VTM-330E
MULTI-FORMAT ON SCREEN MONITOR

PATENT PENDING

FEATURES

The VTM-330E includes all of the popular features of the VTM-200 and VTM-300 series plus the addition of:

- An Eye Pattern Display, on screen simultaneously with waveform, vector, audio, alarms and picture
- Jitter measurement
- A new and intuitive Gamut display for both Encoded and RGB Gamut, on screen simultaneously with waveform and eye pattern, audio, alarms and picture
- A built in Ethernet port
- Four router control ports
- An on screen display of serial digital input signal strength
- Assignable GPIs to allow for external triggers with user defined text that appears in the alarm list
- Preset lockout
- Variable output display aspect ratio
- Closed Captioning display
- Interfaces with SpyderWeb™ and STM-350 test and measurement streamer
- XGA output with external XGA input loop through
- Keyboard loop through for system integration
- Automatic Signal Quality verification with time and date stamps
- Displays include dual inputs and dual filters, parade or overlay
- Timecode input with on screen display and alarm marking
- GPI for alarms
- Downloadable on screen alarm log
- Optional frame capture
- Options for analog, AES/EBU and embedded audio plus unique CineSound™ display
- 8 memories with full system setup
- Includes single connection SpyderWeb™ software
- Standards available: NTSC, PAL , 525 and 625

OPTIONS

- Internal Frame Capture option captures and converts the XGA output of any VTM-300 series product to an electronic file format for viewing and printing from a host PC
- Remote control panels are available for all models and versions

The **VTM-330E** expands the advanced capabilities of the successful VTM-300 on screen test and measurement system with the addition of many requested features. New features for the VTM-330E include eye pattern displays and jitter measurements, an internal Ethernet port, and a unique Gamut display. These innovative features are complimented with the addition of the ability to control up to four Videotek RS-12 series routers for input expansion, closed captioning detection and decoding with on screen display, plus an on screen display of input signal strength.

The VTM-330E accepts two composite analog inputs (NTSC or PAL) with the second composite input configurable as a single CAV input, plus two serial digital video (601) inputs. The audio options include: (1) analog and AES/EBU, (2) analog, AES/EBU and embedded, and (3) analog, AES/EBU and embedded with unique Videotek CineSound™ audio display for 5.1/7.1 applications.

The VTM-330E is for use in broadcasting, production, graphics, editing and network monitoring applications where critical monitoring of analog and digital video is necessary. The VTM-330E produces a 1024x768 XGA display for viewing on any standard XGA monitor. User viewing is selectable among the full information view show (picture, waveform, vector, audio and alarms) or a full screen view of either picture, waveform, vector or audio. Options to the VTM-330E include: three audio options (the unique Videotek CineSound™ display), a built-in screen capture, extended SpyderWeb™ networked monitoring software and the STM-350 test and measurement streamer.

Videotek Multi-format On Screen Monitor Features

MODEL	VIDEO INPUTS				OPTIONAL AUDIO INPUTS				FEATURE ITEMS					
	ANALOG COMPOSITE	CAV	601	HD/SDI	ANALOG STEREO	AES/EBU W/ANALOG MONITOR	EMBEDDED AUDIO MONITOR	DOLBY DIGITAL™ (AC™) OR DOLBY™ W/ANALOG	ALARM LOG	MOBILE OPTION	REMOTE CONTROL OPTIONS	FRAME CAPTURE OPTION	COMPOSITE OUTPUT OPTION	CATALOG PAGE NO.
VTM-420HD/SD	—	—	2***	2***	Opt 7/8	Opt 7/8	Opt 7/8	Opt 8	Y	Y	SpyderWeb™** or RCU	Internal Option FC-400	No	28
VTM-400HD	—	—	—	2	Opt 6	Opt 6	Opt 6	No	Y	Y	SpyderWeb™** or RCU	Internal Option FC-400	No	30
VTM-330E	2	1*	2	—	Opt 3/4/5	Opt 3/4/5	Opt 4/5	No	Y	Y	SpyderWeb™** or RCU	Internal Option FC-300	No	36
VTM-320	2	1*	2	—	Opt 3/4/5	Opt 3/4/5	Opt 4/5	No	Y	Y	SpyderWeb™** or RCU	Internal Option FC-300	No	38
VTM-300	2	—	2	—	Opt 3/4/5	Opt 3/4/5	Opt 4/5	No	Y	Y	SpyderWeb™** or RCU	Internal Option FC-300	No	38

