

# **VTM-100**

## **TELEVISION SIGNAL MONITOR**



The Videotek **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 drop-down 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.

**See the VTM Selection Guide on page 40**

### **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

# VTM-100 SPECIFICATIONS

## GENERAL

### STANDARDS:

NTSC/PAL (Auto Detect)

### FORMATS:

Composite/Component

### DISPLAY WAVEFORM ACCURACY:

±1% @ 1V

### VIDEO RESPONSE:

100 kHz - 6 MHz ±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%

### TIME BASE MODES:

Line Rate: 1H, 2H, 3H

Field Rate: 1V, 2V, 3V

Sweep Mags: x1, x5, x10, x20 relative to 1H or 1V

### INPUT GAIN RANGE:

Fully adjustable from 50% to 500%

### COMPONENT FORMATS:

Y/C (through YC-1 OPT.), RGB, BETA, M-II<sup>®</sup>, SMPTE, EBU, 75% and 100%

### COMPOSITE VECTOR ACCURACY:

±1°

### COMPOSITE VECTOR PHASE CONTROL:

>360°, continuously variable

### SC/H PHASE MEASUREMENT

### ACCURACY:

±5°

### 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 75Ω load, sync negative

Level: 1V p-p ±6 dB

Return Loss: ≥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 75Ω 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:

Height: 1.75" (4.5 cm)

Width: 19" (48.3 cm)

Depth: 16" (40.6 cm)

### WEIGHT: 15.0 lb (6.8 kg)

## OTHER

### REMOTE CONTROL:

RS-232 or mouse supports Microsoft<sup>®</sup> or Logitech<sup>®</sup>

## STANDARD ACCESSORIES

Operator's Handbook

Rackmount Kit

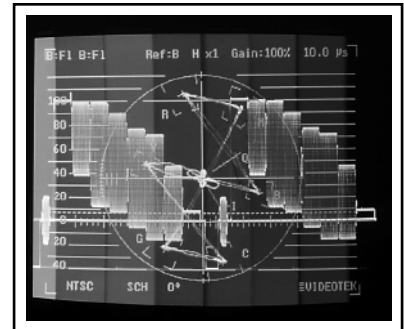
Power Cord

## OPTIONS

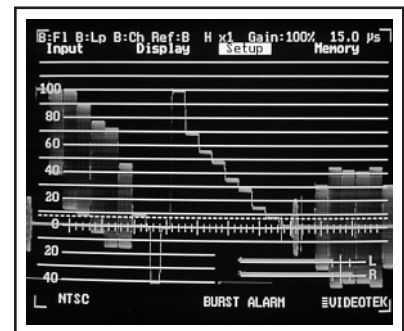
Service Manual

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

## BURST ALARM

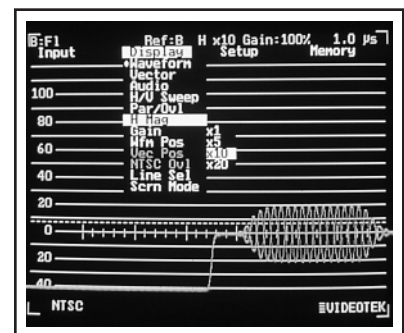


## COMBO WFM/VEC OVER PICTURE 2H FLAT and SC/H PHASE



## COMBO WFM/AUDIO 3H FLAT/LP/CHROMA

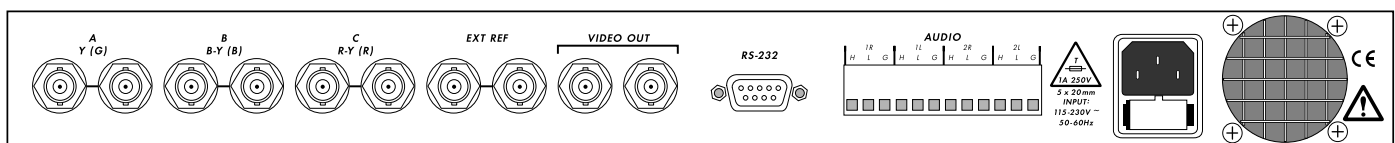
## L AUDIO R AUDIO



## MENUS

## MAG MODE DISPLAY

TEST & MEASUREMENT



VTM-100 BACK PANEL