completion Time:100 ms

Name:Post-Tone Delay(sec)

Tag:GENSEQ>Edit Delay

Commands:GET, SET

Data Type:FLOAT


Range: 0 to 1

Availability:

Menu:GENSEQ

Typical Completion Time:100 ms

Name:Save Sequence Definition

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Tag:GENSEQ:Save  
 Commands:GET, SET  
 Data Type:STRING  
 char set:0, 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, , ., \_, (, )  
 Availability:  
     Menu:GENSEQ  
 Typical Completion Time:2000 ms


Name:Load Sequence Definition  
 Tag:GENSEQ:Load  
 Commands:GET, SET  
 Data Type:LIST  
 List Values:  
 Availability:  
     Menu:GENSEQ  
 Typical Completion Time:2000 ms

Name:Sync to Code Entry  
 Tag:GENSEQ:Sync Sequences  
 Commands:GET, SET  
 Data Type:BOOLEAN  
 List Values: No, Yes  
 Availability:  
     Menu:GENSEQ  
 Typical Completion Time:100 ms

Name:Duration Sequence  
 Tag:GENSEQ:Dur Sequence  
 Commands:GET, SET  
 Data Type:STRING  
 Format:(GENSEQCode)  
 char set:0, 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, E, F, G, H, I, J  
 Availability:  
     Menu:GENSEQ  
 Typical Completion Time:100 ms

Name:Delay Sequence  
 Tag:GENSEQ:Delay Sequence  
 Commands:GET, SET  
 Data Type:STRING  
 Format:(GENSEQCode)  
 char set:0, 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, E, F, G, H, I, J  
 Availability:  
     Menu:GENSEQ  
 Typical Completion Time:100 ms

Name:Spectrum Analyzer  
 Tag:INSTRUMENTS:SPEC\_AN  
 Commands:GO  
 Data Type:SUBMENU  
 Availability:  
     Menu:INSTRUMENTS  
 Typical Completion Time:2000 ms

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Name:Modulation Scope  
 Tag:INSTRUMENTS:MOD\_SCOPE  
 Commands:GO  
 Data Type:SUBMENU  
 Availability:  
     Menu:INSTRUMENTS  
 Typical Completion Time:2000 ms

Name:Oscilloscope  
 Tag:INSTRUMENTS:O\_SCOPE  
 Commands:GO  
 Data Type:SUBMENU  
 Availability:  
     Menu:INSTRUMENTS  
 Typical Completion Time:2000 ms


Name:Dual Display  
 Tag:INSTRUMENTS:DUAL\_SCOPE  
 Commands:GO  
 Data Type:SUBMENU  
 Availability:  
     Option:R8-ESA  
     Menu:INSTRUMENTS  
 Typical Completion Time:2000 ms

Name:Tracking Generator  
 Tag:INSTRUMENTS:TRACK\_GEN  
 Commands:GO  
 Data Type:SUBMENU  
 Availability:  
     Option:R8-TG  
     Menu:INSTRUMENTS  
 Typical Completion Time:5000 ms

Name:Single Port VNA  
 Tag:INSTRUMENTS:VNA  
 Commands:GO  
 Data Type:SUBMENU  
 Availability:  
     Menu:INSTRUMENTS  
 Typical Completion Time:9000 ms

Name:Presets  
 Tag:TEST:PRESETS  
 Commands:GO  
 Data Type:SUBMENU  
 Typical Completion Time:2000 ms

Name:Test Mode  
 Tag:TEST:Test Mode  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Standard, DMR [Option=R8-DMR], PROJECT 25 [Option=R8-P25], P25 Trunk [Option=R8-P25TRNK], NXDN [Option=R8-NXDN], NXDN Trunk [Option=R8-NXDNTYPC], TETRA Base Station [Option=R8-TETRA\_BSM], TETRA DMO [Option=R8-

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TETRA\_DMO], TETRA TMO [Option=R8-TETRA\_TMO], DPMR [Option=R8-DPMR], P25 II [Option=R8-P25\_II], PTC-ITCR [Option=R8-PTC\_ITCR], PTC-ACSES [Option=R8-PTC\_ACSES], AVIONICS [Option=R8-AVIONICS]  
 Typical Completion Time:5000 ms

Name:AutoScript  
 Tag:TEST:AUTOSCRIPT  
 Commands:GO  
 Data Type:SUBMENU  
 Typical Completion Time:0 ms

Name:Calibration  
 Tag:SETTINGS:CALIBRATION  
 Commands:GO  
 Data Type:SUBMENU  
 Availability:  
     Menu:SETTINGS  
 Typical Completion Time:0 ms

Name:System Settings  
 Tag:SETTINGS:SETUP  
 Commands:GO  
 Data Type:SUBMENU  
 Availability:  
     Menu:SETTINGS  
 Typical Completion Time:2000 ms

Name:Battery Status  
 Tag:SETTINGS:BATTERY  
 Commands:GO  
 Data Type:SUBMENU  
 Availability:  
     Menu:SETTINGS  
 Typical Completion Time:2000 ms

Name:Acknowledge Message  
 Tag:SETTINGS:ACK\_MESSAGE  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Menu:SETTINGS  
 Typical Completion Time:0 ms

Name>About  
 Tag:SETTINGS:ABOUT  
 Commands:GO  
 Data Type:SUBMENU  
 Availability:  
     Menu:SETTINGS  
 Typical Completion Time:2000 ms

Name:Options  
 Tag:SETTINGS:OPTIONS  
 Commands:GO  
 Data Type:SUBMENU

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Availability:

Menu:SETTINGS

Typical Completion Time:2000 ms

Name:PLL Lock Status

Tag:MONITOR:PLL Status

Commands:GET

Data Type:INTEGER

Typical Completion Time:0 ms

Name:High Power Attenuator Temp

Tag:MONITOR:HP Attenuator Temp

Commands:GET

Data Type:FLOAT

Range: 0 to 100

Typical Completion Time:0 ms

Name:Receive Power Meter Temp

Tag:MONITOR:RX Power Meter Temp

Commands:GET

Data Type:FLOAT

Range: 0 to 100

Typical Completion Time:0 ms

Name:Generate Power Meter Temp

Tag:MONITOR:Gen Power Meter Temp

Commands:GET

Data Type:FLOAT

Range: 0 to 100

Typical Completion Time:0 ms

Name:Frequency Error (Hz)

Tag:MONITOR:Frequency Error

Commands:GET

Data Type:FLOAT

Typical Completion Time:0 ms

Name:Frequency Error (PPM)

Tag:MONITOR:Frequency Error PPM

Commands:GET

Data Type:FLOAT

Typical Completion Time:0 ms

Name:Input Level

Tag:MONITOR:Input Level

Commands:GET

Data Type:FLOAT

Availability:

Operating Mode:Monitor, Duplex


Typical Completion Time:0 ms

Name:Input Level

Tag:MONITOR:Input Lvl

Commands:GET

Data Type:FLOAT

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Availability:

Operating Mode:Monitor, Duplex  
 Typical Completion Time:0 ms

Name:Deviation

Tag:MONITOR:Deviation+

Commands:GET

Data Type:FLOAT

Availability:

Operating Mode:Monitor, Duplex  
 Typical Completion Time:0 ms

Name:Deviation

Tag:MONITOR:Deviation-

Commands:GET

Data Type:FLOAT

Availability:

Operating Mode:Monitor, Duplex  
 Typical Completion Time:0 ms

Name:Center Frequency

Tag:SPEC\_AN:Monitor Frequency

Commands:GET, SET

Data Type:FLOAT

Range: 250000 Hz to 1000000000 Hz

Units: Hz, kHz, MHz, GHz

Availability:

Operating Mode:Monitor, Duplex  
 Menu:SPEC\_AN  
 Typical Completion Time:5000 ms

Name:Span

Tag:SPEC\_AN:Span

Commands:GET, SET

Data Type:FLOAT

Range: 9751 Hz to 1000000000 Hz

Units: Hz, kHz, MHz, GHz

Availability:

Operating Mode:Monitor, Duplex  
 Menu:SPEC\_AN  
 Typical Completion Time:5000 ms

Name:Start Frequency

Tag:SPEC\_AN:Start Frequency

Commands:GET, SET

Data Type:FLOAT

Range: 250000 Hz to 1000000000 Hz

Units: Hz, kHz, MHz, GHz


Availability:

Operating Mode:Monitor, Duplex  
 Menu:SPEC\_AN  
 Typical Completion Time:5000 ms

Name:Stop Frequency

Tag:SPEC\_AN:Stop Frequency



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Commands:GET, SET  
 Data Type:FLOAT  
 Range: 250000 Hz to 1000000000 Hz  
 Units: Hz, kHz, MHz, GHz  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:SPEC\_AN  
 Typical Completion Time:5000 ms


Name:Resolution Bandwidth  
 Tag:SPEC\_AN:Resolution Bandwidth  
 Commands:GET  
 Data Type:FLOAT  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:SPEC\_AN  
 Typical Completion Time:0 ms

Name:Reference Level (dBm)  
 Tag:SPEC\_AN:Reference Level  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 90  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:SPEC\_AN  
 Typical Completion Time:100 ms

Name:Vertical Scale  
 Tag:SPEC\_AN:Vertical Scale  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 10 dB/div, 5 dB/div, 2 dB/div, 1 dB/div  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:SPEC\_AN  
 Typical Completion Time:100 ms

Name:Display Mode  
 Tag:SPEC\_AN:Display Mode  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Normal, Freeze, Max Hold, Average  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:SPEC\_AN  
 Typical Completion Time:100 ms

Name:Trace Math  
 Tag:SPEC\_AN:Trace Math  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: None, Spec-Ref (log),  
 Spec-Ref  
     (lin), Spec+Ref (lin)

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Availability:

Operating Mode:Monitor, Duplex  
 Menu:SPEC\_AN

Typical Completion Time:100 ms

Name:Set Reference Trace

Tag:SPEC\_AN:Set Reference Trace

Commands:DO

Data Type:FUNCTION

Availability:

Operating Mode:Monitor, Duplex  
 Menu:SPEC\_AN

Typical Completion Time:100 ms

Name:Detector

Tag:SPEC\_AN:Detector

Commands:GET, SET

Data Type:LIST

List Values: Power, Peak, Sample, Mean, Valley

Availability:

Operating Mode:Monitor, Duplex  
 Menu:SPEC\_AN

Typical Completion Time:200 ms

Name:Find Peak

Tag:SPEC\_AN:Find Peak

Commands:DO

Data Type:FUNCTION

Availability:

Operating Mode:Monitor, Duplex  
 Menu:SPEC\_AN

Typical Completion Time:100 ms

Name:Center Peak

Tag:SPEC\_AN:Center Peak

Commands:DO

Data Type:FUNCTION

Availability:

Operating Mode:Monitor, Duplex  
 Menu:SPEC\_AN

Typical Completion Time:5000 ms

Name:OBW

Tag:SPEC\_AN:OBW

Commands:GET, SET

Data Type:BOOLEAN

List Values: Off, On


Availability:

Operating Mode:Monitor, Duplex  
 Option:R8-ESA  
 Menu:SPEC\_AN

Typical Completion Time:100 ms

Name:OBW %

Tag:SPEC\_AN:OBW %

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Commands:GET, SET  
 Data Type:INTEGER  
 Range: 70 to 99  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Option:R8-ESA  
     Menu:SPEC\_AN  
 Typical Completion Time:100 ms


Name:CW Harmonics  
 Tag:SPEC\_AN:CW Harmonics  
 Commands:GET, SET  
 Data Type:BOOLEAN  
 List Values: Off, On  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Option:R8-ESA  
     Menu:SPEC\_AN  
 Typical Completion Time:100 ms

Name:Measure Harmonics  
 Tag:SPEC\_AN:Harmonics Meas  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Option:R8-ESA  
     Menu:SPEC\_AN  
 Typical Completion Time:100 ms

Name:Harmonics  
 Tag:SPEC\_AN:Harmonics  
 Commands:GET  
 Data Type:ARRAY  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Option:R8-ESA  
     Menu:SPEC\_AN  
 Typical Completion Time:100 ms

Name:Harmonics Frequencies  
 Tag:SPEC\_AN:Harmonic Freqs  
 Commands:GET  
 Data Type:ARRAY  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Option:R8-ESA  
     Menu:SPEC\_AN  
 Typical Completion Time:100 ms

Name>Select Instrument  
 Tag:DUAL\_SCOPE:Subzone  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Spectrum Analyzer, Modulation Scope

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Availability:

Menu:DUAL\_SCOPE  
 Typical Completion Time:100 ms

Name:Span

Tag:DUAL\_SCOPE:Span  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 9751 Hz to 1000000000 Hz  
 Units: Hz, kHz, MHz, GHz

Availability:

Operating Mode:Monitor, Duplex  
 Menu:DUAL\_SCOPE:Subzone=Spectrum Analyzer  
 Typical Completion Time:5000 ms

Name:Start Frequency

Tag:DUAL\_SCOPE:Start Frequency  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 250000 Hz to 1000000000 Hz  
 Units: Hz, kHz, MHz, GHz

Availability:

Operating Mode:Monitor, Duplex  
 Menu:DUAL\_SCOPE:Subzone=Spectrum Analyzer  
 Typical Completion Time:5000 ms

Name:Stop Frequency

Tag:DUAL\_SCOPE:Stop Frequency  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 250000 Hz to 1000000000 Hz  
 Units: Hz, kHz, MHz, GHz

Availability:

Operating Mode:Monitor, Duplex  
 Menu:DUAL\_SCOPE:Subzone=Spectrum Analyzer  
 Typical Completion Time:5000 ms

Name:Resolution Bandwidth

Tag:DUAL\_SCOPE:Resolution Bandwidth  
 Commands:GET  
 Data Type:FLOAT

Availability:


Operating Mode:Monitor, Duplex  
 Menu:DUAL\_SCOPE:Subzone=Spectrum Analyzer  
 Typical Completion Time:0 ms

Name:Reference Level (dBm)

Tag:DUAL\_SCOPE:Reference Level  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 90

Availability:

Operating Mode:Monitor, Duplex  
 Menu:DUAL\_SCOPE:Subzone=Spectrum Analyzer  
 Typical Completion Time:100 ms

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Name:Vertical Scale  
 Tag:DUAL\_SCOPE:Vertical Scale  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 10 dB/div, 5 dB/div, 2 dB/div, 1 dB/div  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:DUAL\_SCOPE:Subzone=Spectrum Analyzer  
 Typical Completion Time:100 ms


Name:Display Mode  
 Tag:DUAL\_SCOPE:Display Mode  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Normal, Freeze, Max Hold, Average  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:DUAL\_SCOPE:Subzone=Spectrum Analyzer  
 Typical Completion Time:100 ms

Name:Trace Math  
 Tag:DUAL\_SCOPE:Trace Math  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: None, Spec-Ref (log),  
 Spec-Ref  
     (lin), Spec+Ref (lin)  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:DUAL\_SCOPE:Subzone=Spectrum Analyzer  
 Typical Completion Time:100 ms

Name:Set Reference Trace  
 Tag:DUAL\_SCOPE:Set Reference Trace  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:DUAL\_SCOPE:Subzone=Spectrum Analyzer  
 Typical Completion Time:100 ms

Name:Detector  
 Tag:DUAL\_SCOPE:Detector  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Power, Peak, Sample, Mean, Valley  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:DUAL\_SCOPE:Subzone=Spectrum Analyzer  
 Typical Completion Time:200 ms

Name:Find Peak  
 Tag:DUAL\_SCOPE:Find Peak  
 Commands:DO

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Data Type:FUNCTION

Availability:

Operating Mode:Monitor, Duplex

Menu:DUAL\_SCOPE:Subzone=Spectrum Analyzer

Typical Completion Time:100 ms

Name:Center Peak

Tag:DUAL\_SCOPE:Center Peak

Commands:DO

Data Type:FUNCTION

Availability:

Operating Mode:Monitor, Duplex

Menu:DUAL\_SCOPE:Subzone=Spectrum Analyzer

Typical Completion Time:5000 ms

Name:Vertical Scale

Tag:DUAL\_SCOPE:AM Vertical Scale

Commands:GET, SET

Data Type:LIST

List Values: 1%, 2%, 5%, 10%, 20%, 50%

Availability:

Menu:DUAL\_SCOPE:Subzone=Modulation Scope

Typical Completion Time:100 ms

Name:Vertical Scale

Tag:DUAL\_SCOPE:FM Vertical Scale

Commands:GET, SET

Data Type:LIST

List Values: 100 Hz, 200 Hz, 500 Hz, 1 kHz, 2 kHz, 5 kHz, 10 kHz, 20 kHz, 50 kHz

Availability:

Menu:DUAL\_SCOPE:Subzone=Modulation Scope

Typical Completion Time:100 ms

Name:Horizontal Scale

Tag:DUAL\_SCOPE:Horizontal Scale

Commands:GET, SET

Data Type:LIST

List Values: 20 us, 50 us, 100 us, 200 us, 500 us, 1 ms, 2 ms, 5 ms, 10 ms, 20 ms, 50 ms, 100 ms, 200 ms, 500 ms, 1 s

Availability:

Menu:DUAL\_SCOPE:Subzone=Modulation Scope

Typical Completion Time:100 ms

Name:Trigger Mode

Tag:DUAL\_SCOPE:Trigger

Commands:GET, SET

Data Type:LIST

List Values: Auto, Normal, Single


Availability:

Menu:DUAL\_SCOPE:Subzone=Modulation Scope

Typical Completion Time:100 ms

Name:Trigger Level

Tag:DUAL\_SCOPE:Trigger Level

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Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 200000  
 Availability:  
     Menu:DUAL\_SCOPE:Subzone=Modulation Scope  
 Typical Completion Time:100 ms


Name:Trigger Level (%)  
 Tag:DUAL\_SCOPE:AM Trigger Level  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 99  
 Availability:  
     Menu:DUAL\_SCOPE:Subzone=Modulation Scope  
 Typical Completion Time:100 ms

Name:Trigger Position  
 Tag:DUAL\_SCOPE:Trigger Position  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 10%, 50%, 90%  
 Availability:  
     Menu:DUAL\_SCOPE:Subzone=Modulation Scope  
 Typical Completion Time:0 ms

Name:Trigger Edge  
 Tag:DUAL\_SCOPE:Trigger Edge  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Rising, Falling, Either  
 Availability:  
     Menu:DUAL\_SCOPE:Subzone=Modulation Scope  
 Typical Completion Time:100 ms

Name:Scope Mode  
 Tag:DUAL\_SCOPE:Mod Scope Select  
 Commands:GET, SET  
 Data Type:BOOLEAN  
 List Values: Monitor, Generate  
 Availability:  
     Operating Mode:Duplex  
     Menu:DUAL\_SCOPE  
 Typical Completion Time:100 ms

Name:Center Frequency  
 Tag:TRACK\_GEN:Generate Frequency  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 250000 Hz to 1000000000 Hz  
 Units: Hz, kHz, MHz, GHz  
 Availability:  
     Operating Mode:Track Gen  
     Menu:TRACK\_GEN  
 Typical Completion Time:5000 ms

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Name:Span  
 Tag:TRACK\_GEN:Span  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 1 Hz to 50000000 Hz  
 Units: Hz, kHz, MHz, GHz  
 Availability:  
     Operating Mode:Track Gen  
     Menu:TRACK\_GEN  
 Typical Completion Time:5000 ms

Name:Start Frequency  
 Tag:TRACK\_GEN:Start Frequency  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 250000 Hz to 3000000000 Hz  
 Units: Hz, kHz, MHz, GHz  
 Availability:  
     Operating Mode:Track Gen  
     Menu:TRACK\_GEN  
 Typical Completion Time:5000 ms


Name:Stop Frequency  
 Tag:TRACK\_GEN:Stop Frequency  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 259751 Hz to 3000000000 Hz  
 Units: Hz, kHz, MHz, GHz  
 Availability:  
     Operating Mode:Track Gen  
     Menu:TRACK\_GEN  
 Typical Completion Time:5000 ms

Name:Reference Level (dBm)  
 Tag:TRACK\_GEN:Reference Level  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 60  
 Availability:  
     Operating Mode:Track Gen  
     Menu:TRACK\_GEN  
 Typical Completion Time:100 ms

Name:Vertical Scale  
 Tag:TRACK\_GEN:Vertical Scale  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 15 dB/div, 10 dB/div, 5 dB/div, 2 dB/div, 1 dB/div  
 Availability:  
     Operating Mode:Track Gen  
     Option:R8-ESA  
     Menu:TRACK\_GEN  
 Typical Completion Time:100 ms

