Safe & Sound

DK METER – **Audio & Loudness** Metering Complete

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DK METER **at a glance** …

Complete **Audio & Loudness** one-box metering

Hassle-free Flexibility – plug, preset and play

High Quality Tools, yet outstanding value for money

The DK METER range is the perfect and surprisingly affordable 'One box solution' to Audio and Loudness metering. The DK METER complies with all major Broadcast loudness standards and delivers outstanding metering precision and clear read-outs, not merely on Loudness, but across the full range of audio metering tools.

The DK METER toolset makes it application-fit for any audio and loudness setup in broadcast, film & post production as well as live transmission and recording.

With the clear DK METER readout and compliance in your line of sight, you are always **safe and sound.**

Bullets & Benefits
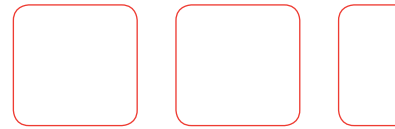
- Crystal clear Loudness metering and numerical readout – **Loudness conformity at a glance**

- Compliant with all major loudness standards (BS1770-2. A/85, R128, ARIB and more…) – **Always hit your target**

- Full featured Audio meter package: Bargraph, FFT (optional), Vectorscope, Phase correlation, StarFish™, JellyFish™ and Moving Coil Emulation – **See and secure your audio from any angle**

- Unique Loudness Reclaim Factor – **Optimize your loudness results**

- Real time True Peak PPM – **Optimized level with no hidden 'digital overs'**

- Compact 'One-Box' design (132x88x18mm) – **Hassle-free placement and installation**

- Unique 'Eye Width' SDI signal quality indicator – **Always trust your SDI input signal**

- Easy and intuitive touch user interface – **Plug and play**

- Flexible and user definable display setup – **Personalize viewings to fit your workflow**

- Convenient 'Screen grabber' (optional) – **Instant documentation of your Loudness levels**

- 4.3" screen size with vertical and horizontal viewing – **Full flexibility and Easy readout**

- USB powered – **Power from included PSU or directly from your computer USB port**

- Analogue, AES, SDI HD 3G: up to 16 input and 12 display channels – **Choose the input format for you**

- Software upgradable via USB connection – **Future proof, add tools as you go**

So much more than Loudness

Looking beyond the Loudness compliance requirements, the DK METER delivers unrivaled audio metering and flexibility. The compact package and 4.3" screen makes DK METER easy to install and position.

The extensive range of scales combined with a strong line-up of audio metering tools, ensures that you can view your audio in exactly the way you please.

Specifically for SDI applications, the DK METER features the unique 'Eye Width' indicator, allowing instant feedback on the SDI signal quality in your setup – No more dropped or critical SDI signals.

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Product Program

AES – Analogue

DK1

> MSD View
> FFT analyzer
> Screen grabber

> 3 AES | 2 Ana
> 8 ch. display

> 4 ch. display
> 3 AES | 2 Ana

> Loudness
> True peak
> PPM
> Phase Meter
> Vectorscope
> Moving Coil

DK2

> MSD View
> FFT analyzer
> Screen grabber

> 8 ch. display
> 3 AES | 2 Ana
> Star | JellyFish™

> Loudness
> True peak
> PPM
> Phase Meter
> Vectorscope
> Moving Coil

SDI – 3G – Eye Width

DK3

> MSD View
> FFT analyzer
> Screen grabber

> 3 AES | 2 Ana
> 8 ch. display

> 8ch. display
> SDI 3G
> Eye Width

> Star | JellyFish™
> Loudness
> True peak
> PPM
> Phase Meter
> Vectorscope
> Moving Coil

DK4

> MSD View
> FFT analyzer
> Screen grabber

> 3 AES | 2 Ana

> 12ch. display
> SDI 3G
> Eye Width

> Star | JellyFish™
> Loudness
> True peak
> PPM
> Phase Meter
> Vectorscope
> Moving Coil

Compliance & Optimization

Within the Loudness discipline, the DK METER is a master. Featuring True Peak PPM and compliance with all major broadcast standards, DK METER offers Bargraphs and numerical read-outs of all relevant loudness parameters; Integrated Loudness, Loudness Range, Short-term and Momentary Loudness.

Additionally the Loudness Reclaim Factor ensures you optimal loudness results in an instant.

