



## HD/SD Eye Pattern, Waveform, Vector and Audio Measurement and Monitoring

The FlexiScope Module Opt 04 allows the display of HD and SD SDI eye, video and audio signals on the MonitorScope, DigiScope 9000 series, in addition to the MicroFlex and FlexiScope hand held instruments.

The HD/SD serial input connection is made to the centre gold plated BNC socket, which is internally terminated at 75 ohms. The left BNC provides an equalised output of the input feed and the right BNC allows an external timing reference or AES audio signal to be input.

FlexiScope modules are simple to exchange in all instruments, just remove two screws and remove the module out of the main frame, insert the new module tighten the two screws and you are now ready for a new set of inputs (and outputs if a TSG module is chosen).

Television standards supported by this module:  
including 1/1.001 standards

HD, SD EYE Pattern Measurement and Monitoring, Video and Audio signal Measurement and Monitoring

### Raster Formats

486i / 59.94, 576i / 50 (ITU-R BT.601)  
720p 50, 59.94, 60Hz (SMPTE 296M)  
1080sF / 23.98, 24, 25, 29.97, 30Hz (SMPTE 274M, RP211)  
1080i / 50, 59.94, 60Hz (SMPTE 274M)  
1080p / 23.98, 24, 25, 29.97, 30 (SMPTE 274M)

### Sampling

4:2:2 (SMPTE 372M)

### Bit Rates

270Mbit, 1.485Gbit (SMPTE 259M, 292M)

*A Hamlet "Made to Measure product"*

### Features and Functions

- Input BNC.
- Loop Out BNC.
- Ext Ref. / AES input BNC.
- Auto sensing of HD/SD formats.
- Audio decode

### Instruments that can use this Module

- FlexiScope. (Handheld Rasterizer with screen)
- MicroFlex. (Handheld Rasterizer with screen)
- MS9000A. (3U Rasterizer with screen & Cursors)
- MS9000B. (3U Rasterizer with screen)
- DS9000A. (1RU Rasterizer with Cursors)
- DS9000B. (1RU Rasterizer)

See the Instruments separate datasheet for full information

## TECHNICAL SPECIFICATION

### HD/SD digital input.

BNC connector.

Input impedance 75 ohms. Max d.c. +/- 10V.

SMPTE 259M serial digital at 800mV p/p.

SMPTE 292M high definition serial digital at 800mV p/p.

Auto equalised up to 250 metres of cable at 270Mb/s, 230 metres of cable at 1.485Gb/s

### HD/SD digital output.

BNC connector.

Output impedance 75 ohms.

Equalised version of the serial digital input.

### Ext-ref / AES input.

BNC connector.

Input impedance 75 ohms.

Max dc +/- 3 volts. Video 0.5 to 2.0V p/p. Digital

Audio min 150mV p/p, max 3V p/p conforming to S/PDIF, AES3, IEC60958 or EIAJ CP1201.

### POWER

Supplied from the Mainframe Instrument.

### 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.

### WARRANTY: -

AbsoluteCare:- 4 Years, providing the purchase is made direct from Hamlet or an authorised reseller and registration\* is completed within one month of purchase.

Warranty Extension: - Can be purchased contact us for details.

\*By using the service area web site <http://www.hamlet.co.uk/serv.html>

### ORDERING INFORMATION

FlexiScope modules are available as options to fit the MonitorScope MS9000A, MS9000B, DigiScope DS9000A and DS9000B, FlexiScope and MicroFlex instruments.

Please therefore utilise the following codes which identify the hosts chassis :

MS HD/SD+EYE

DS HD/SD+EYE

FS HD/SD+EYE

MF HD/SD+EYE

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

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

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