





Satellite, Terrestrial, Cable & CCTV Testing Instrument



User's Guide





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▶ OVERVIEW

A brand new testing instrument, designed to meet the technical needs of DVB & CCTV installations. The EDISION MULTI-FINDER is a compact, 100% portable tester, complete with all the necessary features for testing devices and signals in installations, as well as examining any problems in signal reception and distribution. It features H.265 TV signal decoding, HD IN/OUT ports, AV IN/OUT, BNC IN/OUT and RS485 for PTZ Control. It covers television systems using DVB-S/S2,T/T2/C digital modulations, and the most widely used CCTV signals such as AHD/CVI/TVI/CVBS.



▶ FEATURES

- All in one: Satellite, Terrestrial, Cable & CCTV Testing Instrument
- Digital Combo Finder for DVB-S2, DVB-T2 and DVB-C
- H.265 HEVC decoding support
- DiSEqC 1.0, 1.1, 1.2, USALS and Unicable
- Fast Spectrum Analyzer
- Transponder Data parsing on DVB-S/S2
- Constellation Chart on DVB-S/S2
- Azimuth, Elevation & LNB skew tilt calculator
- 6000 channels TV & Radio programmable
- Favorite Channel list editing
- CCTV Cameras support: AHD/TVI/CVI/CVBS
- DC out support: 12V/1A

- RS485 PTZ Control
- HDMI & AV input/output support
- 7" LCD Display
- Display Buttons with quick access function
- Detachable Lithium Battery 6300mAh
- USB Wi-Fi Support
- Apps: YouTube, RSS Reader, Weather Forecast
- Ports: DC IN, ANT IN, LNB IN, LAN, HD OUT, AV OUT, RS485, RS232/AV IN, HD IN, BNC OUT, BNC IN, DC OUT, USB
- Smart Card Reader
- Software Upgrade by USB & HTTP



▶ PRODUCT OVERVIEW

- 1. USB: Connection for USB storage devices
- DC OUT: Connection for camera power supply (DC 12V1.0A)
- 3. VIDEO IN: Connection for camera video input
- 4. **VIDEO OUT:** Connection for analog video output
- 5. HD IN: Connection for external HDMI sources
- RS 232: Connection for analog video input & RS232 com port
- 7. RS 485: Connection terminals for PTZ control

- 8. AV OUT: Connection for analog video output
- 9. HD OUT: Connection for external HDMI monitor
- 10. CA: Embedded card reader
- 11. **ETHERNET:** Ethernet port RJ45 10/100 Mbps
- 12. LNB IN: Input for satellite signal
- 13. ANT IN: Input for terrestrial or cable signal
- 14. **DC IN:** Connection for power adapter (DC 12V4.5A)
- 15. POWER: ON/OFF power switch

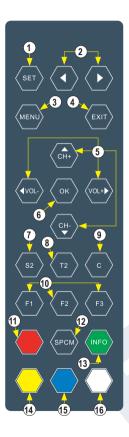


▶ PACKAGE CONTENTS

- 1. MULTI-FINDER
- 2. Transportation Bag
- 3. Protective Bag
- 4. Remote Control
- 5. Car Charger

- 6. Jack to AV Cable
- 7. Jack to RS232 Cable
- 8. BNC to BNC Cable
- 9. DC-OUT Adaptor Cable
- 10. PSU





► FRONT PANEL KEYS

- 1. Enter monitor OSD menu
- 2. Monitor OSD menu adjustment keys
- 3. Enter the main menu
- 4. Exit or back
- 5. Navigation, CH & VOLUME keys
- 6. Enter or submit
- 7. Start sattellite installation
- 8. Start terrestrial installation
- 9. Start cable installation
- User programmable function keys
 f1 default: CVBS Video input
 f2 default: Camera Video Input
 f3 default: HDMI input
- 11. Audio menu or other function
- 12. Start spectrum analyzer

- 13. Subtitle or user defined
- 14. Teletext or user defined
- 15. Change output video resolution or user defined
- 16. TV / Radio or user defined