StarFish™ · JellyFish™ · Vectorscope · Phase Correlation

In addition to True Peak Bargraphs and Loudness readings, the DK METER offers detailed views on a number of other key audio parameters. The renowned DK-Technologies StarFish™ allows full multi-channel overview of audio energy as well as phase relations at a glance, while the classic Vectorscope indicates L/R and Mono/Stereo width. The simple Phase Correlation meter delivers ….well….Phase Correlation.
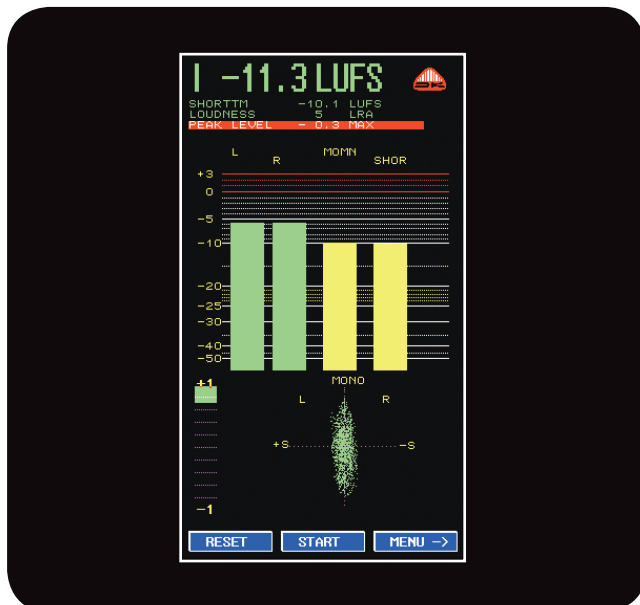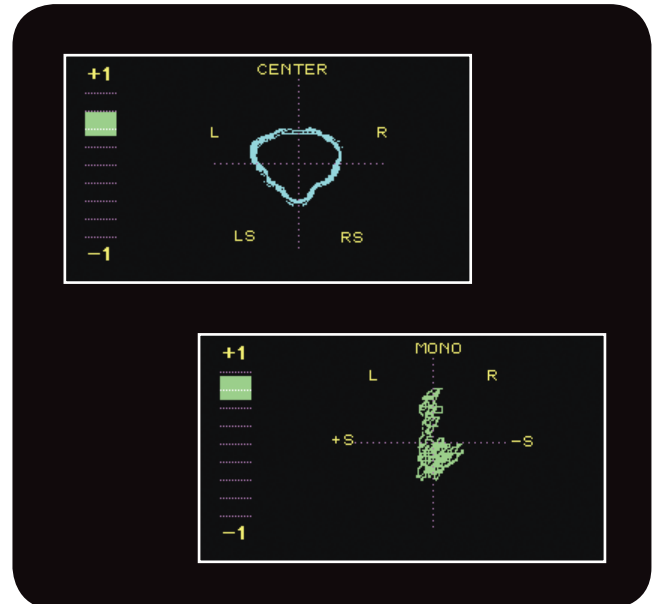
'One box' Audio & Loudness

The 4.3" display of DK METER reads out crystal clear audio and loudness metering, be it vertically or horizontally.

From the compliant Dual Loudness readings, over stereo and multi-channel True Peak Bargraphs, underpinned by the renowned DK-Technologies StarFish™ and Phase Correlation, DK METER delivers the highest accuracy metering – all in one single box.

MSD View & FFT analyzer

The MSD View will feel like 'coming home' to those familiar with the classic DK-Technologies MSD meter range.

The landscape view offers a perfect side-by-side lineup of the many audio metering tools of the DK METER.

Additionally, the FFT spectrum analyzer, allows you to constantly monitor and secure that you are hitting your spectral target dead on.

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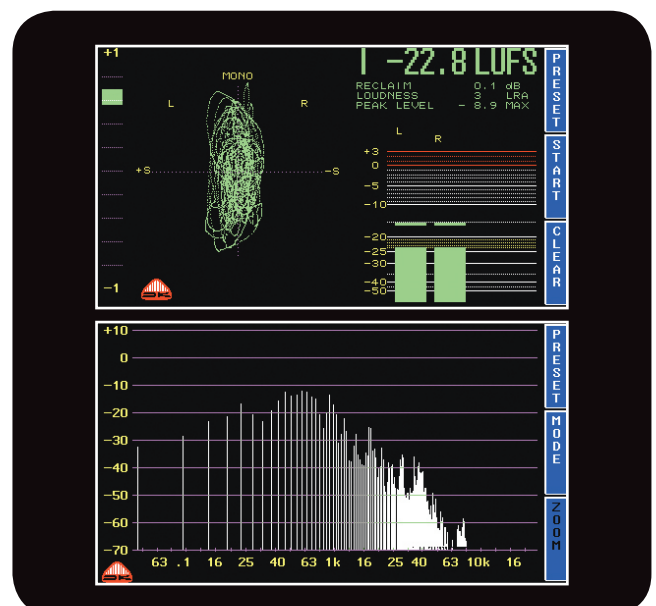
Eye Width – Instant SDI signal indication

If you've ever experienced the frustration of clock issues and slip samples on your digital inputs, you will welcome the SDI Eye Width's simplicity (included in all SDI capable units).

