USER'S MANUAL

SATELLITE RECEIVER & CABLE TESTER

RP-080

- 0 MI1483 -

SAFETY NOTES

Read the instruction manual before using the equipment, mainly "SAFETY RULES" paragraph.

The symbol  ***on the equipment means "SEE USER'S MANUAL". In this manual may also appear as a Caution or Warning symbol.***
Warning and Caution statements may appear in this manual to avoid injury hazard or damage to this product or other property.

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English

SATELLITE RECEIVER &
CABLE TESTER

RP-080

1 GENERAL INFORMATION

1.1 Description

The **RP-080** is a handy, versatile and easy to use signal generator with which satellite receivers and coaxial cables of buildings can be checked.

1.2 Specifications ⚠

English

RECEIVER TEST MODE

Frequency	
Pilot carriers	
UHF Band	85 MHz and 750 MHz
L Band (IF Sat)	1000 MHz and 2150 MHz
Accuracy	± 100 kHz
Level	75 to 100 dBμV (selectable in 1 dB steps)
Accuracy	
UHF Band	± 2 dB
L (FI Sat) Band	± 3 dB
LEDs	Carrier output level (individually)
Voltage and 22 kHz	
Indication	13 V yellow LED illuminated 13 V + 22 kHz yellow LED flashes 18 V blue LED illuminated 18 V + 22 kHz blue LED flashes

Connector	F female (input/output)
Power supply	12 - 18 V / 120 mA (by means of RF cable or external DC supply)
Equipment consumption	3 W

Environmental operating conditions

Altitude:	up to 2000 m
Temperature range:	from 5° C to 40° C
Maximum relative humidity:	80% (up to 31° C), decreasing lineally up to 50% at 40° C.

Mechanical features

Dimensions	77 mm W x 85 mm H x 28 mm D
Weight	150 g

INCLUDED ACCESSORIES

AL-005	External mains adapter
AD-060	F/m - BNC/m adapter

OPTIONAL ACCESSORIES

CC-030	F/m - F/m coaxial cable
AD-058	F/m - F/f quick adapter
AL-032	230 V UK mains adapter

2 SAFETY RULES

* Use this equipment **connected only to devices or systems with their common at ground potential**.

* External AC adapter can be used in **Overvoltage Category II**, installations and **Pollution Degree 1** environment, **Only indoor use.**

* When using some of the following accessories use only the specified ones to ensure safety:

  Power adapter

* Use this instrument under the **specified environmental conditions**.

* Remenber that voltages higher than **70 V DC** or **33 V AC rms** are dangerous.

* Use for the signal inputs / outputs, specially when working with high levels, **appropriate low radiation cables.**

* Follow the **cleaning instructions** described in the Maintenance Paragraph.

English

* Symbols related with safety:

 DIRECT CURRENT

 ALTERNATING CURRENT

 DIRECT AND ALTERNATING

 GROUND TERMINAL

 PROTECTIVE CONDUCTOR

 FRAME TERMINAL

 EQUIPOTENTIALITY

 ON (Supply) / OFF (Supply)

 DOUBLE INSULATION
(CLASS II protection)

 CAUTION
(Risk of electric shock)

 CAUTION (Refer to manual)

 FUSE

2.1 Descriptive Examples of Over-Voltage Categories

Cat I Low voltage installations isolated from the mains

Cat II Portable domestic installations

Cat III Fixed domestic installations

Cat IV Industrial installations

English

3 OPERATING INSTRUCTION

3.1 Description of the controls and elements

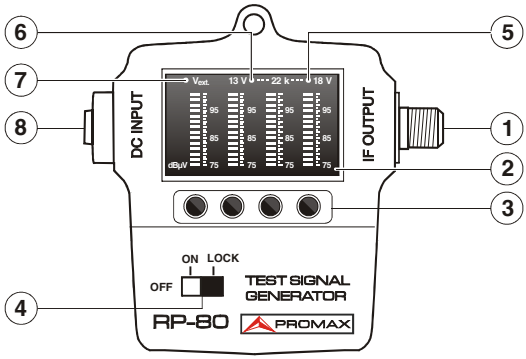

Figure 1.- Front view

[1] IF OUTPUT Output connector

Frequency pilots output. This jack will be connected with the IF input jack (antenna input) of the signal receiver.

[2] PILOT LEVEL INDICATORS

LED indicators in red colour corresponding to the output level of every carrier signal (in 1 dB steps).

[3] PILOT LEVEL SELECTION BUTTONS

Each button allows output level selection for a single frequency carrier (in 1 dB steps).

