

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



The LCD Scope 292WVA has been designed to satisfy specific requirements requested by cost conscious users who need high quality, accuracy combined with familiar and intuitive operation.

The LCD Scope series has no cathode ray tube, 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 measurement and monitoring utilising a base unit with two options, both of which may be retro fitted. As with all Hamlet products the LCD Scope includes a host of features and functions normally only associated with much more expensive devices.

*This product contains proprietary patented designs.*

### Features and Functions

- HD SDI, SD SDI, Composite, component, - plus 4 audio bar graphs and phase display.
- Multi-standard NTSC & PAL.
- Built-in low maintenance LCD.
- Full measurement functionality including, full field line select.
- Gamut violation display and alarm.
- External ref.
- HFT™ hands free timing.
- On screen mode displays.
- 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 +/- 3 volts. YCrCb or RGB.  
HD Serial digital input. BNC connector. Input impedance 75 ohms. Max d.c. +/- 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 +/- 3 volts.

## AUDIO

4 x Analog balanced inputs. Zin 22K.

## 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 2.1mm jack. 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 MONITOR

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  
<http://www.hamlet.co.uk/serv.html>

## ORDERING INFORMATION

### 292WVA LCD SCOPE

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

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

### OPTIONS

292 - SRM	Single Rack Mount Kit
292 - AMU	Audio monitoring accessory
292 - SCC	Soft carry case

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