In the cell-phone antenna signal strength style, the Eye Width indicator instantly shows you the quality of the incoming SDI stream, allowing you to focus on what is important – the audio outcome!
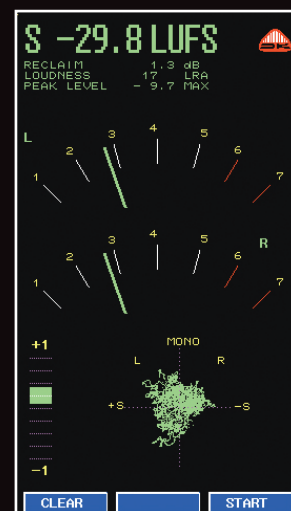

Horizontal Bargraph Readings

DK METER offers numerous relevant meter views, including the classic Horizontal Bargraph view.

The horizontal views allow DK METER to fit directly into a context of classic bargraphs, while adding the up-to-date Loudness readouts as well as the StarFish™ & Vectorscope – a perfect mix.
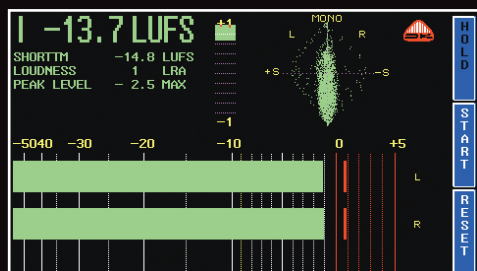
Moving Coil Emulation

The visually smooth Moving Coil emulations may be used with any of the DK METER provided scales including PPM and VU movements. The emulation can be used in a single meter, dual meter or Two twin modes (L/R and M/S indication). The Moving Coil meter visually integrates seamlessly with the other metering options of the DK METER; StarFish™, JellyFish™, Phase Correlation and essential Loudness readouts.

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Mechanical Measures

88 mm   18 mm

132 mm

35 mm

35 mm

Mounting pattern

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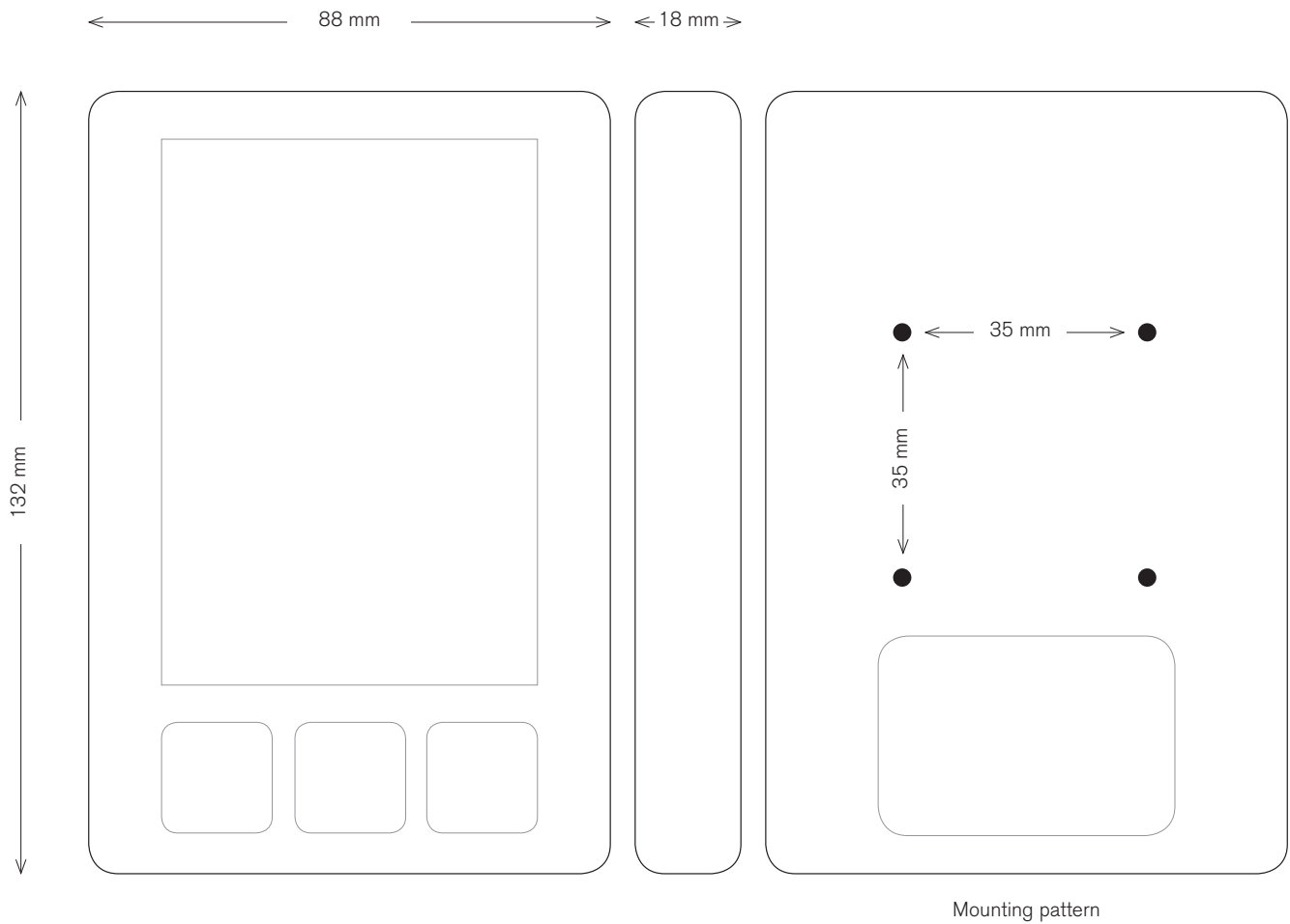
Specifications

