

LDG Electronics

Dual Analog Color Meter MC-101, 990, 7610, 7800

For Icom, Yaesu and Kenwood HF Transceivers



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

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The LDG Dual Analog Color Meter

The LDG Dual Color Analog Meter is a precision instrument that will provide many years of quality service. The Dual Meter provides two, three-inch meters to compliment the “virtual” meters on your radio’s display panel. Each meter can show S-Meter reading, final amplifier voltage and current, power output, SWR, compression level and ALC level.

Both meters are 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. Each meter has adjustments on the back for separate 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.

Specifications:

Meters: Dual 3.0” Analog Meter

Illumination: Color LED Backlight, Adjustable Brightness

Radio Connection: Stereo 3.5mm TRS

DC Connector: 5.5x2.5mm Center Positive

Voltage: 13.8 VDC +/- 15%

Current Draw: 200 mA max

Size: 8.5”x3.5”x3.5” (215x90x90mm)

Weight: 1.5 lbs. (680 g)

Connections:

With the radio turned off, connect one end of the stereo cable to the external meter Jack on the back of the Radio. Connect the other end of the stereo cable to the Jack marked "Radio" on the back of the Meter. Connect the DC cable to a DC supply that can provide 13.8 VDC at 500mA or above. The Red tinned wire goes to positive and black goes to ground. 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 each meter. Position the radio and meter for normal use and enjoy the view.

General Operation:

The main function of the LDG meter is to display the meter information to the user. When the user chooses S-meter for their external meter, the radio sends an electrical signal to the LDG meter to position the needle according to the radio's internal S meter. The user would then read the Scale corresponding to the S-meter reading. Likewise, when using the LDG meter to measure the output wattage, the radio is telling the LDG meter what to display. The user would view scale corresponding to the Power level. The Menus in the radio can be used to select which scale on the LDG analog meter to use for measurements at different times.

Radio firmware can change quite frequently. Be sure to have the correct user's manual available for your firmware version to see what meter options are available to you.



Front View



Back View

Operating Notes:

MC-990 for Kenwood TS-990:

Connecting an analog meter to the METER connector on the rear enables you to display the level of signals transmitted or received on the main band and sub band. The signal type to the main band and the sub band can be configured independently from the METER terminal.

CONFIGURING THE OUTPUT TO AN EXTERNAL METER

Connecting an analog meter (commercially available) to the **METER** connector on the rear panel enables you to display the levels of signals transmitted or received on the main band and the sub band. The signal type to the main band and the sub band can be configured independently. Follow the procedure below to select the type of signal to be transferred to an external meter while transmitting. Signal strength is the signal type to be transferred to an external meter while transmitting.

The METER terminal has the following output rating. {page 2-10}

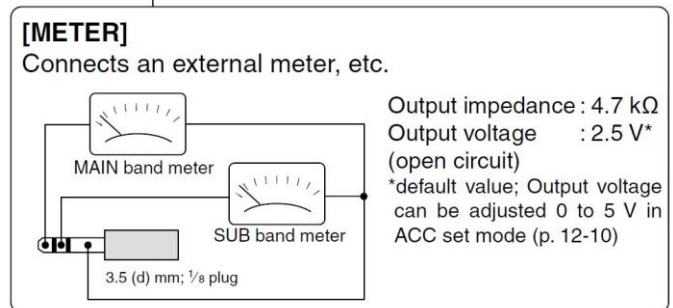
Voltage 0 V to 5 V (no load)
Input Impedance: 4.7kΩ

MC-7610 for Icom IC-7610:

The External Meter Output menu selects the desired item for an external meter indicator. Outputs received signal strength, transmit output power, VSWR, ALC, speech compression, Vd or Id levels for an external meter.

MC-7800 for Icom IC-7800:

The External Meter Output menu selects the desired item for an external meter indicator. Outputs receiving signal strength level, transmit output power, VSWR, ALC, speech compression, Vd or Id levels for an external meter.



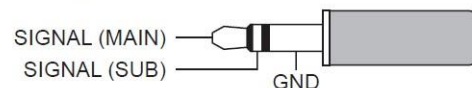
MC-101 for FTdx-101:

Connecting an analog meter to the METER connector on the rear enables you to display the level of signals transmitted or received on the main band and sub band.

⑧ METER

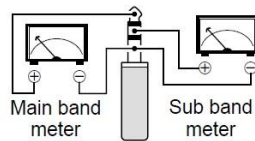
This 3.5-mm jack is to connect an external meter. The meter display is output as an analog voltage (0 V to about 3 V).

Insert appropriate resistors in series according to the meter you use.



METER

Connects to an external meter.
Outputs the received signal strength or squelch level.
3.5 mm (1/8 in) (d)



- Output voltage: 8 V (maximum)
- Output impedance: 10 kΩ

① You can select the output signal from received signal strength and squelch levels.

MENU » **SET > Connectors**

Product 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 Ham radio community.

Visit the LDG Electronics web site on-line at www.ldgelectronics.com often to learn about new developments. We offer complete product support through our web site, and we're here for you for any questions that you might have. All of our products are supported with a two-year transferrable warranty. If you sell your LDG product, provide the new owner with a copy of the original sales receipt, and the two-year warranty transfers to the new owner. Your product receipt establishes eligibility for warranty service; save that receipt!

LDG does not warrant against product damage or abuse. A product failure caused by the customer or by other natural calamity (e.g. lightning) is not covered under the two-year warranty. Uncovered damage can be caused by failure to heed the product's published limitations and specifications, or by not following good Amateur practice.

Service for your Product

Visit the Customer Support Center on our web site www.ldgelectronics.com and download the LDG Product Repair Form. On the Repair Form, tell us what happened (or didn't happen) and why the product needs servicing. The technician will attempt to duplicate the issue you described, so please be accurate and complete. Ask your shipper for a tracking number or delivery verification. Be sure to include your email address and phone number so we can contact you when your product is being returned.

Send your carefully packaged unit to:

LDG Electronics, Inc.

Attn: Repair Department

1445 Parran Rd

St. Leonard, MD 20685

Product Feedback

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

Very Important Safety Warning

Never install antennas or transmission lines over or near power lines. You can be seriously injured or killed if any part of the antenna, support or transmission line touches a power line. Always think of this general antenna safety rule: the distance to the nearest power line should be at least twice the length of the longest antenna, transmission line or support.

Important Safety Warning

Be sure to turn off your radio and power supply before connecting or disconnecting any cables in your station. Many people are injured every year by equipment they thought was off or disconnected.

Safety Warning

Be aware of, and follow, all electrical and safety codes of your municipality.