



# SEFRAM 7846

## The ideal companion for Digital Terrestrial TV (DVB-T) and satellite TV (DVB-S and DVB-S2) Display SD\* and HD\* TV programs

### Robust and easy to use

With only 5 keys on the front panel, you access directly to all measurements. Using the 7846 is intuitive. The new rugged plastic housing is designed for extensive field use and protects sensitive parts of the instrument.

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

The 7846 provides all measurements in **DVB-T, DVB-S and DVB-S2**. You will get : BER, MER, lost packets and noise margin/link margin.

### SEFRAM 7846 : remote supply from 5V to 24V is included

When the remote supply is needed for external amplifiers and LNB, the 7846 will offer the following voltages 5V, 13V, 18V and 24V. The TV meter provides DiSEqC 1.2 and SatCR compatibility.

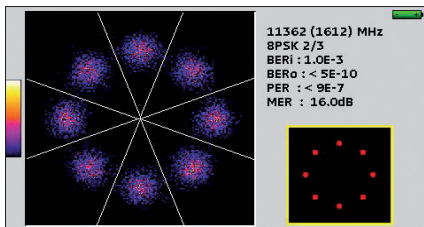
### LCD colour display with display of MPEG-2 and MPEG-4 TV programs

The 7846 offers a bright LCD TFT display for measurements results and for free-to-air TV programs (MPEG-2 and MPEG-4).

### All necessary functions available to analyse signals and ease your job

The 7846 includes a spectrum analyser, display the constellation diagram (DVB-S/S2 and DVB-T) and the echoes (guard interval) for DVB-T.

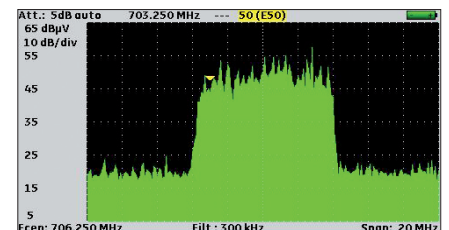
\* free to air



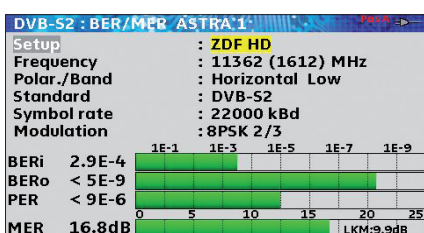
Constellation diagram

#	name	place	frequency	configuration
363	R1 CH PU	ST-ETIENNE	E50	---
364	R2 L P B	ST-ETIENNE	E23	---
365	R3 CANAL	ST-ETIENNE	E39	---
366	R4 M6 AB	ST-ETIENNE	E54	---
367	R5 HD	ST-ETIENNE	E29	---
368	R6 TF1 N	ST-ETIENNE	E26	---
0	DIGITAL+	ASTRA 1	10729 VL	---
1	ARD	ASTRA 1	10743 HL	---
2	SKY D	ASTRA 1	10773 HL	---

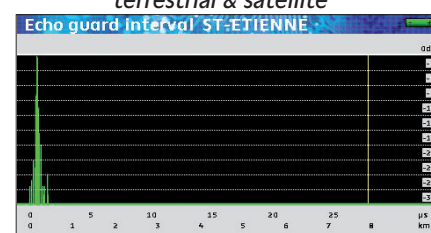
Channels monitoring terrestrial & satellite



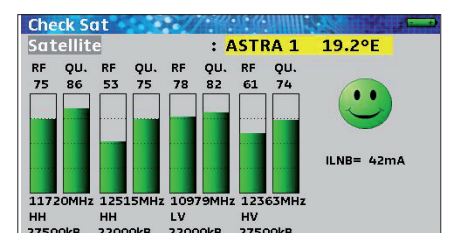
Fast spectrum analysis



All digital measurements



Echoes display with guard interval



Fast checksat mode for dish alignment



DVB-T  
DVB-S  
DVB-S2

**NEW PRODUCT  
2011**

**SEFRAM  
7846**

### Fast checksat mode : save you time for dish alignment

The 7846 includes a very fast checksat mode for dish alignment. User will have a graphical information combined with a beeper.

### USB interface

The 7846 includes two USB interfaces for updating and getting the benefit of free firmware updates. They can be used to transfer data to a computer to create reports when you measurements campaigns are done.