Name:# of Points



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Tag:TRACK\_GEN:Number of Points  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 100 to 600  
 Availability:  
     Operating Mode:Track Gen  
     Menu:TRACK\_GEN  
 Typical Completion Time:4000 ms


Name:RBW  
 Tag:TRACK\_GEN:RBW  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Wide, Medium, Narrow  
 Availability:  
     Operating Mode:Track Gen  
     Menu:TRACK\_GEN  
 Typical Completion Time:4000 ms

Name:Display Mode  
 Tag:TRACK\_GEN:Display Mode  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Normal, Freeze, Max Hold, Average  
 Availability:  
     Operating Mode:Track Gen  
     Menu:TRACK\_GEN  
 Typical Completion Time:100 ms

Name:Marker Mode  
 Tag:TRACK\_GEN:SA Markers  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Off, Absolute, Delta  
 Availability:  
     Operating Mode:Track Gen  
     Menu:TRACK\_GEN  
 Typical Completion Time:100 ms

Name:Marker Type  
 Tag:TRACK\_GEN:Marker Type  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Point Cross, Vertical Bar, Horizontal Bar, Full Cross  
 Availability:  
     Operating Mode:Track Gen  
     Menu:TRACK\_GEN  
 Typical Completion Time:100 ms

Name:Toggle Marker  
 Tag:TRACK\_GEN:Toggle Marker  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:Track Gen

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Menu:TRACK\_GEN  
 Typical Completion Time:100 ms

Name:Select Marker  
 Tag:TRACK\_GEN:Select Marker  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 1, 2, 3, 4  
 Availability:  
     Operating Mode:Track Gen  
     Option:R8-ESA  
     Menu:TRACK\_GEN  
 Typical Completion Time:100 ms


Name:Set Marker Frequency  
 Tag:TRACK\_GEN:Marker Frequency  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 250000 Hz to 1000000000 Hz  
 Units: Hz, kHz, MHz, GHz  
 Availability:  
     Operating Mode:Track Gen  
     Menu:TRACK\_GEN  
 Typical Completion Time:100 ms

Name:Find Peak  
 Tag:TRACK\_GEN:Find Peak  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:Track Gen  
     Menu:TRACK\_GEN  
 Typical Completion Time:100 ms

Name:Find Valley  
 Tag:TRACK\_GEN:Find Valley  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:Track Gen  
     Menu:TRACK\_GEN  
 Typical Completion Time:100 ms

Name:Center Marker  
 Tag:TRACK\_GEN:Center Marker  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:Track Gen  
     Menu:TRACK\_GEN  
 Typical Completion Time:5000 ms

Name:Output Level (dBm)  
 Tag:TRACK\_GEN:Output Level  
 Commands:GET, SET

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Data Type:FLOAT

Range: 0 to 5

Availability:

Operating Mode:Track Gen

Menu:TRACK\_GEN

Typical Completion Time:500 ms

Name:Attenuation

Tag:TRACK\_GEN:Attenuation

Commands:GET, SET

Data Type:LIST

List Values: 0 dB, 2 dB, 4 dB, 6 dB, 8 dB, 10 dB, 12 dB, 14 dB, 16 dB, 18 dB, 20 dB, 22 dB, 24 dB, 26 dB, 28 dB, 30 dB, 32 dB, 34 dB, 36 dB, 38 dB, 40 dB, 42 dB, 44 dB, 46 dB, 48 dB, 50 dB, 52 dB, 54 dB, 56 dB, 58 dB, 60 dB, 62 dB

Availability:

Operating Mode:Track Gen

Menu:TRACK\_GEN

Typical Completion Time:500 ms

Name:Pre-Amplifier

Tag:TRACK\_GEN:PreAmp On

Commands:GET, SET

Data Type:BOOLEAN

List Values: Off, On

Availability:

Operating Mode:Track Gen

Menu:TRACK\_GEN

Typical Completion Time:500 ms

Name:Gen Port

Tag:TRACK\_GEN:Generate Port

Commands:GET, SET

Data Type:BOOLEAN

List Values: RF In/Out, Gen Out

Availability:

Operating Mode:Track Gen

Menu:TRACK\_GEN

Typical Completion Time:500 ms

Name:Monitor Port

Tag:TRACK\_GEN:Monitor Port

Commands:GET, SET

Data Type:BOOLEAN

List Values: RF In/Out, Antenna

Availability:

Operating Mode:Track Gen

Menu:TRACK\_GEN

Typical Completion Time:500 ms

Name:Normalize


Tag:TRACK\_GEN:Normalize

Commands:GET, SET

Data Type:BOOLEAN

List Values: Off, On

Availability:

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Operating Mode:Track Gen  
 Menu:TRACK\_GEN  
 Typical Completion Time:500 ms

Name:Update Trace  
 Tag:TRACK\_GEN:Trace Request  
 Commands:  
 Data Type:BOOLEAN  
 List Values: F, T  
 Availability:


Operating Mode:Track Gen  
 Menu:TRACK\_GEN  
 Typical Completion Time:100 ms

Name:  
 Tag:TRACK\_GEN:Trace  
 Commands:GET  
 Data Type:ARRAY  
 Availability:  
 Operating Mode:Track Gen  
 Menu:TRACK\_GEN  
 Typical Completion Time:100 ms

Name:Coupling  
 Tag:O\_SCOPE:Coupling  
 Commands:GET, SET  
 Data Type:BOOLEAN  
 List Values: DC, AC  
 Availability:  
 Menu:O\_SCOPE  
 Typical Completion Time:500 ms

Name:Horizontal Scale  
 Tag:O\_SCOPE:Ext Horizontal Scale  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 20 us (Max 50 kHz In), 50 us (Max 20 kHz In), 100 us (Max 10 kHz In), 200 us (Max 5 kHz In), 500 us (Max 2 kHz In), 1 ms (Max 1 kHz In), 2 ms (Max 500 Hz In), 5 ms (Max 200 Hz In), 10 ms (Max 100 Hz In), 20 ms (Max 50 Hz In), 50 ms (Max 20 Hz In), 100 ms (Max 10 Hz In), 200 ms (Max 5 Hz In), 500 ms (Max 2 Hz In), 1 s (Max 1 Hz In)  
 Availability:  
 Menu:O\_SCOPE  
 Typical Completion Time:500 ms

Name:Vertical Scale  
 Tag:O\_SCOPE:Ext Vertical Scale  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 50 mV, 100 mV, 200 mV, 500 mV, 1 V, 2 V, 5 V, 10 V, 15 V, 20 V, 25 V  
 Availability:  
 Menu:O\_SCOPE  
 Typical Completion Time:500 ms

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Name:Trigger Mode  
 Tag:O\_SCOPE:Ext Trigger  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Auto, Normal, Single, Freeze  
 Availability:  
     Menu:O\_SCOPE  
 Typical Completion Time:500 ms


Name:Trigger Level  
 Tag:O\_SCOPE:Ext Trigger Level  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 100  
 Availability:  
     Menu:O\_SCOPE  
 Typical Completion Time:500 ms

Name:Trigger Position  
 Tag:O\_SCOPE:Ext Trigger Position  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 10%, 50%, 90%  
 Availability:  
     Menu:O\_SCOPE  
 Typical Completion Time:500 ms

Name:Trigger Edge  
 Tag:O\_SCOPE:Ext Trigger Edge  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Rising, Falling, Either  
 Availability:  
     Menu:O\_SCOPE  
 Typical Completion Time:500 ms

Name:Vertical Scale  
 Tag:MOD\_SCOPE:AM Vertical Scale  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 1%, 2%, 5%, 10%, 20%, 50%  
 Availability:  
     Menu:MOD\_SCOPE  
 Typical Completion Time:100 ms

Name:Vertical Scale  
 Tag:MOD\_SCOPE:FM Vertical Scale  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 100 Hz, 200 Hz, 500 Hz, 1 kHz, 2 kHz, 5 kHz, 10 kHz, 20 kHz, 50 kHz  
 Availability:  
     Menu:MOD\_SCOPE  
 Typical Completion Time:100 ms

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Name:Horizontal Scale  
 Tag:MOD\_SCOPE:Horizontal Scale  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 20 us, 50 us, 100 us, 200 us, 500 us, 1 ms, 2 ms, 5 ms, 10 ms, 20 ms, 50 ms, 100 ms, 200 ms, 500 ms, 1 s  
 Availability:  
     Menu:MOD\_SCOPE  
 Typical Completion Time:100 ms


Name:Trigger Mode  
 Tag:MOD\_SCOPE:Trigger  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Auto, Normal, Single  
 Availability:  
     Menu:MOD\_SCOPE  
 Typical Completion Time:100 ms

Name:Trigger Level  
 Tag:MOD\_SCOPE:Trigger Level  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 200000  
 Availability:  
     Menu:MOD\_SCOPE  
 Typical Completion Time:100 ms

Name:Trigger Level (%)  
 Tag:MOD\_SCOPE:AM Trigger Level  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 99  
 Availability:  
     Menu:MOD\_SCOPE  
 Typical Completion Time:100 ms

Name:Trigger Position  
 Tag:MOD\_SCOPE:Trigger Position  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 10%, 50%, 90%  
 Availability:  
     Menu:MOD\_SCOPE  
 Typical Completion Time:0 ms

Name:Trigger Edge  
 Tag:MOD\_SCOPE:Trigger Edge  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Rising, Falling, Either  
 Availability:  
     Menu:MOD\_SCOPE  
 Typical Completion Time:100 ms

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Name:Scope Mode  
 Tag:MOD\_SCOPE:Mod Scope Select  
 Commands:GET, SET  
 Data Type:BOOLEAN  
 List Values: Monitor, Generate  
 Availability:  
     Operating Mode:Duplex  
     Menu:MOD\_SCOPE  
 Typical Completion Time:100 ms

Name:System Version  
 Tag:ABOUT:SystemVersion  
 Commands:GET  
 Data Type:STRING  
 Availability:  
     Menu:ABOUT  
 Typical Completion Time:0 ms


Name:Application Version  
 Tag:ABOUT:AppVersion  
 Commands:GET  
 Data Type:STRING  
 Availability:  
     Menu:ABOUT  
 Typical Completion Time:0 ms

Name:R8000 Library Version  
 Tag:ABOUT:DllVersion  
 Commands:GET  
 Data Type:STRING  
 Availability:  
     Menu:ABOUT  
 Typical Completion Time:0 ms

Name:Signal Service Provider Version  
 Tag:ABOUT:SSP\_Version  
 Commands:GET  
 Data Type:STRING  
 Availability:  
     Menu:ABOUT  
 Typical Completion Time:0 ms

Name:Audio Library Version  
 Tag:ABOUT:AudioVersion  
 Commands:GET  
 Data Type:STRING  
 Availability:  
     Menu:ABOUT  
 Typical Completion Time:0 ms

Name:Operating System Version  
 Tag:ABOUT:OSVersion  
 Commands:GET  
 Data Type:STRING  
 Availability:

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Menu:ABOUT  
 Typical Completion Time:0 ms

Name:BIOS Version  
 Tag:ABOUT:BIOSVersion  
 Commands:GET  
 Data Type:STRING  
 Availability:

Menu:ABOUT  
 Typical Completion Time:0 ms

Name:Main Board Revision  
 Tag:ABOUT:MainPCBA  
 Commands:GET  
 Data Type:STRING  
 Availability:

Menu:ABOUT  
 Typical Completion Time:0 ms

Name:RF Board Revision  
 Tag:ABOUT:RfPCBA  
 Commands:GET  
 Data Type:STRING  
 Availability:

Menu:ABOUT  
 Typical Completion Time:0 ms

Name:Control FPGA Version  
 Tag:ABOUT:ControlFPGA  
 Commands:GET  
 Data Type:STRING  
 Availability:

Menu:ABOUT  
 Typical Completion Time:0 ms

Name:  
 Tag:ABOUT:TxFPGA  
 Commands:GET  
 Data Type:STRING  
 Availability:


Menu:ABOUT  
 Typical Completion Time:0 ms

Name:RX FPGA Version  
 Tag:ABOUT:RxFPGA  
 Commands:GET  
 Data Type:STRING  
 Availability:

Menu:ABOUT  
 Typical Completion Time:0 ms

Name:Comm FPGA Version  
 Tag:ABOUT:PCIEFPGA  
 Commands:GET  
 Data Type:STRING



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Availability:

Menu:ABOUT

Typical Completion Time:0 ms

Name:XTX BC Version

Tag:ABOUT:XTX\_BC

Commands:GET

Data Type:STRING

Availability:

Menu:ABOUT

Typical Completion Time:0 ms

Name:XTX Product Revision

Tag:ABOUT:XTX\_Product

Commands:GET

Data Type:STRING

Availability:

Menu:ABOUT

Typical Completion Time:0 ms

Name:XTX Serial Number

Tag:ABOUT:XTX\_Serial

Commands:GET

Data Type:STRING

Availability:

Menu:ABOUT

Typical Completion Time:0 ms

Name:Cable Sweep Table

Tag:SETUP:CABLE\_SWEEP

Commands:GO

Data Type:SUBMENU

Availability:

Menu:SETUP

Typical Completion Time:2000 ms

Name:Input Decoding

Tag:SETUP:Input Decoding

Commands:GET, SET

Data Type:BOOLEAN

List Values: Internal, External

Availability:

Menu:SETUP

Typical Completion Time:100 ms

Name:Input Impedance

Tag:SETUP:Input Impedance

Commands:GET, SET

Data Type:BOOLEAN


List Values: 1 MegOhm, 600 Ohm

Availability:

Menu:SETUP

Typical Completion Time:100 ms

Name:Reference Clock Mode

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Tag:SETUP:Ref Clock Mode  
 Commands:GET, SET  
 Data Type:BOOLEAN  
 List Values: Output, Input  
 Availability:  
     Menu:SETUP  
 Typical Completion Time:500 ms

Name:Analog Measurement Averaging  
 Tag:SETUP:Analog Msr Averaging  
 Commands:GET, SET  
 Data Type:BOOLEAN  
 List Values: Off, On  
 Availability:  
     Menu:SETUP  
 Typical Completion Time:100 ms


Name:Analog Averaging Samples  
 Tag:SETUP:Analog Msr Avg Samples  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 2 to 100  
 Availability:  
     Menu:SETUP  
 Typical Completion Time:100 ms

Name:Digital Measurement Averaging  
 Tag:SETUP:Digital Msr Averaging  
 Commands:GET, SET  
 Data Type:BOOLEAN  
 List Values: Off, On  
 Availability:  
     Menu:SETUP  
 Typical Completion Time:100 ms

Name:Digital Averaging Samples  
 Tag:SETUP:Digital Msr Avg Samples  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 2 to 100  
 Availability:  
     Menu:SETUP  
 Typical Completion Time:100 ms

Name:Automatic Attenuation  
 Tag:SETUP:Auto Attn  
 Commands:GET, SET  
 Data Type:BOOLEAN  
 List Values: Off, On  
 Availability:  
     Menu:SETUP  
 Typical Completion Time:100 ms

Name:Auto Attn Minimum  
 Tag:SETUP:Auto Attn Min

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Commands:GET, SET  
 Data Type:LIST  
 List Values: 0 dB, 2 dB, 4 dB, 6 dB, 8 dB, 10 dB, 12 dB, 14 dB, 16 dB, 18 dB,  
 20 dB, 22 dB, 24 dB, 26 dB, 28 dB, 30 dB, 32 dB, 34 dB  
 Availability:  
     Menu:SETUP  
 Typical Completion Time:100 ms

Name:Auto Attn High Threshold  
 Tag:SETUP:Auto Attn Thd Hi  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 0  
 Availability:  
     Menu:SETUP  
 Typical Completion Time:100 ms


Name:Auto Attn Low Threshold  
 Tag:SETUP:Auto Attn Thd Lo  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 0  
 Availability:  
     Menu:SETUP  
 Typical Completion Time:100 ms

Name:Pre-Amplifier Auto Off  
 Tag:SETUP:PreAmp Auto Off  
 Commands:GET, SET  
 Data Type:BOOLEAN  
 List Values: Disabled, Enabled  
 Availability:  
     Menu:SETUP  
 Typical Completion Time:100 ms

Name:RF Level Offset  
 Tag:SETUP:RF Level Offset  
 Commands:GET, SET  
 Data Type:BOOLEAN  
 List Values: Off, On  
 Availability:  
     Menu:SETUP  
 Typical Completion Time:100 ms

Name:RF In/Out Offset (dB)  
 Tag:SETUP:RF In/Out Offset  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 99  
 Availability:  
     Menu:SETUP  
 Typical Completion Time:500 ms

Name:RF Gen Out Offset (dB)  
 Tag:SETUP:RF Gen Out Offset

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Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 99  
 Availability:  
     Menu:SETUP  
 Typical Completion Time:500 ms

Name:Cable Sweep Enable  
 Tag:SETUP:Cable Sweep State  
 Commands:GET, SET  
 Data Type:BOOLEAN  
 List Values: Off, On  
 Availability:  
     Menu:SETUP  
 Typical Completion Time:100 ms


Name:Cable Sweep File  
 Tag:SETUP:Cable Sweep Files  
 Commands:GET, SET  
 Data Type:LIST  
 List Values:  
 Availability:  
     Menu:SETUP  
 Typical Completion Time:0 ms

Name:Antenna Offset (dB)  
 Tag:SETUP:Antenna Offset  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 99  
 Availability:  
     Menu:SETUP  
 Typical Completion Time:500 ms

Name:Mod Out Range  
 Tag:SETUP:Mod Out Range  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: High, Low [ABOUT:RfPCBA not like ^[0-8]\$]  
 Availability:  
     Menu:SETUP  
 Typical Completion Time:100 ms

Name:Mod Out DC Offset (mV)  
 Tag:SETUP:ModOutDC\_Offset  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 300  
 Availability:  
     Menu:SETUP  
 Typical Completion Time:500 ms

Name:Pre/De-emphasis  
 Tag:SETUP:Emphasis  
 Commands:GET, SET

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Data Type:BOOLEAN  
 List Values: Off, On  
 Availability:  
     Menu:SETUP  
 Typical Completion Time:100 ms

Name:Meter In Filter  
 Tag:SETUP:Meter In Filter  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: None, C-Msg, CCITT, De-emphasis  
 Availability:  
     Menu:SETUP  
 Typical Completion Time:100 ms


Name:Internal Audio Weighting  
 Tag:SETUP:Internal Audio Weight  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: None, C-Msg, CCITT  
 Availability:  
     Menu:SETUP  
 Typical Completion Time:100 ms

Name:Language  
 Tag:SETUP:Language Select  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: English, Spanish  
 Availability:  
     Menu:SETUP  
 Typical Completion Time:6000 ms

Name:Date  
 Tag:SETUP:NewDate  
 Commands:GET, SET  
 Data Type:STRING  
 Format:(MM.DD.YYYY)  
 char set:0, 1, 2, 3, 4, 5, 6, 7, 8, 9, .  
 Availability:  
     Menu:SETUP  
 Typical Completion Time:100 ms

Name:Time  
 Tag:SETUP:NewTime  
 Commands:GET, SET  
 Data Type:STRING  
 Format:(HH:MM)  
 char set:0, 1, 2, 3, 4, 5, 6, 7, 8, 9, :  
 Availability:  
     Menu:SETUP  
 Typical Completion Time:100 ms

Name:Apply Date/Time Changes  
 Tag:SETUP:ApplyDateTime

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Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Menu:SETUP  
 Typical Completion Time:100 ms

Name:R8000 Legacy Mode  
 Tag:SETUP:Legacy  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Standard R8100, Legacy R8000  
 Availability:  
     Menu:SETUP  
 Typical Completion Time:500 ms


Name:Reset to Defaults  
 Tag:SETUP:DefaultSetups  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Menu:SETUP  
 Typical Completion Time:100 ms

Name:  
 Tag:BATTERY:SerialNumber  
 Commands:GET  
 Data Type:INTEGER  
 Availability:  
     Menu:BATTERY  
 Typical Completion Time:0 ms

Name:  
 Tag:BATTERY:TimeToEmpty  
 Commands:GET  
 Data Type:FLOAT  
 Availability:  
     Menu:BATTERY  
 Typical Completion Time:0 ms

Name:  
 Tag:BATTERY:TimeToFull  
 Commands:GET  
 Data Type:FLOAT  
 Availability:  
     Menu:BATTERY  
 Typical Completion Time:0 ms

