Satlink WS-6979

Satlink WS-6979 DVB-S2/T2 HD Combo Satellite Meter Finder User Manual

Model: WS-6979 | Brand: Satlink

1. Introduction

The Satlink WS-6979 is a versatile handheld combined meter designed for digital television signal installation. It supports DVB-S/S2, DVB-T/T2, and DVB-C standards, along with MPEG-2/4 H.265 (8-bit) decoding. Its compact size, lightweight design, intuitive user interface, extended battery life, and comprehensive feature set make it an essential tool for installing satellite and terrestrial antenna signals in various residential and multi-dwelling unit environments.
Key features include a 4.3-inch high-definition TFT LCD, constellation analyzer, spectrum analyzer, and support for various scanning modes. The device automatically calculates AZ and EL angles and includes an integrated speaker for audio feedback.

2. Package Contents

Verify that all items listed below are included in your package. If any items are missing or damaged, please contact your retailer.

- Satlink WS-6979 Main Unit
- AV Cable
- Power Adapter (DC12V/1.5A)
- Car Charger Cable
- Carrying Bag
- User Manual (this document)

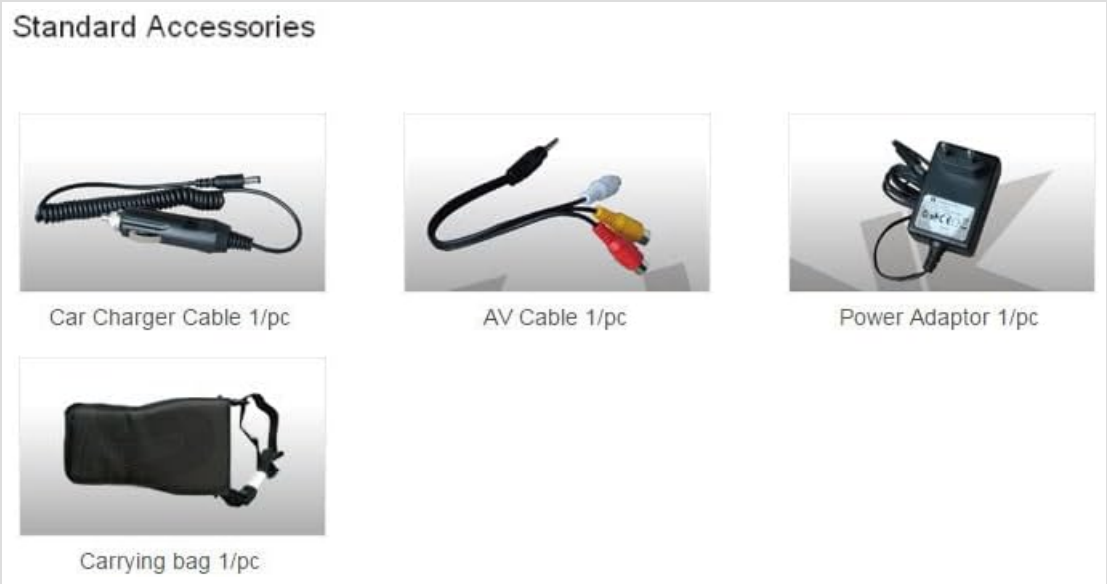

Figure 2.1: Standard Accessories included with the WS-6979.

3. Product Overview

The WS-6979 features a robust design with a clear display and intuitive controls for efficient signal measurement and analysis.

3.1 Front Panel and Controls

Figure 3.1: Front view of the WS-6979, highlighting the display and control buttons.

The front panel includes a 4.3-inch LCD screen for displaying menus, signal parameters, and video. Below the screen are navigation buttons (INFO, OK, EXIT, MUTE), a numeric keypad (0-9), and function keys (F1-F4, SCAN, MENU, AV/S, TEXT, SUBT, TV/R).

