

LDG Electronics, Inc.

FTC-Meter for Yaesu FT-857/FT-897

For Yaesu FT-857/FT-897 Transceivers



LDG Electronics, Inc., 1445 Parran Road, Saint Leonard, MD 20685

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Specifications & Ratings

- Meter: 3.0" Illuminated Analog Meter
- Illumination: Color LED Backlight, Adjustable Brightness
- Radio Connection: Stereo 3.5mm tip-ring-sleeve
- DC Power supply and Stereo cable included; DC Connector: 5.5x2.5mm Center Positive
- Voltage: 13.8 VDC +/- 15%
- Current Draw: 500 mA max
- Dimensions: 4.5"x3.5"x3.5" (114 x 90 x 90mm)
- Weight: 13 ounces (368 grams)

Introducing the FTC-Meter

Congratulations on selecting the LDG Electronics FTC-Meter. The LDG Color Analog Meter is a precision instrument that will provide many years of quality service. The meter provides a three-inch analog meter to compliment the “virtual” meter on your FT-857/897’s display panel. It can show S-Meter reading, final amplifier voltage and current, power output, SWR, compression level and ALC level.

The meter is illuminated by high-visibility color LEDs from behind. This color backlighting is very attractive, easy on the eyes during long operating sessions, and makes it a snap to read the meters precisely. The meter has adjustments on the back for color and brightness settings. Be sure to read the entire manual to ensure safe operation and long life of the meter. With proper care this meter will provide many hours of enjoyable operation.



Welcome Notes

Welcome to the LDG Electronics family of amateur radio equipment! Starting in 1995 and based in St. Leonard, Maryland, LDG defines state of the art equipment for the Amateur (“Ham”) radio community. In addition to offering established equipment, we’re continuing to grow our product line. Check our web site (<https://www.ldgelectronics.com>) often to learn about new developments!

Technical Support

The LDG customer support staff are ready to answer your product questions by telephone and by e-mail. We know that you will enjoy your product even more knowing LDG is ready to answer your questions as the need arises. Visit the Support Center at: ldgelectronics.com/support

Our website links you to the on-line Customer Support Center where you can send us a question, do your own research in the LDG Product Knowledge Books, and read through lists of frequently asked product questions. LDG regularly updates on-line information, so the best on-line support information is available all day and every day.

The LDG website provides links to product manuals just in case you lose this one! When you are thinking about the purchase of other LDG products our website also has complete product specifications and photographs you can use to help make your purchase decision. Don't forget the links to all the quality LDG Dealers who are also ready to help you make that purchase decision.

Two-Year Transferable Warranty

Your product is warrantied against manufacturer defects in parts and labor for two full years from the date of purchase. This two-year warranty is also transferable. When you sell or give away your LDG product, give the new owner a copy of the original sales receipt and the two-year warranty transfers to the new owner.

There is no need to complete a warranty card or to register an LDG product. Your product receipt establishes eligibility for warranty service, so save that receipt. Send your receipt with the product whenever you send your product to LDG for repair. Products sent to LDG without a receipt are considered requests for out-of-warranty repair.

LDG does not guarantee product damage or abuse. This means that a product failure, as determined by LDG, to be caused by the customer or by other natural calamity (ex: lightning) is not covered under the two-year warranty. Damage can be caused by failure to heed the product's published limitations and specifications or by not following good Amateur practice.

Out Of Warranty Service

If a product fails after the warranty period, LDG wants to help you get it fixed. Send the product to us for repair any time you like. We will determine what needs to be done and contact you with an estimate.

Returning Your Product For Service

Returning a product to LDG is easy. We do not require a return merchandise authorization. Visit the Customer Support Center: www.ldgelectronics.com/support and download the LDG Product Repair Form. List all contact information including email address and all details of problems you are experiencing. For warranty service, please include a copy of your purchase receipt. After the unit is received and logged into our service department system, an email will be sent confirming your unit is in process. Repairs can take three to four weeks but are usually faster. The most recent information on returning products for service is found at the LDG Customer Support Center. Ship unit with repair form to:

LDG Electronics, Inc.
Attn: Repair Department
1445 Parran Rd
St. Leonard, MD 20685

Product Feedback

We encourage product feedback! Tell us what you really think of your LDG product. In a card, letter, or email (preferred) tell us how you used the product and how well it worked in your application. Send along a photo or even a schematic or drawing to illustrate your narrative. We would like to share your comments with our staff, our dealers, and even other customers on the LDG website.

Your FTC-Meter

Your FTC-Meter is a quality, precision instrument that will give you many years of outstanding service; take a few minutes to get to know it.

