DisplayMax® Model 800

Headend, Distribution & Installation Signal Level Meter

- **VoIP & HSD Qualifier**
  Insure that ingress will not interfere with VoIP & HSD services
- **Ingress Detection**
  Fast ingress scan with peak-hold function
- **Full Spectrum Display**
  View the response of your entire system on one screen
- **Data Recording**
  Download or print saved files for a permanent record
- **Auto-Calibration**
  Eliminate the cost and downtime of annual calibration
- **Additional Standard Features**
  C/N, HUM, Audio, Auto-Check, Tilt & Fast Charge

Product Description

The DisplayMax 800 is powerful enough to maintain the headend, yet simple enough for routine installation checks. With a wide range of measurement options, a technician can quickly check an individual channel, favorite channels, all channels, tilt, ingress, C/N or HUM.

The graphic display allows a technician to view the full system response and quickly identify problems such as low level, roll-off, suck-outs or missing channels. In the ingress mode, the graphic display shows a spectrum analyzer view of the full return path, revealing any unwanted ingress signals.

All multi-channel modes are supported by an automatic pass/fail test that compares all measured channels against user defined parameters. In less than one minute a headend technician or installer can scan up to 135 channels and verify that all analog and digital channels are within tolerance.

Data recording permits all measurements to be saved and downloaded to a computer.

VoIP and High-Speed Data Qualifier

Qualifying the drop and home wiring for VoIP and HSD services requires more than just checking signal level. Although proper signal level is important, verifying the shielding properties of the coax is equally important. Why is shielding important? Bad shielding allows unwanted signals (ingress) to enter the return path and slow down or abruptly stop digital services. Since more than 90% of ingress is generated at the drop and home wiring, it is necessary to check all installations for good shielding.

To test the entire home for ingress, disconnect the ground block and connect the meter to the home wiring. Performing an ingress scan will immediately show if ingress is present. A peak-hold mode will capture intermittent ingress if left running for a longer period of time.

Since shielding problems also allow forward channels to escape from the cable, a leakage detector is very effective in finding the source of an ingress problem. The Displaymax 800 can perform leakage testing when upgraded to model 800CLI.

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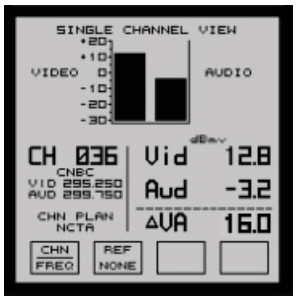
SAMPLE SCREENS

SINGLE DIGITAL CHANNEL

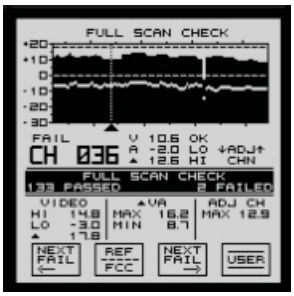
Quickly tune and display the average power of a single digital channel. The spectrum analyzer display shows how the power is distributed over the channel's bandwidth.

SINGLE ANALOG CHANNEL



Quickly tune and display the picture carrier, audio carrier and dB difference on a single screen. Monitor audio quality on the built-in speaker.

FULL SCAN & CHECK

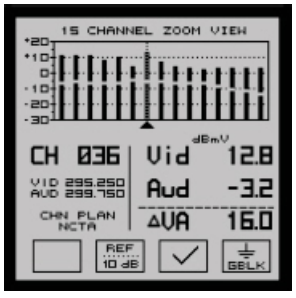


View the response of the entire system including both analog and digital channels. Press the 'check' key for an on-screen pass/fail summary of the system.

MEASURE INGRESS

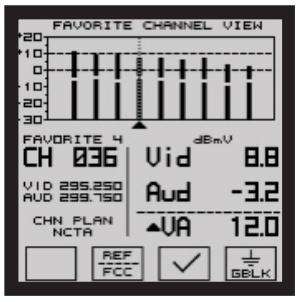
Check for ingress on the return-path. The spectrum analyzer display reveals the ingress signals that interfere with digital services such as VoIP and high-speed data.

