

# Measurement Sets

## VM700T

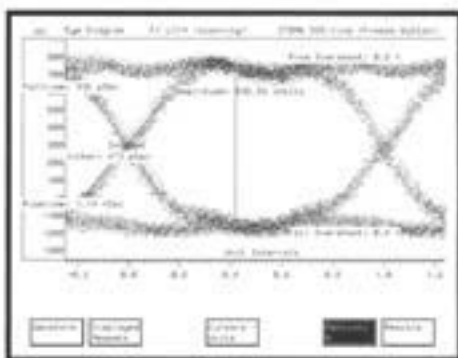
### VM700T VIDEO MEASUREMENT SET

- Opt. 01 – NTSC Measurements
- Opt. 11 – PAL Measurements
- Opt. 1S and 2S – Serial Digital Video Capability
- Opt. 20 – Teletext Measurements
- Opt. 21 Camera Measurements
- Opt. 22 – Sync Timing Wander Measurement
- Opt. 30 – Component
- Opt. 40 – Audio Measurement Module
- Opt. 41 – 6 Channel Audio Measurement Module
- Opt. 42 – Audio to Video Delay Measurement
- Opt. 48 – GPIB Interface
- Opt. 1C – Cabinet Version
- Opt. 1G – Echo/Rounding Measurements
- Opt. 1P – Printer
- Opt. 1T – Calibration
- Opt. 1Z – Probe Adapter



### VM700T (TURBO)

- Many Capabilities in One Instrument
  - Digital Waveform Monitor
  - Digital Vectorscope
  - Picture Display
  - Group Delay and Frequency Response
  - Noise Measurement Set
  - Automatic Measurement Set
- Auto Mode
  - Unattended Monitoring of NTSC or PAL Video Signals From Studios, STLs, Earth Stations, and Transmitters
  - User-specified Limits
- Measure Mode Provides Graphic Display of Measurements
  - ICPM
  - K-factor
  - Differential Gain and Phase
  - Chrominance to Luminance Delay
  - Noise Spectrum
  - Group Delay with Sin x/x
  - Color Bars
  - Relative to Reference on Most Measurements
  - Configurable for All Standard Test Signals
- Award-winning User Interface
- State-of-the-art Architecture
- Extremely Fast Update Rate
- Parallel and Serial Printer Ports
- Three Input Channels
- Channel Difference Modes
- External VGA Display Port
- Fully Documented Remote Control Operation
- Hardcopy for Analysis and Documentation



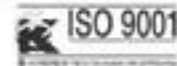
### VM700T (TURBO) OPTION 1S/2S

- Automatic Analysis of 270 Mbit Component, and 143 Mbit Composite and 360 Mbit Component Serial Digital Video Signals
- Continuous Real-Time Format Analyzer with Event Logging and Frame Capture
- Eye Diagram Display with Automatic Limit Violation Detection
- Jitter Measurements with Wide Band Spectral Analysis
- Ancillary Data Analyzer with Full Frame Data Distribution Display
- Conformance Testing to SMPTE 259M
- AES and Embedded Digital Audio Measurements
- Parade, Stacked and Overlay Displays with Interpolated Waveforms
- SMPTE RP-165 Digital Error Detection and Reporting
- Audio-to-Video Delay Measurements on AES or Embedded Audio
- Picture Mode with Relative to Reference Capability
- Relative to Reference Modes
- Longitudinal Time Code Input for Time Stamping Error Events
- Video Wander Measurement

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>



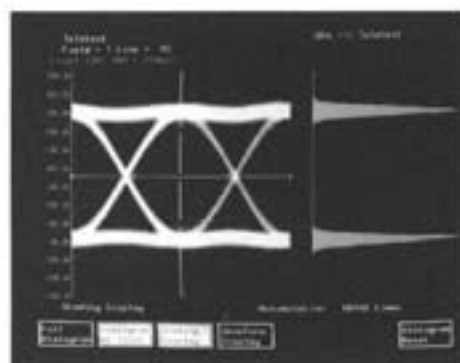
Tektronix measurement products are manufactured in ISO registered facilities.



For product detail, request a TV catalog by completing the business reply card in the back of this catalog.

# Measurement Sets

## VM700T



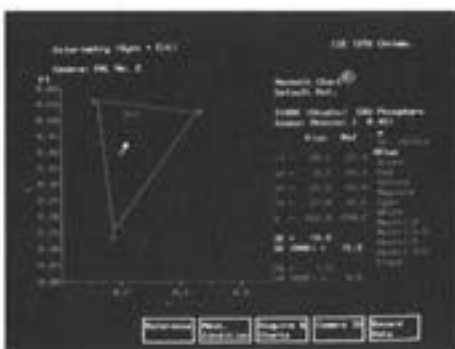
Teletext Eye Height and Eye Width display with histogram.

### VM 700T OPTION 20

- Adds Teletext Measurement to the VM700T Measurement Mode
- Measures and Monitors teletext Signals for either NTSC or PAL Systems
- Provides the following Measurements:
  - Eye Height
  - Eye Width
  - Data Level
  - Start-of-Code
  - Number of Run-in Bits

### VM 700T OPTION 21

- Significantly simplifies key measurements of camera performance
- Compatible with NTSC or PAL cameras
- Automates pre-purchase evaluation and comparison of cameras
- Reduces time spent on acceptance testing, routine maintenance and operational adjustments
- Uses industry standard charts
- Camera matching simplified with relative-to-reference mode
  - Four key measurements:
    - Colorimetry
    - CCD Defects
    - Fixed Pattern Noise
    - Frequency Response
- Five additional measurements:
  - Detail
  - Gamma
  - Geometry and Registration
  - Shading
  - Vertical Smear



Colorimetry.

### VM700T AND VM700A OPTION 22

- Automatic measurement of H-Sync frequency offset error and Drift-rate characteristics
- Frequency normalizing allows referencing to a studio timing source
- Peak hold functions with user definable measurement limits
- No special test signals required
- In service testing
- Measures both NTSC and PAL video
- Use together with existing SONET and SDH test systems to aid in total network timing verification for video transport

### VM 700T OPTION 30

- Incorporates both Automated and Manual Audio Measurements.
- Audio Spectral Analysis
  - Multitone Analysis
  - Stereo Audio Monitoring.
  - Provides Numerical Results For:
    - Relative Timing of B-Y and R-Y
    - Relative Amplitude of B-Y and R-Y
    - Peak to Peak Amplitude for B-Y and R-Y
    - Peak White Amplitude
  - Compatible With SMPTE/EBU, Betacam®, and MII Formats
  - Numerical Results In All Measurements
  - Level Meter Displays Amplitude of All Three Channels Simultaneously
  - Configurable for Y/R-Y/B-Y or GBR Formats



Lightning Display.

- Full Complement of Component Analog Video Measurements and Displays:

- Bowtie
- K-Factor
- Lightning
- Multiburst
- Parade
- Non-Linearity
- Overlay
- Channel Delay
- Vector
- Noise
- Color Bar
- Level Meter

### VM 700T OPTION 40/41

- Incorporates both Automated and Manual Audio Measurements.
- Audio Spectral Analysis
- Multitone Analysis
- Stereo Audio Monitoring.

### VM 700T OPTION 42/AVTIME

- Measures timing difference between audio and video portions from different transmission paths
- Supports both NTSC and PAL

### VM 700T OPTION 48 GPIB INTERFACE

- Enhances VM 700T Remote Control Capability
- Allows Access to GPIB Environments and Development Software