Name:  
 Tag:BATTERY:Temperature  
 Commands:GET  
 Data Type:FLOAT  
 Availability:  
     Menu:BATTERY  
 Typical Completion Time:0 ms

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Name:  
 Tag: BATTERY:CycleCount  
 Commands: GET  
 Data Type: INTEGER  
 Availability:  
     Menu: BATTERY  
 Typical Completion Time: 0 ms

Name:  
 Tag: BATTERY:Charge  
 Commands: GET  
 Data Type: FLOAT  
 Availability:  
     Menu: BATTERY  
 Typical Completion Time: 0 ms


Name:  
 Tag: BATTERY:Charging  
 Commands: GET  
 Data Type: BOOLEAN  
 List Values:  
 Availability:  
     Menu: BATTERY  
 Typical Completion Time: 0 ms

Name: Save Configuration As  
 Tag: PRESETS:New  
 Commands: GET, SET  
 Data Type: STRING  
 char set: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P, Q, R, S, T, U, V, W, X, Y, Z, , ., \_, (, )  
 Availability:  
     Menu: PRESETS  
 Typical Completion Time: 2000 ms

Name: Load Factory Configuration  
 Tag: PRESETS:Load Defaults  
 Commands: DO  
 Data Type: FUNCTION  
 Availability:  
     Menu: PRESETS  
 Typical Completion Time: 15000 ms

Name: RF Level Offset  
 Tag: AUTOTUNE:RF Level Offset  
 Commands: GET, SET  
 Data Type: BOOLEAN  
 List Values: Off, On  
 Availability:  
     Menu: AUTOTUNE  
 Typical Completion Time: 100 ms

Name: RF In/Out Offset (dB)  
 Tag: AUTOTUNE:RF In/Out Offset  
 Commands: GET, SET

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Data Type:FLOAT

Range: 0 to 99

Availability:

Menu:AUTOTUNE

Typical Completion Time:500 ms

Name:Cable Sweep Enable

Tag:AUTOTUNE:Cable Sweep State

Commands:GET, SET

Data Type:BOOLEAN

List Values: Off, On

Availability:

Menu:AUTOTUNE

Typical Completion Time:100 ms

Name:Cable Sweep File

Tag:AUTOTUNE:Cable Sweep Files

Commands:GET, SET

Data Type:LIST

List Values:

Availability:

Menu:AUTOTUNE

Typical Completion Time:0 ms

Name:Voice Loopback

Tag:DMR:Voice Loopback

Commands:GET

Data Type:LIST

List Values: Off, Record [Operating Mode=Monitor], Play [Operating Mode=Generate], Record & Play

Availability:

Operating Mode:Monitor, Generate, Duplex

Menu:DMR

Typical Completion Time:0 ms

Name:DMR Mon Sync Status

Tag:DMR:Sync

Commands:GET

Data Type:BOOLEAN

List Values:

Availability:

Operating Mode:Monitor, Duplex

Menu:DMR

Typical Completion Time:0 ms

Name:Mon Sync Pattern


Tag:DMR:SYNC Pattern

Commands:GET, SET

Data Type:LIST

List Values: BS Sourced Voice [DMR:UUT\_Cfg=Repeater Live or DMR:UUT\_Cfg=BS Test], BS Sourced Data [DMR:UUT\_Cfg=Repeater Live or DMR:UUT\_Cfg=BS Test], MS Sourced Voice [DMR:UUT\_Cfg=MS Test], MS Sourced Data [DMR:UUT\_Cfg=MS Test], TDMA slot 1 Voice [DMR:UUT\_Cfg=MS Test], TDMA slot 1 Data [DMR:UUT\_Cfg=MS Test], TDMA slot 2 Voice [DMR:UUT\_Cfg=MS Test], TDMA slot 2 Data [DMR:UUT\_Cfg=MS Test]



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Availability:

Operating Mode:Monitor, Duplex  
Menu:DMR

Typical Completion Time:100 ms

Name:

Tag:DMR:SYNC Count

Commands:GET

Data Type:INTEGER

Availability:

Operating Mode:Monitor, Duplex  
Menu:DMR

Typical Completion Time:0 ms

Name:Source ID

Tag:DMR:Source ID

Commands:GET

Data Type:INTEGER

Availability:

Operating Mode:Monitor, Duplex  
Menu:DMR

Typical Completion Time:0 ms

Name:Color Code

Tag:DMR:Monitor CC

Commands:GET

Data Type:STRING

Availability:

Operating Mode:Monitor, Duplex  
Menu:DMR

Typical Completion Time:0 ms

Name:Copy CC to Generator

Tag:DMR:Copy CC to Generator

Commands:DO

Data Type:FUNCTION

Availability:

Operating Mode:Monitor, Duplex  
Menu:DMR

Typical Completion Time:100 ms

Name:Color Code

Tag:DMR:Color Code

Commands:GET, SET

Data Type:INTEGER

Range: 0 to 15

Availability:

Operating Mode:Generate, Duplex  
Menu:DMR


Typical Completion Time:100 ms

Name:Burst

Tag:DMR:Burst

Commands:GET, SET

Data Type:LIST

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List Values: A, B, C, D, E, F

Availability:

Operating Mode:Monitor, Duplex

Menu:DMR

Typical Completion Time:100 ms

Name:BER Test

Tag:DMR:BER Test

Commands:GET, SET

Data Type:LIST

List Values: Stop, Start

Availability:

Operating Mode:Monitor, Duplex

Menu:DMR

Typical Completion Time:500 ms

Name:Modulation Mode

Tag:DMR:Gen Mod Mode

Commands:GET, SET

Data Type:LIST

List Values: Off, Continuous

Availability:

Operating Mode:Generate, Duplex

Menu:DMR

Typical Completion Time:500 ms

Name:Test Pattern

Tag:DMR:Test Pattern

Commands:GET, SET

Data Type:LIST

List Values: 1031 Hz Tone, Calibration (0.153 1%) [Operating Mode=Generate or Operating Mode=Duplex], 0.153, Silence [Operating Mode=Generate or Operating Mode=Duplex], BS Busy [Operating Mode=Generate or Operating Mode=Duplex], BS Idle [Operating Mode=Generate or Operating Mode=Duplex]

Availability:

Operating Mode:Generate, Duplex

Menu:DMR

Typical Completion Time:100 ms

Name:Symbol Deviation (Hz)

Tag:DMR:Symbol Deviation

Commands:GET

Data Type:FLOAT

Availability:

Operating Mode:Monitor, Duplex

Menu:DMR

Typical Completion Time:0 ms

Name:

Tag:DMR:FSK Error


Commands:GET

Data Type:FLOAT

Range: 0 to 100

Availability:

Operating Mode:Monitor, Duplex

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Menu:DMR  
 Typical Completion Time:0 ms

Name:  
 Tag:DMR:Magnitude Error  
 Commands:GET  
 Data Type:FLOAT  
 Range: 0 to 100  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:DMR  
 Typical Completion Time:0 ms


Name:Symbol Rate Error (mHz)  
 Tag:DMR:Sym Rate Err  
 Commands:GET  
 Data Type:FLOAT  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:DMR  
 Typical Completion Time:0 ms

Name:  
 Tag:DMR:BER Result  
 Commands:GET  
 Data Type:FLOAT  
 Range: 0 to 100  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:DMR  
 Typical Completion Time:0 ms

Name:DMR Library Version  
 Tag:DMR:Version  
 Commands:GET  
 Data Type:STRING  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:DMR  
 Typical Completion Time:0 ms

Name:UUT Configuration  
 Tag:DMR:UUT\_Cfg  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: MS Test, BS Test, Repeater Live [Option=R8-DMR\_RPTR]  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:DMR  
 Typical Completion Time:100 ms

Name:Eye Diagram Data  
 Tag:DMR:Eye Data  
 Commands:GET  
 Data Type:ARRAY

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Availability:

Operating Mode:Monitor, Duplex  
Menu:DMR

Typical Completion Time:100 ms

Name:

Tag:P25:BER Result

Commands:GET

Data Type:FLOAT

Range: 0 to 100

Availability:

Menu:P25

Typical Completion Time:0 ms

Name:Symbol Deviation (Hz)

Tag:P25:Symbol Deviation

Commands:GET

Data Type:FLOAT

Availability:

Operating Mode:Monitor, Duplex

Menu:P25

Typical Completion Time:0 ms

Name:Symbol Rate Error (mHz)

Tag:P25:Symbol Rate Error

Commands:GET

Data Type:FLOAT

Availability:

Operating Mode:Monitor, Duplex

Menu:P25

Typical Completion Time:0 ms

Name:

Tag:P25:EVM

Commands:GET

Data Type:FLOAT

Availability:

Operating Mode:Monitor, Duplex

Menu:P25

Typical Completion Time:0 ms

Name:

Tag:P25:Modulation Fidelity

Commands:GET

Data Type:FLOAT

Availability:

Operating Mode:Monitor, Duplex

Menu:P25


Typical Completion Time:0 ms

Name:Mon Test Pattern

Tag:P25:Mon Test Pattern

Commands:GET, SET

Data Type:LIST

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List Values: 1011 Hz Tone, Calibration (Tone 5%), Standard Tx (0.153/V.52), Silence, Modified 1011 Hz

Availability:

Operating Mode:Monitor, Duplex

Menu:P25

Typical Completion Time:100 ms

Name:Gen Test Pattern

Tag:P25:Gen Test Pattern

Commands:GET, SET

Data Type:LIST

List Values: 1011 Hz Tone, Calibration (Tone 5%), Standard Tx (0.153/V.52), Silence, Symbol Rate [Operating Mode=Generate], Low Deviation [Operating Mode=Generate], C4FM Mod Fidelity [Operating Mode=Generate]

Availability:

Operating Mode:Generate, Duplex

Menu:P25

Typical Completion Time:100 ms

Name:Generate Modulation Type

Tag:P25:Modulation Type

Commands:GET, SET

Data Type:LIST

List Values: FM [Test Mode=Standard], AM [Test Mode=Standard], USB [Test Mode=Standard and Option=R8-SSB], LSB [Test Mode=Standard and Option=R8-SSB], 4FSK [Test Mode=DMR or Test Mode=DPMR or Test Mode=NXDN], GMSK~ [Test Mode=PTC-ACSES], C4FM [Test Mode=PROJECT 25 or Test Mode=P25 Trunk], LSM [Test Mode=PROJECT 25 or Test Mode=P25 Trunk], WCQPSK [Test Mode=PROJECT 25 or Test Mode=P25 Trunk], pi/4 DQPSK [Test Mode=PTC-ITCR or Test Mode=TETRA DMO or Test Mode=TETRA TMO or Test Mode=TETRA BST], HCPM [Test Mode=P25 II], HDQPSK [Test Mode=P25 II and Operating Mode=Monitor or Test Mode=P25 II and Operating Mode=Generate]

Availability:

Operating Mode:Generate, Duplex

Menu:P25

Typical Completion Time:100 ms

Name:Modulation Mode

Tag:P25:Gen Mod Mode

Commands:GET, SET

Data Type:LIST

List Values: Off, Continuous, Burst

Availability:

Operating Mode:Generate, Duplex

Menu:P25

Typical Completion Time:500 ms

Name:NAC (Hex)

Tag:P25:NAC

Commands:GET, SET

Data Type:STRING

Format:0x000

Availability:

Operating Mode:Generate, Duplex

Menu:P25

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Typical Completion Time:100 ms

Name:Monitor Modulation Type  
 Tag:P25:Mon Mod Type  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: C4FM, LSM, WCQPSK  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:P25  
 Typical Completion Time:100 ms


Name:Monitor NAC  
 Tag:P25:Monitor NAC  
 Commands:  
 Data Type:STRING  
 Format:0x000  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:P25  
 Typical Completion Time:100 ms

Name:Reset Symbol Rate Error  
 Tag:P25:Reset SRE  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:P25  
 Typical Completion Time:100 ms

Name:BER Test  
 Tag:P25:BER Test  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Stop, Start  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:P25  
 Typical Completion Time:500 ms

Name:Eye Diagram Data  
 Tag:P25:Eye Data  
 Commands:GET  
 Data Type:ARRAY  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:P25  
 Typical Completion Time:100 ms

Name:Voice Frame Encoder  
 Tag:P25:P25\_VFENCODE Table  
 Commands:GO  
 Data Type:SUBMENU  
 Availability:

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Operating Mode:Generate, Duplex  
 Menu:P25  
 Typical Completion Time:2000 ms

Name:Voice Frame Data  
 Tag:P25:Voice Frames  
 Commands:GET  
 Data Type:ARRAY  
 Availability:

Operating Mode:Monitor, Duplex  
 Menu:P25  
 Typical Completion Time:100 ms

Name:Copy NAC to Generator  
 Tag:P25:Copy NAC to Generator  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:

Operating Mode:Monitor, Duplex  
 Menu:P25  
 Typical Completion Time:100 ms

Name:Project 25 Library Version  
 Tag:P25:Version  
 Commands:GET  
 Data Type:STRING  
 Availability:

Menu:P25  
 Typical Completion Time:0 ms


Name:NAC (Hex)  
 Tag:P25\_VFENCODE:NAC  
 Commands:GET, SET  
 Data Type:STRING  
 Format:0x000

Availability:  
 Operating Mode:Generate, Duplex  
 Menu:P25\_VFENCODE  
 Typical Completion Time:100 ms

Name:Key ID (Hex)  
 Tag:P25\_VFENCODE:KID  
 Commands:GET, SET  
 Data Type:STRING  
 Format:0x0000

Availability:  
 Operating Mode:Generate, Duplex  
 Menu:P25\_VFENCODE  
 Typical Completion Time:100 ms

Name:Algorithm ID (Hex)  
 Tag:P25\_VFENCODE:ALGID  
 Commands:GET, SET  
 Data Type:STRING  
 Format:0x00

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Availability:

Operating Mode:Generate, Duplex

Menu:P25\_VFENCODE

Typical Completion Time:100 ms

Name:Status Symbols

Tag:P25\_VFENCODE:SS

Commands:GET, SET

Data Type:LIST

List Values: 0 - Unknown Talkaround, 1 - Busy, 2 - Unknown In/Out, 3 - Idle

Availability:

Operating Mode:Generate, Duplex

Menu:P25\_VFENCODE

Typical Completion Time:100 ms

Name:Low Speed Data (Hex)

Tag:P25\_VFENCODE:LSD

Commands:GET, SET

Data Type:STRING

Format:0x00000000

Availability:

Operating Mode:Generate, Duplex

Menu:P25\_VFENCODE

Typical Completion Time:100 ms

Name:Talk Group ID (Hex)

Tag:P25\_VFENCODE:Group Address

Commands:GET, SET

Data Type:STRING

Format:0x0000

Availability:

Operating Mode:Generate, Duplex

Menu:P25\_VFENCODE

Typical Completion Time:100 ms

Name:MFID (Hex)

Tag:P25\_VFENCODE:MFID

Commands:GET, SET

Data Type:STRING

Format:0x00

Availability:

Operating Mode:Generate, Duplex

Menu:P25\_VFENCODE

Typical Completion Time:100 ms

Name:Raw (Hex)

Tag:P25\_VFENCODE:Raw

Commands:GET, SET

Data Type:STRING

Format:0x00000000000000000000


Availability:

Operating Mode:Generate, Duplex

Menu:P25\_VFENCODE:Subzone=Raw

Typical Completion Time:100 ms



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Name:Link Control Opcode  
 Tag:P25\_VFENCODE:Subzone  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Raw, 0 - LC\_GRP\_V\_CH\_USR, 3 - LC\_U2U\_V\_CH\_USR  
 Availability:  
     Operating Mode:Generate, Duplex  
     Menu:P25\_VFENCODE  
 Typical Completion Time:100 ms


Name:SF - MFID Format  
 Tag:P25\_VFENCODE:SF  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 0 - Explicit Format, 1 - Standard MFID  
 Availability:  
     Operating Mode:Generate, Duplex  
     Menu:P25\_VFENCODE:Subzone=0 - LC\_GRP\_V\_CH\_USR, 3 - LC\_U2U\_V\_CH\_USR  
 Typical Completion Time:100 ms

Name:Service Options (Hex)  
 Tag:P25\_VFENCODE:Service Options  
 Commands:GET, SET  
 Data Type:STRING  
 Format:0x00  
 Availability:  
     Operating Mode:Generate, Duplex  
     Menu:P25\_VFENCODE:Subzone=0 - LC\_GRP\_V\_CH\_USR, 3 - LC\_U2U\_V\_CH\_USR  
 Typical Completion Time:100 ms

Name:S - Explicit Source ID  
 Tag:P25\_VFENCODE:S  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 0 - Not Required, 1 - Required  
 Availability:  
     Operating Mode:Generate, Duplex  
     Menu:P25\_VFENCODE:Subzone=0 - LC\_GRP\_V\_CH\_USR  
 Typical Completion Time:100 ms

Name:Target Address (Hex)  
 Tag:P25\_VFENCODE:Target Address  
 Commands:GET, SET  
 Data Type:STRING  
 Format:0x000000  
 Availability:  
     Operating Mode:Generate, Duplex  
     Menu:P25\_VFENCODE:Subzone=3 - LC\_U2U\_V\_CH\_USR  
 Typical Completion Time:100 ms

Name:Source Address (Hex)  
 Tag:P25\_VFENCODE:Source Address  
 Commands:GET, SET  
 Data Type:STRING  
 Format:0x000000

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Availability:

Operating Mode:Generate, Duplex

Menu:P25\_VFENCODE:Subzone=0 - LC\_GRP\_V\_CH\_USR, 3 - LC\_U2U\_V\_CH\_USR

Typical Completion Time:100 ms

Name:Reset to Defaults

Tag:P25\_VFENCODE:Reset

Commands:DO

Data Type:FUNCTION

Availability:

Operating Mode:Generate, Duplex

Menu:P25\_VFENCODE

Typical Completion Time:200 ms

Name:Subzone

Tag:P25\_TRUNK:Subzone

Commands:GET, SET

Data Type:LIST

List Values: Alert/Dispatch, BER

Availability:

Operating Mode:Duplex

Menu:P25\_TRUNK

Typical Completion Time:100 ms

Name:Generate Modulation Type

Tag:P25\_TRUNK:Modulation Type

Commands:GET, SET

Data Type:LIST

List Values: FM [Test Mode=Standard], AM [Test Mode=Standard], USB [Test Mode=Standard and Option=R8-SSB], LSB [Test Mode=Standard and Option=R8-SSB], 4FSK [Test Mode=DMR or Test Mode=DPMR or Test Mode=NXDN], GMSK~ [Test Mode=PTC-ACSES], C4FM [Test Mode=PROJECT 25 or Test Mode=P25 Trunk], LSM [Test Mode=PROJECT 25 or Test Mode=P25 Trunk], WCQPSK [Test Mode=PROJECT 25 or Test Mode=P25 Trunk], pi/4 DQPSK [Test Mode=PTC-ITCR or Test Mode=TETRA DMO or Test Mode=TETRA TMO or Test Mode=TETRA BST], HCPM [Test Mode=P25 II], HDQPSK [Test Mode=P25 II and Operating Mode=Monitor or Test Mode=P25 II and Operating Mode=Generate]

Availability:

Operating Mode:Duplex

Menu:P25\_TRUNK

Typical Completion Time:100 ms

Name:Modulation Mode

Tag:P25\_TRUNK:Gen Mod Mode

Commands:GET, SET

Data Type:LIST

List Values: Off, Continuous

Availability:

Operating Mode:Duplex


Menu:P25\_TRUNK:Subzone=BER

Typical Completion Time:500 ms

Name:NAC (Hex)

Tag:P25\_TRUNK:NAC

Commands:GET, SET

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Data Type:STRING  
 Format:0x000  
 Availability:  
     Operating Mode:Duplex  
     Menu:P25\_TRUNK  
 Typical Completion Time:100 ms


Name:Voice Call  
 Tag:P25\_TRUNK:Voice Call  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Stop, Start  
 Availability:  
     Operating Mode:Duplex  
     Menu:P25\_TRUNK:Subzone=Alert/Dispatch  
 Typical Completion Time:100 ms

Name:Send Call Alert  
 Tag:P25\_TRUNK:Call Alert  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:Duplex  
     Menu:P25\_TRUNK:Subzone=Alert/Dispatch  
 Typical Completion Time:100 ms