3.2 Side and Rear Panels

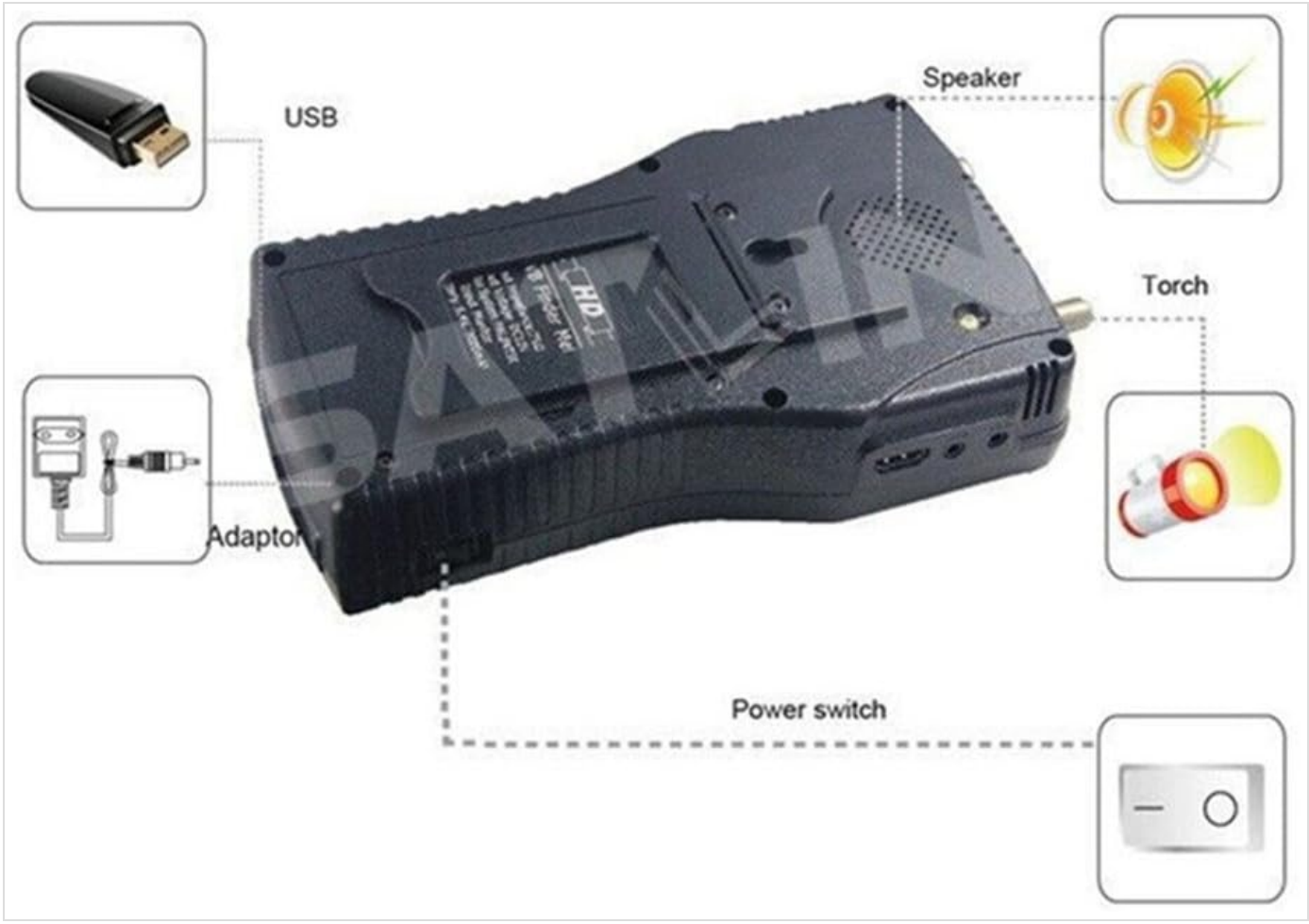

Figure 3.2: Rear view of the WS-6979, showing various ports and features.

The device features a USB port for software updates, an integrated speaker for audio output, a torch for illumination in dark environments, and a power switch. The power adapter input is also located on the rear or side.

Figure 3.3: Close-up of the side panel with F-type connector, AV IN/OUT, and USB port.

Figure 3.4: Close-up of the side panel with the DVB-T/T2/C input connector.

4. Setup

Follow these steps for initial setup of your Satlink WS-6979 device.

4.1 Charging the Device

1. Connect the provided power adapter to the DC input port on the device.
2. Plug the power adapter into a standard electrical outlet (100-240VAC, 50/60Hz).
3. The charging indicator light will illuminate. Allow the device to charge fully before first use. A full charge typically takes several hours.
4. The device can also be charged using the car charger cable.

