# High and Standard Definition SDI, Analog and Audio Signal Monitor



The LCD Scope HDWVA has been designed to satisfy specific requirements requested by cost conscious users who need high quality, accuracy combined with familiar and intuitive operation - with backward compatibility in mind.

The LCD Scope series has no cathode ray tube, or external LCD, using instead a liquid crystal display. It therefore has none of the problems associated with CRT's such as focus, stigmatism, parallax, EHT failure or high maintenance costs.

The LCD Scope contains the latest proprietary, digital designs from Hamlet, producing a range of unique PAL and NTSC devices, which may be used in a variety of environments. The LCD Scope makes an ideal replacement for existing or failing CRT units but is itself only 160mm deep. Like other innovative and award winning Hamlet

products, the LCD Scope establishes a new method of monitoring utilising a base unit with the option of fitting the Advanced Monitoring Unit.

As with all Hamlet products the LCD Scope includes a great feature set and functions with an unprecedented return on investment.

This product contains proprietary patented designs

## **Features and Functions**

- HD, SD, Composite, component, plus 4 audio bar graphs and phase display.
- Multi-standard NTSC & PAL.
- Built-in low maintenance LCD.
- Full monitoring functionality including, full field line select.
- Gamut violation display and alarm.
- External ref.
- HFT<sup>™</sup> hands free timing.
- On screen mode displays.
- 4 channels of Analog Audio with embedded audio options
- Audio Stereo ¼" Prof jack socket.
- RS232 remote control.
- Powered via 12Vdc mains adapter or from in-built batteries.
- Only 160mm deep, rack mount, stand alone or portable operation.
- Weighs only 2.5Kg.

# Standards supported

1920 x 1080/60/2:1 1920 I 74.25MHz.

1920 x 1080/59.94/2:1 1920 I 74.25MHz/1001

1920 x 1080/50/2:1 1920 I 74.25MHz

1920 x 1080/30/1:1 1920 P 74.25MHz

1920 x 1080/29.97/1:1 1920 P 74.25MHz/1001

1920 x 1080/25/1:1 1920 P 74.25MHz

1920 x 1080/24/1:1 1920 P 74.25MHz

1920 x 1080/23.98/1:1 1920 P 74.25MHz/1001

1920 x 1080/30 (sf) 1920 Seg Form 74.25MHz

1920 x 1080/29.97 (sf) 1920 SF 74.25MHz/1001

1920 x 1080/25 (sf) 1920 SF 74.25MHz

1920 x 1080/24 (sf) 1920 SF 74.25MHz

1920 x 1080/23.98 (sf) 1920 SF 74.25MHz/1001

1280 x 720/60/1:1 1280 P 74.25MHz

1280 x 720/59.94/1:1 1280 P 74.25MHz/1001



# **TECHNICAL SPECIFICATION**

#### **INPUTS**

Composite input. BNC connector with loop through output. Return loss better than 40dB. Zin of 22k. Max dc +/- 3 volts. YC input. 4 pin mini din socket with loop through output. Return loss better than 40dB. Zin of 22k. Max dc +/- 3 volts.

Component input. 3 x BNC connectors with switchable terms. Return loss better than 40dB. Zin of 75R or 22k. Max dc  $\pm$  volts. YCrCb or RGB.

HD Serial digital input. BNC connector. Input impedance 75 ohms. Max d.c.  $\pm$ 10V.

SMPTE 292 serial component. 800mV pp +/-10% auto equalised up to 300 metres of cable.

Serial digital output. BNC connector. Output impedance 75 ohms.

Equalised version of the serial digital input.

External ref input. BNC connector with loop through output. Return loss better than 40dB. Zin of 22k. Max dc  $\pm$  volts.

#### **AUDIO**

4 x Analog balanced inputs. Zin 22K.

4 x SDI embedded

#### **AUDIO MONITORING OUTPUT**

Quarter inch professional stereo jack.

#### REMOTE CONTROL

9 pin D socket for GPI, data up/down load and remote control. **POWER** 

10 to 13V d.c. to Centre neg 2.1mm skt.. 1A max.

#### **ENVIRONMENT**

Indoor use, 5 to 45 deg.C. Ambient to 2,000m. Max humidity 80% to 31 deg.C decreasing to 50% at 40 deg.C. Overvoltage category 2. Pollution degree 1.

#### **DISPLAY AREAS**

Display 100mm x 75.5mm viewing area. Waveform 256 pixels wide x 240 pixels high. Audio/Gamut area 64 pixels wide x 240 pixels high.

#### **WAVEFORM MONITOR**

Response Flat is +/- 0.5% 50Hz to 30MHz. Low Pass is -3db @ 1.5MHz, -60db @ 6.75MHz. Timebase H, 2H and Hmag (x5). V, 2V and Vmag. Line select is any line from the frame. Parade is a 3H display of input or filter parade.

#### **VECTOR MONITOR**

Video Traditional component or composite display. Component accuracy 0.2%. Bandwidth 15MHz. Composite accuracy 1%. Bandwidth 1.3MHz.

Audio Stereo phase display of left or right audio pair. Phase accuracy 2 deg.

Gamut Poly™ display of RGB signal shows up illegal colours.

### **AUDIO MÓNITOR**

Accuracy Better than 0.1db over full scale range. Characteristics BBC, EBU, Nordic and VU.

#### **PHYSICAL**

DIMENSIONS: - 214mm x 131mm x 185mm. WEIGHT: - 2.5Kg

#### WARRANTY: - 1 Year.

Extendable free on registration: - To 2 Years By using the service area of our web site <a href="http://www.hamlet.co.uk/support/warranty/">http://www.hamlet.co.uk/support/warranty/</a>

# ORDERING INFORMATION HDWVA LCD SCOPE

In-Built LCD display, With all options included provides analog composite, component, HD, SD and audio monitoring capability.

\* Features available as options (see options list below)

#### **OPTIONS**

292 - SRM 292 - AMU 292 - SCC

Single Rack Mount Kit Audio monitoring accessory Soft carry case



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Hamlet products are Manufactured to ISO9001.2000 and ISO14001 specification.

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Hamlet Video International Ltd, Maple House, 11 Corinium Business Centre, Raans Road, Amersham, Bucks, HP6 6FB, England. Tel: - +44 (0) 1494 729 728 Fax: - +44 (0) 1494 723 237 Freephone (UK): - 0500 625525 E-mail: <a href="mailto:sales@hamlet.co.uk">sales@hamlet.co.uk</a> Website: <a href="mailto:www.hamlet.co.uk">www.hamlet.co.uk</a>