Front Panel:

The front panel of the FTC- Meter displays only the meter face. No controls are present on the front panel.



Back Panel:

The back panel of the FTC- Meter has two jacks and three controls:



- **On/Off:** Turns Power on & off
- **Color:** Adjusts illumination color
- **Bright:** Adjusts illumination brightness
- **Radio:** connects the FTC-Meter to your transceiver
- **+12VDC:** Connect the supplied DC coaxial power cable to this 5.5 x2.5 mm connector and a source of 13.8 +/-15% VDC at 500 mA or above, center pin positive

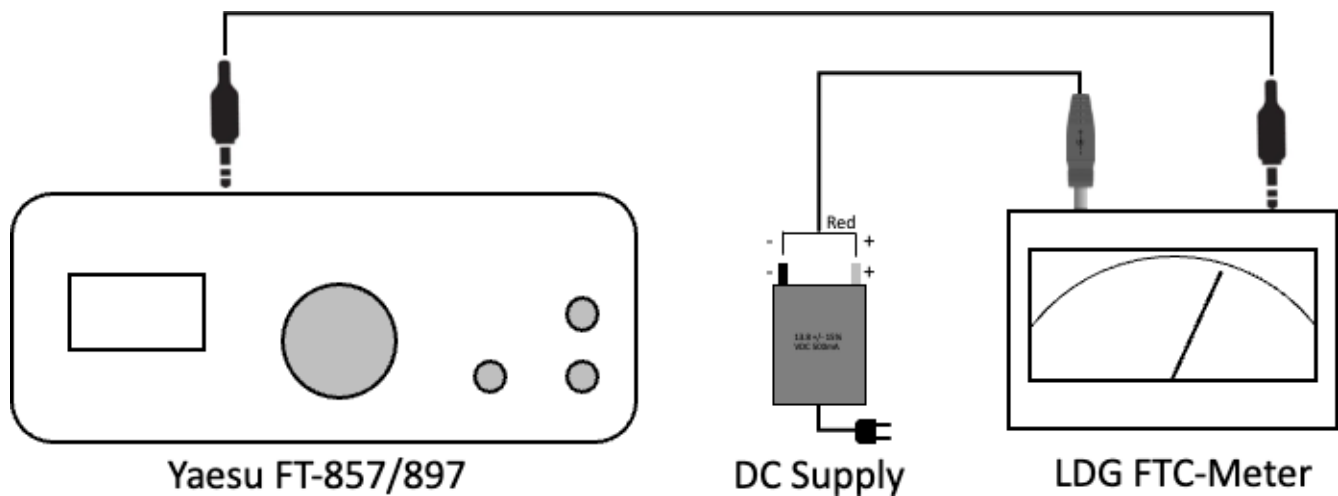
Installing the FTC-Meter

The FTC- Meter is intended for indoor use only; it is not water-resistant. If you use it outdoors, you must protect it from rain.

Always turn your radio off before plugging or unplugging anything. The radio may be damaged if cables are connected or disconnected while the power is on.

With the radio turned off, connect one end of the included stereo cable to the external meter jack on the radio. Connect the other end of the cable to the jack marked "Radio" on the back of the meter.

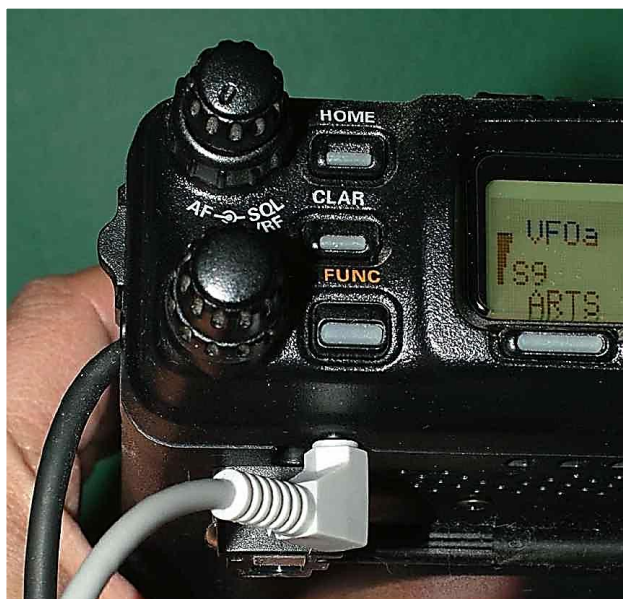
Connect the included DC Power supply. The push button on/off switch on the back of the meter controls the power to the unit. With the unit on, adjust the brightness and color of the meter. Position the radio and meter for normal use and enjoy the view. The meter movement will function without DC power, but the illumination LEDs will not.



