

## NEW WAVE... 4 INTO 1 DOES GO!



2 channel version shown

We are very excited about the forthcoming release of the new PT0760M HD/SD Video Meter, the long awaited replacement of the PT5664. The PT0760M will be shown for the first time at NAB 2008. It has been designed for use in studios, post production facilities, OB trucks & MCRs.

The first released products have been specified for use in OB vans and television production houses which are limited for space. The PT0760M will be equipped with the ability to receive and view up to 4 independent video channels within the single unit. This will save space and weight as well as cost. The unit will allow the user to switch to a single channel view instantly in the event there is a problem.

The PT0760M has an in-built rasterizer to permit viewing of the waveform on an HD monitor plus an in-built Quad Splitter to permit the viewing of all four channels, waveform, picture, audio etc on an external HD/SD monitor.

The video meter includes picture preview of the selected image.

HD/SD Internal Signal Generator provides test signals in 1080p, 1080i, 720p, and SD formats. The test signals include several colour bar signals, colour black, SDI checkfield, monitor alignment signals.

- The PT0760M will include the following features in all models:
- 2 or 4 auto sensing HD/SD inputs with simultaneous display on internal or external screen
  - 2 or 4 HD/SD outputs
  - In-built rasterizer
  - In-built Quad Splitter for simultaneous viewing on external screen of up to 4 HD/SD channels
  - Waveform monitoring of G, B, R, Y, Cb, Cr & luminance
  - Universal 1/2 rack, 3RU or Desktop
  - Horizontal & Vertical Zoom via in-built jog wheel
  - Internal memory
  - User definable Gamut error ranges
  - Simple single button changeover between audio and video

The unit is fully field upgradeable and therefore all the planned and available options can be added by the dealer or the competent user.

- These options include:
- Multiple audio outputs
  - Audio de-embedding providing metering and 5.1 Starfish™ display
  - Audio outputs for the 5.1 audio monitoring
  - ITU 1770/1771 loudness metering
  - BLITS 5.1 ident tones

Plans for later release include the provision of a Video Vectorscope, Jitter and Eyeheight measurement. Prices for this highly innovative new product from DK-Technologies A/S will be published at NAB 2008. Please contact your local dealer to register your interest and find out more.



## New StarFish™ & BLITS Makes Easy Work of 5.1 Surround Sound



StarFish™, the new display technology for our flagship MSD600M++ audio meters, represents a massive leap forward for all those who work in the 5.1 domain by literally allowing audio engineers to see what they are hearing.

Recording studios, broadcast and post production facilities will already be familiar

with JellyFish™, our industry-standard stereo display technology. StarFish™, which works alongside JellyFish™, is just as easy to use and proving equally revolutionary for everyone working in surround sound.

StarFish™ allows engineers to visualise true acoustic audio levels by showing an image of the acoustic audio level as it is experienced by the listener. The colour of the StarFish™ contour reflects the correlation between neighbouring audio channels in the surround signal. With StarFish™, any surround mix can be optimized for stereo and mono listening as both stereo and mono downmixes can be displayed simultaneously.

BLITS (Black & Lane's Identification Tones for Surround) provides channel identification tones

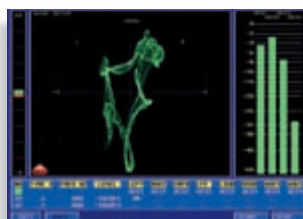
for all channels within a 5.1 Surround Sound signal. This also helps to provide information in a stereo downmix - channel presence/absence.

The BLITS tones can be used at the start of a programme to help identify channels, in OB trucks for channel identification back to the studio and MCR as well as lineup for storage devices.

The arrangement of the tones is designed to provide sequential and easy to read displays on bargraph meters. During the sequence the bargraph meters will move in turn across the accepted layout of L, C, R, LFE, Ls & Rs.

We have incorporated StarFish™ and BLITS into our latest version 5.3 software for the MSD600M++ Series of audio meters and a full software upgrade, to incorporate these important new features, is available. Contact your local dealer for assistance.

BLITS Identification Tones			
L	880Hz	1 KHz	2 KHz
R	880Hz	1 KHz	2 KHz
C	1,320Hz		2 KHz
LFE	82.5Hz		2 KHz
Ls	660Hz		2 KHz
Rs	660Hz		2 KHz
		4.8 Sec	5.3 Sec
			3.3 Sec



DK - Technologies

## DON'T MISS

**AT LAST!** - A solution for the Loudness Issue...

Our Sync and Test Signal Generators Now Have **GPS Genlock...**

**Matching LCD Panels** - Measuring CRT And LCD Monitors is Easy...

**StarFish™** Makes Easy Work Of Surround Sound Measurement...

**NEW** PT0760M HD/SDi Waveform monitor and vectorscope...

## NEWS FLASH

**Fox/SKY Television in Rome have purchased the first MSD100C Loudness meters to comply with Italian legislation.**

Alessandro Travagliani of Fox/SKY said:

*"Your developments on the unit are amazing. You have developed this product in record time and it meets all the criteria set out by our organisation and ITU."*