Name:WACN ID (Hex)  
 Tag:P25\_TRUNK:WACN ID  
 Commands:GET, SET  
 Data Type:STRING  
 Format:0x00000  
 Availability:  
     Operating Mode:Duplex  
     Menu:P25\_TRUNK:Subzone=Alert/Dispatch  
 Typical Completion Time:100 ms

Name:SYSTEM ID (Hex)  
 Tag:P25\_TRUNK:SYSTEM ID  
 Commands:GET, SET  
 Data Type:STRING  
 Format:0x000  
 Availability:  
     Operating Mode:Duplex  
     Menu:P25\_TRUNK:Subzone=Alert/Dispatch  
 Typical Completion Time:100 ms

Name:WUID (Hex)  
 Tag:P25\_TRUNK:WUID  
 Commands:GET, SET  
 Data Type:STRING  
 Format:0x000000  
 Availability:  
     Operating Mode:Duplex  
     Menu:P25\_TRUNK:Subzone=Alert/Dispatch  
 Typical Completion Time:100 ms

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Name:RFSS ID (Hex)  
 Tag:P25\_TRUNK:RFSS ID  
 Commands:GET, SET  
 Data Type:STRING  
 Format:0x00  
 Availability:  
     Operating Mode:Duplex  
     Menu:P25\_TRUNK:Subzone=Alert/Dispatch  
 Typical Completion Time:100 ms


Name:WGID (Hex)  
 Tag:P25\_TRUNK:WGID  
 Commands:GET, SET  
 Data Type:STRING  
 Format:0x0000  
 Availability:  
     Operating Mode:Duplex  
     Menu:P25\_TRUNK:Subzone=Alert/Dispatch  
 Typical Completion Time:100 ms

Name:SITE ID (Hex)  
 Tag:P25\_TRUNK:SITE ID  
 Commands:GET, SET  
 Data Type:STRING  
 Format:0x00  
 Availability:  
     Operating Mode:Duplex  
     Menu:P25\_TRUNK:Subzone=Alert/Dispatch  
 Typical Completion Time:100 ms

Name:Bandplan Table  
 Tag:P25\_TRUNK:BANDPLAN Table  
 Commands:GO  
 Data Type:SUBMENU  
 Availability:  
     Operating Mode:Duplex  
     Menu:P25\_TRUNK:Subzone=Alert/Dispatch  
 Typical Completion Time:2000 ms

Name:Identifier Update  
 Tag:P25\_TRUNK:Iden Up  
 Commands:GET, SET  
 Data Type:BOOLEAN  
 List Values: OFF, ON  
 Availability:  
     Operating Mode:Duplex  
     Menu:P25\_TRUNK:Subzone=Alert/Dispatch  
 Typical Completion Time:100 ms

Name:Control Chnl TX Frequency  
 Tag:P25\_TRUNK:CCTx  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 250000 Hz to 1000000000 Hz

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Units: Hz, kHz, MHz, GHz

Availability:

Operating Mode: Duplex

Menu: P25\_TRUNK:Subzone=Alert/Dispatch

Typical Completion Time: 100 ms

Name: Control Chnl RX Frequency

Tag: P25\_TRUNK:CCRx

Commands: GET, SET

Data Type: FLOAT

Range: 250000 Hz to 1000000000 Hz

Units: Hz, kHz, MHz, GHz

Availability:

Operating Mode: Duplex

Menu: P25\_TRUNK:Subzone=Alert/Dispatch

Typical Completion Time: 100 ms

Name: CCTx Channel

Tag: P25\_TRUNK:CCTx Chnl

Commands: GET, SET

Data Type: INTEGER

Range: 0 to 4095

Availability:

Operating Mode: Duplex

Menu: P25\_TRUNK:Subzone=Alert/Dispatch

Typical Completion Time: 100 ms

Name: CCRx Channel

Tag: P25\_TRUNK:CCRx Chnl

Commands: GET, SET

Data Type: INTEGER

Range: 0 to 4095

Availability:

Operating Mode: Duplex

Menu: P25\_TRUNK:Subzone=Alert/Dispatch

Typical Completion Time: 100 ms

Name: Voice Chnl TX Frequency

Tag: P25\_TRUNK:VCTx

Commands: GET, SET

Data Type: FLOAT

Range: 250000 Hz to 1000000000 Hz

Units: Hz, kHz, MHz, GHz

Availability:

Operating Mode: Duplex

Menu: P25\_TRUNK:Subzone=Alert/Dispatch

Typical Completion Time: 100 ms

Name: Voice Chnl RX Frequency

Tag: P25\_TRUNK:VCRx

Commands: GET, SET

Data Type: FLOAT

Range: 250000 Hz to 1000000000 Hz

Units: Hz, kHz, MHz, GHz

Availability:

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 Menu: P25\_TRUNK:Subzone=Alert/Dispatch  
 Typical Completion Time: 100 ms

Name: VCTx Channel  
 Tag: P25\_TRUNK:VCTx Chnl  
 Commands: GET, SET  
 Data Type: INTEGER  
 Range: 0 to 4095  
 Availability:  
   Operating Mode: Duplex  
   Menu: P25\_TRUNK:Subzone=Alert/Dispatch  
 Typical Completion Time: 100 ms


Name: VCRx Channel  
 Tag: P25\_TRUNK:VCRx Chnl  
 Commands: GET, SET  
 Data Type: INTEGER  
 Range: 0 to 4095  
 Availability:  
   Operating Mode: Duplex  
   Menu: P25\_TRUNK:Subzone=Alert/Dispatch  
 Typical Completion Time: 100 ms

Name: Reset Symbol Rate Error  
 Tag: P25\_TRUNK:Reset SRE  
 Commands: DO  
 Data Type: FUNCTION  
 Availability:  
   Operating Mode: Duplex  
   Menu: P25\_TRUNK  
 Typical Completion Time: 100 ms

Name: BER Test  
 Tag: P25\_TRUNK:BER Test  
 Commands: GET, SET  
 Data Type: LIST  
 List Values: Stop, Start  
 Availability:  
   Operating Mode: Duplex  
   Menu: P25\_TRUNK  
 Typical Completion Time: 500 ms

Name: Test Pattern  
 Tag: P25\_TRUNK:Test Pattern  
 Commands: GET, SET  
 Data Type: LIST  
 List Values: 1011 Hz Tone, Calibration (Tone 5%), Standard Tx (0.153/V.52), Silence  
 Availability:  
   Operating Mode: Duplex  
   Menu: P25\_TRUNK:Subzone=BER  
 Typical Completion Time: 100 ms

Name: BS Mode

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Tag:P25\_TRUNK:P25\_EXP  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Implicit, Explicit  
 Availability:  
     Operating Mode:Duplex  
     Option:R8-P25\_EXP  
     Menu:P25\_TRUNK:Subzone=Alert/Dispatch  
 Typical Completion Time:100 ms


Name:Band  
 Tag:BANDPLAN:Band  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 800 MHz, 700 MHz, UHF/VHF  
 Availability:  
     Operating Mode:Duplex  
     Menu:BANDPLAN  
 Typical Completion Time:100 ms

Name:Set Band Plan to Defaults  
 Tag:BANDPLAN:Band Defaults  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:Duplex  
     Menu:BANDPLAN  
 Typical Completion Time:200 ms

Name:Bandwidth  
 Tag:BANDPLAN:Bandwidth  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 6.25 kHz, 12.5 kHz  
 Availability:  
     Operating Mode:Duplex  
     Menu:BANDPLAN  
 Typical Completion Time:100 ms

Name:Base Frequency  
 Tag:BANDPLAN:Base Frequency  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 250000 Hz to 1000000000 Hz  
 Units: Hz, kHz, MHz, GHz  
 Availability:  
     Operating Mode:Duplex  
     Menu:BANDPLAN  
 Typical Completion Time:100 ms

Name:Channel Spacing (kHz)  
 Tag:BANDPLAN:Chnl Spacing  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 512

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Availability:

Operating Mode: Duplex  
Menu: BANDPLAN

Typical Completion Time: 100 ms

Name: Transmit Offset (MHz)

Tag: BANDPLAN: TX Offset

Commands: GET, SET

Data Type: FLOAT

Availability:

Operating Mode: Duplex  
Menu: BANDPLAN

Typical Completion Time: 100 ms

Name: Channel Identifier

Tag: BANDPLAN: Channel Id

Commands: GET, SET

Data Type: INTEGER

Range: 1 to 16

Availability:

Operating Mode: Duplex  
Menu: BANDPLAN

Typical Completion Time: 100 ms

Name:

Tag: NXDN: BER Result

Commands: GET

Data Type: FLOAT

Range: 0 to 100

Availability:

Operating Mode: Monitor, Duplex  
Menu: NXDN

Typical Completion Time: 0 ms

Name: Symbol Deviation (Hz)

Tag: NXDN: Symbol Deviation

Commands: GET

Data Type: FLOAT

Availability:

Operating Mode: Monitor, Duplex  
Menu: NXDN

Typical Completion Time: 0 ms

Name:

Tag: NXDN: Modulation Fidelity

Commands: GET

Data Type: FLOAT

Availability:

Operating Mode: Monitor, Duplex  
Menu: NXDN


Typical Completion Time: 0 ms

Name: Bit Rate (bps)

Tag: NXDN: Bit Rate

Commands: GET, SET



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Data Type:BOOLEAN  
 List Values: 4800, 9600  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:NXDN  
 Typical Completion Time:100 ms


Name:  
 Tag:NXDN:Monitor RAN  
 Commands:GET  
 Data Type:STRING  
 Availability:  
     Menu:NXDN  
 Typical Completion Time:0 ms

Name:Copy RAN to Generator  
 Tag:NXDN:Copy RAN to Generator  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:NXDN  
 Typical Completion Time:100 ms

Name:RAN(encode)  
 Tag:NXDN:Generate RAN  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 63  
 Availability:  
     Operating Mode:Generate, Duplex  
     Menu:NXDN  
 Typical Completion Time:100 ms

Name:Mon Test Pattern  
 Tag:NXDN:Mon Test Pattern  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 1031 Hz Tone [NXDN:Bit Rate=4800], 1031 Hz Tone [NXDN:Bit Rate=9600], 1011 Hz Tone [NXDN:Bit Rate=9600], Calibration (0.153 2%), 511 (0.153/PN9)  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:NXDN  
 Typical Completion Time:100 ms

Name:Gen Test Pattern  
 Tag:NXDN:Gen Test Pattern  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 1031 Hz Tone [NXDN:Bit Rate=4800], 1031 Hz Tone [NXDN:Bit Rate=9600], 1011 Hz Tone [NXDN:Bit Rate=9600], Calibration (0.153 2%), 511 (0.153/PN9), 511 (0.153/FSW+PN9) [Operating Mode=Generate], Interference [Operating Mode=Generate], Max Freq Deviation [Operating Mode=Generate], 1/3 Freq Deviation [Operating Mode=Generate]

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Availability:

Operating Mode:Generate, Duplex  
Menu:NXDN

Typical Completion Time:100 ms

Name:Generate Modulation Mode

Tag:NXDN:Gen Mod Mode

Commands:GET, SET

Data Type:LIST

List Values: Off, Continuous, Burst

Availability:

Operating Mode:Generate, Duplex  
Menu:NXDN

Typical Completion Time:500 ms

Name:BER Test

Tag:NXDN:BER Test

Commands:GET, SET

Data Type:LIST

List Values: Stop, Start

Availability:

Operating Mode:Monitor, Duplex  
Menu:NXDN

Typical Completion Time:500 ms

Name:Eye Diagram Data

Tag:NXDN:Eye Data

Commands:GET

Data Type:ARRAY

Availability:

Operating Mode:Monitor, Duplex  
Menu:NXDN

Typical Completion Time:100 ms

Name:NXDN Library Version

Tag:NXDN:Version

Commands:GET

Data Type:STRING

Availability:

Menu:NXDN

Typical Completion Time:0 ms

Name:Subzone

Tag:NXDN\_TRUNK:Subzone

Commands:GET, SET

Data Type:LIST

List Values: Alert/Dispatch, BER

Availability:


Operating Mode:Duplex  
Menu:NXDN\_TRUNK

Typical Completion Time:100 ms

Name:Modulation Mode

Tag:NXDN\_TRUNK:Gen Mod Mode

Commands:GET, SET

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Data Type:LIST  
 List Values: Off, Continuous  
 Availability:  
     Operating Mode:Duplex  
     Menu:NXDN\_TRUNK:Subzone=BER  
 Typical Completion Time:500 ms


Name:Voice Call  
 Tag:NXDN\_TRUNK:Voice Call  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Stop, Start  
 Availability:  
     Operating Mode:Duplex  
     Menu:NXDN\_TRUNK:Subzone=Alert/Dispatch  
 Typical Completion Time:100 ms

Name:Test Pattern  
 Tag:NXDN\_TRUNK:Test Pattern  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 1031 Hz Tone [NXDN\_TRUNK:Bit Rate=4800], 1031 Hz Tone [NXDN\_TRUNK:Bit Rate=9600], 1011 Hz Tone [NXDN\_TRUNK:Bit Rate=9600], Calibration (0.153 2%), 511 (0.153/PN9)  
 Availability:  
     Operating Mode:Duplex  
     Menu:NXDN\_TRUNK:Subzone=BER  
 Typical Completion Time:100 ms

Name:BER Test  
 Tag:NXDN\_TRUNK:BER Test  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Stop, Start  
 Availability:  
     Operating Mode:Duplex  
     Menu:NXDN\_TRUNK  
 Typical Completion Time:500 ms

Name:Send Status Inquiry  
 Tag:NXDN\_TRUNK:Status Inquiry  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:Duplex  
     Menu:NXDN\_TRUNK:Subzone=Alert/Dispatch  
 Typical Completion Time:100 ms

Name:CCTx Channel  
 Tag:NXDN\_TRUNK:CCTx Chnl  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 1023  
 Availability:  
     Operating Mode:Duplex

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 Typical Completion Time:100 ms


Name:VCTx Channel  
 Tag:NXDN\_TRUNK:VCTx Chnl  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 1023  
 Availability:  
     Operating Mode:Duplex  
     Menu:NXDN\_TRUNK:Subzone=Alert/Dispatch  
 Typical Completion Time:100 ms

Name:Control Chnl TX Frequency  
 Tag:NXDN\_TRUNK:CCTx  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 250000 Hz to 1000000000 Hz  
 Units: Hz, kHz, MHz, GHz  
 Availability:  
     Operating Mode:Duplex  
     Menu:NXDN\_TRUNK:Subzone=Alert/Dispatch  
 Typical Completion Time:100 ms

Name:Voice Chnl TX Frequency  
 Tag:NXDN\_TRUNK:VCTx  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 250000 Hz to 1000000000 Hz  
 Units: Hz, kHz, MHz, GHz  
 Availability:  
     Operating Mode:Duplex  
     Menu:NXDN\_TRUNK:Subzone=Alert/Dispatch  
 Typical Completion Time:100 ms

Name:Transmit Offset (MHz)  
 Tag:NXDN\_TRUNK:Tx Off  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 100  
 Availability:  
     Operating Mode:Duplex  
     Menu:NXDN\_TRUNK:Subzone=Alert/Dispatch  
 Typical Completion Time:100 ms

Name:System Code  
 Tag:NXDN\_TRUNK:SYSTEM ID  
 Commands:GET, SET  
 Data Type:STRING  
 char set:0, 1, 2, 3, 4, 5, 6, 7, 8, 9  
 Availability:  
     Operating Mode:Duplex  
     Menu:NXDN\_TRUNK:Subzone=Alert/Dispatch  
 Typical Completion Time:100 ms

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Name:Site Code  
 Tag:NXDN\_TRUNK:SITE ID  
 Commands:GET, SET  
 Data Type:STRING  
 char set:0, 1, 2, 3, 4, 5, 6, 7, 8, 9  
 Availability:  
     Operating Mode:Duplex  
     Menu:NXDN\_TRUNK:Subzone=Alert/Dispatch  
 Typical Completion Time:100 ms


Name:Unit ID  
 Tag:NXDN\_TRUNK:WUID  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 65535  
 Availability:  
     Operating Mode:Duplex  
     Menu:NXDN\_TRUNK:Subzone=Alert/Dispatch  
 Typical Completion Time:100 ms

Name:Group ID  
 Tag:NXDN\_TRUNK:WGID  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 65535  
 Availability:  
     Operating Mode:Duplex  
     Menu:NXDN\_TRUNK:Subzone=Alert/Dispatch  
 Typical Completion Time:100 ms

Name:Category  
 Tag:NXDN\_TRUNK:Category  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 2  
 Availability:  
     Operating Mode:Duplex  
     Menu:NXDN\_TRUNK:Subzone=Alert/Dispatch  
 Typical Completion Time:100 ms

Name:Bit Rate (bps)  
 Tag:NXDN\_TRUNK:Bit Rate  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 4800, 9600  
 Availability:  
     Operating Mode:Duplex  
     Menu:NXDN\_TRUNK:Subzone=Alert/Dispatch, BER  
 Typical Completion Time:100 ms

Name:Voice Playback  
 Tag:NXDN\_TRUNK:Voice Playback  
 Commands:GET, SET  
 Data Type:BOOLEAN  
 List Values: OFF, ON

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Availability:

Operating Mode: Duplex  
 Menu: NXDN\_TRUNK: Subzone=Alert/Dispatch

Typical Completion Time: 100 ms

Name: Constellation Data

Tag: TETRA: Constellation Data

Commands: GET

Data Type: ARRAY

Availability:

Menu: TETRA

Typical Completion Time: 100 ms

Name:

Tag: TETRA: Modulation Spectrum

Commands: GET

Data Type: ARRAY

Availability:

Menu: TETRA

Typical Completion Time: 100 ms

Name: Reset Averaging

Tag: TETRA: Reset RX

Commands: DO

Data Type: FUNCTION

Availability:

Operating Mode: Monitor

Menu: TETRA

Typical Completion Time: 100 ms

Name: Measurement Averaging

Tag: TETRA: Measurement Averaging

Commands: GET, SET

Data Type: INTEGER

Range: 1 to 250

Availability:

Operating Mode: Monitor

Menu: TETRA

Typical Completion Time: 100 ms

Name: Unwanted Power in Slot 3

Tag: TETRA: Unwanted Active

Commands: GET, SET

Data Type: BOOLEAN

List Values: No, Yes

Availability:

Operating Mode: Monitor

Menu: TETRA

Typical Completion Time: 100 ms


Name:

Tag: TETRA: Symbol Deviation

Commands: GET

Data Type: FLOAT

Availability:

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Operating Mode:Monitor  
 Menu:TETRA  
 Typical Completion Time:0 ms

Name:  
 Tag:TETRA:EVM RMS  
 Commands:GET  
 Data Type:FLOAT  
 Availability:  
     Operating Mode:Monitor  
     Menu:TETRA  
 Typical Completion Time:0 ms


Name:  
 Tag:TETRA:EVM Peak  
 Commands:GET  
 Data Type:FLOAT  
 Availability:  
     Operating Mode:Monitor  
     Menu:TETRA  
 Typical Completion Time:0 ms

Name:  
 Tag:TETRA:Unwanted Power  
 Commands:GET  
 Data Type:FLOAT  
 Availability:  
     Operating Mode:Monitor  
     Menu:TETRA  
 Typical Completion Time:0 ms

Name:  
 Tag:TETRA:Residual Power  
 Commands:GET  
 Data Type:FLOAT  
 Availability:  
     Operating Mode:Monitor  
     Menu:TETRA  
 Typical Completion Time:0 ms

Name:Test Pattern  
 Tag:TETRA:Test Pattern  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 1000 Hz Tone, Silence  
 Availability:  
     Operating Mode:Generate  
     Menu:TETRA  
 Typical Completion Time:100 ms

Name:Modulation Mode  
 Tag:TETRA:Gen Mod Mode  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Off, Continuous

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Availability:

Operating Mode:Generate

Menu:TETRA

Typical Completion Time:500 ms

Name:TETRA DMO Library Version

Tag:TETRA:Version

Commands:GET

Data Type:STRING

Availability:

Menu:TETRA

Typical Completion Time:0 ms

Name:

Tag:TETRA\_TMO:HORIZ MENU

Commands:GET, SET

Data Type:LIST

List Values: Call Mobile, Channel Plan, TX Test, RX Test, PLC Test, T1 Test, Main Screen

Availability:

