CX100 ComXpert Quick Start Guide

GENERAL INFORMATION

This guide contains basic operating and safety information for the CX100 ComXpert Handheld Radio Test Set. Refer to the *CX100 ComXpert Operation Manual* for complete safety information, product specifications, and detailed information about the device's functions and capabilities.

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 *CX100 ComXpert Operation Manual* for complete product safety information.

CAUTION

- Only use the AC Adapter/Charger provided with the product to charge the battery.
- Only connect the AC Adapter/Charger to the correct mains voltage indicated on the ratings label.
- Do not use or store the battery in temperatures that exceed the manufacturer's specifications. Follow manufacturer's instructions for battery storage and use.
- The battery included with the product is only to be used with the CX100.
- The device casing may become hot to the touch during extended periods of continuous battery usage.
- Do not overload input connectors. Refer to product specifications or product labeling for maximum input ratings.

SAFETY SPECIFICATIONS

Refer to the *CX100 ComXpert Operation Manual* for complete specifications.

Table 1 Temperature Specifications

Parameter	Specification
Storage Temperature	-40 to +71 °C without battery -20 to +60 °C with battery
Operating Temperature	-10 to 40 °C (+14 to 104 °F)
Charging Temperature	0 to 45 °C (32 to 113 °F) ≤ 85% RH

Table 2 Power Specifications

Parameter	Specification
Battery Operation	~3 hours continuous
Charging Time	5 hours
Power Supply Input	100-240 VAC, 1.5 A, 50-60 Hz
Power Supply Output	12 VDC, 5.0A max, DC Input Connector

Table 3 Maximum Input Ratings

Input Connector	Specification
DUPLEX Connector	20 W (+43 dBm) (duty-cycled)
ANT/SWR Connector	50 VDC, +27dBm (de-rated below 50 MHz)
Audio Input Connector	22.6 Vpk
10 MHz I/O Connector (External Frequency Input)	1 to 5 Vpp for Sine waves 3.3/5 V TTL for Square waves

DEVICE CONNECTORS

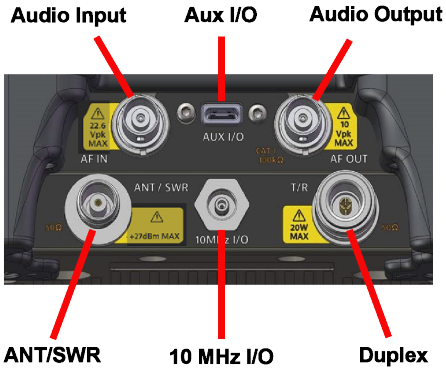

Fig. 1 CX100 Signal I/O Connectors

AUDIO IN CONNECTOR

The Audio In Connector serves as the RF Instrument's primary AF, Digital and external modulation input connector.

AUDIO OUT CONNECTOR

The Audio Out Connector serves as the RF Instrument's primary AF generator and digital output connector.

ANT/SWR CONNECTOR

The ANT/SWR connector is selectable as either an RF Input or RF Output connector.

DUPLEX CONNECTOR

The DUPLEX Connector is selectable as the RF Generator output and/or the RF Receiver input connector.

10 MHZ FREQUENCY REFERENCE I/O CONNECTOR

The 10 MHz Frequency Reference I/O Connector is used to connect the CX100 to an external frequency reference, or to output the device's internal frequency reference from the CX100 to other equipment.

Fig. 2 CX100 Auxiliary I/O Connectors

DC INPUT CONNECTOR

The DC Input connector is used to connect the CX100 to an AC Power Supply.

USB CONNECTOR

The USB connector is used for transferring data and performing USB software/firmware upgrades.

ETHERNET CONNECTOR

The Ethernet connector is used to connect the device to a network.

DEVICE LEDS

The following LEDs indicate system activity and status:

Fig. 3 Front Panel LEDs

Fig. 4 Charge Status LED

TX LED

The TX LED Indicates Transmitter status.

RX LED

The RX LED indicates Reciever status.

ERROR LED

The Error LED indicates error and alarm conditions. Solid red indicates error and alarm conditions. The type of error varies depending on the application.

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BATTERY LED

The Battery LED is a multi-color LED that indicates the battery status.

CHARGE STATUS LED

The **Charge Status LED** is a multi-colored LED that indicates the charge status of the device.