English

Note: When two contiguous LEDs appear lit the level is 1 dB higher than this one stated by the lower LED. (See an example in the next figure).

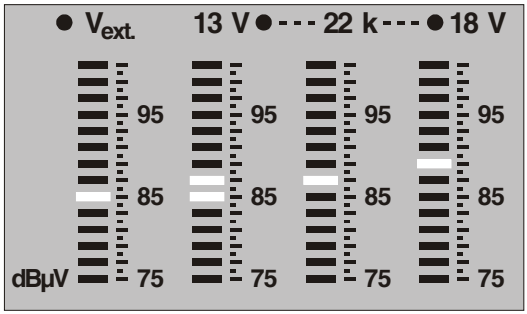

Figure 2.- Output level Indication in dBµV

[4] OFF-ON-LOCK Power on/off switch / Output levels locking

OFF	Instrument power-off (deactivates the output levels)
ON	Activates the output levels
LOCK	Locks the output levels

[5] H (18 V) Blue LED for 18 V

This LED will be illuminated, if on the coaxial line is present a 18 V supply voltage. If in addition, a 22 kHz switching signal is superimposed on the 18 V supply voltage, this LED will flash.

[6] V (13 V) Yellow LED for 13 V

This LED will be illuminated, if on the coaxial line is present a 13 V supply voltage. If in addition, a 22 kHz switching signal is superimposed on the 13 V supply voltage, this LED will flash.

[7] VextC INPUT Green LED states external power supply

Connector to power the instrument through an external DC source (13-18 V / 120 mA).

[8] DC INPUT DC power supply adapter jack

Jack to connect external DC power supply (12-18 V / 120 mA).

3.2 Operating Instructions

English

3.2.1 Using combined with a TV level meter

The **RP-080** has been specially designed for using joint to **PROMAX**'s TV level meters, which are able to tune the Satellite and Terrestrial band like **PRODIG-5 EXPLORER**, **PROLINK-4/4C *Premium***, **PROLINK-3/3C *Premium*** or **MC-577.**

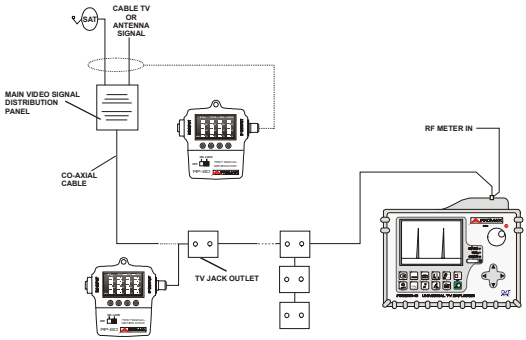

Figure 3.- Checking a TV SAT - UHF installation.

1.- Separate the installation section that is desired to check from the general panel or from one of the jack outlets of the TV signal distribution network.

2.- Connect the **RP-080** OUTPUT [1] connector to one of the ends from section under test, and use the TV level meter (RF input) on the other.

3.- Select on **RP-080**, depending on the presence of amplifiers in the line, the output levels for each carrier by means the pilot level selection buttons [3].

4.- Turns on the level meter, select the TERRESTRIAL (UHF) or SATELLITE (IF) band, select the representation of the spectrum in the whole band (*Full Span*) and set as maximum a 100 dBμV reference level.

5.- Verify on the TV level meter screen in the SPECTRUM ANALYSER mode the presence of the two pilot frequencies generated by the **RP-080** as well as the received signal level to evaluate the attenuation value from line. Adjust the frequency span to a suitable margin.

6.- Repeat the two steps previously described in order to verify the following frequency band.

Consequently, the correct equalisation of the selected installation section will be able to be verified.

IMPORTANT REMARK:

Video carriers generated by **RP-080** are not modulated, therefore do not try to visualize a video picture on TV receiver or TV level meter since these equipments only demodulate **AM** signals.
It is possible to verify the pilot signal level using the SPECTRUM analyser mode on a TV level meter.

English

4 MAINTENANCE

The method of maintenance to be carried out by the user consists of cleaning the cover. All other operations should be carried out by authorised agents or by personnel qualified in the service of instruments.

4.1 Cleaning recommendations

CAUTION

Do not use scented hydrocarbons or chlorides solvents. Such products may attack the materials used in the construction of the cover.

The cover should be cleaned by means of a light solution of detergent and water applied with a soft cloth.

Dry thoroughly before using the system again.

4.2 Internal fuses which user cannot replace

The following fuse must be replaced by authorized personnel:

F1 0.5 A SLOW 125 V SMD


PROMAX