

# Sefram

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<http://www.sefram.fr>

## SEFRAM 7806

### The ideal companion for Digital Terrestrial TV 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. We add a quick guide in the top cover to remind all functions and menus. The new rugged plastic housing is designed for extensive field use and protects sensitive parts of the instrument.

#### All DVB-T measurements

The 7806 provides all measurements in DVB-T (COFDM modulation). You will have :BER, MER and lost packets.

#### SEFRAM 7806: remote supply from 5V to 24V is included

When the remote supply is needed for external amplifiers the 7806 will offer the following voltages 5V, 13V, 18V and 24V.

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

The 7806 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

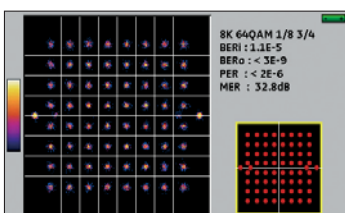
The 7806 includes a spectrum analyser, display the constellation diagram in COFDM and the echoes (guard interval).



**SEFRAM  
7806**

#### USB interface

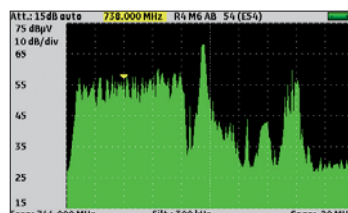
The 7806 includes two USB interfaces for updating and getting the benefit of free firmware updates. They can be used to transfer data to a computer to create reports when you measurements campaigns are done.



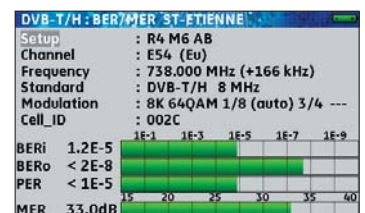
Constellation diagram

#	name	place	frequency	configuration
51	R1 CH PU	ST-ETIENNE	E50	---
52	R2 L P B	ST-ETIENNE	E23	---
53	R3 CANAL	ST-ETIENNE	E39	---
54	R4 M6 AB	ST-ETIENNE	E54	---
55	TS HD	ST-ETIENNE	E29	---
56	R6 TP1 N	ST-ETIENNE	E26	---
58	TF 1	ST-ETIENNE	E35	---
59	FR 2	ST-ETIENNE	E30	---
60	FR 3	ST-ETIENNE	E33	---

Channels monitoring



Fast spectrum analysis



BER - MER in COFDM

## Specifications

## SEFRAM 7806

<b>Frequency</b>	
Range	45-865 MHz
Resolution	50kHz
<b>Level measurement</b>	
Dynamic range	20-120 dB $\mu$ V
Units	dB $\mu$ V, dBmV, dBm, V
Accuracy	$\pm 2$ dB $\pm$ 0.05dB/ $^{\circ}$ C
Resolution	0,1dB
Measurement filter	300kHz
Standards	B, G, D, K, I, L, M, N, FM, DVB-T/H
<b>Digital measurements</b>	
Error rate measurement	DVB-T/H CBER (before correction), VBER (after correction), UNC/PER (lost packets)
Modulation error rate (MER)	0-35dB
Bandwidth	5, 6, 7 or 8 MHz
Viterbi	1/2, 2/3, 3/4, 5/6, 7/8 (auto)
Guard Interval	1/32, 1/16, 1/8, 1/4 (auto)
Carriers	2k / 8k (auto)
Standard	EN 301-701
<b>Spectrum analysis</b>	
Sweep rate	150 ms typical, 400 points
Filter	1 MHz
Attenuator	automatic (0 to 60 dB, with 10 dB steps)
Dynamic (display)	60 dB (10 dB/div)
Span	0, 5, 10, 20, 50, 100, 200, 500MHz and full span
<b>Measurement map</b>	
Capacity	scrolling of 50 programs max.
Display	texte
<b>Constellation diagram</b>	
Display	graphical display, 16QAM/64QAM/QPSK
<b>Memory</b>	
Data	frequency maps, measures, spectrum, constellation diagrams, echoes
Capacity	1000 files max.
<b>Input / Output</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)
<b>RF input</b>	
Connector	75 Ohms (F type or BNC type with 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 $^{\circ}$ C to 45 $^{\circ}$ C
Storage temperature	-10 $^{\circ}$ C to 60 $^{\circ}$ C
EMC and safety	EN-61010-1, EN61326-A1 and A2, EN55022 (B)
Dimensions	200 x 190 x 100 mm
Weight	1,5kg

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

**Optional accessories :** USB cable (A to mini B): P/N. 978551100  
Car cigare lighter adaptor: P/N 978361000  
F/F adaptor : P/N 213200015

*Dolby Digital and Dolby Digital Plus are trade mark of Dolby Laboratories*



FT 7806 A00- Specifications can be updated without notice



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### For assistance and ordering

