



CX300 ComXpert Quick Start Guide

This guide contains basic operating and safety information for the CX300 ComXpert Communications Service Monitor. Refer to the *CX300 ComXpert Operation Manual* on the test set for detailed information about the device's functions and capabilities and for complete product safety information.

DECLARATION OF CONFORMITY

VIAVI recommends keeping a copy of the Declaration of Conformity that shipped with the unit with the device at all times.

WARRANTY INFORMATION

Warranty information for this product is available on the VIAVI website at <https://www.viavisolutions.com/en-us/warranty-information>.

SAFETY INFORMATION

Refer to the *CX300 ComXpert Operation Manual* for complete product safety information.



CAUTION

- Only use the AC Adapter/Charger provided with the product to charge the battery.
- Do not use the AC Adapter/Charger outdoors or in a wet or damp location.
- Only connect the AC Adapter/Charger to the correct mains voltage indicated on the ratings label.
- Do not overload input connectors. Refer to product specifications, or product labeling for maximum input ratings.

SAFETY SPECIFICATIONS

Refer to the *CX300 ComXpert Operation Manual* for complete product specifications.

Table 1 Power Ratings

Parameter	Specification
Power Input	VAC, 50/60 Hz, Switch Selectable
Input Current	5 A @ 115 VAC, 3 A @ 230 VAC
AC/DC Power Adapter	
Input	100-240V, ~50-60 Hz, 2.2A max
Output	19-27 V, 15A Max
Battery	14.4 V, 6.7 A-h, 96 Wh, Lithium Ion

Table 2 Maximum Input Ratings

Connector	Specification
RF Duplex	+45 dBm (50 W continuous, < 35°C ambient) +51 dBm (125 W, 30 seconds on, 90 seconds off or until temperature alarm)
RF Input	+27 dBm (preamp off, > 1 MHz) +13 dBm (preamp on or < 1 MHz), ±50 Vdc
Audio Input 1	200 Vpk max, CAT 1
Audio Input 2	200 Vpk max, CAT 1
Trigger Input	Minimum logic high ≥ 2.4 maximum logic high ≤ 3.3 V
REF Input	-10 dBm to +10 dBm

CONTROL AND OPERATION

The CX300 User Interface (UI) can be operated locally using the touch-based display or a USB mouse and keyboard. The CX300 can also be controlled remotely using a VNC viewing application.

TECHNICAL ASSISTANCE

Contact the Technical Assistance Center (TAC) for technical support or with any questions regarding this or other VIAVI products.

– Phone: 1-844-GO-VIAVI

For the latest TAC information, go to:

<http://www.viavisolutions.com/en/services-and-support/support/technical-assistance>

CX300 CONTROLS AND CONNECTORS

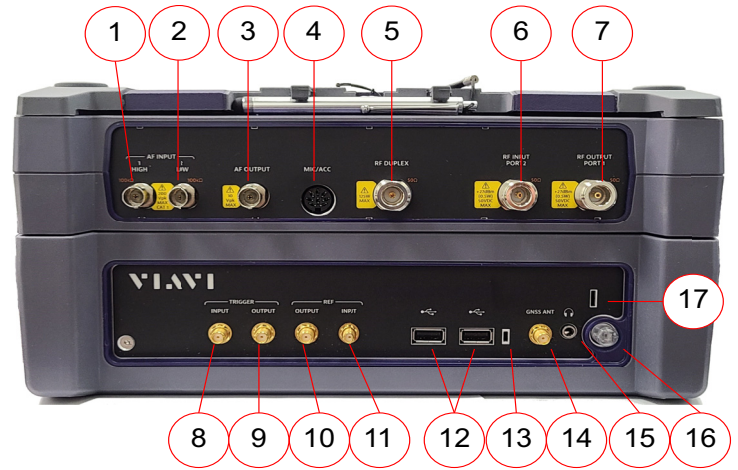


Figure 1 CX300 I/O Connectors

#	Connector	Description
1	AF INPUT 1 HIGH	High power audio input connector.
2	AF INPUT 2 LOW	Low power audio input connector.
3	AF OUTPUT	Audio output for the AF Generators.
4	MIC/ACC	Microphone and accessory connector.
5	RF DUPLEX	Provides low level output and high level input detection.
6	RF INPUT / PORT 2	RF Input connector.
7	RF OUTPUT / PORT 1	RF Output connector.
8	Trigger INPUT	Connector for synchronizing signals from an external timing reference.
9	Trigger OUTPUT	Connector allows the CX300 internal timing reference to be used as trigger source.
10	REF OUTPUT	Output port for 10 MHz reference signal.
11	REF INPUT	External frequency reference input connector.
12	USB	USB connectors allow for the use of an external USB memory to extend storage capacity or to upgrade software.
13	Reserved	Reserved for future development.
14	GNSS ANT	The Global Navigation Satellite System (GNSS) Antenna is used to connect a GNSS antenna for acquisition of location and timing data.
15	Audio Connector	Input jack for the use of headphones.
16	Power Button/LED	Turns the test set on and off.
17	Reserved	Reserved for future development.

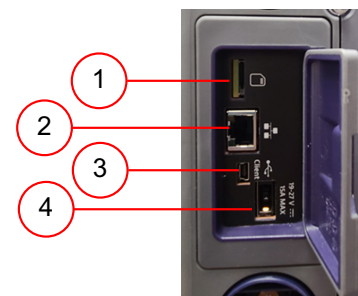


Figure 2 Side Panel Connectors

#	Connector	Description
1	Micro SD Port	Allows a Micro SD card to be used as storage location for instrument data.
2	LAN Connector	Used to connect the CX300 to a network.



#	Connector	Description
3	Mini USB Connector	Supports USB Test and Measurement Class (TMC) and controls via SCPI communication.
4	AC/DC Power Adapter Connector	Connects the CX300 to AC Power Supply.

