# Model Two

**Signal Level Meter**

- Verifies System Performance Using a Complete Range of Measurements
- Measures Analog and Digital Carrier Levels from 5 to 870 MHz
- 5 to 870 MHz Spectrum Analyzer Range
- Large, High-Resolution Display and Easy-to-Understand User Interface
- Ample Measurement Data Storage for Unattended Testing


Designed for the cable test environment, keeping the needs of the installer and field technician in mind, the hand-held Model Two™ signal level meter provides a full complement of measurement functions at an affordable price.

The large LCD display is highly readable in all conditions. The internal battery can operate up to six hours on a single charge and can be fully charged in three hours. One hour of fast charging from AC or vehicle power provides nearly three hours of extended operation. The meter features a built-in speaker.

**Learned Channel Plans**

As a convenience for contractors working with several channel lineups, the Model Two can retain up to five user-defined channel plans. Channel plans can be learned automatically at drops or can be downloaded from any PC running Trilithic's ToolBox™ software.

**Special Tilt/Favorites Plan**

The operator can select up to twelve key channels in each user plan to be included in a tilt/favorite channel plan, allowing for quick go/no-go testing and easy amplitude adjustments.

**Informative Measurement Modes**

The Model Two also performs direct power measurement of QAM signals and even displays the spectrum of the full reverse and forward paths. Amplitude measurements are fast and efficient. Carrier amplitudes are displayed individually, as a group (up to 12 favorites) or as a full-span display. It can also be set to automatically perform unattended level, spectrum, tilt (favorite), and limit tests at programmed intervals, with data logging. In addition, the meter supports a volt meter function.

**Data Storage**

The Model Two saves up to 35 level, tilt, spectrum, channel scan, limit test, and auto-test measurement data files. The operator may recall and display recorded data or upload it to a PC running Trilithic's ToolBox software.

**Auto-Test Programs**

Groups of tests can be assembled into automatic procedures that can be executed with one keystroke. Auto-test data can then be automatically scored against specified limits and combined into reports.

**Automated FCC Proof of Performance Test with Data Evaluation**

The Model Two performs all Part 76 level-related proof tests, including:

- Video carrier levels
- Relative video/audio carrier levels
- Difference between maximum and minimum video carrier levels
- Difference between adjacent video carrier levels
- 24-hour variation test

Tests can be executed immediately or can be programmed to perform at timed intervals. The Model Two has the ability to score test results against FCC limits or limits set by the user.

**Reverse and Forward Spectrum Analysis**

The Model Two can:

- Scan for ingress at ground blocks, down to -40 dBmV
- Scan the full forward spectrum to detect spurious and ingress
- Identify frequencies using the marker function

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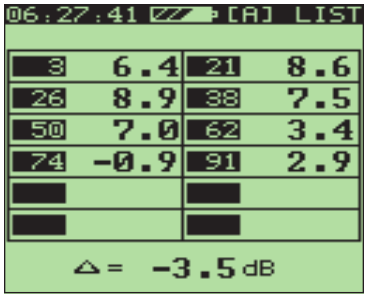
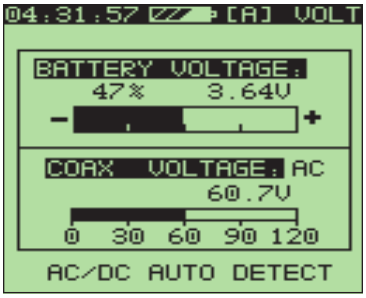
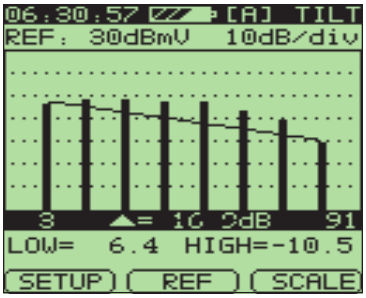
**Signal Level Meter**




