Satlink ST-5150

Satlink ST-5150 DVB-S/S2/T/T2/C Combo Meter User Manual

Model: ST-5150

1. INTRODUCTION

The Satlink ST-5150 is a versatile combined signal meter designed for professional installation and maintenance of satellite, terrestrial, and cable television systems. This device supports DVB-S/S2, DVB-T/T2 (H.265), and DVB-C signal measurements. It provides accurate readings of signal strength, quality (MER), Bit Error Rate (BER), and Carrier-to-Noise (C/N) ratio, displayed both numerically and graphically on a 4.3-inch TFT LCD screen. This manual provides detailed instructions for the proper use, setup, and maintenance of your Satlink ST-5150 meter.

2. SAFETY INFORMATION

Please read and understand all safety instructions before operating the device. Failure to follow these instructions may result in electric shock, fire, or damage to the device.

- Do not expose the device to rain or moisture.
- Do not open the device casing. Refer all servicing to qualified personnel.
- Use only the provided power adapter for charging.
- Keep the device away from extreme temperatures and direct sunlight.
- Ensure proper ventilation to prevent overheating.
- Avoid dropping or subjecting the device to strong impacts.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- Satlink ST-5150 DVB-S/S2/T/T2/C Combined Meter
- Rubber Protective Case
- Power Supply Adapter
- 12V Connection Cable

- AV Cable (3.5 mm jack to 3 RCA)
- 2 F-connectors (for RF/ANT measurement sockets)
- User Manual (German language, English translation provided in this document)

4. PRODUCT OVERVIEW

The Satlink ST-5150 features a compact design with a clear display and intuitive controls. Below are images illustrating the device and its various ports and buttons.

4.1 Front View

Figure 4.1: Front view of the Satlink ST-5150, showing the 4.3-inch TFT LCD screen, numeric keypad, and function buttons.

4.2 Side and Rear Connections

Figure 4.2: Side view detailing the connectivity ports of the Satlink ST-5150.

Figure 4.3: Rear view detailing the connectivity ports of the Satlink ST-5150.

4.3 Connection Diagram

Figure 4.4: Connection diagram for the Satlink ST-5150, showing typical setups.

5. SETUP

5.1 Charging the Device

Before first use, fully charge the internal Li-oN battery. Connect the provided power supply adapter to the DC IN port on the device and plug it into a wall outlet. The charging indicator light will illuminate. A full charge typically takes several hours.

5.2 Initial Power-On and Language Selection

1. Press and hold the **POWER** button to turn on the device.

2. Upon first boot, you may be prompted to select a language. Use the navigation buttons to select your preferred language (e.g., English) and press **OK**.

3. The main menu will then appear.

5.3 Connecting for Signal Measurement

The ST-5150 features dedicated F-sockets for different signal types:

- **DVB-S/S2 (RF) F-socket:** Connect your satellite LNB cable or multiswitch output to this port using an F-connector.

- **T2/T/C (ANT) F-socket:** Connect your terrestrial antenna cable or cable TV signal to this port using an F-connector.

6. OPERATING INSTRUCTIONS

6.1 Main Menu Navigation

From the main menu, use the navigation buttons (Up, Down, Left, Right) to highlight the desired function and press **OK** to select it.

Figure 6.1: Main menu interface of the Satlink ST-5150.

6.2 Signal Measurement

Select the appropriate measurement mode from the main menu (DVB-S2, DVB-T2, or DVB-C).

6.2.1 DVB-S/S2 Satellite Measurement

1. Select **DVB-S2** from the main menu.
2. Configure satellite parameters: Select the satellite, LNB type, frequency, symbol rate, polarization, and DiSEqC settings (1.0, 1.1, 1.2, USALS, Unicable 1.0 & 1.1) as required.
3. Adjust your satellite dish until the signal strength and quality (MER) readings are maximized. The device provides numerical values and bar graphs for easy optimization.
4. A sound and light alarm will indicate signal lock.