* Input "B" assigned as composite or CAV   ** Single connection SW-IP SpyderWeb™ software included   *** Inputs are shared formats

VIDEOTEK ® 800-800-5719 610-327-2292 Fax: 610-327-9295 Visit us on the Worldwide Web: **www.videotek.com** • ISO 9001 Certified • 5 Year Warranty

VIDEO

INPUTS A AND B: (Analog)
NTSC/PAL composite video
SIGNAL LEVEL:
1V p-p
MAXIMUM DISPLAYABLE SIGNAL:
1.4V p-p
INPUT IMPEDANCE:
75Ω nominal
RETURN LOSS:
≥45 dB to 5 MHz

INPUT C AND D: (Digital)
ITU-R BT.601, SMPTE 259M
DATA RATE:
270 Mb/s, 525/625 line rate
INPUT IMPEDANCE:
75Ω nominal
RETURN LOSS:
≥18 dB, 5 to 270 MHz

REFERENCE

INPUT:
Blackburst or NTSC/PAL analog
composite video
LEVEL:
286mV p-p NTSC/300mV p-p PAL sync
and burst ±6dB
IMPEDANCE:
Hi-Z Looping
RETURN LOSS:
≥45 dB, 0 to 5 MHz

XGA OUTPUT

R, G, B OUTPUT LEVELS:
1V p-p nominal
R, G, B OUTPUT IMPEDANCE:
75Ω nominal
HORIZONTAL SYNC:
Negative TTL pulse @ 48,363Hz ±1%
VERTICAL SYNC:
Negative TTL pulse @ 60.004Hz ±1%
CONNECTOR:
15-pin HD (high density), female

XGA MONITOR REQUIREMENTS

Must be capable of displaying 1024 x 768
progressive @ 60Hz
(VESA Standard #9011101A)
CONNECTOR:
15-pin VGA "D" connector

AUDIO (OPTIONAL)

INPUTS A AND B: (Analog)
8 monophonic or 4 stereo channels,
balanced or unbalanced, analog audio
MAXIMUM INPUT LEVEL:
+24 dBm (600Ω)
INPUT IMPEDANCE:
>20 kΩ
CONNECTION:
37-pin D-sub, male

INPUTS C AND D: (Digital)
AES/EBU serial digital
INPUT IMPEDANCE:
75Ω nominal
OUTPUT SIGNAL FORMAT:
up to 8 monophonic or 4 stereo channels,
balanced or unbalanced, analog audio
OUTPUT SIGNAL LEVEL:
4 dB ±.5 dB relative to audio input.
For digital audio -20dBFs produces a 0dBm
analog output level (600Ω).
Output level adjustment ±6dB.
OUTPUT IMPEDANCE:
10Ω unbalanced or
20Ω balanced (nominal)
CONNECTION:
BNC female

CONTROL

GPI:
8 user assigned inputs with custom message
to alarm list
DEFAULT SETTINGS:
Input Selection (A, B, C or D)
On Air Tally
Memory Sequence
Capture Frame
Transfer Captured Frame
GPO:
2 user assigned outputs
Any alarm or combination of alarms
INPUT IMPEDANCE:
10 kΩ returned to +5 VDC
ALARM OUTPUT:
relay closure
MAXIMUM RELAY CURRENT:
100 mA

REMOTE CONTROL:
KEYBOARD INTERFACE:
PC/AT compatible for remote control
COMMUNICATIONS:
RS-232/422 selectable, No parity, 8 data
bits, 1 stop bit, supported baud rates: 19200,
38400, 57600, and 115200

EXTERNAL ROUTER CONTROL:
Four separate RJ-11 female, for use with
Videotek RS-12 series routers for input
expansion