DEVICE CONTROLS

The front panel controls are used to operate and control the device.

Fig. 5 CX100 Front Panel Controls

OK BUTTON

The **OK Button** is used to confirm a setting or close a window.

HARD KEYS

The **Hard Keys** select screen-specific options or to select menus associated with each key.

BACK BUTTON

The **Back Button** is used to exit a menu or to go back to the previous menu or screen.

POWER BUTTON

The **Power Button** is used to turn the device on or off.

ARROW BUTTONS

The **Arrow Buttons** are used to navigate the UI.

UTILITY TRAY BUTTON

Pressing the **Utility Tray Button** opens the **Utility Tray** which contains buttons that access system functions.

HOME BUTTON

Pressing the **Home Button** returns to the device's home screen.

PREPARATION FOR USE

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

- Unpack the device and battery. Store packing material and shipping container for possible future use.
- Install the battery (refer to the *CX100 ComXpert Operation Manual* for the battery installation procedure).
- Verify shipment is complete in accordance with packing list. Report any discrepancies to VIAVI.
- The CX100 is shipped from the factory with a protective film in place over the LCD. Remove the protective film from the LCD before use.

POWERING THE DEVICE

The CX100 is designed to be powered by an internal battery or an external AC power supply.

To Connect the Device to an AC Power Supply

1. Connect the power cord to the AC Adapter/Charger.
2. Connect the DC connector to the device's DC input connector.
3. Connect the power cord to a grounded AC power supply.

To Charge the Battery

1. Connect the device to a grounded AC power supply.
2. Verify the device's **Battery LED** turns Amber to indicate the battery is charging.
3. The **Battery LED** turns green when the battery is fully charged.

POWER ON/OFF PROCEDURES

To Turn the Device ON

1. Press and release the **Power Button**.
2. An initializing indicator screen is displayed during the boot-up process. Wait while the device completes the boot-up process; this takes ~ 30 seconds.
3. The **Home Screen** is displayed when the device is ready for use.

To Turn the Device OFF

1. Press and hold the **Power Button** for ~ 3 seconds. Release the **Power Button** when the Front Panel LEDs begin to flash.

VERIFY OPERATION - DEVICE SELF TEST

The following procedure is used to verify that the CX100 is operating properly; the procedure is not intended to verify that the CX100 is operating to specified performance parameters.

1. Power on the device.
2. Verify the **Front Panel LED**s flash on and off in a series of red and green during the boot-up process.
3. When the device is ready for use, verify the **Front Panel Battery LED Indicator** is illuminated.
4. When the display loads, select the **RF Instrument** menu.
5. Select the **AutoTest** button.
6. Select the **File Field** located at the top of the screen.
7. Select **Self Test** from the test list.
8. Press the **Select All Soft-key**.
9. Press the **Run Selected Soft-key**.
10. Wait while the device performs a series of automated test process. Do not interrupt this process of the self test will fail. Status indicators show when self test is finished.
11. When **AutoTest** is finished, verify all portions of the test have passed. If any portion of the AutoTest fails, please contact VIAVI for technical assistance.

CONTROL AND OPERATION

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

UI LAYOUT

The User Interface (UI) is designed to be intuitive and easy to use. The CX100's screen layout and screen content changes based on factors such as the selected function, user settings and modes of operation. Most screens consist of a Header Bar, the Main Display area, and a Footer area.

HEADER BAR

The Header Bar displays system indicators and the **Utility Tray Button** which is used to access device tools and functions.

MAIN DISPLAY AREA

The Main Display area contains a variety of components depending on the selected function. The area may contain a list of collapsible menus/panels, plot fields, or data tables.

FOOTER AREA

When present, the Footer area contains either a Shortcut Area or a Soft-key Panel. The Shortcut Area is used to provide quick access to frequently used functions. Soft-key panels contain controls and functions associated with the active test function.

UI INDICATORS

The following indicators are commonly used system functions. Refer to the *CX100 ComXpert Operation Manual* for information about device UI indicators not described in this guide.

The **Battery Status Indicator** displays the charge level of the device's internal battery. The charge level is also displayed as a percent next to the indicator.

The **Network Connection Indicator** is displayed when the device is connected to an active LAN.

The **AC Power Indicator** is displayed when the device is connected to an AC power supply.

The **WiFi Indicator** is displayed when the device is connected to a WiFi network.

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