Menu:TETRA\_TMO

Typical Completion Time:0 ms

Name:Graphical Displays

Tag:TETRA\_TMO:Graphical Displays

Commands:DO

Data Type:FUNCTION

Availability:

Operating Mode:Monitor, Duplex

Menu:TETRA\_TMO

Typical Completion Time:500 ms

Name:Call Type

Tag:TETRA\_TMO:Call Type

Commands:GET, SET

Data Type:LIST

List Values: Individual Duplex, Individual Simplex, Group, Phone, Emergency, SDS/DTMF/DGNA, Ambient Listening

Availability:

Operating Mode:Monitor, Duplex

Menu:TETRA\_TMO

Typical Completion Time:500 ms

Name>Select Group

Tag:TETRA\_TMO>Select Group

Commands:GET, SET

Data Type:LIST

List Values: No Selection

Availability:

Operating Mode:Monitor, Duplex


Menu:TETRA\_TMO

Typical Completion Time:500 ms

Name:Voice Loopback

Tag:TETRA\_TMO:Voice Loopback



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Commands:GET, SET  
 Data Type:LIST  
 List Values: Voice, 2.4kHz, 1.6kHz, 1kHz, 800Hz, 400Hz, Off  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_TMO  
 Typical Completion Time:500 ms


Name:RF Output Level  
 Tag:TETRA\_TMO:RF Output Level  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 dBm to 0 dBm  
 Units: dBm  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_TMO  
 Typical Completion Time:1000 ms

Name:Attenuation  
 Tag:TETRA\_TMO:Attenuation  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 0 dB, 2 dB, 4 dB, 6 dB, 8 dB, 10 dB, 12 dB, 14 dB, 16 dB, 18 dB, 20 dB, 22 dB, 24 dB, 26 dB, 28 dB, 30 dB, 32 dB, 34 dB, 36 dB, 38 dB, 40 dB, 42 dB, 44 dB, 46 dB, 48 dB, 50 dB, 52 dB, 54 dB, 56 dB, 58 dB, 60 dB, 62 dB  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_TMO  
 Typical Completion Time:500 ms

Name:Average Readings  
 Tag:TETRA\_TMO:Average Readings  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 1 to 100  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_TMO  
 Typical Completion Time:500 ms

Name:Test Limits  
 Tag:TETRA\_TMO:Test Limits  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_TMO  
 Typical Completion Time:500 ms

Name:Sync  
 Tag:TETRA\_TMO:Sync  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:

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Operating Mode:Monitor, Duplex  
 Menu:TETRA\_TMO  
 Typical Completion Time:4000 ms

Name:Command Registration  
 Tag:TETRA\_TMO:Command Registration  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:

Operating Mode:Monitor, Duplex  
 Menu:TETRA\_TMO  
 Typical Completion Time:1000 ms

Name:  
 Tag:TETRA\_TMO:RF Power  
 Commands:GET  
 Data Type:FLOAT  
 Availability:

Operating Mode:Monitor, Duplex  
 Menu:TETRA\_TMO  
 Typical Completion Time:0 ms

Name:  
 Tag:TETRA\_TMO:Unwanted Output Power  
 Commands:GET  
 Data Type:FLOAT  
 Availability:

Operating Mode:Monitor, Duplex  
 Menu:TETRA\_TMO  
 Typical Completion Time:0 ms

Name:  
 Tag:TETRA\_TMO:Residual Power  
 Commands:GET  
 Data Type:FLOAT  
 Availability:


Operating Mode:Monitor, Duplex  
 Menu:TETRA\_TMO  
 Typical Completion Time:0 ms

Name:  
 Tag:TETRA\_TMO:Freq Error  
 Commands:GET  
 Data Type:FLOAT  
 Availability:

Operating Mode:Monitor, Duplex  
 Menu:TETRA\_TMO  
 Typical Completion Time:0 ms

Name:  
 Tag:TETRA\_TMO:EVM RMS  
 Commands:GET  
 Data Type:FLOAT  
 Availability:

Operating Mode:Monitor, Duplex

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Menu:TETRA\_TMO  
 Typical Completion Time:0 ms

Name:  
 Tag:TETRA\_TMO:EVM Peak  
 Commands:GET  
 Data Type:FLOAT  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_TMO  
 Typical Completion Time:0 ms

Name:  
 Tag:TETRA\_TMO:Frame Alignment  
 Commands:GET  
 Data Type:FLOAT  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_TMO  
 Typical Completion Time:0 ms

Name:Bar Charts  
 Tag:TETRA\_TMO:Bar Charts  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_TMO  
 Typical Completion Time:100 ms

Name:Spectrum  
 Tag:TETRA\_TMO:Spectrum  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_TMO  
 Typical Completion Time:100 ms

Name:Power Profile  
 Tag:TETRA\_TMO:Power Profile  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_TMO  
 Typical Completion Time:100 ms

Name:Constellation  
 Tag:TETRA\_TMO:Constellation  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_TMO

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Typical Completion Time:100 ms

Name:Upper Mini Graph

Tag:TETRA\_TMO:UpperGraph

Commands:GET, SET

Data Type:LIST

List Values: Spectrum, Power Profile, Symbols, Trajectories

Availability:

Operating Mode:Monitor, Duplex

Menu:TETRA\_TMO

Typical Completion Time:100 ms

Name:Lower Mini Graph

Tag:TETRA\_TMO:LowerGraph

Commands:GET, SET

Data Type:LIST

List Values: Spectrum, Power Profile, Symbols, Trajectories, Bar Graphs

Availability:

Operating Mode:Monitor, Duplex

Menu:TETRA\_TMO

Typical Completion Time:100 ms

Name:Frequency

Tag:TETRA\_TMO:CPFrequency

Commands:GET, SET

Data Type:FLOAT

Range: 250000 Hz to 1000000000 Hz

Units: Hz, kHz, MHz, GHz

Availability:

Operating Mode:Monitor, Duplex

Menu:TETRA\_TMO

Typical Completion Time:500 ms

Name:Band

Tag:TETRA\_TMO:Band

Commands:GET, SET

Data Type:LIST

List Values: 100 MHz, 300 MHz, 400 MHz, 450 MHz, 800 MHz, 900 MHz

Availability:

Operating Mode:Monitor, Duplex

Menu:TETRA\_TMO

Typical Completion Time:500 ms

Name:MCCH

Tag:TETRA\_TMO:MCCH

Commands:GET, SET

Data Type:INTEGER

Range: 0 to 10000

Availability:


Operating Mode:Monitor, Duplex

Menu:TETRA\_TMO

Typical Completion Time:500 ms

Name:TS

Tag:TETRA\_TMO:TS

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Commands:GET, SET  
 Data Type:LIST  
 List Values: 2, 3, 4  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_TMO  
 Typical Completion Time:500 ms


Name:Channel Offset  
 Tag:TETRA\_TMO:Channel Offset  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 0 Hz, 6.250 kHz, -6.25 kHz, 12.500 kHz, -12.500 kHz  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_TMO  
 Typical Completion Time:500 ms

Name:Duplex Offset  
 Tag:TETRA\_TMO:Duplex Offset  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 1.6 MHz [TETRA\_TMO:Band=100 MHz], 4.5 MHz [TETRA\_TMO:Band=100 MHz], 5 MHz [TETRA\_TMO:Band=400 MHz or TETRA\_TMO:Band=450 MHz], 10 MHz [TETRA\_TMO:Band=300 MHz or TETRA\_TMO:Band=400 MHz or TETRA\_TMO:Band=450 MHz], 45 MHz [TETRA\_TMO:Band=800 MHz or TETRA\_TMO:Band=900 MHz]  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_TMO  
 Typical Completion Time:500 ms

Name:Operating Mode  
 Tag:TETRA\_TMO:Operating Mode  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Normal, Reverse  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_TMO  
 Typical Completion Time:500 ms

Name:Connection Mode  
 Tag:TETRA\_TMO:Connection Mode  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Normal, Fallback  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_TMO  
 Typical Completion Time:500 ms

Name:MCC  
 Tag:TETRA\_TMO:MCC  
 Commands:GET, SET  
 Data Type:INTEGER

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Range: 0 to 500

Availability:

Operating Mode:Monitor, Duplex

Menu:TETRA\_TMO

Typical Completion Time:500 ms

Name:MNC

Tag:TETRA\_TMO:MNC

Commands:GET, SET

Data Type:INTEGER

Range: 0 to 10000

Availability:

Operating Mode:Monitor, Duplex

Menu:TETRA\_TMO

Typical Completion Time:500 ms

Name:BCC

Tag:TETRA\_TMO:BCC

Commands:GET, SET

Data Type:INTEGER

Range: 0 to 10

Availability:

Operating Mode:Monitor, Duplex

Menu:TETRA\_TMO

Typical Completion Time:500 ms

Name:Larea

Tag:TETRA\_TMO:Larea

Commands:GET, SET

Data Type:INTEGER

Range: 0 to 10

Availability:

Operating Mode:Monitor, Duplex

Menu:TETRA\_TMO

Typical Completion Time:500 ms

Name:Limits Default

Tag:TETRA\_TMO:Limits Default

Commands:DO

Data Type:FUNCTION

Availability:

Operating Mode:Monitor, Duplex

Menu:TETRA\_TMO

Typical Completion Time:500 ms

Name:Power Class

Tag:TETRA\_TMO:Power Class

Commands:GET, SET

Data Type:LIST


List Values: 2 (10W), 2L (5.6W), 3 (3W), 3L (1.8W), 4 (1W), 4L (0.56W)

Availability:

Operating Mode:Monitor, Duplex

Menu:TETRA\_TMO

Typical Completion Time:100 ms

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Name:Unwanted Power  
 Tag:TETRA\_TMO:Unwanted Power  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 0  
 Availability:  
     Menu:TETRA\_TMO  
 Typical Completion Time:100 ms


Name:Residual Carrier Power  
 Tag:TETRA\_TMO:Residual Carrier Power  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 10  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_TMO  
 Typical Completion Time:100 ms

Name:Frequency Error  
 Tag:TETRA\_TMO:Frequency Error  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 200  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_TMO  
 Typical Completion Time:100 ms

Name:RMS Vector  
 Tag:TETRA\_TMO:RMS Vector  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 50  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_TMO  
 Typical Completion Time:100 ms

Name:Peak Vector  
 Tag:TETRA\_TMO:Peak Vector  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 50  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_TMO  
 Typical Completion Time:100 ms

Name:Frame Align Symbols  
 Tag:TETRA\_TMO:Frame Align Limit  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 1  
 Availability:

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 Menu:TETRA\_TMO  
 Typical Completion Time:100 ms

Name:RX Sensitivity  
 Tag:TETRA\_TMO:RX Sensitivity  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 0  
 Availability:

Operating Mode:Monitor, Duplex  
 Menu:TETRA\_TMO  
 Typical Completion Time:100 ms

Name:MS T1 BER  
 Tag:TETRA\_TMO:MS T1 BER  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 10  
 Availability:

Operating Mode:Monitor, Duplex  
 Menu:TETRA\_TMO  
 Typical Completion Time:100 ms

Name:MS T1 MER  
 Tag:TETRA\_TMO:MS T1 MER  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 10  
 Availability:

Operating Mode:Monitor, Duplex  
 Menu:TETRA\_TMO  
 Typical Completion Time:100 ms

Name:Burst Samples  
 Tag:TETRA\_TMO:Burst Samples  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 1 to 1000000  
 Availability:


Operating Mode:Monitor, Duplex  
 Menu:TETRA\_TMO  
 Typical Completion Time:100 ms

Name:Start Test  
 Tag:TETRA\_TMO:Start Test  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:

Operating Mode:Monitor, Duplex  
 Menu:TETRA\_TMO  
 Typical Completion Time:100 ms

Name:RX Test  
 Tag:TETRA\_TMO:RX Test



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Commands:

Data Type:BOOLEAN

List Values:

Availability:

Operating Mode:Monitor, Duplex

Menu:TETRA\_TMO

Typical Completion Time:100 ms

Name:Start Level

Tag:TETRA\_TMO:Start Level

Commands:GET, SET

Data Type:INTEGER

Range: 0 to 0

Availability:

Operating Mode:Monitor, Duplex

Menu:TETRA\_TMO

Typical Completion Time:100 ms

Name:Step Level

Tag:TETRA\_TMO:Step Level

Commands:GET, SET

Data Type:INTEGER

Range: 1 to 10

Availability:

Operating Mode:Monitor, Duplex

Menu:TETRA\_TMO

Typical Completion Time:100 ms

Name:Start RX Test

Tag:TETRA\_TMO:Start RX Test

Commands:DO

Data Type:FUNCTION

Availability:

Operating Mode:Monitor, Duplex

Menu:TETRA\_TMO

Typical Completion Time:100 ms

Name:

Tag:TETRA\_TMO:RXSensitivityResult

Commands:GET

Data Type:STRING

Availability:

Operating Mode:Monitor, Duplex

Menu:TETRA\_TMO

Typical Completion Time:100 ms

Name:Start PLC Test

Tag:TETRA\_TMO:Start PLC Test

Commands:DO


Data Type:FUNCTION

Availability:

Operating Mode:Monitor, Duplex

Menu:TETRA\_TMO

Typical Completion Time:100 ms

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Name:

Tag:TETRA\_TMO:PL1

Commands:GET

Data Type:STRING

Availability:

Operating Mode:Monitor, Duplex

Menu:TETRA\_TMO

Typical Completion Time:100 ms

Name:

Tag:TETRA\_TMO:PL2

Commands:GET

Data Type:STRING

Availability:

Operating Mode:Monitor, Duplex

Menu:TETRA\_TMO

Typical Completion Time:100 ms

Name:

Tag:TETRA\_TMO:PL3

Commands:GET

Data Type:STRING

Availability:

Operating Mode:Monitor, Duplex

Menu:TETRA\_TMO

Typical Completion Time:100 ms

Name:

Tag:TETRA\_TMO:PL4

Commands:GET

Data Type:STRING

Availability:

Operating Mode:Monitor, Duplex

Menu:TETRA\_TMO

Typical Completion Time:100 ms

Name:

Tag:TETRA\_TMO:PL5

Commands:GET

Data Type:STRING

Availability:

Operating Mode:Monitor, Duplex

Menu:TETRA\_TMO

Typical Completion Time:100 ms

Name:

Tag:TETRA\_TMO:PL6

Commands:GET

Data Type:STRING


Availability:

Operating Mode:Monitor, Duplex

Menu:TETRA\_TMO

Typical Completion Time:100 ms

Name:T1 Burst Type

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Tag:TETRA\_TMO:T1 Burst Type  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: TCH/7.2, SCH/F, BSCH+SCH/HD  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_TMO  
 Typical Completion Time:100 ms


Name:MS Mode  
 Tag:TETRA\_TMO:T1 MS Mode  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: MS TX Test, MS RX Test, RF Loopback  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_TMO  
 Typical Completion Time:100 ms

Name:RF Output Level  
 Tag:TETRA\_TMO:T1 RF Level  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 0  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_TMO  
 Typical Completion Time:1000 ms

Name:Start Test  
 Tag:TETRA\_TMO:Start T1 Test  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_TMO  
 Typical Completion Time:100 ms

Name:Stop Test  
 Tag:TETRA\_TMO:Stop T1 Test  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_TMO  
 Typical Completion Time:100 ms

Name:ETSI Test  
 Tag:TETRA\_TMO:ETSI T1 Test  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_TMO  
 Typical Completion Time:100 ms

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Name:

Tag:TETRA\_TMO:T1 BER

Commands:GET

Data Type:FLOAT

Availability:

Operating Mode:Monitor, Duplex

Menu:TETRA\_TMO

Typical Completion Time:0 ms

Name:

Tag:TETRA\_TMO:T1 MER

Commands:GET

Data Type:FLOAT

Availability:

Operating Mode:Monitor, Duplex

Menu:TETRA\_TMO

Typical Completion Time:0 ms

Name:TETRA\_TMO Library Version

Tag:TETRA\_TMO:Version

Commands:GET

Data Type:STRING

Availability:

Menu:TETRA\_TMO

Typical Completion Time:0 ms

Name:

Tag:TETRA\_BST:HORIZ MENU

Commands:GET, SET

Data Type:LIST

List Values: Channel Plan, TX Test, Test Limits, , , , Main Screen

Availability:

Menu:TETRA\_BST

Typical Completion Time:0 ms

Name:Graphical Displays

Tag:TETRA\_BST:Graphical Displays

Commands:DO

Data Type:FUNCTION

Availability:

Operating Mode:Monitor, Duplex

Menu:TETRA\_BST

Typical Completion Time:100 ms

Name:Test Mode

Tag:TETRA\_BST:BSMode

Commands:GET, SET

Data Type:LIST

List Values: Monitor Mode, T1 Mode

Availability:

Operating Mode:Monitor, Duplex

Option:R8-TETRA\_BST1

Menu:TETRA\_BST

Typical Completion Time:100 ms

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Name:BS OEM  
 Tag:TETRA\_BST:BS OEM  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: User Defined, Cassidian TB3, Motorola Dimetra, Motorola MTS 1, Rohill TetraNode  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_BST  
 Typical Completion Time:500 ms


Name:Downlink Frequency  
 Tag:TETRA\_BST:Downlink Frequency  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 380000000 Hz to 400000000 Hz  
 Units: Hz, kHz, MHz, GHz  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_BST  
 Typical Completion Time:1000 ms

Name:Attenuation  
 Tag:TETRA\_BST:Attenuation  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 0 dB, 2 dB, 4 dB, 6 dB, 8 dB, 10 dB, 12 dB, 14 dB, 16 dB, 18 dB, 20 dB, 22 dB, 24 dB, 26 dB, 28 dB, 30 dB, 32 dB, 34 dB, 36 dB, 38 dB, 40 dB, 42 dB, 44 dB, 46 dB, 48 dB, 50 dB, 52 dB, 54 dB, 56 dB, 58 dB, 60 dB, 62 dB  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_BST  
 Typical Completion Time:100 ms

Name:Average Readings  
 Tag:TETRA\_BST:Averaging  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 1 to 100  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_BST  
 Typical Completion Time:100 ms

Name:Cable Offset (dB)  
 Tag:TETRA\_BST:RF In/Out Offset  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 99  
 Availability:  
     Menu:TETRA\_BST  
 Typical Completion Time:100 ms

Name:Gen Offset (dB)

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Tag:TETRA\_BST:RF Gen Out Offset  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 99  
 Availability:  
     Menu:TETRA\_BST  
 Typical Completion Time:100 ms

Name:  
 Tag:TETRA\_BST:RF Power  
 Commands:GET  
 Data Type:FLOAT  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_BST  
 Typical Completion Time:100 ms


Name:  
 Tag:TETRA\_BST:Residual Power  
 Commands:GET  
 Data Type:FLOAT  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_BST  
 Typical Completion Time:100 ms

Name:  
 Tag:TETRA\_BST:Freq Error  
 Commands:GET  
 Data Type:FLOAT  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_BST  
 Typical Completion Time:100 ms

Name:  
 Tag:TETRA\_BST:EVM RMS  
 Commands:GET  
 Data Type:FLOAT  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_BST  
 Typical Completion Time:100 ms

Name:  
 Tag:TETRA\_BST:EVM Peak  
 Commands:GET  
 Data Type:FLOAT  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_BST  
 Typical Completion Time:100 ms

Name:Uplink Signal Mode  
 Tag:TETRA\_BST:Uplink Signal Mode

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Commands:GET, SET  
 Data Type:LIST  
 List Values: Auto, TX On, Transmit, Receive, Loopback, Manual Transmit,  
 Manual Receive, Manual Loopback, Downlink T2 (No Scrambling)  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_BST  
 Typical Completion Time:500 ms


Name:Uplink Signal Type  
 Tag:TETRA\_BST:Uplink Signal Type  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Auto, TCH/7.2, SCH/F, STCH+STCH, SCH/HU+SCH/HU, TCH/S, TCH/2.4  
 N=1, TCH/4.8 N=1  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_BST  
 Typical Completion Time:500 ms

Name:RF Output Level (dBm)  
 Tag:TETRA\_BST:RF Output Level  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 dBm to 0 dBm  
 Units: dBm  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_BST  
 Typical Completion Time:1000 ms

Name:Codec Tones  
 Tag:TETRA\_BST:Codec Tones  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 400 Hz, 800 Hz, 1000 Hz, 1600 Hz, 2400 Hz  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_BST  
 Typical Completion Time:100 ms

Name:  
 Tag:TETRA\_BST:D11MNC  
 Commands:GET  
 Data Type:INTEGER  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_BST  
 Typical Completion Time:100 ms

