

# Sefram

# SEFRAM 7848

## The ideal companion for Digital Terrestrial TV (DVB-T, DVB-T2/T2) and Digital Satellite (DVB-S/S2) Display SD et HD\* TV programs

### Touch screen, compact, robust and easy to use

With its panoramic 7 inches touch screen, you have full benefit of the touch screen technology: intuitive access to functions, menus and measurements. The new rugged housing with protective bumpers is designed for extensive field use and protection of sensitive parts of the instrument.

### All digital measurements in DVB-T, DVB-T2 , DVB-S and DVB-S2

The 7848 provides all measurements in DVB-T/T2, DVB-S/S2. For each digital standard, we provide all measurements, including BER, MER, lost packets, noise margin and echoes analysis.

### Panoramic LCD with display of MPEG-2 and MPEG-4\* TV programs

The 7848 offers a bright and panoramic hight quality LCD display for measurements results and free-to-air MPEG-2 / MPEG-4 programs display.

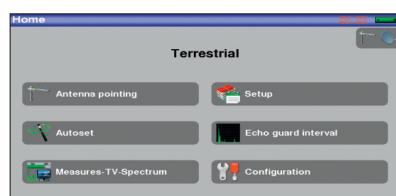
### All necessary functions and tools to save time

The 7848 has a very simple and intuitive man-machine interface. Special functions have been added to save time and money.

### Checking the alignment of antennas

The 7848 includes a checksat mode for satellite and a special tool to align terrestrial antennas. User will have a graphical information combined with a beeper.

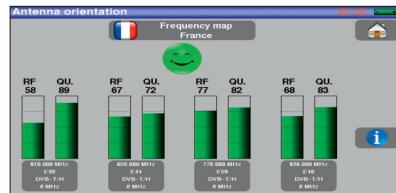
\* only for free-to-air



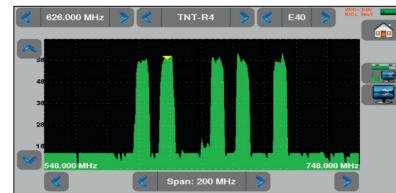
Home page for terrestrial: simple  
and intuitive



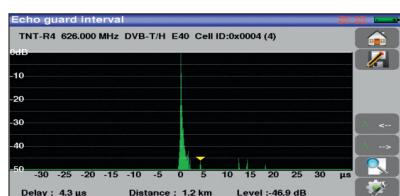
Home page for satellite



Alignment of terrestrial antenna  
with 4 multiplex



Spectrum in terrestrial mode



Echoes / guard interval (terrestrial)



