

Standard Definition SDI, Analog Video* and Audio* Signal Monitor



The Digi Scope DS601AX is compact, low power On Screen Display (OSD) device, which is ideal alternative to, and/or replacements for broadcast measuring devices in production or engineering environments. Especially where repetitive monitoring or measurements need to be made.

Areas such as, master control, pre or post production, editing and graphics suites, remote sites and OB vehicles. Indeed anywhere serial digital signals or multi-format measurement is required.

Options are made with “drop in cards”, so it couldn’t be easier. The DS601AX unit is capable of Standard definition serial digital video (SD SDI) analysis, measurement and monitoring. With the addition of “optional cards” the units are able to cover composite analog video (PAL & NTSC)*, component analog video (YcrCb & RGB)*, and audio* in its embedded, AES/EBU and analog formats.

Digital signal that can be investigated: Cyclic redundancy Counts (CRC), Active Picture EDH, Full Field EDH, signal strength, jitter, gamut errors, illegal codes, pixel amplitudes, SAV and EAV timings, embedded field groups, display checksum, resolution, and television standard.

Capability with the optional audio DAC* to provide stereo audio balanced outputs from the selected input (AES, Analog or Embedded).

Features and Functions

- Inputs:
 - 2 SD SDI CCIR 601 (SMPTE 259M) with relocked outputs.
 - 2 Composite (PAL & NTSC) video inputs*.
- 525 or 625 auto sensing.
- Contains patent applied proprietary 10 bit processing designs.
- On screen digitally generated analyser, waveform and vectorscope displays.
- Error detection and handling (EDH/CRC) (SMPTE RP 165).
- Error logging.
- Gamut indicator on front panel.
- Poly™ illegal colour display and alarm in RGB domain.
- Full field line select, Mag line select set up and recall with or without cursors.
- Cursor measurement and readouts for V, timing and phase and amplitude.
- Outputs: CAV(YCrCb), RGB and composite in-vision displays.
- Nine user definable display modes may be stored.
- Nine factory set display modes are stored in memory.
- HFT™ hands free timing.
- RS232 remote control*.

* Features available as options
(see options list below)

This product contains proprietary patented designs.

TECHNICAL SPECIFICATION

INPUTS

Serial digital inputs. BNC connectors. Input impedance 75 ohms. Max d.c. +/- 10V.

SMPTTE 259M, ITU-R BT.601/656 serial component. 800mV pp +/- 10% auto equalised up to 300 metres.

Serial digital outputs. BNC connectors. Output impedance 75 ohms. Equalised versions of the serial digital inputs.

External ref input. BNC connector with loop through output. Return loss better than 40dB. Zin of 22k. Max dc +/- 3 volts.

Composite inputs*. 2 x BNC connectors with loop through outputs. Return loss better than 40dB. Zin of 22k. Max dc +/- 3 volts.

Component inputs*. 3 x BNC connectors with loop through outputs. Return loss better than 40dB. Zin of 22k. Max dc +/- 3 volts. YCrCb or RGB.

OUTPUTS

Serial digital outputs. BNC connectors. 800mV to 75 ohms.

Hi Res output*. 15 pin high density D socket. Analog 0.7V R, G, B and H and V sync.

Composite output. BNC connector. 1V to 75 ohms.

Component outputs. BNC connectors. 1V to 75 ohms. YCrCb or RGB.

AUDIO*

4 x Analog balanced inputs. Zin 22K.

2 x AES/EBU digital audio inputs @ 48KHz, 44.1KHz or 32KHz. Zin 200R.

4 x Analog balanced outputs, line level.

REMOTE CONTROL*

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

POWER

90-260V AC at 48Hz to 66Hz @ 20VA, with 200mA slow T fuse.

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

Waveform cutout boxes 38uS x 512 lines or 19uS x 256 lines or 9.5uS x 128 lines.

Horizontal and vertical positions are menu selectable.

Text cutout box 38uS x 32 lines at top or bottom of frame.

Audio cutout boxes 3.6uS x 512 lines at left and right of frame.

WAVEFORM MONITOR

Resolution Full 10 bit processing. Display resolution 512 x 512.

Response Flat is unprocessed digital data stream

Low Pass is -3db @ 1.5MHz, -60db @ 6.75MHz.

Sensitivity 1volt encoded video reads 1 volt on screen. Totally digital processing guarantees accuracy. Mag is x 4 gain.

Timebase H, 2H, 3H and Hmag, which is selectable to x5 or x10. V, 2V, Line select and Vmag, electable to 2,4,8,16 or 32 lines.

Line select is a fully sampled and bright display.

Chop provides parade and overlay displays.

AUDIO MONITOR*

Accuracy Better than 0.1db over full scale range.

Characteristics BBC Type 2, Digital, Nordic, VU EBU, DIN and expanded.

VECTOR MONITOR

Video Traditional component or composite (option) display.

Digital component accuracy 0.2%. Bandwidth 3.375MHz.

Composite accuracy 1%. Bandwidth 1.0MHz.

Audio Stereo phase display of left or right audio pair. Phase accuracy 2 deg. Display compression 30db.

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

PHYSICAL

DIMENSIONS: - 49 x 25 x 4.5cm.

WEIGHT: - 3Kg.

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

DS601AX DIGI SCOPE

For operational areas where engineering features are required. On screen SDI analyser, waveform, vectorscope

* Features available as options (see options list below)

OPTIONS

DS -SDIO	SD SDI video output of picture with inserted traces and data
DS-ANIN	Analog video inputs card for composite, component YCrCb or RGB signals
DS-AUDIN	Audio input card for analog, embedded and AES/EBU signals
DS-POL	Audio Polar phase display option - requires DS-AUDIN
DS-VDAC	Video DAC of the selected digital input - without inserted trace or data
DS-ADAC	Audio DAC of the selected audio - requires DS-AUDIN
DS-RC	Remote control for Digi Scope

Specifications and features herein are subject to change without prior notice. Hamlet Video International Limited products are covered by a number of Applied or Granted UK, North American and World Patents. Prior art is claimed in All Territories on features and functions incorporated in the product designs herein. Hamlet is a registered Trademark of Hamlet Video International Limited. Flexiscope, Whichwire and Videoscope are registered Trademarks of Hamlet Video International Limited. Monitor Scope, Digi Scope, Adept, LCD Scope, Protean, Digi Gen, VidScope, GenPen, Micro Scope, Pico Scope, PC Scope, Chameleon, Digital Window, Programme Level Meter and Stereo Scope are Trade Marks of Hamlet Video International Limited.

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

Our most up to date information is available on our web site.

Copyright © 2006 Hamlet Video International

08/06

Hamlet Video International Ltd, Maple House, 11 Corinium Business Centre, Raans Road, Amersham, Bucks, HP6 6FB, England.

Tel: - +44 (0) 1494 729728 Fax: - +44 (0) 1494 723 237 Freephone (UK): - 0500 625525

E-mail: sales@hamlet.co.uk Website: www.hamlet.co.uk

Hamlet Video International USA, Tecads Inc, 26741 Portola Pkwy, Suite 1E, #601, Foothill Ranch, CA 92610-1763, U.S.A.

Tel: - +1 949-597-1053, Fax: - +1 949-597-1094 Toll Free: - 866-4-HAMLET

E-mail: sales@hamlet.us.com Web site: www.hamlet.us.com

HAMLET[®]
EXCELLENCE IN VISION