▶ BACK PANEL

- 1. Detachable battery
- 2. Flat surface stand





► FRONT PANEL LED INDICATIONS

- 1. Indicates that AV input is in operation
- 2. Indicates that CCTV input is in operation
- 3. Indicates that HDMI input is in operation
- 4. Indicates locking of selected RF channel
- 5. Indication for charging status
- 6. Indication for device status
- 7. IR sensor window



▶ TECHNICAL SPECIFICATIONS

SYSTEM

Main Processor 800M Hz based CPU

Flash Memory 128M bits DDR SDRAM 256MB

TUNER/FRONT-END

Tuner Type DVB-S / DVB-S2

Input Connector F-type, Connector, Female 950 MHz ~ 2150 MHz

Signal Level -65 to -25 dBm

LNB Power Current: Max. 400mA with Overload Protection

Demodulation QPSK, 8PSK

Input Symbol Rate 1-45 Mbps, Convolutional Code Rate

Forward Error Correction (FEC) 1/2, 2/3, 3/4, 5/6, 7/8, 1/4, 1/3, 2/5, 3/5, 4/5, 8/9, 9/10 and Auto

Tuner Type DVB-T/DVB-T2

Input Connector IEC-Type, Connector, Female

Signal Level Nordig Compliant DBOOK Compliant

Forward Error Correction (FEC) DVB-T: Viterbi + Reed Solomon 1/2, 2/3, 3/4, 5/6, 7/8.

Input Frequency DVB-T2: LPDC + BCH 1/2, 3/5, 2/3, 3/4, 5/6.

Constellation QPSK, 16-QAM, 64-QAM, 256-QAM Both rotated and non-rotated

Guard Interval 1/4, 19/256, 1/8, 19/128, 1/16, 1/32, 1/128

FFT Mode 1k, 2k, 4k, 8k normal and extended, 16k normal and extended, 32k normal and extended.

Channel Bandwidth 6/7/8 MHz

Antenna power output 12V/24V,50mA max

Demodulation COFDM 2K/8K

FEC Decoder 1/4, 2/3, 3/4, 5/6, 7/8, k=7

Tuner Type DVB-C

Input Connector IEC-Type, Connector, Female

Frequency Range 47-862MHZ

Signal Level -20dBmV to +20dBmV

Bandwidth 8MHZ Demodulation QAM

Constellations 8,16,32,64,128,256

Input Symbol Rate 1.5 - 7Mbps



POWER SUPPLY

Aspect Radio

Input Voltage Adapter 100~240V AC, 50/60Hz

Power Consumption 20W MAX
Power charger output 12V DC 4.5A

Battery Detachable 2 cell

Detachable 2 cell Lithium Battery 7.4 V/6300mAh

Battery standard charging/discharging time 4H/6-7H

MPEG TS A/V DECODING

Input Rate Max.120Mbit/s

4:3, 16:9, Letter Box

Video Decoding MPEG-2, MP@ML, MPEG-4 part 10/H.264/H.265

Video Resolution HDMI IN / OUT 480p, 576p, 720p@50/60Hz, 1080i @50/60Hz, 1080p@50/60Hz

Audio Decoding MPEG-1 layer I/II, MPEG-2 layer II, Dolby digital, Dolby digital plus Left / Right / Stereo/ Mono

Sampling Rate 32KHz, 44.1KHz and 48KHz

A/V & DATA INPUT/OUTPUT

A/V IN/OUT Video CVBS input/output & Audio L/R input/output

RS-232C Transfer rate up to 115.2Kbps 3.5mm"Phone Jack Type

Audio output Built-in speakers

VIDEO OUT/IN BNC-Type, Video input/output AHD/TVI/CVI/CVBS

RS 485 150~115200bps

DC OUT 12V 1A RJ-45 10M/100M

USB USB 2.0 HDMI VER1.3 Type A

PHYSICAL SPECIFICATION

LCD display 7 inch 640x480

Size[W*H*D] 233mmX 165mmX50mm

Net Weight <2.0KG
Operation Temperature 0°C~+45°C

Storage Temperature -10°C~+70°C

Storage Humidity 5%~95% RH (Non-Condensing)