Name:  
 Tag:TETRA\_BST:D11MCC  
 Commands:GET  
 Data Type:INTEGER  
 Availability:

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Operating Mode:Monitor, Duplex  
 Menu:TETRA\_BST  
 Typical Completion Time:100 ms

Name:  
 Tag:TETRA\_BST:D11BCC  
 Commands:GET  
 Data Type:INTEGER  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_BST  
 Typical Completion Time:100 ms

Name:  
 Tag:TETRA\_BST:D11LA  
 Commands:GET  
 Data Type:INTEGER  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_BST  
 Typical Completion Time:100 ms


Name:  
 Tag:TETRA\_BST:Downlink BER  
 Commands:GET  
 Data Type:STRING  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_BST  
 Typical Completion Time:100 ms

Name:  
 Tag:TETRA\_BST:Downlink MBR  
 Commands:GET  
 Data Type:STRING  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_BST  
 Typical Completion Time:100 ms

Name:  
 Tag:TETRA\_BST:Uplink BER  
 Commands:GET  
 Data Type:STRING  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_BST  
 Typical Completion Time:100 ms

Name:  
 Tag:TETRA\_BST:Uplink MER  
 Commands:GET  
 Data Type:STRING  
 Availability:  
     Operating Mode:Monitor, Duplex



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Menu:TETRA\_BST  
 Typical Completion Time:100 ms

Name:Gen Port  
 Tag:TETRA\_BST:Generate Port  
 Commands:GET, SET  
 Data Type:BOOLEAN  
 List Values: RF In/Out, Gen Out  
 Availability:  
     Operating Mode:Duplex  
     Menu:TETRA\_BST  
 Typical Completion Time:1000 ms


Name:Monitor Port  
 Tag:TETRA\_BST:Monitor Port  
 Commands:GET, SET  
 Data Type:BOOLEAN  
 List Values: RF In/Out, Antenna  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_BST  
 Typical Completion Time:1000 ms

Name:Pre-Amp  
 Tag:TETRA\_BST:PreAmp On  
 Commands:GET, SET  
 Data Type:BOOLEAN  
 List Values: Off, On  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_BST  
 Typical Completion Time:1000 ms

Name:Sync  
 Tag:TETRA\_BST:Sync  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_BST  
 Typical Completion Time:5000 ms

Name:Bar Charts  
 Tag:TETRA\_BST:Bar Charts  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_BST  
 Typical Completion Time:100 ms

Name:Spectrum  
 Tag:TETRA\_BST:Spectrum  
 Commands:DO  
 Data Type:FUNCTION

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Availability:

Operating Mode:Monitor, Duplex

Menu:TETRA\_BST

Typical Completion Time:100 ms

Name:Power Profile

Tag:TETRA\_BST:Power Profile

Commands:DO

Data Type:FUNCTION

Availability:

Operating Mode:Monitor, Duplex

Menu:TETRA\_BST

Typical Completion Time:100 ms

Name:Constellation

Tag:TETRA\_BST:Constellation

Commands:DO

Data Type:FUNCTION

Availability:

Operating Mode:Monitor, Duplex

Menu:TETRA\_BST

Typical Completion Time:100 ms

Name:Upper Mini Graph

Tag:TETRA\_BST:UpperGraph

Commands:GET, SET

Data Type:LIST

List Values: Spectrum, Power Profile, Symbols, Trajectories

Availability:

Operating Mode:Monitor, Duplex

Menu:TETRA\_BST

Typical Completion Time:100 ms

Name:Lower Mini Graph

Tag:TETRA\_BST:LowerGraph

Commands:GET, SET

Data Type:LIST

List Values: Spectrum, Power Profile, Symbols, Trajectories, Bar Graphs

Availability:

Operating Mode:Monitor, Duplex

Menu:TETRA\_BST

Typical Completion Time:100 ms

Name:Channel

Tag:TETRA\_BST:Channel

Commands:GET, SET

Data Type:INTEGER

Range: 0 to 40000

Availability:


Operating Mode:Monitor, Duplex

Menu:TETRA\_BST

Typical Completion Time:100 ms

Name:Band

Tag:TETRA\_BST:Band

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Commands:GET, SET  
 Data Type:LIST  
 List Values: 100 MHz, 300 MHz, 400 MHz, 450 MHz, 800 MHz, 900 MHz  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_BST  
 Typical Completion Time:100 ms


Name:Channel Offset  
 Tag:TETRA\_BST:Channel Offset  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 0 Hz, 6.250 kHz, -6.25 kHz, 12.500 kHz, -12.500 kHz  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_BST  
 Typical Completion Time:100 ms

Name:Duplex Offset  
 Tag:TETRA\_BST:Duplex Offset  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 1.6 MHz [TETRA\_BST:Band=100 MHz], 4.5 MHz [TETRA\_BST:Band=100 MHz], 5 MHz [TETRA\_BST:Band=400 MHz or TETRA\_BST:Band=450 MHz], 10 MHz [TETRA\_BST:Band=300 MHz or TETRA\_BST:Band=400 MHz or TETRA\_BST:Band=450 MHz], 45 MHz [TETRA\_BST:Band=800 MHz or TETRA\_BST:Band=900 MHz]  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_BST  
 Typical Completion Time:100 ms

Name:Operating Mode  
 Tag:TETRA\_BST:Operating Mode  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Normal, Reverse  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_BST  
 Typical Completion Time:100 ms

Name:MCC  
 Tag:TETRA\_BST:MCC  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 500  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_BST  
 Typical Completion Time:100 ms

Name:MNC  
 Tag:TETRA\_BST:MNC  
 Commands:GET, SET  
 Data Type:INTEGER

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Range: 0 to 10000

Availability:

Operating Mode:Monitor, Duplex

Menu:TETRA\_BST

Typical Completion Time:100 ms

Name:BCC

Tag:TETRA\_BST:BCC

Commands:GET, SET

Data Type:INTEGER

Range: 0 to 10

Availability:

Operating Mode:Monitor, Duplex

Menu:TETRA\_BST

Typical Completion Time:100 ms

Name:Limits Default

Tag:TETRA\_BST:Limits Default

Commands:DO

Data Type:FUNCTION

Availability:

Operating Mode:Monitor, Duplex

Menu:TETRA\_BST

Typical Completion Time:1000 ms

Name:RF Power Lower Limit

Tag:TETRA\_BST:RFPLLLimit

Commands:GET, SET

Data Type:INTEGER

Range: 0 to 200

Availability:

Menu:TETRA\_BST

Typical Completion Time:100 ms

Name:RF Power Upper Limit

Tag:TETRA\_BST:RFPLULimit

Commands:GET, SET

Data Type:INTEGER

Range: 0 to 200

Availability:

Menu:TETRA\_BST

Typical Completion Time:100 ms

Name:Residual Carrier Power

Tag:TETRA\_BST:Residual Carrier Power

Commands:GET, SET

Data Type:INTEGER

Range: 0 to 10

Availability:


Operating Mode:Monitor, Duplex

Menu:TETRA\_BST

Typical Completion Time:100 ms

Name:Frequency Error

Tag:TETRA\_BST:Frequency Error

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Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 200  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_BST  
 Typical Completion Time:100 ms


Name:RMS Vector  
 Tag:TETRA\_BST:RMS Vector  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 50  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_BST  
 Typical Completion Time:100 ms

Name:Peak Vector  
 Tag:TETRA\_BST:Peak Vector  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 50  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_BST  
 Typical Completion Time:100 ms

Name:Uplink BER  
 Tag:TETRA\_BST:UplinkBERLimit  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 10  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_BST  
 Typical Completion Time:100 ms

Name:Uplink MER  
 Tag:TETRA\_BST:UplinkMERLimit  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 10  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_BST  
 Typical Completion Time:100 ms

Name:Downlink BER  
 Tag:TETRA\_BST:DownlinkBERLimit  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 10  
 Availability:  
     Operating Mode:Monitor, Duplex

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 Typical Completion Time:100 ms

Name:Downlink MBR  
 Tag:TETRA\_BST:DownlinkMBRLimit  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 10  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_BST  
 Typical Completion Time:100 ms

Name:Burst Samples  
 Tag:TETRA\_BST:Burst Samples  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 1 to 1000000  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_BST  
 Typical Completion Time:100 ms


Name:Start Test  
 Tag:TETRA\_BST:Start TX Test  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:TETRA\_BST  
 Typical Completion Time:100 ms

Name:TETRA BSM Library Version  
 Tag:TETRA\_BST:Version  
 Commands:GET  
 Data Type:STRING  
 Availability:  
     Menu:TETRA\_BST  
 Typical Completion Time:0 ms

Name:TETRA BST1 Library Version  
 Tag:TETRA\_BST:Version1  
 Commands:GET  
 Data Type:STRING  
 Availability:  
     Menu:TETRA\_BST  
 Typical Completion Time:0 ms

Name:  
 Tag:OPTIONS:Enabled  
 Commands:GET  
 Data Type:STRING  
 Typical Completion Time:0 ms

Name:Calibrate Now

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Tag:CALIBRATION:Start Cal

Commands:DO

Data Type:FUNCTION

Availability:

Menu:CALIBRATION

Typical Completion Time:0 ms

Name:RF Input Status

Tag:CALIBRATION:RF Input Cal Status

Commands:GET

Data Type:INTEGER

Availability:

Menu:CALIBRATION

Typical Completion Time:0 ms

Name:RF Output Cal Status

Tag:CALIBRATION:RF Output Cal Status

Commands:GET

Data Type:INTEGER

Availability:

Menu:CALIBRATION

Typical Completion Time:0 ms

Name:Synth Mode

Tag:POCSAG:Synth Mode

Commands:GET, SET

Data Type:LIST

List Values: Off, Continuous, Burst [AUDIO:Format=A/B Sequence or AUDIO:Format=5/6 Tone or AUDIO:Format=POCSAG or AUDIO:Format=General Sequence], Disconnect Tone [AUDIO:Format=DPL or AUDIO:Format=DPL Invert]

Availability:

Operating Mode:Monitor, Generate, Duplex

Menu:POCSAG

Typical Completion Time:500 ms

Name:Capcode

Tag:POCSAG:Capcode

Commands:GET, SET

Data Type:STRING

char set:0, 1, 2, 3, 4, 5, 6, 7, 8, 9

Availability:

Operating Mode:Monitor, Generate, Duplex

Menu:POCSAG

Typical Completion Time:100 ms

Name:Function Bits

Tag:POCSAG:Function Bits

Commands:GET, SET

Data Type:LIST


List Values: 00, 01, 10, 11

Availability:

Operating Mode:Monitor, Generate, Duplex

Menu:POCSAG

Typical Completion Time:100 ms

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Name:POCSAG Message  
 Tag:POCSAG:POCSAG Message  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Tone Only, NumericNum, NumericSet, AlphaNumUC, AlphaNumLC, AlphaNumSP, NumericCust, AlphaNumCust  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:POCSAG  
 Typical Completion Time:100 ms


Name:Edit Message  
 Tag:POCSAG:NumericCust Message  
 Commands:GET, SET  
 Data Type:STRING  
 Format:(POCSAGCustom)  
 char set:0, 1, 2, 3, 4, 5, 6, 7, 8, 9, U, , -, ], [  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:POCSAG  
 Typical Completion Time:100 ms

Name:Edit Message  
 Tag:POCSAG:AlphaNumCust Message  
 Commands:GET, SET  
 Data Type:STRING  
 Format:(POCSAGCustom)  
 char set:!, ", #, \$, %, ', (, ), \*, +, -, ., /, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, , : , ; , < , = , > , ? , @ , A , B , C , D , E , F , G , H , I , J , K , L , M , N , O , P , Q , R , S , T , U , V , W , X , Y , Z , ] , \ , [ , ^ , \_ , ` , a , b , c , d , e , f , g , h , i , j , k , l , m , n , o , p , q , r , s , t , u , v , w , x , y , z , { , } , ~  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:POCSAG  
 Typical Completion Time:100 ms

Name:Message Length  
 Tag:POCSAG:Message Length  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 60  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:POCSAG  
 Typical Completion Time:100 ms

Name:Data Rate  
 Tag:POCSAG:Data Rate  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 400 to 4800  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:POCSAG



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Name:Polarity  
 Tag:POCSAG:Polarity  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Normal, Inverted  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:POCSAG  
 Typical Completion Time:100 ms


Name>Error Bit  
 Tag:POCSAG>Error Bit  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 2200  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:POCSAG  
 Typical Completion Time:100 ms

Name:Record Results  
 Tag:AUTOSCRIP:Reporting  
 Commands:GET, SET  
 Data Type:BOOLEAN  
 List Values: Off, On  
 Availability:  
     Menu:AUTOSCRIP  
 Typical Completion Time:500 ms

Name:  
 Tag:DPMR:BER Result  
 Commands:GET  
 Data Type:FLOAT  
 Range: 0 to 100  
 Availability:  
     Operating Mode:Monitor  
     Menu:DPMR  
 Typical Completion Time:0 ms

Name:Symbol Deviation (Hz)  
 Tag:DPMR:Symbol Deviation  
 Commands:GET  
 Data Type:FLOAT  
 Availability:  
     Operating Mode:Monitor  
     Menu:DPMR  
 Typical Completion Time:0 ms

Name:  
 Tag:DPMR:Modulation Fidelity  
 Commands:GET  
 Data Type:FLOAT  
 Availability:

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Operating Mode:Monitor  
 Menu:DPMR  
 Typical Completion Time:0 ms


Name:Test Pattern  
 Tag:DPMR:Test Pattern  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Calibration (0.153 2%), 511 (0.153/PN9), Interference [Operating Mode=Generate], Max Freq Deviation [Operating Mode=Generate], 1/3 Freq Deviation [Operating Mode=Generate]  
 Availability:  
     Operating Mode:Monitor, Generate  
     Menu:DPMR  
 Typical Completion Time:100 ms

Name:Modulation Mode  
 Tag:DPMR:Gen Mod Mode  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Off, Continuous, Burst  
 Availability:  
     Operating Mode:Generate  
     Menu:DPMR  
 Typical Completion Time:500 ms

Name:BER Test  
 Tag:DPMR:BER Test  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Stop, Start  
 Availability:  
     Operating Mode:Monitor  
     Menu:DPMR  
 Typical Completion Time:500 ms

Name:Ideal Sym Dev (Hz)  
 Tag:DPMR:Ideal Symbol Deviation  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 800 to 2400  
 Availability:  
     Operating Mode:Monitor, Generate  
     Menu:DPMR  
 Typical Completion Time:100 ms

Name:Filter  
 Tag:DPMR:Filter  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: ETSI, PDR  
 Availability:  
     Operating Mode:Monitor, Generate  
     Menu:DPMR  
 Typical Completion Time:100 ms

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Name:Eye Diagram Data  
 Tag:DPMR:Eye Data  
 Commands:GET  
 Data Type:ARRAY  
 Availability:  
     Operating Mode:Monitor  
     Menu:DPMR  
 Typical Completion Time:100 ms


Name:dPMR Library Version  
 Tag:DPMR:Version  
 Commands:GET  
 Data Type:STRING  
 Availability:  
     Menu:DPMR  
 Typical Completion Time:0 ms

Name:  
 Tag:P25\_II:BER Result  
 Commands:GET  
 Data Type:FLOAT  
 Range: 0 to 100  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:P25\_II  
 Typical Completion Time:0 ms

Name:Symbol Deviation (Hz)  
 Tag:P25\_II:Symbol Deviation  
 Commands:GET  
 Data Type:FLOAT  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:P25\_II  
 Typical Completion Time:0 ms

Name:  
 Tag:P25\_II:Modulation Fidelity  
 Commands:GET  
 Data Type:FLOAT  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:P25\_II  
 Typical Completion Time:0 ms

Name:Symbol Rate Error (mHz)  
 Tag:P25\_II:Sym Rate Err  
 Commands:GET  
 Data Type:FLOAT  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:P25\_II  
 Typical Completion Time:0 ms

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Name:Test Pattern  
 Tag:P25\_II:Test Pattern  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 1031 Hz Tone, Calibration (Tone 5%), Silence, High Deviation  
 [Operating Mode=Generate], Low Deviation [Operating Mode=Generate],  
 Interference [Operating Mode=Generate]  
 Availability:  
     Operating Mode:Monitor, Generate, Duplex  
     Menu:P25\_II  
 Typical Completion Time:100 ms

Name:Generate Modulation Type  
 Tag:P25\_II:Modulation Type  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: FM [Test Mode=Standard], AM [Test Mode=Standard], USB [Test  
 Mode=Standard and Option=R8-SSB], LSB [Test Mode=Standard and Option=R8-SSB],  
 4FSK [Test Mode=DMR or Test Mode=DPMR or Test Mode=NXDN], GMSK~ [Test  
 Mode=PTC-ACSES], C4FM [Test Mode=PROJECT 25 or Test Mode=P25 Trunk], LSM  
 [Test Mode=PROJECT 25 or Test Mode=P25 Trunk], WCQPSK [Test Mode=PROJECT 25  
 or Test Mode=P25 Trunk], pi/4 DQPSK [Test Mode=PTC-ITCR or Test Mode=TETRA  
 DMO or Test Mode=TETRA TMO or Test Mode=TETRA BST], HCPM [Test Mode=P25 II],  
 HDQPSK [Test Mode=P25 II and Operating Mode=Monitor or Test Mode=P25 II and  
 Operating Mode=Generate]  
 Availability:  
     Operating Mode:Generate  
     Menu:P25\_II  
 Typical Completion Time:100 ms

Name:Monitor Modulation Type  
 Tag:P25\_II:Mon Mod Type  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: HCPM [Operating Mode=Monitor or Operating Mode=Generate], HDQPSK  
 Availability:  
     Operating Mode:Monitor  
     Menu:P25\_II  
 Typical Completion Time:100 ms

Name:Modulation Mode  
 Tag:P25\_II:Gen Mod Mode  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Off, Continuous, Burst [Operating Mode=Monitor or Operating  
 Mode=Generate]  
 Availability:  
     Operating Mode:Generate, Duplex  
     Menu:P25\_II  
 Typical Completion Time:500 ms

Name:LCH (logical channel)  
 Tag:P25\_II:Gen LCH  
 Commands:GET, SET  
 Data Type:LIST

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List Values: 0, 1

Availability:

Operating Mode:Generate, Duplex

Menu:P25\_II

Typical Completion Time:100 ms

Name:BER Test

Tag:P25\_II:BER Test

Commands:GET, SET

Data Type:LIST

List Values: Stop, Start

Availability:

Operating Mode:Monitor, Duplex

Menu:P25\_II

Typical Completion Time:500 ms

Name:Eye Diagram Data

Tag:P25\_II:Eye Data

Commands:GET

Data Type:ARRAY

Availability:

Operating Mode:Monitor, Duplex

Menu:P25\_II

Typical Completion Time:100 ms

Name:P25 Phase 2 Library Version

Tag:P25\_II:Version

Commands:GET

Data Type:STRING

Availability:

Menu:P25\_II

Typical Completion Time:0 ms

Name:PTC-ACSES Library Version

Tag:PTC\_ACSES:Version

Commands:GET

Data Type:STRING

Availability:

Menu:PTC\_ACSES

Typical Completion Time:0 ms

Name:Mon Symbol Rate (sps)

Tag:PTC\_ITCR:Mon Sym Rate

Commands:GET, SET

Data Type:BOOLEAN

List Values: 8000, 16000

Availability:

Operating Mode:Monitor, Duplex

Menu:PTC\_ITCR


Typical Completion Time:100 ms

Name:Gen Symbol Rate (sps)

Tag:PTC\_ITCR:Gen Sym Rate

Commands:GET, SET

Data Type:BOOLEAN

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List Values: 8000, 16000

Availability:

Operating Mode:Generate, Duplex

Menu:PTC\_ITCR

Typical Completion Time:100 ms

Name:BER Test

Tag:PTC\_ITCR:BER Test

Commands:GET, SET

Data Type:LIST

List Values: Stop, Start

Availability:

Operating Mode:Monitor, Duplex

Menu:PTC\_ITCR

Typical Completion Time:500 ms

Name:Modulation Mode

Tag:PTC\_ITCR:Gen Mod Mode

Commands:GET, SET

Data Type:LIST

List Values: Off, Continuous

Availability:

Operating Mode:Generate, Duplex

Menu:PTC\_ITCR

Typical Completion Time:500 ms

Name:Packet Sync Status

Tag:PTC\_ITCR:Sync

Commands:GET

Data Type:BOOLEAN

List Values:

Availability:

Operating Mode:Monitor, Duplex

Menu:PTC\_ITCR

Typical Completion Time:0 ms

Name:

Tag:PTC\_ITCR:BER Result

Commands:GET

Data Type:FLOAT

Range: 0 to 100

Availability:

Operating Mode:Monitor, Duplex

Menu:PTC\_ITCR

Typical Completion Time:0 ms

Name:Average Power (dBm)

Tag:PTC\_ITCR:Average Power

Commands:GET


Data Type:FLOAT

Availability:

Operating Mode:Monitor, Duplex

Menu:PTC\_ITCR

Typical Completion Time:0 ms

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Name:Peak Power (dBm)  
 Tag:PTC\_ITCR:Peak Power  
 Commands:GET  
 Data Type:FLOAT  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:PTC\_ITCR  
 Typical Completion Time:0 ms

Name:EVM (%)  
 Tag:PTC\_ITCR:EVM  
 Commands:GET  
 Data Type:FLOAT  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:PTC\_ITCR  
 Typical Completion Time:0 ms


Name:IQ Imbalance (dB)  
 Tag:PTC\_ITCR:IQ Imbalance  
 Commands:GET  
 Data Type:FLOAT  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:PTC\_ITCR  
 Typical Completion Time:0 ms

Name:Phase Err (deg)  
 Tag:PTC\_ITCR:Phase Err  
 Commands:GET  
 Data Type:FLOAT  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:PTC\_ITCR  
 Typical Completion Time:0 ms

Name:Mag Err (%)  
 Tag:PTC\_ITCR:Mag Err  
 Commands:GET  
 Data Type:FLOAT  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:PTC\_ITCR  
 Typical Completion Time:0 ms

Name:  
 Tag:PTC\_ITCR:PAR  
 Commands:GET  
 Data Type:FLOAT  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:PTC\_ITCR  
 Typical Completion Time:0 ms

Name:

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Tag:PTC\_ITCR:Packet Count  
 Commands:GET  
 Data Type:INTEGER  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:PTC\_ITCR  
 Typical Completion Time:0 ms

Name:  
 Tag:PTC\_ITCR:Header Resync Count  
 Commands:GET  
 Data Type:INTEGER  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:PTC\_ITCR  
 Typical Completion Time:0 ms

Name:  
 Tag:PTC\_ITCR>Last Packet Index  
 Commands:GET  
 Data Type:INTEGER  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:PTC\_ITCR  
 Typical Completion Time:0 ms


Name:Eye Diagram Data  
 Tag:PTC\_ITCR:Eye Data  
 Commands:GET  
 Data Type:ARRAY  
 Availability:  
     Operating Mode:Monitor, Duplex  
     Menu:PTC\_ITCR  
 Typical Completion Time:100 ms

Name:PTC-ITCR Library Version  
 Tag:PTC\_ITCR:Version  
 Commands:GET  
 Data Type:STRING  
 Availability:  
     Menu:PTC\_ITCR  
 Typical Completion Time:0 ms

Name:  
 Tag:DMR\_BS\_LIVE:Selected  
 Commands:GET  
 Data Type:BOOLEAN  
 List Values:  
 Availability:  
     Menu:DMR\_BS\_LIVE  
 Typical Completion Time:0 ms

Name:Radio/Source ID  
 Tag:DMR\_BS\_LIVE:RadioID  
 Commands:GET, SET



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Data Type:INTEGER  
 Range: 1 to 16777216  
 Availability:  
     Operating Mode:Generate, Duplex  
     Menu:DMR\_BS\_LIVE  
 Typical Completion Time:100 ms


Name:Emergency  
 Tag:DMR\_BS\_LIVE:Emergency  
 Commands:GET, SET  
 Data Type:BOOLEAN  
 List Values: Off, On  
 Availability:  
     Operating Mode:Generate, Duplex  
     Menu:DMR\_BS\_LIVE  
 Typical Completion Time:100 ms

Name:Priority  
 Tag:DMR\_BS\_LIVE:Priority  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 0, 1, 2, 3  
 Availability:  
     Operating Mode:Generate, Duplex  
     Menu:DMR\_BS\_LIVE  
 Typical Completion Time:100 ms

Name:Slot#  
 Tag:DMR\_BS\_LIVE:Slot  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 1, 2  
 Availability:  
     Operating Mode:Generate, Duplex  
     Menu:DMR\_BS\_LIVE  
 Typical Completion Time:100 ms

Name:Slot to Analyse  
 Tag:DMR\_BS\_LIVE:SlotToAnalyse  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 0, 1, 2  
 Availability:  
     Operating Mode:Generate, Duplex  
     Menu:DMR\_BS\_LIVE  
 Typical Completion Time:100 ms

Name:Target/Call Address  
 Tag:DMR\_BS\_LIVE:TargetAddress  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 16777215  
 Availability:  
     Operating Mode:Generate, Duplex  
     Menu:DMR\_BS\_LIVE

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Typical Completion Time:100 ms

Name:Reset to Defaults  
 Tag:DMR\_BS\_LIVE:BS Live Defaults  
 Commands:D0  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:Generate, Duplex  
     Menu:DMR\_BS\_LIVE  
 Typical Completion Time:100 ms


Name:Select Signal  
 Tag:AVIONICS:Subzone  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Localizer, Glide Slope, Markers, NDB/ADF, VOR, Selcal  
 Availability:  
     Operating Mode:Generate  
     Menu:AVIONICS  
 Typical Completion Time:500 ms

Name:150Hz  
 Tag:AVIONICS:ILS150Hz  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 160  
 Availability:  
     Operating Mode:Generate  
     Menu:AVIONICS:Subzone=Localizer, Glide Slope  
 Typical Completion Time:1000 ms

Name:90Hz  
 Tag:AVIONICS:ILS90Hz  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 110  
 Availability:  
     Operating Mode:Generate  
     Menu:AVIONICS:Subzone=Localizer, Glide Slope  
 Typical Completion Time:1000 ms

Name:SDM (%)  
 Tag:AVIONICS:SDM\_Localizer  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 30 to 50  
 Availability:  
     Operating Mode:Generate  
     Menu:AVIONICS:Subzone=Localizer  
 Typical Completion Time:1000 ms

Name:SDM (%)  
 Tag:AVIONICS:SDM\_Glider  
 Commands:GET, SET  
 Data Type:FLOAT

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Range: 70 to 90

Availability:

Operating Mode:Generate

Menu:AVIONICS:Subzone=Glide Slope

Typical Completion Time:1000 ms

Name:DDM (%)

Tag:AVIONICS:DDM\_Localizer

Commands:GET, SET

Data Type:FLOAT

Range: 0 to 40

Availability:

Operating Mode:Generate

Menu:AVIONICS:Subzone=Localizer

Typical Completion Time:1000 ms

Name:DDM (%)

Tag:AVIONICS:DDM\_Glider

Commands:GET, SET

Data Type:FLOAT

Range: 0 to 80

Availability:

Operating Mode:Generate

Menu:AVIONICS:Subzone=Glide Slope

Typical Completion Time:1000 ms

Name:DDM Presets

Tag:AVIONICS:DDMPresetsLocalizer

Commands:GET, SET

Data Type:LIST

List Values: -15.5, -9.3, -4.5, 0, 4.5, 9.3, 15.5

Availability:

Operating Mode:Generate

Menu:AVIONICS:Subzone=Localizer

Typical Completion Time:1000 ms

Name:DDM Presets

Tag:AVIONICS:DDMPresetsGlideSlope

Commands:GET, SET

Data Type:LIST

List Values: -17.5, -9.1, -4.5, 0, 4.5, 9.1, 17.5

Availability:

Operating Mode:Generate

Menu:AVIONICS:Subzone=Glide Slope

Typical Completion Time:1000 ms

Name:Flag Test

Tag:AVIONICS:FlagTest

Commands:DO


Data Type:FUNCTION

Availability:

Operating Mode:Generate

Menu:AVIONICS:Subzone=Localizer, Glide Slope

Typical Completion Time:0 ms

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Name:Ident On/Off  
 Tag:AVIONICS:IdentOnOff  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:Generate  
     Menu:AVIONICS:Subzone=Localizer, Glide Slope, VOR  
 Typical Completion Time:0 ms

Name:Localizer Channel  
 Tag:AVIONICS:LocalizerChannel  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 108.1 MHz, 108.15 MHz, 108.3 MHz, 108.35 MHz, 108.5 MHz, 108.55 MHz, 108.7 MHz, 108.75 MHz, 108.9 MHz, 108.95 MHz, 109.1 MHz, 109.15 MHz, 109.3 MHz, 109.35 MHz, 109.5 MHz, 109.55 MHz, 109.7 MHz, 109.75 MHz, 109.9 MHz, 109.95 MHz, 110.1 MHz, 110.15 MHz, 110.3 MHz, 110.35 MHz, 110.5 MHz, 110.55 MHz, 110.7 MHz, 110.75 MHz, 110.9 MHz, 110.95 MHz, 111.1 MHz, 111.15 MHz, 111.3 MHz, 111.35 MHz, 111.5 MHz, 111.55 MHz, 111.7 MHz, 111.75 MHz, 111.9 MHz, 111.95 MHz  
 Availability:  
     Operating Mode:Generate  
     Menu:AVIONICS:Subzone=Localizer  
 Typical Completion Time:0 ms

Name:Frequency  
 Tag:AVIONICS:Frequency  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 250000 Hz to 1000000000 Hz  
 Units: Hz, kHz, MHz, GHz  
 Availability:  
     Operating Mode:Generate  
     Menu:AVIONICS:Subzone=Markers, Selcal  
 Typical Completion Time:50000 ms

Name:AM Depth Set Adjust (%)  
 Tag:AVIONICS:NDB\_AMDepth  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 100  
 Availability:  
     Operating Mode:Generate  
     Menu:AVIONICS:Subzone=NDB/ADF  
 Typical Completion Time:50000 ms

Name:Frequency  
 Tag:AVIONICS:NDB\_Channel  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 20 Hz to 150000 Hz  
 Units: Hz, kHz, MHz, GHz  
 Availability:  
     Operating Mode:Generate  
     Menu:AVIONICS:Subzone=NDB/ADF

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Typical Completion Time:10000 ms

Name:Modulation Tone  
 Tag:AVIONICS:NDB\_ModTone  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 Hz to 2040 Hz  
 Units: Hz, kHz, MHz, GHz  
 Availability:  
     Operating Mode:Generate  
     Menu:AVIONICS:Subzone=NDB/ADF  
 Typical Completion Time:10000 ms


Name:Repeat Cycle  
 Tag:AVIONICS:NDB\_RepeatCycle  
 Commands:GET, SET  
 Data Type:BOOLEAN  
 List Values: Off, On  
 Availability:  
     Operating Mode:Generate  
     Menu:AVIONICS:Subzone=NDB/ADF  
 Typical Completion Time:1000 ms

Name:Outer Marker  
 Tag:AVIONICS:OuterMarker  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:Generate  
     Menu:AVIONICS:Subzone=Markers  
 Typical Completion Time:1000 ms

Name:Middle Marker  
 Tag:AVIONICS:MiddleMarker  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:Generate  
     Menu:AVIONICS:Subzone=Markers  
 Typical Completion Time:1000 ms

Name:Inner Marker  
 Tag:AVIONICS:InnerMarker  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:Generate  
     Menu:AVIONICS:Subzone=Markers  
 Typical Completion Time:1000 ms

Name:Active Beacon  
 Tag:AVIONICS:BeaconChannel  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 0 to 3

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Availability:

Operating Mode:Generate  
 Menu:AVIONICS:Subzone=Markers

Typical Completion Time:1000 ms

Name:AM Modulation Depth  
 Tag:AVIONICS:BeaconAmDepth  
 Commands:GET, SET

Data Type:FLOAT  
 Range: 0 to 100

Availability:

Operating Mode:Generate  
 Menu:AVIONICS:Subzone=Markers

Typical Completion Time:1000 ms

Name:VOR Channel  
 Tag:AVIONICS:VORChannel  
 Commands:GET, SET

Data Type:LIST


List Values: 108.00 MHz, 108.05 MHz, 108.20 MHz, 108.25 MHz, 108.40 MHz,  
 108.45 MHz, 108.60 MHz, 108.65 MHz, 108.80 MHz, 108.85 MHz, 109.00 MHz,  
 109.05 MHz, 109.20 MHz, 109.25 MHz, 109.40 MHz, 109.45 MHz, 109.60 MHz,  
 109.65 MHz, 109.80 MHz, 109.85 MHz, 110.00 MHz, 110.05 MHz, 110.20 MHz,  
 110.25 MHz, 110.40 MHz, 110.45 MHz, 110.60 MHz, 110.65 MHz, 110.80 MHz,  
 110.85 MHz, 111.00 MHz, 111.05 MHz, 111.20 MHz, 111.25 MHz, 111.40 MHz,  
 111.45 MHz, 111.60 MHz, 111.65 MHz, 111.80 MHz, 111.85 MHz, 112.00 MHz,  
 112.05 MHz, 112.10 MHz, 112.15 MHz, 112.20 MHz, 112.25 MHz, 112.30 MHz,  
 112.35 MHz, 112.40 MHz, 112.45 MHz, 112.50 MHz, 112.55 MHz, 112.60 MHz,  
 112.65 MHz, 112.70 MHz, 112.75 MHz, 112.80 MHz, 112.85 MHz, 112.90 MHz,  
 112.95 MHz, 113.00 MHz, 113.05 MHz, 113.10 MHz, 113.15 MHz, 113.20 MHz,  
 113.25 MHz, 113.30 MHz, 113.35 MHz, 113.40 MHz, 113.45 MHz, 113.50 MHz,  
 113.55 MHz, 113.60 MHz, 113.65 MHz, 113.70 MHz, 113.75 MHz, 113.80 MHz,  
 113.85 MHz, 113.90 MHz, 113.95 MHz, 114.00 MHz, 114.05 MHz, 114.05 MHz,  
 114.10 MHz, 114.15 MHz, 114.20 MHz, 114.25 MHz, 114.30 MHz, 114.35 MHz,  
 114.40 MHz, 114.45 MHz, 114.50 MHz, 114.55 MHz, 114.60 MHz, 114.65 MHz,  
 114.70 MHz, 114.75 MHz, 114.80 MHz, 114.85 MHz, 114.90 MHz, 114.95 MHz,  
 115.00 MHz, 115.05 MHz, 115.10 MHz, 115.15 MHz, 115.20 MHz, 115.25 MHz,  
 115.30 MHz, 115.35 MHz, 115.40 MHz, 115.45 MHz, 115.50 MHz, 115.55 MHz,  
 115.60 MHz, 115.65 MHz, 115.70 MHz, 115.75 MHz, 115.80 MHz, 115.85 MHz,  
 115.90 MHz, 115.95 MHz, 116.00 MHz, 116.05 MHz, 116.10 MHz, 116.15 MHz,  
 116.20 MHz, 116.25 MHz, 116.30 MHz, 116.35 MHz, 116.40 MHz, 116.45 MHz,  
 116.50 MHz, 116.55 MHz, 116.60 MHz, 116.65 MHz, 116.70 MHz, 116.75 MHz,  
 116.80 MHz, 116.85 MHz, 116.90 MHz, 116.95 MHz, 117.00 MHz, 117.10 MHz,  
 117.15 MHz, 117.20 MHz, 117.25 MHz, 117.30 MHz, 117.35 MHz, 117.40 MHz,  
 117.45 MHz, 117.50 MHz, 117.55 MHz, 117.60 MHz, 117.65 MHz, 117.70 MHz,  
 117.75 MHz, 117.80 MHz, 117.85 MHz, 117.90 MHz, 117.95 MHz,

Availability:

Operating Mode:Generate  
 Menu:AVIONICS:Subzone=VOR

Typical Completion Time:1000 ms

Name: Bearing  
 Tag:AVIONICS: Bearing  
 Commands:GET, SET  
 Data Type:FLOAT

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Range: 0 to 360

Availability:

Operating Mode:Generate

Menu:AVIONICS:Subzone=VOR

Typical Completion Time:1000 ms

Name:Bearing Slew Rate Off/On

Tag:AVIONICS:BearingSlew

Commands:DO

Data Type:FUNCTION

Availability:

Operating Mode:Generate

Menu:AVIONICS:Subzone=VOR

Typical Completion Time:0 ms

Name:Slow/Fast

Tag:AVIONICS:BearingSlewRate

Commands:DO

Data Type:FUNCTION

Availability:

Operating Mode:Generate

Menu:AVIONICS:Subzone=VOR

Typical Completion Time:0 ms

Name:To/From

Tag:AVIONICS:ToFromFlag

Commands:DO

Data Type:FUNCTION

Availability:

Operating Mode:Generate

Menu:AVIONICS:Subzone=VOR

Typical Completion Time:1000 ms

Name:VAR On/Off

Tag:AVIONICS:30HzVariableOnOff

Commands:DO

Data Type:FUNCTION

Availability:

Operating Mode:Generate

Menu:AVIONICS:Subzone=VOR

Typical Completion Time:1000 ms

Name:REF On/Off

Tag:AVIONICS:30HzReferenceOnOff

Commands:DO

Data Type:FUNCTION

Availability:

Operating Mode:Generate

Menu:AVIONICS:Subzone=VOR

Typical Completion Time:1000 ms

Name:sub-carrier On/Off

Tag:AVIONICS:SubCarrierOnOff

Commands:DO

Data Type:FUNCTION

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Availability:

Operating Mode:Generate  
 Menu:AVIONICS:Subzone=VOR

Typical Completion Time:1000 ms

Name:Ref AM Depth

Tag:AVIONICS:SubCarrierDepth

Commands:GET, SET

Data Type:FLOAT

Range: 20 to 40

Availability:

Operating Mode:Generate  
 Menu:AVIONICS:Subzone=VOR

Typical Completion Time:1000 ms

Name:Sub Carrier Frequency

Tag:AVIONICS:SubCarrierFreq

Commands:GET, SET

Data Type:FLOAT

Range: 8964 to 10956

Availability:

Operating Mode:Generate  
 Menu:AVIONICS:Subzone=VOR

Typical Completion Time:1000 ms

Name:Reference Frequency

Tag:AVIONICS:30HzRefFreq

Commands:GET, SET

Data Type:FLOAT

Range: 0 to 40

Availability:

Operating Mode:Generate  
 Menu:AVIONICS:Subzone=VOR

Typical Completion Time:1000 ms

Name:Ref Deviation

Tag:AVIONICS:30HzRefDeviation

Commands:GET, SET

Data Type:FLOAT

Range: 0 to 500

Availability:

Operating Mode:Generate  
 Menu:AVIONICS:Subzone=VOR

Typical Completion Time:1000 ms

Name:VAR Frequency(Hz)

Tag:AVIONICS:30HzVariableFreq

Commands:GET, SET

Data Type:FLOAT


Range: 0 to 40

Availability:

Operating Mode:Generate  
 Menu:AVIONICS:Subzone=VOR

Typical Completion Time:0 ms



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Name:VAR AM Depth  
 Tag:AVIONICS:30HzVariableDepth  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 40  
 Availability:  
     Operating Mode:Generate  
     Menu:AVIONICS:Subzone=VOR  
 Typical Completion Time:0 ms


Name:Gen Port  
 Tag:AVIONICS:Generate Port  
 Commands:GET, SET  
 Data Type:BOOLEAN  
 List Values: RF In/Out, Gen Out  
 Availability:  
     Operating Mode:Generate  
     Menu:AVIONICS  
 Typical Completion Time:500 ms

Name:AM Depth (%)  
 Tag:AVIONICS:Selcal\_AMDepth  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 100  
 Availability:  
     Operating Mode:Generate  
     Menu:AVIONICS:Subzone=Selcal  
 Typical Completion Time:50000 ms

Name:AVIONICS Library Version  
 Tag:AVIONICS:Version  
 Commands:GET  
 Data Type:STRING  
 Availability:  
     Menu:AVIONICS  
 Typical Completion Time:0 ms

Name:  
 Tag:CABLE\_SWEEP:Subzone  
 Commands:GET  
 Data Type:LIST  
 List Values: Table, Two Points, Multiple Points  
 Availability:  
     Menu:CABLE\_SWEEP  
 Typical Completion Time:100 ms

