

Signal Level Meter



LF 943D

The Model LF 943D Signal Level Meter is designed to quickly and accurately measure CATV and VHF/UHF TV signals. The meter is applicable to digital terrestrial video broadcast as well as conventional analog broadcast systems. Sub-band operation starts at 5 MHz allowing for both upstream and down stream CATV testing. Ten memories allow store and recall for commonly used preset frequencies. Visual, aural and digital carrier levels are measured with onscreen display of measurement mode. CATV look up tables include standard HRC and IRC systems. Overall, the meter is easy to use, lightweight and ideal for field use.

Features

- Measures digital and analog CATV, VHF, FM, UHF and pilot signals.
- Large digital display eases accurate repeatable level measurements.
- Memory function can store up to ten arbitrary measurement frequencies.
- CATV upstream can be measured with standard sub band starting at 5MHz.
- CATV lookup tables include USA STD, HRC and IRC systems.
- Antenna direction can easily be peaked with the bargraph display.
- Visual, sound and digital carrier level modes are measured.

Specifications

Frequency Range: 5 to 870 MHz (50 kHz steps)
 Frequency Setting: Settable in 50 kHz steps (The frequency of the memory channels can only be set)
 Built-In Channel Table: Japan, U.S.A. (corresponding to each CATV channel of STD, HRC, IRC), ITU-R (CCIR), China, UK, Hong Kong area, Indonesia, Australia (Selectable with switch)

Level Measurement

Broadcast Format
 Analog: AM (video), FM (sound), CW
 Digital: OFDM (terrestrial digital broadcast system) 16-256 QAM (CATV) 8VSB (terrestrial digital broadcast system in USA)
 The channel bandwidth (i.e., 5 MHz, 6 MHz, 7 MHz, 8 MHz) can automatically be selected by setting the channel table.

Resolution: 1 dB
 Measurement Bandwidth: Analog system: 280 kHz (typ.)
 Digital System: Five points in the channel bandwidth

Measurement Range

Analog: 30 to 110 dBμV (-30 to 50 dBmV) (1 dB steps)
 Digital: 45 to 100 dBμV (-15 to 40 dBmV) (1 dB steps)

Accuracy

Analog: ±3 dB
 Digital: ±3 dB (Frequency response of channel bandwidth should be flat).

Detection Method

Analog: Peak Detection
 Digital: Average-value detection
 Level Unit: dBμV, dBmV, selectable

Display

LCD Panel: Display area: 30 x 70 mm
 Input Connector: F-type, 75 Ω
 Monitor Output: FM detection (sound frequency)
 AM detection (video frequency)
 Output Connector: 3.5 Ø, monaural jack (for earphone)

Memory

Number of Channels: Up to 10 channels
 Storable Item: Frequency, Modulation type (analog or digital)

Other Functions:
 Automatic Power Off: 5, 10, 20, 60 minutes, continuous

Environmental Conditions:

Operating
 Temperature Range: 0 to 40° C
 Operating
 Humidity Range: ≤ 85% RH (without condensation)
 Spec-Guaranteed
 Temperature Range: 0 to 40° C
 Spec-Guaranteed
 Humidity Range: ≤ 85% RH (without condensation)
 Storage
 Temperature Range: -10 to 50° C
 Operating Environment: Indoor/Outdoor use (no rain water)
 Operating Altitude: Up to 2000 m
 Pollution Degree: 2

Dimensions

Size (W x H x D): 7 x 2¹¹/₁₆ x 7⁷/₈ in.,
 180 x 68 x 200 mm (excluding protrusions)
 Weight: 850 g (excluding batteries)
 Approx. 2.9 lbs., 1.3 kg (Including C batteries)

Power Supply:

6 C cells
 Power consumption: Up to 2.5 W
 Accessories:
 Carrying Case.....1
 Name Plate.....1
 C cell.....6
 Instruction Manual.....1