▶OSD MENU

- 1. Installation Menu
- 2. Spectrum
- 3. Services
- 4. Media

- 5. CCTV
- 6. Audio/Video
- 7. System
- 8. Application

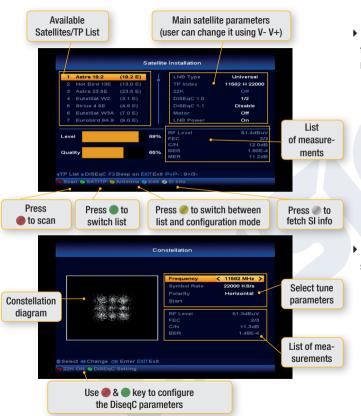




1. Installation Menu

- **1.1 Satellite Installation** Configure, control, scan, measure, edit or add satellites and transponders
- 1.2 Auto Installation Automatically detects DiSEqC connections
- 1.3 Satellite Guide Calculate the appropriate values for Dish calibration.
- 1.4 Constellation Start a constellation chart.
- 1.5 Terrestrial Scan Scan manually or automatically for Terrestrial services.
- 1.6 Cable Full Scan Scan manually or automatically for Cable services.
- 1.7 Cable NID Fast-Scan Scan and manage NID scan tables.





▶ Satellite Installation, here you can configure everything regarding the satellite services, add new satellites or transponders, move a motorized antenna and measure the received signal.

Constellation chart, will help you to detect a bad reception by showing the representing on the screen with modulation dots.





Select terrestrial transponder

> Terrestrial Scan, the user can perform a manual or automatic scan, select the region and power the antenna if necessary.



Cable Full-Scan, starts a full scan and allow you to enter a providers NIT frequency in order to finish the scan faster.



Configure the tuner parameters Enable NIT Search. if it is available

Netw ID Scan unitymedia BW Start Search Add, delete or load a backup a provid-Level 98% Quality

Cable NID Fast-Scan, can perform a fast scan for the configured providers. You can also add manually new Providers depending on your needs.

List of cable providers for fast scan

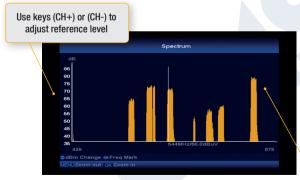
er backup list





2. Spectrum

2.1 DVB-S2 - Start the spectrum view for satellite tuner.2.2 DVB-T2/C - Start the spectrum view for terrestrial tuner.

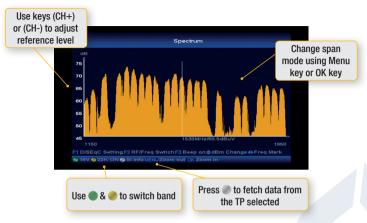


▶ DVB-T2/C spectrum, real time spectrum preview helps you observe any malfunction,interference, ingress and other waveforms that may be affecting the RF installation.

DVB-S2 spectrum, real time spectrum preview helps you quickly and easily with no hassle to finish the satellite dish pointing procedure with SI fetch capability which displays information about the selected transponder.

Change span mode using Menu key or OK key





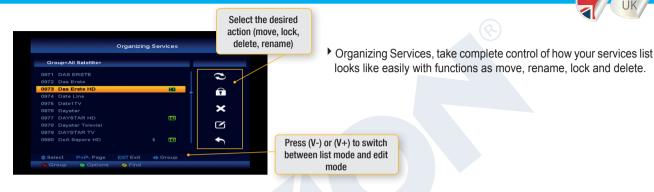
DVB-S2 spectrum, real time spectrum preview with SI fetch capability assures a hassle free satellite setup.



3. Services

- 3.1 Organize Services Edit your channel list service.
- 3.2 Organize Favorites Organize the favorite lists of your choice.
- 3.3 Edivision Show the EPG of the services.







Organizing Favourites, make your own favourites lists to enhance your everyday working experience. Additionally you can fully control the preinstalled favourites lists.

Organize your favourite channels







4. Media

- 4.1 File List Browse the connected USB drives file system.
- 4.2 Storage Information Display information about the connected USB drives.
- 4.3 PVR Settings Configure the PVR settings.
- **4.4 USB Speed Test** Start a speed test of the connected USB drive.
- 4.5 Remove USB Device safely Deactivates the USB drive safely.