4.2 Initial Power On

1. Ensure the device is sufficiently charged.
2. Locate the power switch on the side or rear of the device and slide it to the 'ON' position.
3. The device will boot up and display the main menu on the LCD screen.

4.3 Connecting to an Antenna/LNB

1. For satellite signal measurement (DVB-S/S2), connect the LNB cable from your satellite dish to the F-type connector labeled 'LNB IN' or similar.
2. For terrestrial/cable signal measurement (DVB-T/T2/C), connect the antenna or cable TV signal to the F-type connector labeled 'ANT IN' or similar.
3. Ensure all connections are secure to prevent signal loss.

5. Operating Instructions

This section details the primary functions and operations of the Satlink WS-6979.

5.1 Main Menu Navigation

Use the navigation buttons (up, down, left, right) and the 'OK' button to select options and confirm settings. The 'EXIT' button returns to the previous menu or screen.

Your browser does not support the video tag.

Video 5.1: Introduction to Functionality (demonstrates general menu navigation and settings, applicable to similar Satlink devices).

5.2 Signal Measurement (DVB-S/S2, DVB-T/T2, DVB-C)

1. From the main menu, select the desired mode (DVB-S/S2, DVB-T/T2, or DVB-C).
2. Configure the necessary parameters such as satellite, transponder frequency, symbol rate, and polarization for satellite signals, or channel/frequency for terrestrial/cable signals.
3. The device will display signal strength and quality bars. Adjust your antenna or dish until optimal signal levels are achieved.
4. An audible alarm and light indicator will activate when a signal is locked.

Your browser does not support the video tag.

Video 5.2: Main Operations (demonstrates manual search and signal locking process, applicable to similar Satlink devices).

5.3 Spectrum Analyzer

The spectrum analyzer function allows for visual analysis of the signal spectrum, helping to identify interference or signal distribution issues.

1. Navigate to the 'Spectrum Analyzer' option from the main menu.
2. The screen will display a graphical representation of the signal strength across a frequency range.
3. Adjust parameters like bandwidth, polarity, and 22KHz tone as needed to refine the spectrum view.

