

Automatic Video Measurement Set

New VM100 • New VM101 • New VM140 • New VM141



Features

- Automatically Measures 13 Key Video Parameters
 - Differential Gain
 - Differential Phase
 - Chrominance to Luminance Gain
 - Chrominance to Luminance Phase
 - Frequency Response
 - 2T K-Factor
 - Hum
 - Signal to Noise
 - Group Delay
 - Bar Amplitude
 - Sync Amplitude
 - Burst Amplitude
 - Luminance Non-Linearity
- Verifies Compliance with Industry Standard TV Regulations
- Automatic "Signal ID"
- Fast, Accurate Measurements at a Touch of a Button
- Average Mode for Accurate Results in Low Signal to Noise
- Freeze Mode Suspends Testing to View Intermediate Results
- RS-232C Port for Remote Access or Local Printer Output
- Simple and Intuitive Interface
- Internal Memory for Storage of Measurements Results
- Internal Time Clock for Dating Measurement Results
- RS-232C Control Feature Allows Automatic Control of 1740A Series Waveform Monitor Line Select Mode for Viewing of Measured Signal

Note: The VM140 will be available late summer 1996.

For your local Tektronix representative see the list in the back of this catalog or outside the U.S. call: 1-503-627-1933, inside the U.S. call: 1-800-426-2200.



See Tektronix on the World Wide Web:
<http://www.tek.com>



Tektronix Measurement products are manufactured in ISO registered facilities.



For quick verification and monitoring of the composite baseband video signal, the low cost VM100/101 is a perfect choice. Several key automatic video measurements may be selected with the results quickly and clearly displayed on a high-contrast LCD. Users with little experience in video testing will appreciate the VM100/101's compact size and intuitive push button interface.

VM100 AUTOMATIC VIDEO MEASUREMENTS FOR FCC COMPLIANCE

The VM100 makes standard NTSC video measurements including the baseband measurements required by new FCC cable system regulations. This makes the VM100 a good choice for CATV engineers charged with meeting those requirements. Measurements are initiated with the push of a button. Once completed, the measurement results may be viewed on the LCD, stored in an internal non-volatile memory, or copied to a serial printer for archival. An internal time clock automatically inserts the time and date of each test for later analysis. Measurement results are averaged for a stable reading even in the presence of a low signal-to-noise ratio. A freeze mode can be used to stop all measurement activity so that intermediate results may be examined. When the input signal lacks suitable synchronizing information, such as inverted sync used for video encryption, an external sync reference input can be used.

VM101 AUTOMATIC PAL VIDEO MEASUREMENTS

The VM101 is a low cost, fully automatic PAL video measurement set capable of recognizing 23 PAL test signals. Up to 13 industry standard measurements are constantly updated. Unlike other "automatic" low cost measurement sets, the VM101 requires no test configuration plan or PC setups to begin making measurements. Just apply a signal to the loop-through input and the advanced test signal identification and analysis software does the rest. Measurements are completed quickly with absolutely no configuration required.

Measurement results are viewed directly on the high contrast LCD, eliminating the need for an external display. Measurement results can also be monitored remotely via a simple modem connection, stored in an internal nonvolatile memory for later viewing, or copied to a local serial printer for hardcopy documentation. All measurements are dated by an internal time clock, which provides an accurate time reference for all reports.

Automatic signal averaging is calculated from the system signal-to-noise ratio, thus eliminating the subjective decision of how many times to average a measurement result. A special freeze mode can be used to stop all measurement activity so that intermediate results may be examined. When the input signal lacks suitable horizontal synchronizing information an external sync reference input may be used.

AUTOMATIC TEST SIGNAL IDENTIFICATION

With the VM100/101 "Signal ID" feature, you no longer need to spend valuable time searching video for the correct test signal. The input signal is constantly scanned for all valid test signals. All test signals, as well as their field and line positions, are automatically identified for use with a selected measurement. Operators do not need to be trained to identify which test signal is used with a particular video measurement.

RS-232C PORT FOR REMOTE ACCESS OR PRINTER OUTPUT

A 9-Pin serial port is located on the rear panel of the VM100/101. This serial port can be used for copying measurement results directly to a local printer. In addition, a computer can be used to poll the VM100/101 from a remote location via a modem connection.

A complete report can be retrieved and stored on a PC hard drive for documentation. A sample printout is shown in Figure 1.