Name:  
 Tag:CABLE\_SWEEP:Cable Sweep Files  
 Commands:GET, SET  
 Data Type:LIST  
 List Values:  
 Availability:  
     Menu:CABLE\_SWEEP:Subzone=Table  
 Typical Completion Time:0 ms

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Name:Enable  
 Tag:CABLE\_SWEEP:Cable Sweep State  
 Commands:GET, SET  
 Data Type:BOOLEAN  
 List Values: Off, On  
 Availability:  
     Menu:CABLE\_SWEEP:Subzone=Table  
 Typical Completion Time:100 ms

Name:  
 Tag:CABLE\_SWEEP:Data  
 Commands:GET  
 Data Type:ARRAY  
 Availability:  
     Menu:CABLE\_SWEEP  
 Typical Completion Time:0 ms


Name:  
 Tag:CABLE\_SWEEP:Timestamp  
 Commands:GET  
 Data Type:STRING  
 Availability:  
     Menu:CABLE\_SWEEP  
 Typical Completion Time:0 ms

Name:100MHz Loss (dB)  
 Tag:CABLE\_SWEEP:100MHz Point  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 0  
 Availability:  
     Menu:CABLE\_SWEEP:Subzone=Two Points  
 Typical Completion Time:0 ms

Name:1GHz Loss (dB)  
 Tag:CABLE\_SWEEP:1GHz Point  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 0  
 Availability:  
     Menu:CABLE\_SWEEP:Subzone=Two Points  
 Typical Completion Time:0 ms

Name:Save File As  
 Tag:CABLE\_SWEEP:Save  
 Commands:GET, SET  
 Data Type:STRING  
 char set:0, 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, E, F, G, H, I, J, K, L, M,  
 N, O, P, Q, R, S, T, U, V, W, X, Y, Z, , ., \_, (, )  
 Availability:  
     Menu:CABLE\_SWEEP:Subzone=Two Points, Multiple Points  
 Typical Completion Time:100 ms

Name>Select Display

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Tag:VNA:Subzone  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Return Loss/VSWR, Distance To Fault, Calibration, Smith Chart  
 Availability:  
     Operating Mode:VNA  
     Menu:VNA:Subzone=Return Loss/VSWR, Distance To Fault, Smith Chart  
 Typical Completion Time:100 ms


Name:  
 Tag:VNA:Temperature  
 Commands:GET  
 Data Type:FLOAT  
 Availability:  
     Menu:VNA  
 Typical Completion Time:100 ms

Name:Response Type  
 Tag:VNA:DTF Response  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Bandpass, Lowpass Impulse, Lowpass Step  
 Availability:  
     Operating Mode:VNA  
     Menu:VNA:Subzone=Distance To Fault  
 Typical Completion Time:100 ms

Name:Maximum Length  
 Tag:VNA:Maximum Length  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 m to 1000 m  
 Units: m, ft  
 Availability:  
     Operating Mode:VNA  
     Menu:VNA:Subzone=Distance To Fault  
 Typical Completion Time:100 ms

Name:Start Distance  
 Tag:VNA:Start Distance  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 m to 100 m  
 Units: m, ft  
 Availability:  
     Operating Mode:VNA  
     Menu:VNA:Subzone=Distance To Fault  
 Typical Completion Time:100 ms

Name:Stop Distance  
 Tag:VNA:Stop Distance  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 1 m to 100 m  
 Units: m, ft

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Availability:

Operating Mode:VNA  
 Menu:VNA:Subzone=Distance To Fault

Typical Completion Time:100 ms

Name:Start Frequency

Tag:VNA:Start Frequency

Commands:GET, SET

Data Type:FLOAT

Range: 1000000 Hz to 6000000000 Hz

Units: Hz, kHz, MHz, GHz

Availability:

Operating Mode:VNA  
 Menu:VNA:Subzone=Return Loss/VSWR, Smith Chart

Typical Completion Time:100 ms

Name:Stop Frequency

Tag:VNA:Stop Frequency

Commands:GET, SET

Data Type:FLOAT

Range: 1000000 Hz to 6000000000 Hz

Units: Hz, kHz, MHz, GHz

Availability:

Operating Mode:VNA  
 Menu:VNA:Subzone=Return Loss/VSWR, Smith Chart

Typical Completion Time:100 ms

Name:Center Frequency

Tag:VNA:Center Frequency

Commands:GET, SET

Data Type:FLOAT

Range: 1000000 Hz to 6000000000 Hz

Units: Hz, kHz, MHz, GHz

Availability:

Operating Mode:VNA  
 Menu:VNA:Subzone=Return Loss/VSWR, Distance To Fault, Smith Chart

Typical Completion Time:100 ms

Name:Span

Tag:VNA:Span

Commands:GET, SET

Data Type:FLOAT

Range: 4000 Hz to 5999000000 Hz

Units: Hz, kHz, MHz, GHz

Availability:

Operating Mode:VNA  
 Menu:VNA:Subzone=Return Loss/VSWR, Smith Chart

Typical Completion Time:100 ms

Name:# of Points


Tag:VNA:Points

Commands:GET, SET

Data Type:INTEGER

Range: 101 to 10001

Availability:

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Operating Mode:VNA  
 Menu:VNA:Subzone=Return Loss/VSWR, Distance To Fault, Smith Chart  
 Typical Completion Time:100 ms


Name:IFBW  
 Tag:VNA:IFBW  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 10 Hz, 30 Hz, 100 Hz, 300 Hz, 1 kHz, 3 kHz, 10 kHz, 30 kHz, 100 kHz  
 Availability:  
 Operating Mode:VNA  
 Menu:VNA:Subzone=Return Loss/VSWR, Distance To Fault, Smith Chart  
 Typical Completion Time:100 ms

Name:Trigger Mode  
 Tag:VNA:Trigger Mode  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Freeze, Single, Auto  
 Availability:  
 Operating Mode:VNA  
 Menu:VNA:Subzone=Return Loss/VSWR, Distance To Fault, Smith Chart  
 Typical Completion Time:100 ms

Name:Toggle with DO RF:RF Power  
 Tag:VNA:RF Power  
 Commands:GET, SET  
 Data Type:BOOLEAN  
 List Values: Off, On  
 Availability:  
 Operating Mode:VNA  
 Menu:VNA:Subzone=Return Loss/VSWR, Distance To Fault, Smith Chart  
 Typical Completion Time:100 ms

Name:Output Level  
 Tag:VNA:Output Level  
 Commands:GET, SET  
 Data Type:BOOLEAN  
 List Values: High, Low  
 Availability:  
 Operating Mode:VNA  
 Menu:VNA:Subzone=Return Loss/VSWR, Distance To Fault, Smith Chart  
 Typical Completion Time:100 ms

Name:Averaging  
 Tag:VNA:Averaging  
 Commands:GET, SET  
 Data Type:BOOLEAN  
 List Values: Off, On  
 Availability:  
 Operating Mode:VNA  
 Menu:VNA:Subzone=Return Loss/VSWR, Distance To Fault, Smith Chart  
 Typical Completion Time:100 ms

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Name:Averaging Factor  
 Tag:VNA:Average Factor  
 Commands:GET, SET  
 Data Type:INTEGER  
 Range: 1 to 999  
 Availability:  
     Operating Mode:VNA  
     Menu:VNA:Subzone=Return Loss/VSWR, Distance To Fault, Smith Chart  
 Typical Completion Time:100 ms


Name:Smoothing  
 Tag:VNA:Smoothing  
 Commands:GET, SET  
 Data Type:BOOLEAN  
 List Values: Off, On  
 Availability:  
     Operating Mode:VNA  
     Menu:VNA:Subzone=Return Loss/VSWR, Distance To Fault, Smith Chart  
 Typical Completion Time:100 ms

Name:Smoothing Aperture  
 Tag:VNA:Aperture  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 20  
 Availability:  
     Operating Mode:VNA  
     Menu:VNA:Subzone=Return Loss/VSWR, Distance To Fault, Smith Chart  
 Typical Completion Time:100 ms

Name:Samples  
 Tag:VNA:Frequency Data  
 Commands:GET  
 Data Type:ARRAY  
 Availability:  
     Operating Mode:VNA  
     Menu:VNA:Subzone=Return Loss/VSWR  
 Typical Completion Time:100 ms

Name:Return Loss Samples  
 Tag:VNA:Return Loss Data  
 Commands:GET  
 Data Type:ARRAY  
 Availability:  
     Operating Mode:VNA  
     Menu:VNA:Subzone=Return Loss/VSWR  
 Typical Completion Time:100 ms

Name:VSWR Samples  
 Tag:VNA:VSWR Data  
 Commands:GET  
 Data Type:ARRAY  
 Availability:  
     Operating Mode:VNA  
     Menu:VNA:Subzone=Return Loss/VSWR

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Typical Completion Time:100 ms

Name:Return Loss Ref Value (dB)  
 Tag:VNA:Return Loss Ref Value  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 1000  
 Availability:  
     Operating Mode:VNA  
     Menu:VNA:Subzone=Return Loss/VSWR  
 Typical Completion Time:100 ms


Name:Return Loss Scale (dB/div)  
 Tag:VNA:Return Loss Scale  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 200  
 Availability:  
     Operating Mode:VNA  
     Menu:VNA:Subzone=Return Loss/VSWR  
 Typical Completion Time:100 ms

Name:Return Loss Auto Scale  
 Tag:VNA:Return Loss Auto Scale  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:VNA  
     Menu:VNA:Subzone=Return Loss/VSWR  
 Typical Completion Time:100 ms

Name:VSWR Ref Value  
 Tag:VNA:VSWR Ref Value  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 10001  
 Availability:  
     Operating Mode:VNA  
     Menu:VNA:Subzone=Return Loss/VSWR  
 Typical Completion Time:100 ms

Name:VSWR Scale  
 Tag:VNA:VSWR Scale  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 1000  
 Availability:  
     Operating Mode:VNA  
     Menu:VNA:Subzone=Return Loss/VSWR  
 Typical Completion Time:100 ms

Name:VSWR Auto Scale  
 Tag:VNA:VSWR Auto Scale  
 Commands:DO  
 Data Type:FUNCTION

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Availability:

Operating Mode:VNA  
 Menu:VNA:Subzone=Return Loss/VSWR

Typical Completion Time:100 ms

Name:Distance Points  
 Tag:VNA:Distance Points

Commands:GET  
 Data Type:ARRAY

Availability:

Operating Mode:VNA  
 Menu:VNA:Subzone=Distance To Fault

Typical Completion Time:100 ms

Name:DTF Samples  
 Tag:VNA:DTF Data

Commands:GET  
 Data Type:ARRAY

Availability:

Operating Mode:VNA  
 Menu:VNA:Subzone=Distance To Fault

Typical Completion Time:100 ms

Name:Distance Units  
 Tag:VNA:DTF X-Axis

Commands:GET, SET  
 Data Type:BOOLEAN

List Values: m, ft

Availability:

Operating Mode:VNA  
 Menu:VNA:Subzone=Distance To Fault

Typical Completion Time:100 ms

Name:Ref Value (dB)  
 Tag:VNA:DTF Ref Value

Commands:GET, SET  
 Data Type:FLOAT

Range: 0 to 1000

Availability:

Operating Mode:VNA  
 Menu:VNA:Subzone=Distance To Fault

Typical Completion Time:100 ms

Name:Scale (dB/div)  
 Tag:VNA:DTF Scale

Commands:GET, SET  
 Data Type:FLOAT

Range: 0 to 200

Availability:


Operating Mode:VNA  
 Menu:VNA:Subzone=Distance To Fault

Typical Completion Time:100 ms

Name:Auto Scale

Tag:VNA:DTF Auto Scale



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Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:VNA  
     Menu:VNA:Subzone=Distance To Fault  
 Typical Completion Time:100 ms


Name:  
 Tag:VNA:Cable Name  
 Commands:GET  
 Data Type:LIST  
 List Values: None  
 Availability:  
     Operating Mode:VNA  
     Menu:VNA:Subzone=Distance To Fault  
 Typical Completion Time:100 ms

Name:Velocity Factor  
 Tag:VNA:Velocity Factor  
 Commands:GET  
 Data Type:FLOAT  
 Range: 0 to 1  
 Availability:  
     Operating Mode:VNA  
     Menu:VNA:Subzone=Distance To Fault  
 Typical Completion Time:100 ms

Name:Cable Loss  
 Tag:VNA:Cable Loss  
 Commands:GET  
 Data Type:FLOAT  
 Range: 0 dB/m to 10 dB/m  
 Units: dB/m, dB/ft  
 Availability:  
     Operating Mode:VNA  
     Menu:VNA:Subzone=Distance To Fault  
 Typical Completion Time:100 ms

Name:Cable Loss Frequency  
 Tag:VNA:Cable Loss Frequency  
 Commands:GET  
 Data Type:FLOAT  
 Range: 1000000 Hz to 100000000000 Hz  
 Units: Hz, kHz, MHz, GHz  
 Availability:  
     Operating Mode:VNA  
     Menu:VNA:Subzone=Distance To Fault  
 Typical Completion Time:100 ms

Name:Active Trace  
 Tag:VNA:Active Trace  
 Commands:GET, SET  
 Data Type:BOOLEAN  
 List Values: Return Loss, VSWR  
 Availability:

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Operating Mode:VNA  
 Menu:VNA:Subzone=Return Loss/VSWR  
 Typical Completion Time:100 ms


Name:Marker Mode  
 Tag:VNA:Markers  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: Off, Absolute, Delta  
 Availability:  
     Operating Mode:VNA  
     Menu:VNA:Subzone=Return Loss/VSWR, Distance To Fault  
 Typical Completion Time:100 ms

Name>Select Marker  
 Tag:VNA>Select Marker  
 Commands:GET, SET  
 Data Type:LIST  
 List Values: 1, 2, 3, 4, 5, 6, Ref [VNA:Markers=Delta]  
 Availability:  
     Operating Mode:VNA  
     Menu:VNA:Subzone=Return Loss/VSWR, Distance To Fault  
 Typical Completion Time:100 ms

Name:Marker Frequency  
 Tag:VNA:Marker Frequency  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 1000000 Hz to 6000000000 Hz  
 Units: Hz, kHz, MHz, GHz  
 Availability:  
     Operating Mode:VNA  
     Menu:VNA:Subzone=Return Loss/VSWR  
 Typical Completion Time:100 ms

Name:Marker Distance  
 Tag:VNA:Marker Distance  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 m to 1000 m  
 Units: m, ft  
 Availability:  
     Operating Mode:VNA  
     Menu:VNA:Subzone=Distance To Fault  
 Typical Completion Time:100 ms

Name:Marker On/Off  
 Tag:VNA:Marker On/Off  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:VNA  
     Menu:VNA:Subzone=Return Loss/VSWR, Distance To Fault  
 Typical Completion Time:100 ms

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Name:Max Peak  
 Tag:VNA:Max Peak  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:VNA  
     Menu:VNA:Subzone=Return Loss/VSWR, Distance To Fault  
 Typical Completion Time:100 ms


Name:Peak Excursion  
 Tag:VNA:Peak Excursion  
 Commands:GET, SET  
 Data Type:FLOAT  
 Range: 0 to 1000  
 Availability:  
     Operating Mode:VNA  
     Menu:VNA:Subzone=Return Loss/VSWR, Distance To Fault  
 Typical Completion Time:100 ms

Name:Peak Left  
 Tag:VNA:Peak Left  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:VNA  
     Menu:VNA:Subzone=Return Loss/VSWR, Distance To Fault  
 Typical Completion Time:100 ms

Name:Peak Right  
 Tag:VNA:Peak Right  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:VNA  
     Menu:VNA:Subzone=Return Loss/VSWR, Distance To Fault  
 Typical Completion Time:100 ms

Name:Min Valley  
 Tag:VNA:Min Valley  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:VNA  
     Menu:VNA:Subzone=Return Loss/VSWR, Distance To Fault  
 Typical Completion Time:100 ms

Name:Valley Left  
 Tag:VNA:Valley Left  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:VNA  
     Menu:VNA:Subzone=Return Loss/VSWR, Distance To Fault  
 Typical Completion Time:100 ms

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Name:Valley Right  
 Tag:VNA:Valley Right  
 Commands:DO  
 Data Type:FUNCTION  
 Availability:  
     Operating Mode:VNA  
     Menu:VNA:Subzone=Return Loss/VSWR, Distance To Fault  
 Typical Completion Time:100 ms

Name:Return Loss Markers X  
 Tag:VNA:RL Markers X  
 Commands:GET  
 Data Type:ARRAY  
 Availability:  
     Operating Mode:VNA  
     Menu:VNA:Subzone=Return Loss/VSWR  
 Typical Completion Time:100 ms


Name:Return Loss Markers Y  
 Tag:VNA:RL Markers Y  
 Commands:GET  
 Data Type:ARRAY  
 Availability:  
     Operating Mode:VNA  
     Menu:VNA:Subzone=Return Loss/VSWR  
 Typical Completion Time:100 ms

Name:VSWR Markers X  
 Tag:VNA:VSWR Markers X  
 Commands:GET  
 Data Type:ARRAY  
 Availability:  
     Operating Mode:VNA  
     Menu:VNA:Subzone=Return Loss/VSWR  
 Typical Completion Time:100 ms

Name:VSWR Y  
 Tag:VNA:VSWR Markers Y  
 Commands:GET  
 Data Type:ARRAY  
 Availability:  
     Operating Mode:VNA  
     Menu:VNA:Subzone=Return Loss/VSWR  
 Typical Completion Time:100 ms

Name:DTF Markers X  
 Tag:VNA:DTF Markers X  
 Commands:GET  
 Data Type:ARRAY  
 Availability:  
     Operating Mode:VNA  
     Menu:VNA:Subzone=Distance To Fault  
 Typical Completion Time:100 ms

Name:DTF Markers Y

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Tag:VNA:DTF Markers Y  
 Commands:GET  
 Data Type:ARRAY  
 Availability:  
     Operating Mode:VNA  
     Menu:VNA:Subzone=Distance To Fault  
 Typical Completion Time:100 ms

Name:Smith Chart Samples  
 Tag:VNA:Smith Data  
 Commands:GET  
 Data Type:ARRAY  
 Availability:  
     Operating Mode:VNA  
     Menu:VNA:Subzone=Smith Chart  
 Typical Completion Time:100 ms

Name:VNA Firmware Version  
 Tag:VNA:Version  
 Commands:GET  
 Data Type:STRING  
 Availability:  
     Menu:VNA  
 Typical Completion Time:100 ms

Name:  
 Tag:UTILITY>LastParameter  
 Commands:GET  
 Data Type:INTEGER  
 Availability:  
     Option:R8-OEM  
     Menu:UTILITY  
 Typical Completion Time:0 ms

Q – Updates for 4.2	M. Mullins	DC	5/14/21	0366
P – Updates for 4.1	M.Mullins	DC	12/7/20	0324
N – Updates for 4.0	M.Mullins	DC	09/21/20	0318
M – Updates for 3.8	M. Mullins	DC	06/02/20	0308
L – Updates for 3.7	C. Mboula	DC	09/18/19	<a href="#">0224</a>
K – Updates for 3.5	D. Bulgrien	DC	12/5/18	<a href="#">0215</a>
J – Updates for 3.4.2	D. Bulgrien	DC	10/30/18	<a href="#">0211</a>
H – Updates for 3.3	D. Bulgrien	DC	6/27/18	<a href="#">0198</a>
G – Updates for 3.1	D. Bulgrien	DC	3/7/18	<a href="#">0167</a>
F – Updates for 3.0.0.0	M.Mullins	DC	11/10/17	<a href="#">0156</a>
E – Updates for 2.3.4.0	D. Bulgrien	DC	5/18/17	<a href="#">0118</a>
D – Updates for 2.2.0.0	D. Bulgrien	DC	1/15/17	<a href="#">0098</a>
C – Updates for 2.1.0.0	M. Mullins	F.Fu	8/18/16	<a href="#">0063</a>
B – Updates for 2.0.0.0	D. Bulgrien	F. Fu	8/17/16	<a href="#">0052</a>
A – Was CG1110; 1.19 updates	M. Mullins	F.Fu	11/5/15	<a href="#">0007</a>
Revision – Change	Requested By	Released By	Date	ECO#

<b>FREEDOM</b> Communication Technologies  Kilgore, TX	TYPE:	Programmer's Guide	NO:	<b>FCT-1110</b>	REV:	<b>Q</b>
	TITLE:	<b>R8000 Monitor &amp; Control</b>	PAGE:	158 OF 158		