SatLink WS 6909

SatLink WS-6909 DVB-S/DVB-T Combo Satellite Signal Finder Meter User Manual

1. Introduction

The SatLink WS-6909 is a versatile digital meter designed for aligning both DVB-S (satellite) and DVB-T (terrestrial) signals. Featuring a 3.5-inch high-definition TFT LCD screen, it allows users to view actual channels directly on the device, ensuring quick and accurate signal alignment. The meter includes a unique calibration system for optimal performance and supports various satellite and terrestrial signal parameters.
Note: DVB-T functionality may not be supported in all regions, including America.

2. Package Contents

Please verify that all items listed below are included in your package:

- 1 x SatLink WS-6909 Satellite Meter
- 1 x Power Adaptor
- 1 x AV Cable
- 1 x Car Charger Cable
- 1 x Silicone Case

3. Product Overview

Familiarize yourself with the components and ports of your SatLink WS-6909 meter.

Figure 3.1: Front view of the SatLink WS-6909 meter, showing the 3.5-inch LCD screen, control buttons, and numeric keypad, alongside its protective orange silicone case.

Figure 3.2: Bottom view of the device, featuring the main power switch, DC power input port, and a USB port for software upgrades.

Figure 3.3: Side view of the meter, illustrating the AV IN and AV OUT ports for connecting external video sources or displays.

Figure 3.4: Top view of the device, displaying the F-connector for satellite input and the standard antenna input for terrestrial signals.

4. Setup

4.1 Charging the Device

1. Connect the provided Power Adaptor to the DC input port on the bottom of the meter.
2. Plug the Power Adaptor into a standard electrical outlet. The 'Charge' indicator light on the device will illuminate.
3. Allow the device to charge fully before initial use. A full charge provides approximately 4 hours of operating time.
4. Alternatively, use the Car Charger Cable to charge the device in a vehicle.

4.2 Initial Power On

1. Ensure the device is adequately charged.
2. Flip the main power switch located on the bottom of the meter to the 'ON' position.
3. The device will power on and perform an automatic calibration for optimal performance.

4.3 Connecting Antennas/LNBs

- For satellite signal reception (DVB-S), connect the LNB cable from your satellite dish to the F-connector input on the top of the meter.
- For terrestrial signal reception (DVB-T), connect your terrestrial antenna cable to the standard antenna input on the top of the meter.

5. Operating Instructions

5.1 Basic Navigation

- Use the **MENU** button to access the main menu.
- Navigate through menu options using the directional arrow buttons (**UP**/**DOWN**/**LEFT**/**RIGHT**).
- Press the **OK** button to confirm selections or enter sub-menus.
- Use the **EXIT** button to return to the previous screen or exit the menu.
- The numeric keypad can be used for direct input of values such as frequencies or channel numbers.

5.2 DVB-S (Satellite) Signal Finding

1. From the main menu, select the DVB-S measurement mode.
2. Configure parameters such as satellite, transponder frequency, symbol rate, and polarity. These settings can be modified by the user.
3. The meter supports DISEQC 1.0, 1.1, 1.2, and 22kHz Tone. Adjust these settings as required for your LNB configuration.
4. The meter provides LNB power supply options of 18V/13V (maximum 400mA).
5. Align your satellite dish while observing the signal strength, quality, BER (Bit Error Rate), S/N (Signal-to-Noise ratio), and PWR (Power) on the 3.5-inch LCD screen.
6. The device will provide a sound and light alarm when a signal is locked.
7. The meter can automatically calculate Azimuth (AZ) and Elevation (EL) angles to assist with dish alignment.
8. Search modes include Auto, Blind, and Manual.

5.3 DVB-T (Terrestrial) Signal Finding

1. From the main menu, select the DVB-T measurement mode.
2. Configure the desired frequency range.
3. The meter supports ANT power supply options of 5V/12V/24V for active antennas.
4. Align your terrestrial antenna while observing the signal strength, quality, MER (Modulation Error Ratio), S/N (Signal-to-Noise ratio), and PWR (Power) on the LCD screen.
5. The meter supports multichannel checks and demodulation types including QPSK, 16QAM, and 64QAM.
6. Search modes include Auto and Manual.

5.4 Software Upgrades

The USB port on the bottom of the device is used for software upgrades. Refer to the manufacturer's website for the latest software and instructions.

6. Maintenance

6.1 Cleaning

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

6.2 Battery Care

- To prolong battery life, avoid exposing the device to extreme temperatures.
- Recharge the battery regularly, even if the device is not in frequent use.

6.3 Software Updates

Periodically check the manufacturer's official website for available software updates. Updating the firmware can improve performance and add new features.

7. Troubleshooting

Problem	Possible Cause	Solution
Device does not power on	Low battery; Power switch off; Faulty power adapter	Charge the battery; Ensure power switch is ON; Try a different power source
No signal detected (DVB-S)	Incorrect satellite/transponder settings; LNB not powered; Dish misalignment; Cable issue	Verify satellite and transponder settings; Check LNB power (13/18V); Adjust dish alignment; Inspect cable connections
No signal detected (DVB-T)	Incorrect frequency; Antenna not powered (if active); Antenna misalignment; Regional DVB-T incompatibility	Verify frequency settings; Check ANT power (5/12/24V); Adjust antenna alignment; Confirm DVB-T support in your region
Poor signal quality	Fine-tuning needed; Obstructions; Damaged LNB/antenna	Make small adjustments to alignment; Clear line of sight; Replace faulty components if necessary
Screen frozen or unresponsive	Software glitch	Perform a hard reset by turning the power switch OFF and then ON again. If persistent, consider a software upgrade.

8. Specifications

- **Display:** 3.5 Inch High Definition TFT LCD Screen
- **Battery:** 8.4V/3000mAh Li-ion, Max Operating Time: 4 hours
- **DVB-S Input Frequency:** 950-2150MHz
- **DVB-S Input Level:** -65 to -25dBm
- **DVB-S Input Impedance:** 75Ω
- **DISEQC Support:** 1.0, 1.1, 1.2 and 22kHz Tone
- **LNB Power Supply:** 18V/13V (IMax 400mA)
- **DVB-T Frequency Range:** 46MHz-862MHz
- **DVB-T Level Range:** 40dBµV-110dBµV
- **DVB-T Input Impedance:** 75Ω
- **DVB-T Demodulation:** QPSK, 16QAM, 64QAM
- **ANT Power Supply:** 5V/12V/24V
- **Measurement Types:** Signal strength, quality, BER, S/N, PWR (DVB-S); Signal strength, quality, MER, S/N, PWR (DVB-T)
- **Search Modes:** Auto, Blind, Manual
- **Product Dimensions:** 3.54 x 1.77 x 6.46 inches
- **Item Weight:** 1.76 pounds
- **Model Number:** WS 6909

9. Warranty and Support

For technical assistance, warranty information, or customer support, please contact your original retailer or refer to the manufacturer's official website for contact details. Please have your product model number (WS 6909) and purchase information ready when seeking support.