

Metronic 414951

Metronic 414951 TV/Sat Field Meter (DVB-T2/S2) User Manual

Model: 414951

Introduction	Safety Information	Package Contents	Product Overview	Setup	Operation
	Maintenance	Troubleshooting	Specifications	Warranty & Support	

1. INTRODUCTION

This manual provides detailed instructions for the proper use and maintenance of your Metronic 414951 TV/Sat Field Meter. This device is designed for accurate measurement and alignment of DVB-T2 (terrestrial) and DVB-S2 (satellite) signals, featuring spectrum analysis, SCR (Satellite Channel Router), and DCSS (Digital Channel Stacking System) capabilities. Please read this manual thoroughly before operating the device to ensure optimal performance and safety.

2. SAFETY INFORMATION

Always observe the following safety precautions to prevent injury or damage to the device:

- Do not expose the device to rain, moisture, or extreme temperatures.
- Avoid dropping the device or subjecting it to strong impacts.
- Use only the provided power adapter for charging.
- Do not attempt to open or repair the device yourself. Refer all servicing to qualified personnel.
- Ensure proper ventilation during operation and charging.
- Disconnect the device from power sources before cleaning.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- Metronic 414951 TV/Sat Field Meter
- Protective carrying case

- Power adapter/charger
- Shoulder strap
- User Manual (this document)

MISURATORE DI SEGNALE TV (COMBO TV/SAT)

Nuovo Misuratore di campo Professionale
DVB-S/S2 DVB-T/T2 DVB-C
Analizzatore di Spettro in Tempo Reale
Analizzatore Digitale Terrestre e Satellitare
SCR - SCD - SCD2 - Dcss

DVB-S DVB-S2
DVB-T DVB-T2

METRONIC 414951

Figure 1: Metronic 414951 TV/Sat Field Meter and its included accessories. The image shows the main device, a black protective carrying case, a power adapter, and a shoulder strap.

4. PRODUCT OVERVIEW

The Metronic 414951 is a compact and robust field meter designed for professional use. It features a clear display and intuitive button layout for easy navigation and signal analysis.

4.1 Front Panel Controls

- **Display Screen:** Shows signal parameters, spectrum, and menu options.
- **Function Buttons (F1-F4):** Context-sensitive buttons for various operations.
- **Navigation Buttons (Up, Down, Left, Right, OK):** For menu navigation and selection.
- **MENU Button:** Accesses the main menu.

- **POWER Button:** Turns the device on/off.

4.2 Side/Rear Panel Connections

- **Antenna/LNB Input:** F-connector for connecting terrestrial or satellite antennas.
- **Power Input:** For connecting the charging adapter.
- **USB Port (if present):** For software updates or data transfer.

5. SETUP

5.1 Charging the Device

1. Connect the provided power adapter to the device's power input port.
2. Plug the adapter into a standard electrical outlet.
3. The charging indicator (if present) will illuminate. Allow the device to charge fully before first use.

5.2 Initial Power-On

1. Press and hold the **POWER** button until the screen illuminates.
2. The device will boot up and display the main menu or the last used measurement screen.
3. If prompted, select your preferred language.

6. OPERATION

6.1 DVB-T2 Terrestrial Signal Measurement

1. Connect your terrestrial antenna to the Antenna/LNB input.
2. From the main menu, select "DVB-T2" or "Terrestrial Measurement".
3. Configure parameters such as frequency, bandwidth, and channel number using the navigation buttons.
4. Adjust the antenna direction while observing the signal strength (dBμV) and quality (BER, MER) readings on the screen. Aim for maximum signal strength and minimum error rates.
5. Use the spectrum analysis function (if available via F-button) to visualize the signal distribution.

6.2 DVB-S2 Satellite Signal Measurement

1. Connect your satellite LNB to the Antenna/LNB input. Ensure the LNB is powered by the field meter (check settings).
2. From the main menu, select "DVB-S2" or "Satellite Measurement".
3. Select the desired satellite from the pre-programmed list or manually enter transponder parameters (frequency, symbol rate, polarization).
4. Adjust the satellite dish azimuth, elevation, and LNB skew while monitoring signal strength and quality.
5. For SCR/DCSS systems, navigate to the specific menu option to configure the correct user band and frequency.
6. The spectrum analysis function can assist in identifying adjacent satellites or interference.

6.3 Menu Navigation and Settings

- Press the **MENU** button to access the main menu.
- Use the **Up/Down** buttons to scroll through options.
- Press **OK** to select an option or confirm a setting.
- Use the **Left/Right** buttons to change values or navigate sub-menus.

- Common settings include: Language, Backlight, Auto Power Off, LNB Power, Satellite List Management, Transponder Editing.

7. MAINTENANCE

7.1 Cleaning

- Ensure the device is powered off and disconnected from all cables.
- Wipe the exterior with a soft, dry cloth. For stubborn dirt, a slightly damp cloth can be used, followed by a dry cloth.
- Do not use abrasive cleaners, solvents, or strong chemicals.

7.2 Battery Care

- To prolong battery life, avoid fully discharging the battery frequently.
- If storing the device for an extended period, charge the battery to approximately 50% and store in a cool, dry place. Recharge every 3-6 months.

7.3 Storage

Store the field meter in its protective carrying case when not in use to prevent damage from dust, moisture, and impacts.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
Device does not power on.	Battery is discharged.	Connect the charger and allow the device to charge for at least 30 minutes before attempting to power on.
No signal reading.	Incorrect cable connection; LNB not powered; incorrect frequency/transponder settings; antenna/dish misalignment.	Check all cable connections. Ensure LNB power is enabled in settings. Verify frequency and transponder settings. Re-align antenna/dish.
Inaccurate signal readings.	Interference; faulty cable/LNB; outdated software.	Check for sources of interference. Test with a known good cable/LNB. Check Metronic website for software updates.
Screen is frozen or unresponsive.	Software glitch.	Perform a soft reset by holding the POWER button for 10-15 seconds until the device restarts. If problem persists, contact support.

9. SPECIFICATIONS

Feature	Detail
Model Number	414951
Brand	Metronic
Compatible Devices	Television (TV)

Feature	Detail
Specific Product Uses	TV signal measurement
Connector Type	Component (likely F-connector for signal input)
Input Voltage	12 Volts
Rated Current	10 Amperes
Number of Ports	2 (likely input/output or specific signal ports)
Package Dimensions	21 x 17 x 6.2 cm
Product Weight	3 kg (6.61 lbs)
Color	Standard
Finish	Matte

10. WARRANTY & SUPPORT

10.1 Warranty Information

Metronic products are covered by a limited warranty against defects in materials and workmanship. The specific duration and terms of the warranty may vary by region and retailer. Please retain your proof of purchase for warranty claims. For detailed warranty information, refer to the warranty card included with your product or visit the official Metronic website.

10.2 Customer Support

If you encounter any issues not covered in the troubleshooting section or require further assistance, please contact Metronic customer support. Contact details can typically be found on the Metronic website or on the product packaging.

Online Support: Visit the official [Metronic website](#) for FAQs, software updates, and support contact information.

Email/Phone: Refer to your product documentation for specific email addresses or phone numbers for your region.