

Frontline X500™ Battery Installation Guide

1 Introduction

Use this document for installing a Frontline X500 Battery Pack as an external power source for the Frontline X500 protocol analyzer. Once installed, refer to the X500 Quick Start Guide on how to use the X500 protocol analyzer. Detailed hardware and software information is contained in the Wireless Protocol Suite Hardware and Software User Manual. The manual is also available on FTE.com.



2 Components

Inspect the received shipping container for any damage. Unpack the container and account for each of the system components listed on the accompanying packing list. Visually inspect each component for any damage. In the event of damage, notify Teledyne LeCroy. Retain all shipping materials for shipper's inspection. The X500 battery does not contain any user serviceable items. Any repairs and maintenance must be performed by a service technician that has been trained and approved by Teledyne LeCroy.

The analyzer package includes the following components in addition to the X500 battery pack:

Qty	Description
1	15V 8A power supply
1	Battery charging adapter for standalone charging

Before installing the battery pack on the X500, it is highly recommended to fully charge it. To do so, connect the power adapter to the battery charging adapter. The LED turns red indicating the adapter is powered correctly. Then connect the battery charging adapter to the battery pack. The LED indicator on the charging adapter starts blinking blue. When it's fully charged, the LED turns solid green. Proceed to the installation section below.

3 Battery Installation

The Frontline X500 has an external battery pack option that allows you to extend the range of the analyzer to include locations without easy access to external power sources. The battery pack can be connected to the X500 to operate solely on battery power for about two hours. The battery is charged with an external charging adapter (provided by Teledyne LeCroy) or can be charged when installed with the X500 and connected to an external power source.

To install a battery pack, follow the steps below:



Figure 1 – Frontline X500 battery

1. Turn off power and disconnect the external power source. Ensure that the power switch in the back of the X500 battery pack is off.



Battery power switch

Figure 2 - Frontline X500 battery switch in the off state

2. Open the battery compartment by removing the two screws on the underside of the unit. Take the cover off.

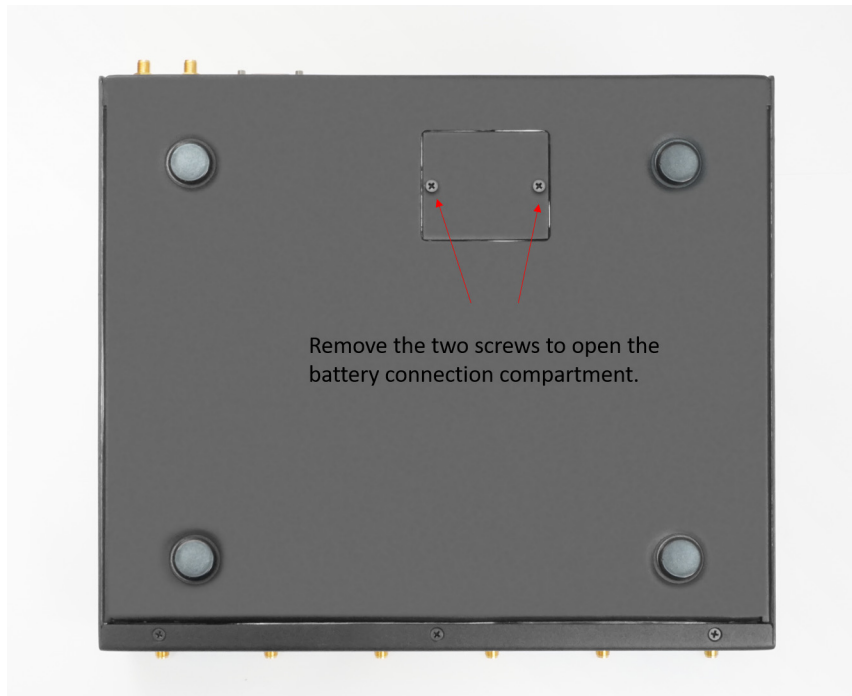


Figure 3 - Frontline X500 showing battery connection compartment

3. Remove the four side screws (two on each side of the unit) to allow connecting the four thumb screws on the battery pack



Figure 4 - Frontline X500 showing screws on the sides

4. Place the Frontline X500 in the battery connection slot and tighten the four thumbscrews to securely connect the battery pack to the X500.



Figure 5 - Frontline X500 and Battery installed

5. After installing the battery, apply power to the X500 by turning the switch to ON. Check the battery charge on the front panel battery charge LEDs.



Figure 6- X500 Battery in the ON state

6. If a charge is necessary, connect the external power source to the X500 until the battery is fully charged. Once you connect the power source the LEDs will start blinking based on the charge level.

Table 1: X500 Battery Power Status Indicators

Indicator	Color	State	Status Indicated
Battery Level 1	None	Off	Battery not present OR Battery not charged
	Green	Constant	Battery discharging. Capacity 20% - 45%.
	Green	Slow Flash	Battery charging. Capacity 20% - 45%.
	Yellow	Slow Flash	Battery charging. Capacity <20%.
		Fast Flash	Battery discharging. Capacity <20%.
Battery Level 2	None	Off	Battery not present OR Battery <45% capacity, and not charging.
	Green	Constant	Battery discharging. Capacity 45% - 70%.
	Green	Flash	Battery charging. Capacity 45% - 70%.
Battery Level 3	None	Off	Battery not present OR Battery <70% capacity, and not charging.
	Green	Constant	Battery discharging. Capacity 70% - 100%.
	Green	Flash	Battery charging. Capacity 70% - 100%.

4 General Precautions

Handling

- Avoid shorting the battery.
- Do not immerse in water.
- Do not disassemble or deform the battery.
- Do not expose to or dispose of the battery in fire.
- Avoid excessive physical shock or vibration.
- Keep out of the reach of children.
- Never use a battery that appears to have suffered abuse.

Charge & Discharge

- Battery should be charged when docked on X500 or power adapter provided by Teledyne.
- Never use a modified or damaged charger.
- Specified product use only.

Storage

- Store in a cool, dry, and well-ventilated area.

Disposal

- Regulations vary for different countries. Dispose of in accordance with local regulations.

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Specifications

- Type: Rechargeable Smart Lithium Ion Battery Pack
- Assembly: External, user removable
- Dimensions: 310.39 x 241.3 x 56.39 mm (12.22" x 9.5" x 2.22")
- Temperature Operating: 32° F to 113° F (0° C to 45° C) for charging and -4° F to 140° F (-20° C to 60° C) for discharging
- Power Capacity: 90 WAh
- Operating time: ~2 hours (varies based on RF activity)

Teledyne LeCroy Customer Support

Periodically check the Teledyne LeCroy Protocol Solutions Group web site for software updates and other support related to this product.

Web: <http://www.fte.com/products/default.aspx>
Sales: Frontline_OnlineSales@Teledyne.com
Support: Frontline_Techsupport@Teledyne.com

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Changes

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