ZOOM - 15 CHANNELS



View the response of 15 consecutive channels. Provides better detail than the Full Scan mode. Press the 'check' key for an on-screen pass/fail summary.

FAVORITE CHANNELS



View only 'Favorite' channels for a quick snap-shot of the system. Press the 'check' key for an on-screen pass/fail summary.

SEE SPECIFICATIONS FOR A FULL LIST OF MEASUREMENT MODES

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SPECIFICATIONS

SIGNAL LEVEL METER

FREQUENCY
Tuning Range: 5 to 872 MHz.
Tuning Resolution: 125 KHz.
IF Bandwidth: 280 KHz.

POWER RANGE
Analog Channels: -30 to +60 dBmV
Digital Channels: -23 to +67 dBmV

ACCURACY
Typical: +/- 0.5 dB
Max Additional Error at 70° F: +/- 0.5 dB
Max Additional Error from 0° to 120° F: +/- 1.0 dB
Digital Channel Error: additional +/- 0.5 dB

LEAKAGE DETECTOR (CLI OPTION)

FREQUENCY
Tuning Range: 108 to 140 MHz.
Tuning Resolution: 25 KHz.
IF Bandwidth: 280 KHz.

SENSITIVITY
2 uV/m (with duck antenna, 3ft. from leak)

ACCURACY
Typical: +/- 0.5 dB
Max Additional Error at 70° F: +/- 0.5 dB
Max Additional Error from 0° to 120° F: +/- 1.0 dB

FEATURES
- Audio warble identifies tagged channels
- Variable pitch aids peaking
- Video filter rejects false leaks

INGRESS DETECTOR

FREQUENCY
Tuning Range: 5 to 40 MHz.
Tuning Resolution: 250 KHz.
IF Bandwidth: 280 KHz.

POWER RANGE
-35 to +60 dBmV

ACCURACY
Typical: +/- 0.5 dB
Max Additional Error at 70° F: +/- 0.5 dB
Max Additional Error from 0° to 120° F: +/- 1.0 dB

CARRIER TO NOISE (C/N)
Range: 50 dB
Minimum Carrier Level: +10 dBmV
Accuracy: +/- 2 dB at 70° F; +/- 3 dB from 0° to 120° F
Measurement made on active analog channels

HUM
Range: 0 to 5%
Filter: 20 to 200 Hz.
Measurement made on active analog channels

BATTERY
Type: 6 high-capacity sub-C NiCad cells
Charge Time: 4 hrs.
Run Time: 4 hrs. continuous
Electronic Shut-Off: Saves power

GENERAL
Dimensions: 4.25” x 10” x 2.75” (11cm x 25.5cm x 7cm)
Weight: 4.25 Lbs (1.9 Kg) including case & battery

STANDARD CHANNEL PLANS
NTSC (EIA), HRC, IRC, AIR (VHF/UHF) and PAL
Custom plans available on request

MEASUREMENT MODES (13)
Single Analog Channel, Single Digital Channel, Single Frequency, 15 Channel Zoom, Sub-Band Channels, Full Scan (135 Channels), Favorite Channels (9 Channels), Tilt, Ingress, C/N, HUM, 24Hr Scan and Auto-Check (available on multi-channel modes)

ACCESSORIES SUPPLIED
Padded Nylon Case: CASE05
110 Volt AC Charger: T70
12 Volt Car Charger: CH04
NiCad Battery Pack: BAT07
Operator’s Manual: ST1008

OPTIONAL ACCESSORIES
Strand Hook: SH02
PC Download Cable: CA20
220/240 Volt AC Charger: T70E
Rubber Duck Antenna: ANT01 (CLI option)
Dipole Antenna: ANT02 (CLI option)
Mag. Mount Monopole Antenna: ANT03 (CLI option)

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