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# SEFRAM 7849

## The ideal companion for Digital Terrestrial TV (DVB-T, DVB-T2/T2 Lite) Digital Cable (DVB-C/C2) 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/T2 Lite, DVB-C/C2, DVB-S and DVB-S2

The 7849 provides all measurements in DVB-T, DVB-T2/T2 Lite, DVB-C/C2, DVB-S and DVB-S2. For each digital standard, we provide all measurements, including the constellation diagram and echoes analysis.

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

The 7849 offers a bright and panoramic high 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 7849 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 7849 includes a checksat mode for satellite and a special tool to align terrestrial antennas. User will have a graphical information combined with a beeper.

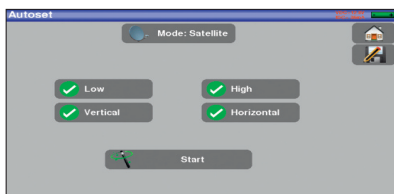
\* only for free-to-air

**NEW**  
DVB-T  
DVB-T2/T2Lite  
DVB-C/C2  
DVB-S  
DVB-S2

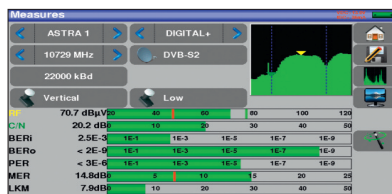


### USB interface

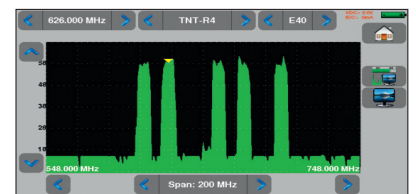
The 7849 includes one USB interface for updating and getting the benefit of free firmware updates. The interface can be used to transfer measurements data, screens shots to a USB memory stick.



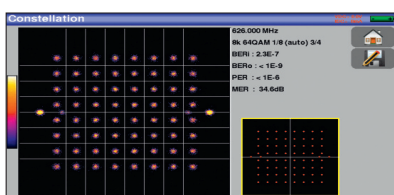
A very powerfull Autoselect



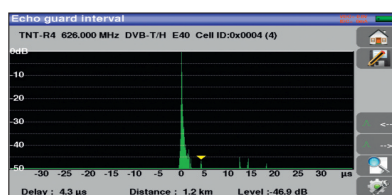
All measurements displayed on a single screen



Spectrum analysis



Constellation diagram



Echoes display with guard interval

freq.	std	RF	C/N	BERi	BERo	PER	MER
E38	DVB-T/H	59.6	38.3	4.7E-8	<1E-6	<1E-5	34.0
E44	DVB-T/H	60.1	37.4	<5E-8	<1E-6	<1E-5	34.6
E59	DVB-T/H	64.2	43.7	<5E-8	<1E-6	<1E-5	35.1
E40	DVB-T/H	60.3	39.8	1.2E-6	<1E-6	<1E-5	34.2
E49	DVB-T/H	59.2	37.4	3.8E-5	<1E-6	<1E-5	33.9
E46	DVB-T/H	60.1	38.8	2.3E-7	<1E-6	<1E-5	33.8
88.000	FM	27.6	22.6				