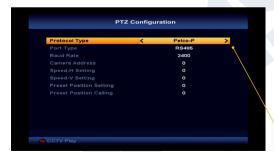
File List, browse and preview files stored in your connected USB drive file system where you can filter out audio, image, video, recordings and s/w files.





5. CCTV

- 5.1 Display CCTV input.
- **5.2 PTZ Configuration.**



PTZ Configuration, take control of your PTZ camera by setting the necessary connection details and use the remote control to Pan, Tilt, Zoom the camera and additionally control the Focus and Aperture size.

Use keys 1 and 4 to control focus, keys 2 and 5 to control zoom and keys 3 and 6 to control the Aperture size.

Select the protocol type, the baud rate and camera address accordingly







6. Audio/Video

- 6.1 Display HDMI input.
- 6.2 Display A/V input.
- 6.3 A/V Output Settings

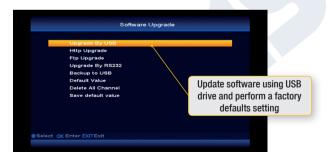


A/V Output Settings, control output video resolution and adjust the video Brightness, Contrast and Satturation. You can also select the OSD transparency.

Select video output mode using keys V- or V+







7. System

- 7.1 Language Set your preferred OSD & Audio language.
- **7.2 Ethernet Settings** Configure your network interfaces.
- 7.3 Time Settings Configure the system time.
- 7.4 Miscellaneous settings Various general settings.
- **7.5 Software Update** Update or backup your firmware.
- 7.6 **Default settings** Restore the default configuration.
- **7.7 Hotkey configuration** Configure the hotkey function.
- 7.8 Information Display general information about the device.
- 7.9 Battery Information Display battery status.
- 7.10 Conditional Access Show CA information about your card.
 - Software Upgrade, get the best user experience and stay up to date by upgrading frequently the installed software in your MultiFinder. Additionally you can wipe channels, make your own firmware backups and overwrite default values. Please note that it is very important during firmware update to connect external power supply to avoid power loss!





▶ Hotkey Setting, several keys can be programmed with different functionality depending on how each user likes to operate them. Please note, when at the very bottom of the OSD menu appears color button indications the colored Hotkeys defined are not in operation!

Configure the desired action for the hotkeys available



8. Application

- 8.1 YouTube Start YouTube application.
- 8.2 RSS Reader Show or add RSS feeds.
- 8.3 Weather forecast Display the weather forecast of the selected cities.
- 8.4 Web TV Start Web TV application.









▶ YouTube, enjoy cable-less(requires external wifi adapter) video streaming service over IP. You can set the desired region to filter the displayed featured videos.

YouTube application available

RSS reader, stay up to date with the latest news by using RSS feeds from various sites. Additionally, users can add their own desired feeds.

RSS Reader application available

Web TV, access Web-TV streams by using this application. It is required from you to add any desired streams manually using the Web-TV list file in order to load it from USB by pressing the white key or manually through OSD.

Web TV application available



► SAFETY REQUIREMENTS

Product inspection: Inspect the equipment for shipping damage. If you have discovered any damage, immediately file a claim to the carrier.

Read and Follow All Instructions: All the safety and operating instructions should be read prior to and followed while operating this product.

Attachments: Do not use attachments that are not approved by the product manufacturer.

Water and Moisture: This product is not waterproof.

Power Sources: This product should be operated only from the type of power source specified.

Wire Protection: Ensure all connected wiring is routed correctly to avoid damage including pinching, excessive bends, or compression.

Power Lines: Always use caution and avoid operating this or any connected equipment near uninsulated power lines or any other hazards.

Servicing: There are no user serviceable parts except the battery (replacement only). Do not attempt to service this product or remove covers other than the battery cover.

Heat: The product should be operated away from heat sources such as radiators, heat registers, stoves, or other products that produce heat.

Maximum input Voltage: Ensure that the voltage applied to the power connector does not exceed 12V. Higher voltages may damage the equipment!



Replace battery only with a new one of the same type.



Recycle or dispose used electrical and electronic devices properly.





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