All measurements on a single screen

**NEW**  
DVB-T  
DVB-T2  
DVB-S  
DVB-S2



| <b>Specifications</b>                 |  | <b>Terrestrial band</b>   | <b>Satellite band</b>  |   |  |  |
|---------------------------------------|--|---|--|---|--|--|
| <b>Frequency</b>                      |  | 45-900 MHz  | 900-2200 MHz   |   |  |  |
| Range                                 |  | Measure: 50kHz, display: 1kHz   | Mesure and display: 1 MHz  |   |  |  |
| <b>Level measurements</b>             |  | 20-120 dBµV   | 30-110 dBµV  |   |  |  |
| Dynamic range                         |  | level, RF power, C/N  | level, RF power, C/N   |   |  |  |
| Measurements                          |  | 10dBµV (typical)  | 20dBµV (typical)   |   |  |  |
| Noise level                           |  | dBµV, dBmV, dBm, V  | dBµV, dBmV, dBm, V   |   |  |  |
| Units                                 |  | ±2dB ± 0.05dB/°C  | ±2dB ± 0.05dB/°C   |   |  |  |
| Accuracy                              |  | 0,1dB   | 0,1dB  |   |  |  |
| Resolution                            |  | 100kHz, 300kHz, 1MHz  | 1MHz, 3MHz, 10MHz  |   |  |  |
| Measurement filters                   |  | B, C, D, K, I, L, M, N, FM, DVB-T/H/T2/T2Lite, DVB-C/C2 (level measurements only)       | PAL, SECAM, NTSC, DVB-S, DVB-S2, DSS                             |   |  |  |
| Standards                             |  |   |  |   |  |  |
| <b>Digital measurements</b>           |  | <b>DVB-T/H</b>  | <b>DVB-T2</b>  | <b>DVB-S / DSS</b>                      |  |  |
| Error rate                            |  | BERi (before Viterbi), BERO (after Viterbi), UNC/PER (lost packets), NM (Noise Margin)  | Before LDPC<br>BCH (after LDPC)<br>FER (lost packets, after BCH) | CBER, BERi, BERO, UNC, PER, Link margin |  |  |
| Modulation Error Rate (MER)           |  | 5-35dB  | 5-35dB   | 0-20dB                                  |  |  |
| Bandwidth                             |  | 6, 7 or 8 MHz   | 1.7, 5, 6, 7 or 8 MHz  | -                                       |  |  |
| Symbol rate                           |  | -   | -  | 1-45Ms/s                                |  |  |
| Viterbi                               |  | 1/2, 2/3, 3/4, 5/6, 7/8 (auto)  | 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 1/3, 2/5, auto                     | 1/2, 2/3, 3/4, 5/6, 6/7, 7/8, auto      |  |  |
| Guard interval                        |  | auto, manual  | auto   | auto                                    |  |  |
| Inverted spectrum                     |  | auto  | auto   | auto                                    |  |  |
| Carriers / FFT                        |  | 2k / 8k (auto)  | 1k, 2k, 4k, 8k, 16k, 32k + band extention                        | -                                       |  |  |
| HP/LP - PLP - Data Slice              |  | HP/LP   | PLP  | -                                       |  |  |
| Standards                             |  | EN 300-744  | ETS 302-755  | ETS 300-421                             |  |  |
| <b>Spectrum analysis</b>              |  | ETS 302 307   |  |   |  |  |
| Sweep rate                            |  | 350 ms typical, 400 points  |  |   |  |  |
| Filters                               |  | 100kHz, 300kHz, 1MHz  | 1MHz, 3MHz, 10MHz  |   |  |  |
| Attenuator                            |  | automatic (0 to 55 dB, with 5 dB steps)   |  |   |  |  |
| Dynamic (display)                     |  | 60 dB (10 dB/div)   | 60 dB (10 dB/div)  |   |  |  |
| Span                                  |  | 5MHz to full span in 1-2-5 sequence   |  |   |  |  |
| <b>Pointing mode</b>                  |  | fast search of transmitter<br>10 transmitters max<br>4 multiplex per transmitter        |  |   |  |  |
|                                       |  | fast search of satellite<br>30 satellites max<br>4 transponders per satellite, with NIT |  |   |  |  |
| <b>Input / output</b>                 |  |   |  |   |  |  |
| Interface                             |  | USB A, Ethernet 10/100 baseT  |  |   |  |  |
| Power supply                          |  | 15V / 1A with 5.5mm jack  |  |   |  |  |
| <b>Remote supply</b>                  |  |   |  |   |  |  |
| Voltage                               |  | 5V/13/18V/24, 500mA max   | 13V/18V, 500mA max   |   |  |  |
| DiSEqC                                |  | -   | DiSEqC 1.2: dishes, committed and uncommitted switches           |   |  |  |
| 22 kHz (mini DiSEqC)                  |  | -   | 22 kHz / 0.6V cc   |   |  |  |
| SatCR and DCSS                        |  | -   | DiSEqC protocol extention, 8 slots maximum                       |   |  |  |
| <b>RF input</b>                       |  |   |  |   |  |  |
| Connector                             |  | 75 Ohms (F/BNC adaptor supplied)  |  |   |  |  |
| Maximum input voltage (DC or AC peak) |  | 70 V DC, 50 Vrms/50Hz max   |  |   |  |  |
| <b>Audio and video decoding</b>       |  |   |  |   |  |  |
| Audio                                 |  | MPEG-1, MPEG-2, AAC, HE AAC, Dolby® Digital, Dolby® Digital Plus                        |  |   |  |  |
| Service table                         |  | SDT, LCN  |  |   |  |  |
| Video                                 |  | MPEG-2 SD and MPEG4 HD (high definition H264)   |  |   |  |  |
| <b>General specifications</b>         |  |   |  |   |  |  |
| Display                               |  | 7 inches (16:9), LCD TFT, backlight (500 cd/m²), resolution: 800 x 480                  |  |   |  |  |
| Power supply                          |  | main adaptor 100-240V, output: 15V DC / 1A  |  |   |  |  |
| Battery (factory installed)           |  | Lithium Ion (25W)   |  |   |  |  |
| Autonomy                              |  | 2 hours (typical)   |  |   |  |  |
| Charging time                         |  | 80% charging in 1H15  |  |   |  |  |
| Operating temperature                 |  | -5°C to 45°C  |  |   |  |  |
| Storage temperature                   |  | -10°C to 60°C   |  |   |  |  |
| EMC and safety                        |  | NF-EN 61362-1 / NF-EN 61326-3 / NF-EN 61010-1   |  |   |  |  |
| Dimensions                            |  | 250 x 165 x 65 mm   |  |   |  |  |
| Weight                                |  | 1,35kg  |  |   |  |  |
| Warranty                              |  | 1 year  |  |   |  |  |

**Supplied with :** main wall plug adapter, user's manual (CD-ROM), F/BNC adaptor, carrying belt, carrying pouch.

**Optional accessories :**

- Sun protector + rain protector + belt hanger kit : 978489000
- Car cigar lighter adaptor : 978361000
- Rain protector : 978489500

FT7848 A00 - Specifications can be updated without notice



## For assistance and ordering

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