Specifications	Terrestrial band	Satellite band
<b>Frequency</b>		
Range	45-865 MHz	950-2150 MHz
Resolution	50kHz	1 MHz
<b>Level measurement</b>		
Dynamic range	20-120 dB $\mu$ V	40-110 dB $\mu$ V
Units	dB $\mu$ V, dBmV, dBm, V	dB $\mu$ V, dBmV, dBm, V
Accuracy	$\pm 2\text{dB} \pm 0.05\text{dB}/^\circ\text{C}$	$\pm 2\text{dB} \pm 0.05\text{dB}/^\circ\text{C}$
Resolution	0,1dB	0,1dB
Measurement filter	300kHz	1MHz
Standards	B, G, D, K, I, L, M, N, FM, DVB-T/H	PAL, SECAM, NTSC, DVB-S, DVB-S2, DSS
<b>Digital measurements</b>	<b>DVB-T/H</b>	<b>DVB-S / DVB-S2* / DSS</b>
Error rate measurement	BERi (before Viterbi correction), BERo (after Viterbi correction), UNC/PER (lost packets), NM (Noise Margin)	BERi, BERo, UNC, PER, LKM
Modulation error rate (MER)	0-35dB	0-20dB
Symbol rate	-	1-45Ms/s
Bandwidth	5, 6, 7 or 8 MHz	-
Viterbi	1/2, 2/3, 3/4, 5/6, 7/8 (auto)	1/2, 2/3, 3/4, 3/5*, 4/5*, 5/6, 6/7, 7/8, 8/9*, 9/10* (auto)
Guard Interval	1/32, 1/16, 1/8, 1/4 (auto)	-
Carriers	2k / 8k (auto)	-
Constellation diagram	graphical display, with zoom	graphical display, with zoom
Standard	EN 301-701	ETS 300-421 / ETS 302 307
<b>Spectrum analysis</b>		
Sweep rate	150 ms typical, 400 points	350 ms typical, 400 points
Filter	1 MHz	1 MHz
Attenuator	automatic (0 to 60 dB, with 10 dB steps)	automatic (0 to 60 dB with 10 dB steps)
Dynamic (display)	60 dB (10 dB/div)	60 dB (10 dB/div)
Span	0, 5, 10, 20, 50, 100, 200, 500MHz and full span	0, 5, 10, 20, 50, 100, 200, 500, 1000 MHz and full span
<b>Checksat mode</b>	-	fast satellite search
	-	30 satellites max
	-	4 transponders per satellite, with NIT
<b>Measurement map</b>		
Capacity	scrolling of 50 programs max.	
Display	texte	
<b>Constellation diagram</b>		
Display	graphical display, with X1, X2, X3 zoom	
<b>Memory</b>		
Data	frequency maps, measures, spectrum, constellation diagrams, echoes	
Capacity	1000 files max.	
<b>Input / Ouput</b>		
Interface	USB A and USB mini B	
Power supply input	15V / 1A with 5.5mm jack	
<b>Remote supply</b>		
Voltage	5/13/18/24V, 500 mA max (300mA max. for 24V)	
DiSEqC	-	DiSEqC 1.2: dishes, committed and uncommitted switches
22 kHz (mini DiSEqC)	-	22 kHz / 0,6V cc
SatCR	-	DiSEqC protocole extension, 8 slots maximum
<b>RF input</b>		
Connector	75 Ohms (F type and BNC adaptors supplied)	
Maximum input voltage	80 V DC, 80 Vrms./50Hz	
<b>Audio and video decoding</b>		
Audio	digital TV sound: AAC, HE-AAC, Dolby Digital, Dolby Digital Plus	
Video	digital TV programs: MPEG2, MPEG4 576i, 720p, 1080i free to air	
<b>General Specifications</b>		
Display	TFT coloured LCD, 4.3 inches (16:9), with backlight	
Power supply	main adaptor 100-240V, 15V DC / 1A output	
Battery (non removable)	Lithium Ion, 10.8V/2.25Ah (life time 200 charge/discharge)	
Autonomy	2 hours 15mn (typical) with HD TV picture and remote supply	
Charging time	full charge of the battery in 2H15 (instrument switched-off)	
Operating temperature	-5°C to 45°C	
Storage temperature	-10°C to 60°C	
EMC and safety	EN-61010-1, EN61326-A1 and A2, EN55022 (B)	
Dimensions	200 x 190 x 100 mm	
Weight	1,5kg	
Warranty	1 year	

**Supplied with :** main charger/adaptor, user manual on CD-ROM, BNC and F adaptor, carrying belt.

**Optional accessories :** USB cable (A to mini B): **P/N. 978551100**  
Car cigare lighter adaptor: **P/N 978361000**



FT 7846A00 - Specifications can be updated without notice



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**For assistance and ordering**

