











FRONT VIEW



- ① "F" male base connector.
- ② Rotary selector / Push button.
- ③ Graphic display with backlight.
- ④ DC power adapter external input.
- ⑤ Volume control.
- ⑥ Keyboard for function selection.
- ⑦ Loudspeaker.
- ⑧ Mini-USB connector.

 When connecting via USB it is recommended to connect it also to the mains to avoid interrupting software communication.

MENU KEYS

-  Selects the **CHANNEL - FREQUENCY** operating mode.
-  Selects the **SCAN** operating mode.
-  Selects the **TILT** operating mode.
-  Selects the **DATALOGGER** operating mode.
-  Access to **CONFIGURATION** menus specific to each operating mode and to the global configuration menu of the unit.
-  Selects the **SPECTRUM ANALYSER** mode.
-  Selects the **HUM** operating mode.
-  On / Off key.
-  Measured Voltage at the input indicator.
-  Battery charge indicator.

FUNCTION KEYS DESCRIPTION

CH-FR It changes between frequency tuning and channel tuning. The operating mode measures the video carrier **level**, the Carrier/Noise ratio (**C/N**), the Video/Audio ratio (**V/A**) and activates audio carrier demodulation for **analogue** channels. For **digital** channels, it measures the channel **power** and the Carrier/Noise ratio (**C/N**), the Bit Error rate (**BER**) and the Modulation Error ratio (**MER**) and represent the **Constellation Diagram**. It also permits to measure the **CSO** and **CTB** intermodulation distortion.

LOGGER The **DATALOGGER** operating mode enables multiple measurements to be performed and memorised for subsequent checking and transfer to PC. It can perform and store up to 55 loggers in the memory. Each logger carries out level, C/N, V/A, channel power or MER measurements on the channels activated in the channel plan (up to a maximum of 140 channels).

SCAN The **SCAN** operating mode shows the signal level of all channels present on the chosen frequency band in a bar-graph display. The span and the reference level may be selected through the rotary selector. In addition, a moving marker shows the numeric level of any specific channel. This mode also allows the user to define the pilot channels, used for the TILT measurement (only in the forward band).

SPECT The **SPECTRUM ANALYSER** mode provides a spectrum analysis over the entire band in two parts: return path or sub-band (5 to 80 MHz) and forward band (5 to 1005 MHz). The span is user definable. In addition, it is possible to change the reference level, and **maximum** and **minimum** levels may be detected and held for INGRESS measurements.

TILT The **TILT** operating mode shows on the display, both graphically and numerically, the level difference between any four frequencies, previously defined as pilot channels, in order to obtain information about band equalisation. This function can be applied to the forward band and to the return path, independently.

HUM This is a multifunctional key. For one hand, it measures the HUM frequency and value (%). HUM is a low frequency modulation that affects carriers and produces a characteristic buzzing in both image and audio, especially in analogue signals. On another hand, it automatically identifies the voltage type (DC or AC) at the input and the frequency in case of alternating voltage.

CONFIG The parameters relative to a particular operating mode can be modified through the **configuration menu associated to the mode**. In order to access the configuration menu associated to a particular operating mode, simply press the **CONFIG** key. Some modes have more than one configuration page, to access to the second page it is necessary to press the **CONFIG** key again. The general parameters of configuration (selecting/editing the channel plan, measurement units, language, etc.) can be changed through the **Global Configuration Menu**, by pressing again the **CONFIG** key. To exit a configuration menu, just press the key of the operating mode you wish to access.