UNPACKING THE DEVICE

- 1 Cut and remove sealing tape on top of shipping container.
- 2 Open shipping container. Remove the top foam insert.
- 3 Remove the test set and accessories from the shipping container.
- 4 Remove anti-static packaging material from test set.
- 5 Unpack the battery.
- 6 Remove packaging material from the battery.
- 7 Store packing material and shipping container for possible future use

PREPARATION FOR USE

Perform the following when the device is received from the factory:

- Verify shipment is complete in accordance with packing list. Report any discrepancies to VIAVI Customer Service.
- Remove the protective film from the LCD before use.
- Install the battery (see procedure below).

INSTALLING THE BATTERY

Refer to the *CX300 ComXpert Operation Manual* if needed for additional information.

- 1 Lay the unit on the back side with the LCD facing up.
- 2 Unscrew the battery door thumb screw and slide the battery door off.

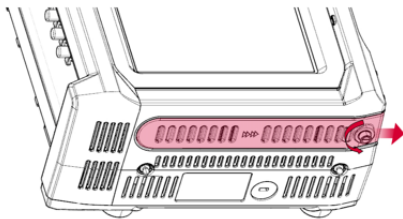


Figure 3 Battery Door Cover Thumbs Screw

- 3 Slide the battery into the battery slot. The key feature should be on the back side of the battery. Keep the battery straight and level with the case opening.

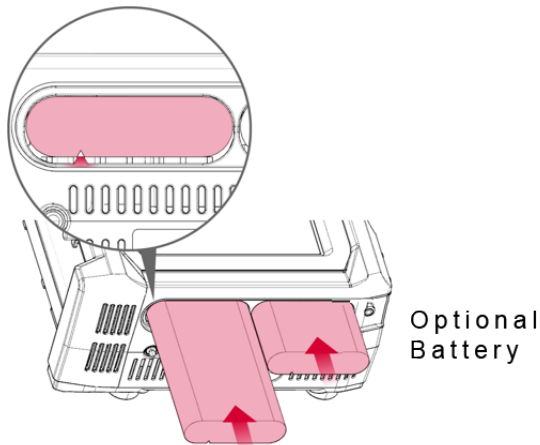


Figure 4 Battery Door Installation Diagram

- 4 After the battery engages the battery contacts, push the battery an additional 1/8" to 1/4" to fully seat the battery. The battery "snaps" into position when the connector is fully seated.
- 5 Slide battery door cover into place.
- 6 Tighten the thumb screw.

POWERING THE DEVICE

The CX300 is powered by an internal battery or an AC power supply.

To Connect the Device to an AC Power Supply

- 1 Connect the AC/DC Power Adapter/Charger to the test set's AC/DC Power Adapter Connector.
- 2 Connect the power cord connector to a grounded AC power supply.

To Charge the Battery

- 1 Connect the test set to an AC power supply.
- 2 Verify the test set's flashes green to indicate the battery is charging.
- 3 The **Power Button/LED** turns and stays green when the battery is fully charged.

POWER ON/OFF PROCEDURES

To Turn the Device ON

- 1 Press and hold the **Power Button/LED** for approximately 1 second, then release.
- 2 Verify the **Power Button/LED** illuminates.
- 3 An initializing indicator screen is displayed during the boot-up process. Wait while the test set completes the boot-up process; this could take less than 2 minutes with a goal of one minute.
- 4 The last viewed screen is displayed when the test set is ready for use.

To Turn the Device OFF

- 1 Press and hold the **Power Button/LED** for approximately 1 second, then release.
- 2 When prompted, select **Power off** to power down the test set.
- 3 Wait while the test set performs a series of power-down processes. Do not interrupt the power-down process or unsaved information may be lost.

VERIFY OPERATION - DEVICE SELF TEST

The following procedure verifies the CX300 is operating properly; the procedure does not verify the CX300 is operating to specified performance parameters.

- 1 Power on the device.
- 2 Verify the **Power Button/LED** is illuminated during the boot-up process.
- 3 When the display loads, select CX300 ComXpert button to display the Test Home Screen.
- 4 Select the AutoTest function.
- 5 Select the Manufacturer button. Select Self Test from the test list.
- 6 Verify CX300 is selected for the Model.
- 7 Verify Loop-back is selected for the Test Type.
- 8 Press the Default button.
- 9 Press the Run Tests button to start the self test.
- 10 Wait while the device performs a series of automated test processes. Do not interrupt these processes or the self test will fail.
- 11 When the self test is finished, verify all portions of the test have passed. Contact VIAVI if any portion of the self test procedure fails.

CONTROL AND OPERATION

The Liquid Crystal Display (LCD) is a touch screen that supports gestures such as press to open/select/activate, press and hold, and drag and drop.

UI LAYOUT

The CX300's screen layout and screen content changes based on factors such as the selected test mode and user selections and settings. Most screens consist of a header bar, a main display area, and a footer area.

DEVICE TOOLBAR

The Device Toolbar is located at the top of the UI; this toolbar is visible on all screens. The Device Toolbar contains controls that are used to access CX300 system and test and measurement screens. Some of the controls are also used to indicate test set status and active functions.


MAIN DISPLAY AREA

The Main Display Area can be configured to display a combination of meter, measurement panes and plot fields. The contents of the Main Display Area updates according to the selected test function as well as user settings.

STATUS BAR

The Status Bar contains indicators that provide visual status of test set functions.

ACCESSING OPERATION MANUAL

 The *CX300 ComXpert Operation Manual* can be viewed on the test set by pressing the Help Button.

Refer to the CX300 ComXpert Web page for product publications

<https://www.viavisolutions.com/en-us/product-category/radio-test/communications-service-monitors>.