# VTM-100

## **Television Signal Monitor**

Harris' Videotek<sup>®</sup> VTM-100 Television Signal Monitor displays waveform, vector and audio information for analog composite, Y/C (requires optional YC-1 adapter), and component video signals plus analog audio on a composite video monitor. The VTM-100's three passive looping inputs auto-detect the incoming video format for NTSC or PAL and changes the graticule and output format accordingly.



The VTM-100 provides a waveform and/or vector display of the input video. The waveform and vector can be displayed independently or as a combination of both. All waveform/vector displays can be keyed or mixed with the picture on screen.

Other features include line select, waveform filters, V Gain, and H Mag. The input format and SC/H measurement are displayed on screen with alarms for SC/H, Burst and Sync level, for easy reference and user convenience.

The VTM-100 provides convenient operation and control from the front panel through a dropdown menu or remotely via a mouse or any PC.

With features usually found only in more expensive test instruments such as waveform parade and overlay, vertical and horizontal sweep rates and magnifications, flat/low pass and chroma filters or full field line select the VTM-100 is the complete test instrument for any analog video testing application in a cost effective package.

#### **FEATURES**

- Waveform, Vector, and stereo audio displays in multiple combinations
- Selectable formats, composite, Y/C, or component
- Three composite or one component passive looping inputs
- Composite waveforms include parade or overlay of up to three inputs with filters
- Sync, burst, and SC/H phase numeric readout and alarms
- SC/H phase, sync and burst amplitude alarm limits are user selectable
- Alarm indication of text message and display color change
- Menus and displays controlled via front panel, mouse, or PC
- Component waveforms include parade, overlay, and bowtie
- Picture mixed or keyed
- Bright, full field line select
- Time base modes: 1H/2H/3H/ and 1V/2V/3V
- Magnifications: x1, x5, x10, and x20

- Flat/low pass/chroma filter selection
- NTSC and PAL standards

#### SPECIFICATIONS Specifications and designs are subject to change without notice

**GENERAL** 

Standards NTSC/PAL (Auto Detect)
Formats Composite/Component

Display Waveform Accuracy ±1% @ 1V

Video Response 25 kHz - 6 MHz  $\pm$ 1% of 100 kHz

Chroma Filter Response Within 3% of flat @ 3.58 MHz and 4.43 MHz

Transient Response Preshoot and/or overshoot ≤1%

±5°

Time Base Modes Line Rate1H, 2H, 3H Field Rate1V, 2V, 3V

Sweep Magsx1, x5, x10, x20 relative to 1H or 1V

Input Gain Range Fully adjustable from 50% to 500% Y/C (through YC-1 OPT.), RGB,

Component Formats BETA, M-II®, SMPTE, EBU, 75% and 100%

Composite Vector Accuracy ±1°

Composite Vector Phase

Control

>360°, continuously variable

SC/H Phase Measurement

Accuracy Memory

5 user-defined setups, with total instrument settings

Display Input displays, graticule and background colors are user-selectable

**INPUTS** 

Video Three BNC loop thru NTSC/PAL composite or one component video

input into 75 ohms load, sync negative

Level  $1V p-p \pm 6 dB$ 

Return Loss  $\leq$  50 dB, DC to 5 MHz

External Reference BNC loop thru, 286 mV NTSC, 300 mV PAL ±6 dB

Audio Two balanced stereo pairs with push-on two-piece connector

Level 0, +4, +8, +12 dBm

**OUTPUTS** 

Video Two 75 ohms BNC Composite Video Outputs. In component mode,

output is "Y" or green channel with selected displays

POWER REQUIREMENTS

Power Input 90-260 VAC, 50/60 Hz

Power Consumption 85 VA

**ENVIRONMENTAL** 

Operating 0°C TO 50°C Storage -40°C to 65°C

Humidity 0 - 90% (non-condensing)
Altitude Operating to 10,000 ft. (3,050m)

Non-operating to 50,000 ft. (15,240m)

**MECHANICAL** 

Dimensions Height1.75" (4.5 cm)

Width19" (48.3 cm) Depth16" (40.6 cm)

Weight 15.0 lb (6.8 kg)

OTHER

Remote Control RS-232 or mouse supports Microsoft® or Logitech®

### STANDARD ACCESSORIES

Operator's Handbook Rackmount Kit Power Cord

### **OPTIONS**

Service Manual

YC-1 Adapter for Y/C input -(YC-1 OPT)

EPC EPC European Power Cord
EPC-UK United Kingdom Power Cord

EPC-AA Australia Power Cord