Display favorite channels and tilt in tabular form

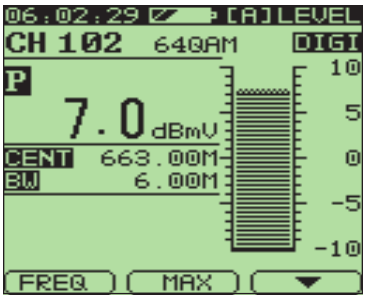



Measure up to 100 Volts, AC/DC

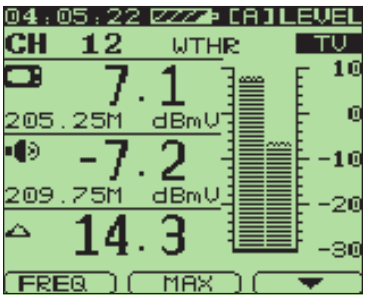



Display favorite channels and tilt as a graph

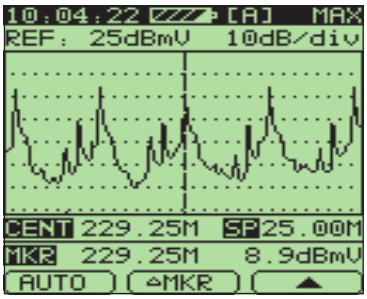

Simple, intuitive set-up screens



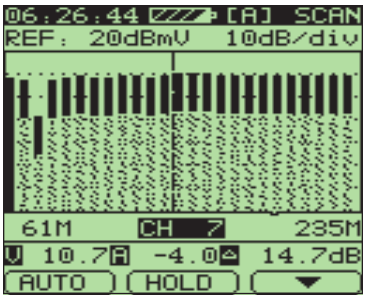

QAM Power available in numeric (shown) or graphic displays




Single channel display, with Δ V/A delta




Display RF spectra from 5 to 870 MHz




Scan all channels, and zoom in with five levels of magnification

# Model Two

**Signal Level Meter**

## SPECIFICATIONS

### Frequency

| | |
|---|---|
| **Frequency Range** | 5 MHz to 870 MHz |
| **Accuracy** | ±50 ppm (20° C ± 5°) |
| **Resolution** | 10 KHz |

### Channel Type

| | |
|---|---|
| **Analog TV** | TV |
| **Digital TV** | QAM, QPSK |
| **FM Channel** | Single frequency, dual audio channels |

### Level Measurement

| | |
|---|---|
| **Range** | -30 dBmV to +60 dBmV (30 dBµV to 120 dBµV) |
| **Accuracy** (> -25 dBmV or 35 dBµV) | **Level:** ±1.5 dB, 10° to 30° C (50° to 86° F) ±3 dB, -10° to +40° C (14° to 104° F) **Scan:** ±2 dB, 10° to 30° C (50° to 86° F) |
| **Resolution** | 0.1 dB |
| **Input Impedance** | 75 Ω (unbalanced, BNC or F-type connector) |
| **Number of Channels** | 150 channels max |
| **Scanning Speed** | 2.75 channels / sec |
| **Scale** | 1, 2, 5, 10 dB/div |
| **Zoom** | (5) levels of magnification (1x, 2x, 3x, 4x, or 5x) or full channel plan scan |

### Frequency Spectrum

| | |
|---|---|
| **Bandwidth** | 2.5 MHz, 6.25 MHz, 12.5 MHz, 25 MHz, 62.5 MHz, and full span |
| **Scale** | 1, 2, 5, 10 dB/div |

### Digital Channel Power (Average)

| | |
|---|---|
| **Bandwidth** | 0.28 to 9.99 MHz |
| **Center Frequency** | 5 MHz (plus ½ channel bandwidth) to 870 MHz (minus ½ channel bandwidth) |
| **Digital Modulation** | QAM, QPSK |

### Tilt Measurement

| | |
|---|---|
| **Number of Channels** | 4 to 12 |
| **Resolution** | 0.1 dB |

### Limit Test Parameters (any of the following may be enabled)

| | |
|---|---|
| **Min Video** | -20 to 59 dBmV (40 to 119 dBµV) |
| **Max Video** | -19 to 60 dBmV (41 to 120 dBµV) |
| **Max Δ Video** | 2 to 30 dB |
| **Min Δ V/A** | 0 to 15 dB |
| **Max Δ V/A** | 5 to 30 dB |
| **Max Δ ADJ** | 0 to 20 dB |
| **24-Hour Video Dev.** | 0 to 20 dB |

### Auto Test

Auto-test up to seven auto-test programs, each composed of any combination of level, tilt, spectrum, and limit.

| | |
|---|---|
| **Time Intervals** | 1 to 23 hours |
| **Test Times** | 1 to 10 times |

Test data storage: up to 35 complete scan files (150 channels max) or 25 complete limit test files (150 channels max); less if other files (level, tilt, spectrum) are saved.

# Model Two

## Signal Level Meter

**Trunk Voltage Measurement**

| | |
|---|---|
| **Input Range** | 1.2 to 100 VAC, 1.0 to 100 VDC |
| **Accuracy** | ±1 V |
| **Resolution** | 0.1 V |

**Other**

| | |
|---|---|
| **Communication Port** | RS-232C |
| **Audio Output** | Built-in speaker |
| **Dimensions (H x W x D)** | 8.58” x 3.74” x 1.93” (218 mm x 95 mm x 49 mm) (excludes belt clip and RF connector) |
| **Weight** | 1.45 lbs (658 g) |
| **Display** | 128 x 128 LCD with backlight |

**Power Supply**

| | |
|---|---|
| **Battery** | 3.6 V, 3.5 AH NiMH battery |
| **Charger** | AC 100 to 240 V, 50/60 Hz, 1.8A 7 VDC (max) * |
| **Work Time** | Average 6 to 8 hours (full charge) |
| **Charge Time** | Less than 3 hours |

*Only the Trilithic charger with internal charging circuitry may be used (P/N 0610165000).

### INCLUDES THE FOLLOWING:

5 to 870 MHz signal level meter
**P/N 2010967000**

Protective rubber bumper

Carrying case

Shoulder strap

AC battery charger

User’s manual

### OPTIONAL ACCESSORIES:

CC-17 protective sleeve
**P/N 2130856000**

CC-18 holster with belt loop
**P/N 2130854000**

### RELATED PRODUCTS:

CL-6 vehicle power adapter
**P/N 2071483000**

ToolBox software (includes I/O-11 PC data cable)
**P/N 0930089000**

I/O-11 PC data cable
**P/N 2071351000**

I/O-15 precision RF coaxial test cable
**P/N 2071527048**