6.2.2 DVB-T/T2 Terrestrial Measurement

1. Select **DVB-T2** from the main menu.
2. Select the country/region and channel/frequency.
3. Adjust your terrestrial antenna for optimal signal strength and quality.

6.2.3 DVB-C Cable Measurement

1. Select **DVB-C** from the main menu.
2. Enter the required parameters such as frequency, symbol rate, and modulation.
3. Optimize the cable signal for best performance.

6.3 Channel Scan

After achieving a stable signal, you can perform a channel scan to find available channels. This function is typically found within the DVB-S2, DVB-T2, or DVB-C menus.

6.4 Multimedia Functions

The device supports multimedia playback via its USB 2.0 port. Connect a USB drive containing compatible media files and select **Multimedia** from the main menu to access these features.

6.5 System Settings

The **System Settings** menu allows you to configure various device parameters, including:

- Language
- Backlight brightness
- Audio settings
- Time and date
- Factory reset
- Software upgrade (via USB)

6.6 HDMI Output

The HDMI 1.4 output allows you to display the meter's screen content on an external monitor or TV. Connect an HDMI cable from the device's HDMI port to your display's HDMI input.

6.7 AV IN / AV OUT

The 3.5mm AV IN/OUT jack provides analog video and audio input/output. Use the supplied AV cable to connect external analog sources for display on the meter, or to output the meter's signal to an external device.

6.8 DC OUT (12V)

The 12V DC OUT port can be used to power CCT (Closed-Circuit Television) cameras for testing purposes, providing a convenient power source during installation.

7. MAINTENANCE

7.1 Cleaning

Wipe the device with a soft, dry cloth. Do not use liquid cleaners or solvents, as they may damage the casing or screen.

7.2 Battery Care

To prolong battery life, avoid fully discharging the battery frequently. If the device will not be used for an extended period, charge it to approximately 50% and store it in a cool, dry place. Recharge every few months to prevent deep discharge.

7.3 Software Updates

Periodically check the manufacturer's website for available software updates. Updates can be installed via the USB port, typically by placing the update file on a USB drive and following the instructions in the System Settings menu.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
Device does not power on.	Battery is discharged.	Connect the power adapter and charge the device.
No signal detected.	Incorrect cable connection; Incorrect satellite/transponder settings; Antenna/LNB misalignment.	Check all cable connections. Verify satellite/transponder settings. Adjust antenna/LNB position.
Poor signal quality.	Antenna/LNB not optimally aligned; Obstruction in signal path; Faulty cable/connector.	Fine-tune antenna/LNB alignment. Remove any obstructions. Inspect cables and connectors for damage.
Screen is blank or frozen.	Software error; Device crash.	Perform a soft reset by holding the power button until the device turns off, then restart. If persistent, perform a factory reset via System Settings.

9. SPECIFICATIONS

Feature	Specification
Model	ST-5150

Feature	Specification
Display	4.3-inch High Definition TFT LCD Screen
Signal Compatibility	DVB-S/S2, DVB-T/T2 (H.265/HEVC), DVB-C
Video Decoding	MPEG2, MPEG4, H.264/MPEG4 AVC, H.265/HEVC hardware decoding
Measurement Parameters	Level (Pegel), C/N, BER, MER
DiSEqC Support	DiSEqC 1.0, 1.1, 1.2, USALS
Unicable Support	Unicable 1.0 & 1.1
Signal Strength Units	dBμV, dBm, or dBmV (selectable)
Connectivity	HDMI 1.4 Output, USB 2.0 Port, AV IN/OUT (3.5mm jack), DC OUT (12V)
Battery	7.4V / 2.6Ah Li-oN Battery
Operating Voltage	7.4 V
Dimensions (H x W x D)	170 x 120 x 40 mm
Weight	Approx. 500 g (0.5 kg)
Material	PVC
Additional Features	Quick system start-up, Analog video input, LNB short protect, Auto Calculate Angle of AZ, EL

10. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the documentation provided with your purchase or contact your retailer. Keep your proof of purchase for warranty claims. Software updates may be available on the manufacturer's official website.