

PT0710M HD/SD Waveform Monitor

PRODUCT CODE: **PT0710M**



DK - Technologies



The PT0710M has been designed to meet the increasing demands by broadcasters to reduce costs. In order to achieve this we have launched an entry level of our respected PT0760M which reduces the facilities without compromise on quality.

The PT0710M is capable of being upgraded to the full facilities of its big brother the PT0760M without loss of any facilities.

This entry level Waveform Monitor can display the waveform of the constituent parts of the image, Red (R), Green (G) & Blue (B) plus Luminance (Y). An optional facility to measure the incoming signals against an external reference can be provided through the **STA - Smart Timing Analysis** - which can display timing differences in the SDI inputs from the external reference (Black Burst or Tri-Level).

The PT0710M employs the PT0760M feature of **SVLC – Smart Video Landscaping Compressor** - which provides highlighting of the detail within the signals. This makes any errors easier to see and improves the user experience. The PT0710M provides user adjustable Colour Gamut Alarms which are displayed on the screen in a highly visible Red Flash

The PT0710M can be viewed on an external screen and can show up to 16 embedded audio channels. These audio signals are routed to the bargraph audio metering and to an output card

(optional) for audio monitoring on an external device, this option requires the upgraded audio software.

The meter can be equipped with Dolby E decoding (optional) to allow extraction to the audio meters of all elements of the Dolby encoded signal, this option requires the upgraded audio software.



Options...

- PT0700R Client Panel for remote operation
- PT0710M to PT0760M Software Upgrade*
- HD/SD SDI Output*
- Closed Caption Display
- External Reference Input Module including Loop-Through
- 8 Channel Analogue Audio Input Module*
- 8 Channel Analogue Audio Output Module*
- 4 x AES3 Digital Audio Input Module*
- 4 x AES3 Digital Audio Output Module*
- Dolby E Decoder*

- ITU Loudness BS1770/BS1771 (LU, LKFS & LUFs scale)*
- StarFish™ & JellyFish™ for 5.1/6.1/7.1 Surround Sound*
- Level/Loudness Logging*
- BLITS Tone Generator*
- Spectrum Analyzers (1/3rd Octave & FFT)*
- External Screen controller to permit individual controls of internal and external screens*
- Table top stand
- 19" x 3u rack mount frame

HD 1080p	HD 720p
1080p/30	720p/60
1080p/29.97	720p/59.94
1080p/25	720p/50
1080p/24	720p/30
1080p/23.98	720p/29.97
	720p/25
	720p/24
	720p/23.98
HD 1080i	SD
1080i/30	576i/25 (625)
1080i/29.97	487i/29.97 (525)
1080i/25	

Ordering Information...

PT0710M

1 HD/SD Channel Input, Auto Sensing, inc RGBY, Vectorscope, Colour Gamut Alarms, Audio De-embedding, Simple bargraph metering (16 Ch) & DVI/VGA O/P

PT0760M-DT/STAND

Desktop Stand for PT0760M/PT0740/PT0730M/PT0710M /PT0660M/PT0600M

PT0760M-RM/KIT

19" 3RU Rack cabinet to house any combination from PT0760M/PT0740/PT0730/PT0710M /PT0600M/PT0660M/ PT0200C/PT0700R

PT0760M-ANAREF

External Analogue Black Burst/Tri Level reference with loop through

Features...

- HD/SD Input Auto Sensing
- Waveform Monitor
- Vectorscope
- Colour Gamut Alarms
- Fully adjustable intensity for scale, trace and background
- SVLC – Smart Video Landscape Compressor for detail highlighting
- STA – Smart Timing Analysis (Optional)
- Full HD/SD Audio De-embedding
- Alternate Audio & Video display
- Independent Video & Audio controls
- Multi-user Control Panel (Optional)
- DVI/VGA Output
- 19" Rack mount (3U high half-rack unit), short depth for compact installations
- The powerful preset menus, allow the PT0710M to be at the heart of both operational and engineering workstations

The Next
Generation

* Options will require the relevant software upgrade, ask your dealer

PT0710M HD/SD Waveform Monitor



PT0710M - HARDWARE OPTIONS

HD/SD VIDEO

ANALOGUE & DIGITAL AUDIO

INFORMATION



PT0760M-SDI-4I*

SDI input specifications:

SMPT-Formats: 259M, 292M
 Connector: BNC, 75Ω
 (Internally Terminated)
 Return Loss: > 15dB
 (5MHz - 1.5GHz)
 Input Level: 800mVp-p, ±10%
 (0m Cable)
 Equalization Range: 259M: 0-280m
 (Belden 8281 cable type): 292M: 0-100m



PT0760M-ANAREF

External Analogue Video reference:

Connector: BNC, 75Ω (Not internally terminated)
 Return Loss: >35dB
 (5MHz to 30MHz)
 Input Level: 1Vp-p typical, 2Vp-p
 (Maximum)
Supports video standards:
 SDTV: SMPTE 125M
 SMPTE 267M
 ITU-R BT_601
 (480I, 576I)

HDTV: SMPTE 296M(720P)
 SMPTE 274M(1080I/P)
 SMPTE RP 211 (1080PsF)



PT0760M-O/P-8A*

8 Channel Analogue Audio Output Module:

Connector: 25 pin Female D-Sub
 Sample Rate with internal Sync: 48kHz
 Max. Output Level at 600Ω: +18dB (VCC=12V)
 +24dB (VCC >20V)
 24 bits.
 Bit Resolution: 24 bits.
 Frequency Range: 30Hz to 20kHz ±0.3dB
 Sample rate range with external sync: 32 kHz to 50 kHz
 Group delay: <0.21 msec
 Dynamic range A-weighted: >101 dB
 Crosstalk at 1 kHz: < -96 dB
 Signal-to-noise ratio: 93 dB (typical)
 Nominal output impedance: < 5 ohm



PT0760M-O/P-8D*

4 Channel Digital Output Module (AES3):

Connectors: 15 pin Female D-Sub (AES3-2003) & 4 x BNC (AES3-id2001)
 Sample rate with internal Sync: 48kHz
 Output Level (BNC), 75Ω: 1V
 Output Level (D-Sub), 110Ω: 5V (balanced)
 Bit Resolution: 24 bits.



