# **CABLE TV ANALYSER**



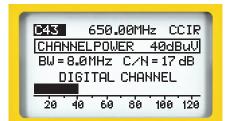
## PROMAX-12

- \* FROM 5 TO 1005 MHz
- \* BER & MER ON QAM DIGITAL SIGNALS
- \* MULTISTANDARD:
  - 16/32/64/256 QAM ANNEX A/B/C QPSK
- \* ANALOGUE CHANNELS
- \* DIGITAL CHANNELS
- \* BROADBAND POWER DETECTION
- \* SCAN
- \* C/N, CSO, CTB, VAC VOLTAGE, HUM
- \* MAX AND MIN HOLD
- \* CHANNEL POWER BY INTEGRATION
- \* TILT
- \* DATALOGGER
- \* PRINTING
- \* CONNECTION TO PC



#### Digital channel power

Just pressing a button, the channel power measurement, carrier/noise, BER and MER can be carried out. MER is an essential measurement, because it is useful to determine the digital signal quality.



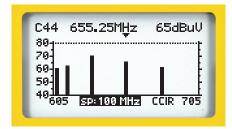
#### **Data Logger**

The **PROMAX-12** can acquire and internally store the required measurements for a later review. It also can print them or transfer the measurements to a PC.

#### Scan

In this mode we can see all the channels of the selected channel plan graphically represented with their associated signal levels. A MARKER can be placed on any of the channels displayed on the screen in order to find their frequency or their signal level.

The SPAN and the REFERENCE LEVEL can be changed in order to adapt the presentation to the users test requirements.

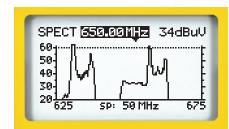


### Constellation

The constellation diagram allows to evaluate graphically the received signal quality, the aspect of the on screen diagram will depend on the digital transmission characteristics.

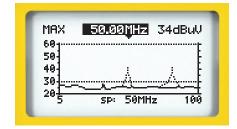
### **Spectrum Analyser**

It can be essential to solve cable modem related problems and very helpul for interference and noise troubleshooting both in the forward and return bands. The HOLD function maintains MAX and MIN values: this is of great value for identifying interfering signals, for example, in the return band.



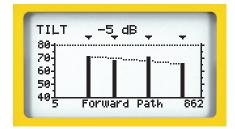
#### Return path

It also includes return path spectrum analyser with max hold function for testing of the cable modem transmission at the subscriber premises, allowing to test the upstream generator of the subscriber cable modem.



#### Tilt

The Tilt function provides a graphic and numeric representation of the absolute level of any 4 defined pilot frequencies and the difference between two of them. An interesting application is found in the return path where the PROMAX-12 together with the RP-110 Pilot Generator will permit to evaluate the frequency response in a graphical and comfortable mode.





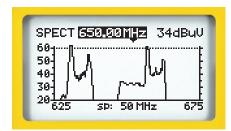
# **CABLE TV ANALYSER**



## PROMAX-12

### Intermodulation (CTB/CSO)

The Composite Triple Beat (CTB) and Composite Second Order (CSO) are an indication of the level of interference in the television channel generated by intermodulation of signals from other channels. Usually, other channels from the same system. Over certain level CTB and / or CSO the interference becomes visible on the television signal.



#### Language

It can be selected among English, French, German and Spanish.



### included accessories

Mains Power Adapter, Mains cable, Soft Carrying bag, F/F Connector Adapter, Rubber Shock Protector.

## optional accessories

F/BNC connector adapter, F/IEC connector adapter, Hard transport case, F/F RF cable, PC / printer communication cable, Car lighter adapter.

SPECIFICATIONS	PROMAX-12	Digital measurements	
TUNING		MER (Modulation Error Rate)	
Tuning range	From 5 to 1005 MHz.	Measurement range	26 dB to 40 dB
Tuning mode	By channels or by frequency	Accuracy	± 2 dB
Channel plan	Selectable	BER (Bit error rate)	
Resolution	10 kHz	Measured before RS decoding	
Indication	Graphic display with backlight	(PreBER)	
	1 1 3	Measurement range	10 E-2 to 10 E-8 (low resolution) E-9 (High
LEVEL MEASUREMENT		Ĭ	resolution), E-10 in Continous mode
Measurement		Measured after RS decoding	,
Analogue Channels	Signal level measurement on video carrier	(PosBER)	
Digital Channels	Channel power measurement by integration	Measurement range	10 E-2 to 10 E-8 (low resolution) E-9 (High
	through channel bandwidth		resolution), E-10 in Continous mode
Measurement range		Constellation Diagram	DVB-QAM signals (Annex A/B/C) & DOCSIS /
Analogue channels	From 25 to 120 dBµV (-35 dBmV to 60 dBmV).		Euro-DOCSIS
Digital channels	From 35 to 120 dBµV (-25 dBmV to 60 dBmV)	Lock range	50 dBμV to 120 dBμV (-10 dBmV to 60 dBmV)
	(channels of 8 MHz).	Symbol rate Measurement	1000 to 7000 Ksym/s for 16/64/256 QAM
Maximum input level		Datalogger	For each digital channel, the level and the
From 5 to 863 MHz	120 dBμV (60 dBmV)		MER can be stored. (BER for data dumping to
DC to 60 Hz	60 V DC or RMS		printer or transfer to PC)
Reading	Digital in dBµV, dBmV or dBm and analogue	Modulation type	QAM 16/32/64/128/256 ITU J83 annex A/C,
	by Graphic display with backlight.	B 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	QAM 64/256 ITU J83 annex B y QPSK
•	1 dB resolution.	Bandwidth	8 MHz
Accuracy	1 0 dD (0 to 40 %C) No motive vide a model detion	Frequency tuner	62.5 kHz
Analogue Channels	± 2 dB (0 to 40 °C) Negative video modulation	MECHANICAL FEATURES	
Digital Channels	± 3 dB (0 to 40 °C) For 8 MHz channel bandwidth	Dimensions	W 70 (00 at diaplay) v H 218 v D 50
	pariuwiuth		W. 70 (90 at display) x H. 218 x D. 50 mm
		Weight	825 g.

DESIGN AND SPECIFICATIONS ARE SUBJECT TO CHANGES WITHOUT PRIOR NOTICE. 04/15