DISPLAY

GENERAL:
Picture, waveform/eye pattern, vector and
audio simultaneously in a 4-quadrant display,
or a full screen display of each of these
separately.
WAVEFORM:
Analog - encoded display
Digital - native Y C$_B$ C$_R$ or RGB or composite
encoded
VECTOR:
Analog - R - Y vs B - Y
Digital - C$_R$ vs C$_B$ or R - Y vs B - Y for
encoded display
TIME BASE FOR SWEEPS:
1 or 2 lines, 1 or 2 fields
each sweep can be magnified x5
component displays are paraded or overlaid;
1 H for overlay, 3 H for parade
WAVEFORM ACCURACY: <1%
VECTOR ACCURACY: ±1°
SC/H ACCURACY: ±5° @ SC/H=0°
EYE:
Display eye or waveform plus eye parade

POWER REQUIREMENTS

POWER INPUT:
90 to 260 VAC, 50/60 Hz, nominal
POWER CONSUMPTION:
150 VA

MECHANICAL

DIMENSIONS:
Height: 1.75" (4.5 cm)
Width: 19.0" (48.3 cm)
Depth: 19.75" (50.2 cm)
WEIGHT:
9.3 lb (4.2 kg)

ENVIRONMENTAL

OPERATING TEMPERATURE:
0° to 50°C
STORAGE TEMPERATURE:
-40° to 65°C
HUMIDITY:
90% maximum (non-condensing)
OPERATING ALTITUDE:
To 10,000 feet (3,050m) above sea level

ACCESSORIES

STANDARD:
Operator's Manual
Rackmount Kit
Power cord
SpyderWeb™ software SW-IP:
Alarm logging, remote control, and
unattended monitoring for one
VTM-300/400HD series via RS-232/422, or
over a LAN, WAN, or Internet using
network IP communications.
Includes cable SW-ADK-2.

OPTIONS

Service Manual
VTM-OPT 3:
Four analog stereo inputs and four AES/EBU
inputs
VTM-OPT 4:
Four analog stereo inputs, four AES/EBU
inputs, and monitoring or embedded audio
VTM-OPT 5:
Four analog stereo inputs, four AES/EBU
inputs display of 1, 2, 3, or 4 pairs per video
input; and CineSound™ Multi Channel Audio
Display
FC-300:
Internal frame capture
SpyderWeb™ SW-M.6:
SpyderWeb™ Software for monitoring
multiple units via RS-422 multi-drop
interconnections. Alarm logging, remote
control, and unattended monitoring for 1 to 6
VTM-300/400HD Series.
Includes cable SW-ADK-2.
SpyderWeb™ SW-M.12:
SpyderWeb™ Software for monitoring
multiple units via RS-422 multi-drop
interconnections. Alarm logging, remote
control, and unattended monitoring for 1 to
12 VTM-300/400HD Series.
Includes cable SW-ADK-2.
SpyderWeb™ software SW-IP.6:
For monitoring multiple units using network IP
communications. Alarm logging, remote
control, and unattended monitoring for 1 to 6
VTM-300/400HD series over LAN, WAN, or
Internet. Includes cable SW-ADK-2.
SpyderWeb™ software SW-IP.12:
For monitoring multiple units using network IP
communications. Alarm logging, remote
control, and unattended monitoring for 1 to
12 VTM-300/400HD series over LAN,
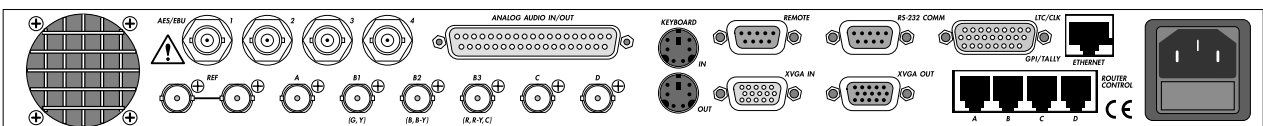WAN, or Internet. Includes cable
SW-ADK-2.

VTM MOBILE OPT.2:
Accomodates: VTM-330E* and
VTM-420HD/SD*

* PAL models when VGA output set to the
fixed VESA standard

VTM Mobile Opt.2

Add portability to any VTM-300/400HD Series or VTM-200 Series (NTSC only)
model with a fold out, adjustable viewing angle 15" active matrix TFT LCD display
(1024x768 resolution) mounted in a shock resistant lightweight carrying case.

VTM-330E BACK PANEL