Measurement map



<b>Specifications</b>	<b>Terrestrial band</b>	<b>Satellite band</b>
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Range	5-900 MHz		900-2200 MHz		
Resolution	Measure: 50kHz, display: 1kHz		Measure and display: 1 MHz		
Dynamic range	20-120 dBμV (30-120dBμV for 5 - 45MHz)		30-110 dBμV		
Measurements	level, RF power, C/N		level, RF power, C/N		
Noise level	10dBμV (typical)		20dBμV (typical)		
Units	dBμV, dBmV, dBm, V		dBμV, dBmV, dBm, V		
Accuracy	±2dB ± 0.05dB/°C		±2dB ± 0.05dB/°C		
Resolution	0,1dB		0,1dB		
Measurement filters	100kHz, 300kHz, 1MHz		MHz, 3MHz, 10MHz		
Standards	B, G, D, K, I, L, M, N, FM, DVB-T/H/T2/T2 Lite, DVB-C/C2		PAL, SECAM, NTSC, DVB-S, DVB-S2, DSS		
Error rate	BERi (before Viterbi), BERO (after Viterbi), UNC/PER (lost packets), NM (Noise Margin)	Before LDPC BCH (after LDPC) FER (lost packets, after BCH)	BER, UNC, NM, LDPC*, BCH*, FER*	CBER, BERi, BERO, UNC, PER, Link margin	LDPC (BERi), BCH (BERo), PER, Link Margin
Modulation Error Rate (MER)	5-35dB	5-35dB	DVB-C: 20-40dB, DVB-C2: 5-35dB	0-20dB	0-20dB
Bandwidth	6, 7 or 8 MHz	1.7, 5, 6, 7 or 8 MHz	6MHz, 8MHz	-	-
Symbol rate	-	-	DVB-C: 1 at 7,224Ms/s	1-45Ms/s	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	2/3, 3/4, 4/5, 5/6, 8/9, 9/10	1/2, 2/3, 3/4, 5/6, 6/7, 7/8, auto	2/5, 1/2, 3/5, 2/3, 3/4, 5/6, 8/9, 9/10, auto
Guard interval	auto, manual	auto	auto	auto	auto
Inverted spectrum	auto	auto	auto	auto	auto
Carriers / FFT	2k / 8k (auto)	1k, 2k, 4k, 8k, 16k, 32k + band extension	-	-	-
HP/LP - PLP - Data Slice	HP/LP	PLP	PLP + Slice data*	-	-
Constellation	QPSK, 16QAM, 64QAM, auto	QPSK, 16QAM, 64QAM, 256QAM, auto	16QAM, 32QAM, 64QAM, 256QAM, 1024QAM*, 4096QAM*, auto	QPSK	QPSK, 8PSK, 16APSK, 32APSK
Echoes et pre-echoes	Dynamic: 50dB/ -75kms +75kms (8k)	Dynamic: 50dB/ -75kms +75kms (8k)	Dynamic: 50dB/ -35kms +35kms (4k)	-	-
Standards	EN 300-744	ETS 302-755	-	ETS 300-421	ETS 302 307
Sweep rate	350 ms typical, 400 points				
Filters	100kHz, 300kHz, 1MHz		1MHz, 3MHz, 10MHz		
Attenuator	automatic (0 to 55 dB, 5 dB steps)				
Dynamic (display)	60 dB (10 dB/div)		60 dB (10 dB/div)		
Span	5MHz at full span with 1-2-5 sequence				
	fast search of transmitter 10 transmitters max, 4 multiplex per transmitter		fast search of satellite 30 satellites max, 4 transponders per satellite, with NIT		
Capacity	scrolling of 50 programs				
Display	texte				
Display	display of constellation diagram				
Data	maasures, spectrum, constellation diagrams, echoes				
Capacity	1000 files max.				
Interface	USB A, Ethernet 10/100 baseT				
Power supply input	15V / 1A with 5.5mm input jack (male)				
Voltage	5/13/18/24V, 500 mA max (300mA max. for 24V)		13V/18V, 500 mA max		
DiSEqC	-		DiSEqC 1.2: dishes, committed and uncommitted switches		
22 kHz (mini DiSEqC)	-		22 kHz / 0.6V cc		
SatCR and DCSS	-		DiSEqC protocol extension, 8 slots maximum		
Connector	75 Ohms (F to BNC adaptor supplied)				
Maximum input voltage (DC or AC peak)	70 V DC, 50 Vrms./50Hz max				
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)				

**General specifications**

Display	7 inches (16:9), LCD TFT, backlight (500 cd/m <sup>2</sup> ), 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



FT7849 A00 - Specifications can be updated without notice



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**For assistance and ordering**