PT0760M-I/P-8A*

8 Channel Analogue Audio Input Module (balanced):

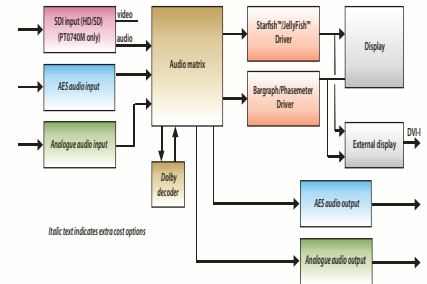
Connector: 25 pin Female D-Sub.
 Sample Rate with internal Sync: 48kHz
 Max. input Level: +24dB
 Bit Resolution: 24 bits
 Frequency Range: 30Hz to 20kHz ±0.3dB
 Nominal input impedance: > 20kΩ
 Group delay: <0.82 msec
 Dynamic range, A-weighted: >103 dB
 Crosstalk at 1 kHz: < -96 dB
 Signal-to-noise ratio: 93 dB (typical)



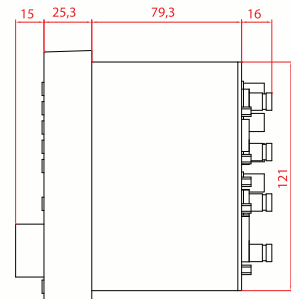
PT0760M-I/P-8D*

4 Channel Digital Input Module (AES3):

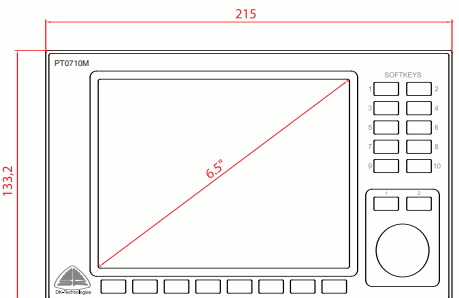
Connectors: 15 pin Female D-Sub (AES3-2003) & 4 BNC (AES3-id-2001)
 Sample rate internal: 48kHz
 Sample rate for input module: 8kHz - 108kHz
 Input Level: >500mV
 Bit Resolution: 24 bits
 Input impedance: 110Ω
 Group delay: 1.75 msec (Max.)
 THD & Noise: -103 dB @ 1 kHz (typical)
 Dynamic range: >120 dB



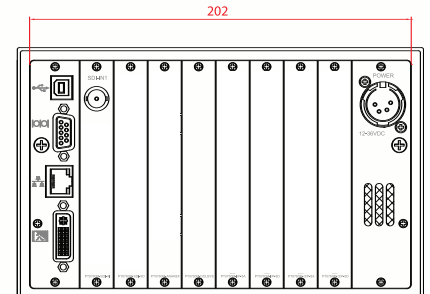
Side View



Front View



Rear View



GENERAL SPECIFICATIONS

General Connectivity:

External Display: DVI-I (DVI or VGA)
 640x480p60
 1280x720p60
 24 bit color
 Monitor, Control & Update
 RS232 / USB (-A) / (RJ45)

Power Supply:

Power input Connector: XLR4-male
 Input Voltage: 12-36VDC
 Power Usage: 15-40W

Physical Characteristics:

Height: 133.4 mm
 Width: 215.2 mm
 Depth: 145 mm Max.
 Weight: 2.5kg (typical)

Environmental Conditions:

Storage temperature: -20° to +70°C
 Operating temperature: +5° to +45°C
 Humidity: Non-condensing (IEC 721)

*Requires PT0710M-SW-Upgrade



DK - Technologies WORLDWIDE OFFICES:

www.dk-technologies.com

DENMARK

DK-Technologies A/S,
 Marielundvej 37D,
 DK-2730 Herlev.
 Tel: +45 44 85 02 55
 Fax: +45 44 85 02 50
 Email: info@dk-technologies.com

GERMANY

DK-Technologies Germany GmbH,
 Tibarg 32c,
 D-22459 Hamburg.
 Tel: +49 (0) 40 70 10 37 07
 Fax: +49 (0) 40 70 10 37 05
 Email: cr@dk-technologies.com

UK

DK-Technologies (UK) Ltd,
 Coles Yard Barn, North Lane, Clanfield,
 Hampshire PO8 0RN, England.
 Tel: +44 (0) 23 92 59 61 00
 Fax: +44 (0) 23 92 59 61 20
 Email: info.uk@dk-technologies.com

USA

DK-Technologies America,
 2100 B2 Walsh Ave,
 Santa Clara, CA 95050-2590, USA.
 Tel: 0800 421 0888
 Fax: +45 44 85 02 50
 Email: info@dk-technologies.com