FT-857 Installation:

The meter jack on the FT-857 is located under the front panel, near the FUNC button. Plug the right-angle end of the included 1/8" stereo cable into the meter jack. Plug the other end of the cable into the jack marked "Radio" on the back panel of the FTC-Meter.

Connect the supplied DC Power supply to the DC Power jack on the back of the FTC- Meter. If the backlight feature is not desired simply leave the DC power unconnected; the meter will still function normally.



FT-897 Installation:

The meter jack on the FT-897 is located under the front panel, just to the right of the main tuning knob. Plug the right-angle end of the included 1/8" stereo cable into the meter jack. Plug the other end of the cable into the jack marked "Radio" on the back panel of the FTC-Meter.



Setup

Two menu items in the extended menu system of the FT-857 and FT-897 transceivers configure an external meter such as the FTC-Meter. In order to access those menu items, the extended menu system must be enabled if it is not already.

Press and hold the FUNC button on the transceiver to enter menu mode. Rotate the SELECT knob until Menu 1, "EXT MENU" is showing. Turn the main tuning knob until EXT MENU is "ON". This enables the extended menu system.

Receive Parameter Selection

With the transceiver still in menu mode turn the SELECT knob to menu item #60 "MTR ARX SEL", then rotate the main tuning knob to choose which radio parameter is displayed on the FTC-Meter during receive operation. Rotate the main tuning knob to select one of the following 4 options.

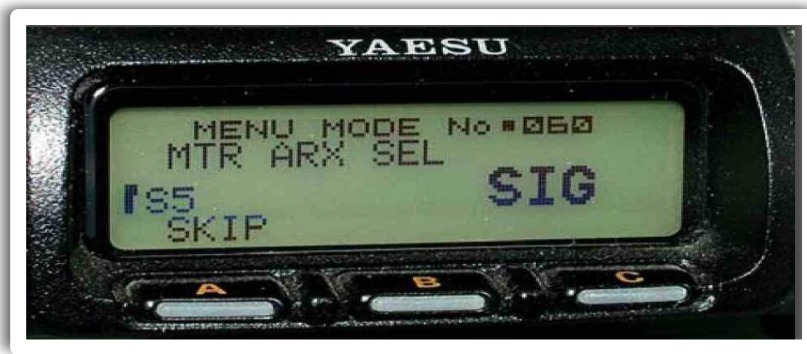
Menu #60 MTR ARX SEL	Meaning
OFF	No meter display when receiving
VLT	Displays incoming power supply voltage
CTR	FM discriminator centering. FM reception is tuned properly when the needle is in the center
SIG	Received signal strength (S-Meter)

Transmit Parameter Selection

With the transceiver still in menu mode, turn the SELECT knob to menu item #61, "MTR ATX SEL", then rotate the main tuning knob to choose which radio parameter is displayed on the FTC-Meter during transmit operation. Rotate the main tuning knob to select one of the following 6 options.

Menu #61MTR ATX SEL	Meaning
OFF	No meter display when transmitting
VLT	Displays incoming power supply voltage
SWR	Standing Wave Ratio (SWR)
MOD	Modulation percentage / deviation level
ALC	Automatic Level Control voltage
PWR	Transmit power output

Finish Setup



After selecting the receive and transmit parameters, press and hold the FUNC button to return the radio to normal operation. The parameter selection process can be repeated at any time; select menu item 60 for the receive parameter, or menu item 61 for the transmit parameter.

Operation

Operation of the FTC-Meter is completely transparent; no user input is required. Simply operate the transceiver as usual; the FTC-Meter will display the selected parameters during transmit and receive operation. If the display of different parameters is desired, simply repeat the Receive Parameter Selection or Transmit Parameter selection.

Application Notes

Base Station Use

The FTC-Meter may be placed nearly anywhere on the operating desk. The included 1/8" stereo connection cable provides the ability to place the meter up to several feet away from the transceiver. Some obvious choices include placing on top or beside the radio, or near the station's computer.

Mobile Use

The FTC-Meter is ideal for use in a car, truck or RV. For mobile use LDG recommends that a fused power cable (not included) be used to power the FTC-Meter. A 1 amp "fast-blow" fuse is recommended. Remember to keep your eyes on the road, and not on the FTC-Meter!

Care and Maintenance

Your FTC-Meter is essentially maintenance-free. The outer case may be cleaned as needed with a soft cloth slightly dampened with household cleaning solution. As with any modern electronic device the FTC-Meter can be damaged by temperature extremes, water, impact, or static discharge.