The Next Generation

## MAKE YOUR LCD PANELS MATCH

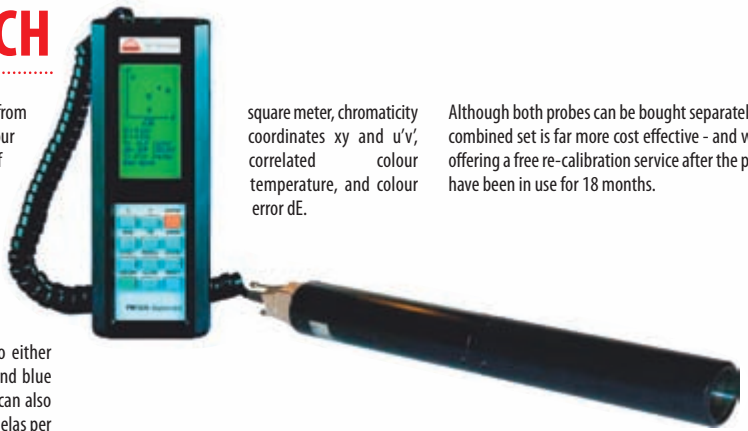
With more and more broadcast and post production facilities making the switch from CRT to LCD, we have introduced an easy to use colour analyser set that can calibrate both types of monitor.

Packaged in a handy flight case for safe transportation and storage, The PM5639 includes an LCD probe with a separate stand, a CRT probe with a suction cup and a display unit.

The LCD probe is designed for white point alignment and is slim enough to be used on any size LCD without touching the screen itself. The probe can also be used to measure changes in the monitor's colour

and luminance when the screen is viewed from the side. Both probes provide automatic colour balance alignment for a wide range of manufacturer's monitors and use proprietary, highly stable dichroic optical filters to split the screen light into its colour components so that the screen's chromaticity coordinates can be easily determined.

The set's display unit can be connected to either probe and shows the relative red, green and blue components as bars for easy alignment. It can also display luminance in footlamberts and candelas per



square meter, chromaticity coordinates  $xy$  and  $u'v'$ , correlated colour temperature, and colour error  $dE$ .

Although both probes can be bought separately, the combined set is far more cost effective - and we are offering a free re-calibration service after the probes have been in use for 18 months.

# LOUDNESS PROBLEMS SOLVED

It's well known within the audio industry that today's sound processing can lead to remarkably high perceived sound levels without sound actually exceeding the maximum permitted signal peak levels. Finding a way of stopping this has become something of a Holy Grail for the industry, especially for broadcasters who know that perceived loudness can spoil the viewers' enjoyment of a programme and even make them switch off.

To combat this, the ITU recently introduced Recommendations BS.1770 and BS.1771, which specify the algorithms that should be used to measure audio programme loudness. Broadcasters and production houses, including SKY, ITV, the BBC and RAI in Italy, were quick to pick up on this and asked DK to come up with a product that would solve the loudness issue once and for all.

Our response is the Stereo Loudness Meter MSD100C Loudness, a stand-alone unit that incorporates the algorithms recommended by the ITU and is able to display the loudness of the individual audio channels, as well as the sum of the left and right signals. It can be used in any broadcast or post production facility as a health check during production or prior to transmission.

The unit provides accurate loudness matching of audio from a number of different sources and offers a selection of working modes, including Fast mode for real time viewing of loudness, Integrated mode for measuring the loudness of a recorded section or the complete recording and Gated mode for viewing loudness of audio material with long pauses (e.g. golf tournaments).



- Selectable digital and analogue stereo inputs
- Loudness Units (LU) scale, covering a range from -18db to +9db
- Summed channel loudness
- Individual left and right channel loudness
- Numeric readout
- Audio vector oscilloscope & phase correlation meter displays
- VGA output for external display

The stereo MSD100C Loudness meter is available with a choice of different languages to help the user. It is provided with different scales to meet the varied requirements of worldwide broadcasters but still maintains the loudness measurement as set out by the ITU.

Please contact your local dealer for a demonstration and a quotation.



Photo courtesy of NASA

Customers with PT5300 sync and test signal generators can now lock their machines to a Global Positioning System (GPS) time reference with our new PT8616 GPS Genlock option, which provides the ultimate in timing stability.

The PT8616 allows the timing of the generator's output signals to be defined against a real time clock. This means that any number of PT5300s can run in sync, even when they are physically separated by long distances and have no direct interconnect for synchronisation.

The unit is especially useful for broadcasters with remote facilities as it allows generators to be synchronised to the master complex without the risk of introducing artefacts into the signal or frames

skipping and repeating, which can easily happen if generators are not properly synchronised.

Delivered as a hardware module that integrates seamlessly into the PT5300 generator, the PT8616 also ensures the frequency reference is always correct in a master generator setup. When redundant systems are used with changeover units (PT5211), the individual master generators can be synchronised via the PT8616, causing minimum disturbance if a changeover situation should occur.

As well as precisely controlling the timing of video and audio signals, the PT8616 also enables the retrieval of ultra precise real time clock data from the GPS. Timecode, containing the real time clock information can be sourced directly from the PT5300 and used as the master clock in the complex.

We are supplying the PT8616 with a robust weatherproof antenna, cable and mounting accessories to make installation quick and easy.

## Synchronised Pictures from around the world using GPS

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