	DK1	DK2	DK3	DK4
Audio Connectors				
Meter Connector	15-pole D-Sub	15-pole D-Sub	-	15-pole D-Sub
Analogue input	2 XLR input (optional)	2 XLR input (optional)	-	2 XLR input (optional)
AES input	3 BNC (AES3-4-2009)	3 BNC (AES3-4-2009)	-	3 BNC (AES3-4-2009)
Video Connectors				
SDI In	-	-	BNC 3G/HD/SD SDI	BNC 3G/HD/SD SDI
SDI Out	-	-	BNC 3G/HD/SD SDI (active loop through)	BNC 3G/HD/SD SDI (active loop through)
Digital Input				
Bit Resolution	24 bit	24 bit	-	24 bit
Group Delay	1.75msec	1.75msec	-	1.75msec
Nominal input imp.	75 ohm	75 ohm	-	75 ohm
S-rate w/ int. & ext. sync.	48kHz	48kHz	48kHz	48kHz
Analogue Input				
Input type	Balanced (electronic)	Balanced (electronic)	-	Balanced (electronic)
Dynamic range	>103dB	>103dB	-	>103dB
Crosstalk	<96dB	<96dB	-	<96dB
SNR	typical 93dB relative to -1dBFS	typical 93dB relative to -1dBFS	- -	typical 93dB relative to -1dBFS
Nominal input Imp.	>20kOhm	>20kOhm	-	>20kOhm
Maximum input level	24dBu	24dBu	-	24dBu
Frequency resp. 20Hz-20kHz	+/-0.3dB	+/-0.3dB	-	+/-0.3dB
Loudness				
Compliant with...	ITU BS1770-2, EBU R128, ATSC A/85, ARIB	ITU BS1770-2, EBU R128, ATSC A/85, ARIB	ITU BS1770-2, EBU R128, ATSC A/85, ARIB	ITU BS1770-2, EBU R128, ATSC A/85, ARIB
Reference Level digital	-12dBFS & -24dBFS	-12dBFS & -24dBFS	-12dBFS & -24dBFS	-12dBFS & -24dBFS
Dynamic gate level range	-2LU dB to -20LU/Off	-2LU dB to -20LU/Off	-2LU dB to -20LU/Off	-2LU dB to -20LU/Off
Sliding integration window	0 to 30 seconds	0 to 30 seconds	0 to 30 seconds	0 to 30 seconds
Num. Loudness indication	LRA	LRA	LRA	LRA
True Peak	Flying peak & Num.	Flying peak & Num.	Flying peak & Num.	Flying peak & Num.
Peak indicator thrs./hold time	-2dBFS / >0.5sec	-2dBFS / >0.5sec	-2dBFS / >0.5sec	-2dBFS / >0.5sec
Power				
Consumption	350mA	350mA	350mA	350mA
Power Supply	Wall plug, USB output, 100-240VAC, 5VDC, 500mA May be powered from Computer or USB hub	Wall plug, USB output, 100-240VAC, 5VDC, 500mA May be powered from Computer or USB hub	Wall plug, USB output, 100-240VAC, 5VDC, 500mA May be powered from Computer or USB hub	Wall plug, USB output, 100-240VAC, 5VDC, 500mA May be powered from Computer or USB hub

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