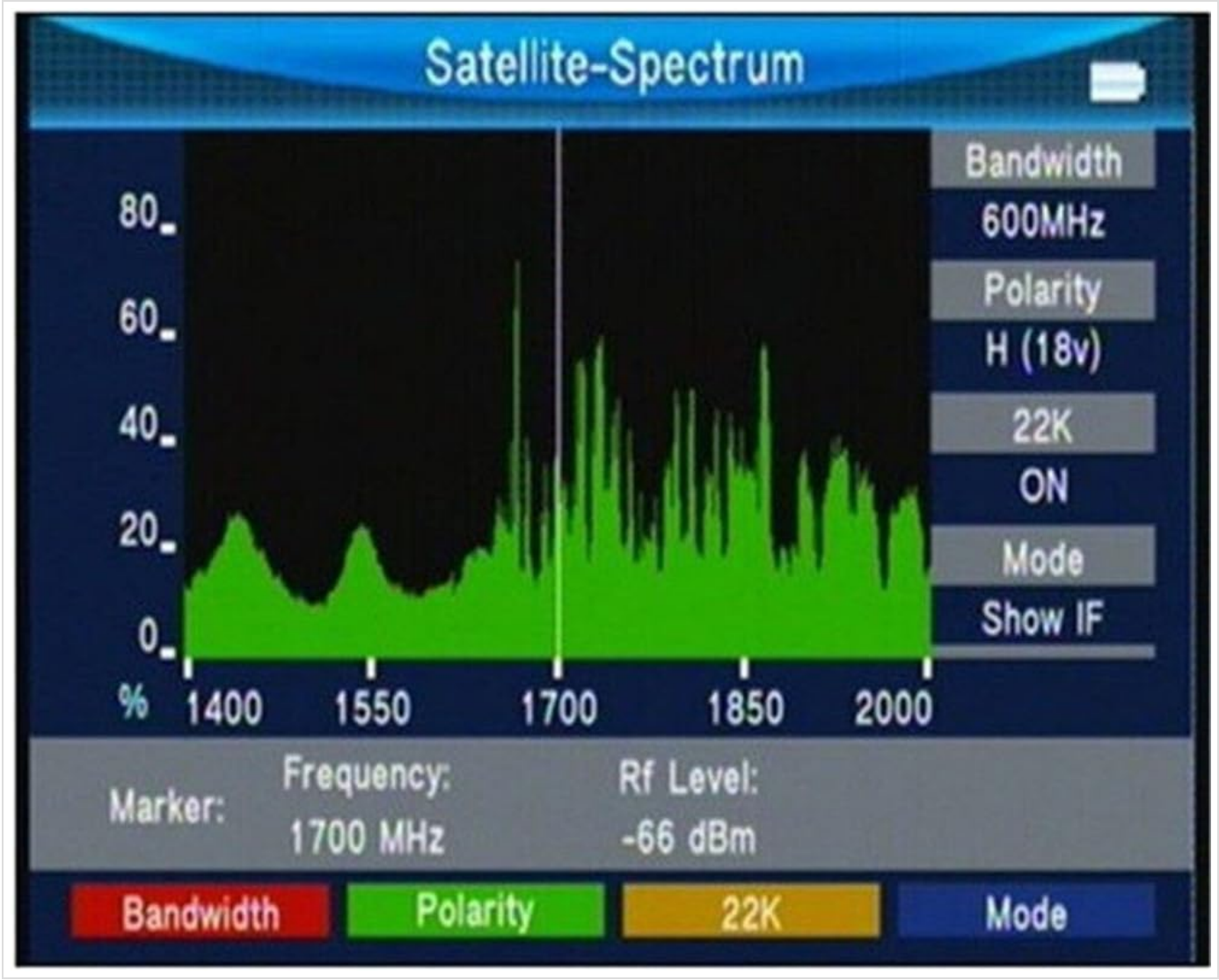

Figure 5.1: Spectrum Analyzer display.

5.4 Constellation Analyzer

The constellation analyzer provides a visual representation of the signal modulation, which is crucial for diagnosing signal quality issues, especially for digital signals.

1. Select the 'Constellation Analyzer' option from the menu.
2. Observe the constellation diagram to assess signal integrity. A tightly clustered pattern indicates good signal quality.

5.5 DiSEqC Control

The WS-6979 supports DiSEqC 1.0/1.1/1.2 and 0/22KHz Tone for controlling multiple LNBs or motorized dishes. Configure these settings in the satellite setup menu.

5.6 AV In/Out and HDMI

The device includes AV input and output ports (3.5mm jack) for connecting external video sources or displaying the meter's output on a larger screen. An HDMI output (1.3a) is also available for high-definition video display.

6. Maintenance

Proper maintenance ensures the longevity and optimal performance of your WS-6979.

6.1 Battery Care

The device is equipped with a 7.4V/3000mAh Li-Ion battery. To maximize battery life:

- Avoid fully discharging the battery frequently.
- Charge the device regularly, even if not in use for extended periods.
- Store the device in a cool, dry place when not in use.

6.2 Software Updates

Software updates can be performed via the USB port. Visit the official Satlink website for the latest firmware and instructions.

6.3 Cleaning

Use a soft, dry cloth to clean the device. Avoid using liquid cleaners or solvents, which may damage the screen or casing.

7. Troubleshooting

If you encounter issues with your WS-6979, refer to the following common problems and solutions.

Problem	Possible Cause	Solution
Device does not power on	Low or depleted battery; Power switch off; Faulty power adapter	Charge the battery; Ensure power switch is ON; Test with a different power adapter if available.
No signal detected	Incorrect cable connection; Incorrect LNB/antenna settings; Obstruction to dish/antenna; Faulty LNB/antenna	Check all cable connections; Verify LNB/antenna settings (frequency, polarization, DiSEqC); Ensure clear line of sight; Test LNB/antenna if possible.
Poor signal quality	Misaligned dish/antenna; Interference; Damaged cable	Fine-tune dish/antenna alignment; Check for sources of interference; Inspect cables for damage.
Screen is blank or frozen	Software error; Low battery	Perform a hard reset (power off and on); Charge the device; If issue persists, consider a firmware update.

8. Specifications

Below are the detailed technical specifications for the Satlink WS-6979.

System capabilities	Fully DVB compliant	Yes
SATELLITE INPUT/ DEMODULATION	Connector Type	F Type
	Input Frequency	950 to 2150 MHz
	Signal Input Level	- 65 to -25 dBm
	LNB Supply	13V/18V, IMax 400mA
	Demodulation Type	QPSK,8PSK,16APSK
	Symbol Rate	2<Rs<45Mband(SCPC/MCPC)
DVB-S/S2 Input /Demodulation	Connector Type	FEMALE Type
	Input Frequency	48 to 862 MHz
	Signal Input Level	-79.5dBm (MAX)
	ANT Supply	5V, 12V/17V Imax 100mA
	Demodulation Type	QPSK,16QAM,64QAM,256QAM
LCD Features	LCD Type	TFT TRANSMISSIVE
	Number of Dots	480(RGB) x272
	Active area (W x H)	95.04x53.86 mm^2
AV Output interface	Connector Type	3.5 mm jack
	Video Output	CVBS
	Audio Output	Stereo Audio L/R output
HDMI output connecter	Format	HDMI 1.3a
AV Input interface	Connector Type	3.5 mm jack
	Video input	CVBS
	Audio input	Stereo Audio L/R input
Audio/Video Processing	Resolving rate	PAL-25 frame@720*576,NTSC-30 frame@720*480,
	Signal compatibility	Support conversion for different video formats
	Video Format	4:3,16:9,By Pan & Scan and Letter Box conversion
	Audio output mode	Stereo, Mono, R/L
Data Service Port	Connector	USB
	Data protocol	USB2.0 interface
	File format	wma,mp3,mp4,avi,jpg,jpeg,bmp,img
Microprocessor	Microprocessor	NOVATEK
	Clock Frequency	500MHz
	SDRAM Memory	1Gbit DDR3
Power Supply	Li-Ion Battery	7.4V/3000mAh(The machine behind labeling shall prevail)
	Adapter	OUTPUT :DC12V/1.5A INTUPT :100-240V AC 50/60Hz(Will be subject to actual configuration)
	Power consumption	Max. 10W
Physical Characerstics	Size	125x205X45(mm)
	Net Weight	0.66KG

Figure 8.1: Detailed System Specifications.

Feature	Specification
Standards	DVB-S2/S, DVB-T/T2, DVB-C, MPEG-2, MPEG-4, H.265 (8-bit)
Input Frequency (Satellite)	950~2150MHz
Input Signal Level (Satellite)	-65~-25dBm
LNB Power	13V/18V, IMax 400mA
Demodulation Type (Satellite)	QPSK, 8PSK, 16APSK
Input Frequency (Terrestrial/Cable)	48~862MHz

Feature	Specification
Input Signal Level (Terrestrial/Cable)	-79.5dBm (MAX)
ANT Power	5V, 12V/17V Imax 100mA
Demodulation Type (Terrestrial/Cable)	QPSK, 16QAM, 64QAM, 256QAM
Display	4.3 inch TFT LCD, 480(RGB)x272 pixels
Video Output	CVBS (3.5mm jack), HDMI 1.3a
Audio Output	Stereo L/R (3.5mm jack)
Video Input	CVBS (3.5mm jack)
Audio Input	Stereo L/R (3.5mm jack)
Video Decoding	MPEG-2 MP@HL, MPEG-1, MPEG-4 ASP @L5 HD, H.264 MP & HP @L4, H.265 (8-bit)
Audio Decoding	MPEG-1 Layer I/II, MPEG-2 Layer I/II
USB Interface	USB 2.0
File System Support	NTFS, FAT32, FAT16
Microprocessor	Novatek, 500MHz
Memory	1GB DDR3 SDRAM
Battery	7.4V/3000mAh Li-Ion
Power Consumption	Max. 10W
Dimensions	95 x 155 x 45mm
Net Weight	0.7 kg

9. Warranty and Support

The Satlink WS-6979 comes with a standard manufacturer's warranty. Please refer to the warranty card included in your package for specific terms and conditions. For technical support, software updates, or service inquiries, please contact your retailer or the official Satlink customer service channels. Keep your purchase receipt as proof of purchase for warranty claims.

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question

Answered questions about this manual

Where can I find software updates for the Satlink WS-6979 SE satellite meter?

To update the software on your Satlink WS-6979, you should follow these steps based on the official manual:Official Source: Visit the official Satlink website to download the latest firmware files. If you cannot find...

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