

Complete & Compliant



DK T7 PT0T7 DK T7 Stereo

DK T7 Data sheet
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Introducing the DK T7

Hit your Audio and Loudness sweet-spot with outstanding precision and instant overview – no matter the standard or target.

We are proud to present our feature packed and high precision 7" Multi touch Audio, Loudness & Logging Meter.

The DK T7 marks another high point in Audio & Loudness Metering. Complete with all our well-known high precision metering tools as well as 3G SDI, 8 ch. AES I/O, Headphone out and more - **all included from the get-go** - the DK T7 has you covered for any possible application.



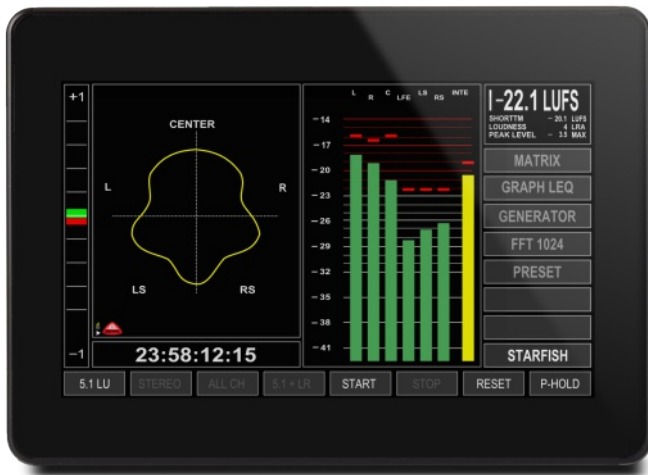
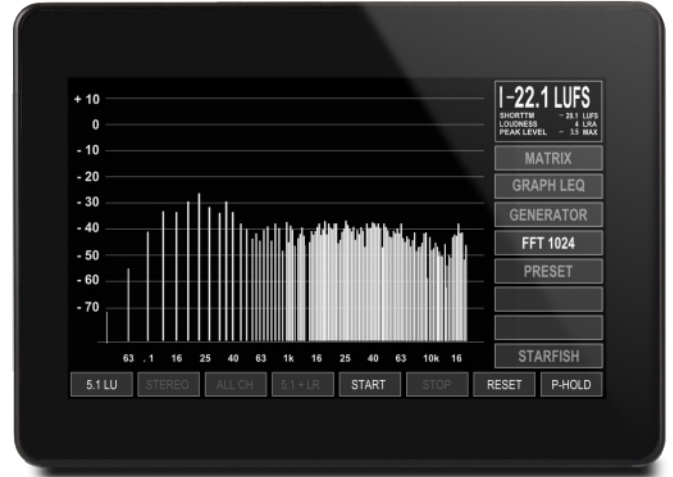
Bullets & Benefits

- Top Notch 7" TFT with ultra wide viewing angle
- Bargraphs or Moving Coil – Your choice of metering tool
- JellyFish™ & StarFish™ Channel inter relations – Phase Security
- Loudness and True Peak Logging - Document & Report
- Mouse & Keyboard operation - Access from a distance
- FFT Analysis – See and secure your audio from any angle
- 7.1 Surround viewing - StarFish 7.1
- SDI 3G I/O, AES/EBU (8ch. I/O), Analogue (2 ch. In)*
- HDMI screen and Audio output – Monitor your Meter
- Headphone Output – Listen in
- USB and Ethernet Control – Log and Report
- Ultra fast response Multi Touch screen User interface

FFT Spectrum Analyser

With 1024 filter resolution, the on board FFT spectrum analysis allows you to see the nitty gritty of your frequency content.

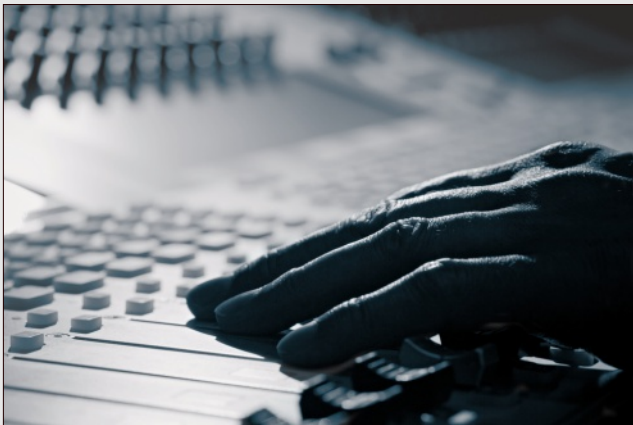
The FFT enables you to always confirm that the spectral balance of your source signal is correct. Additionally, the FFT comes in very handy as a tool of identifying and homing in on problem signals i.e. background rumble, HF test tones etc.



StarFish® Graphical Inter-channel View

No matter if you are Surround or Stereo, DK T7 gives you instant inter-channel views.

DK-Technologies' well-known channel and phase tools, JellyFish® and StarFish® gives you the detailed graphical representation of each channel amplitude and phase relationship, making it perfect for balancing out your stereo or surround mix as well as, spotting potential problems and errors in your signal.



DK T7 in TV Broadcast

DK T7 fits right into today's TV Broadcast applications providing instant metering as well as detailed Logging and Reporting on True Peak as well as all relevant Loudness parameters.

The 3G SDI allows hassle-free connectivity, while the HDMI output enables on-screen metering displays alongside the Loudness Logging Application.



Post Production with DK T7

As a post-production audio metering and logging tool, DK T7 stands out as one of the top choices.

The integrated audio and loudness toolbox offers numerous views of your audio ranging from True Peak & Loudness and into StarFish channel interrelations as well as detailed FFT Spectrum Analysis.

DK T7 allows instant compliance through Reporting, Documenting and Reviewing through its included Logging Application.

Bargraph or Moving Coil - Your Choice

DK T7 offers the choice of Bargraphs or Moving Coil emulation whether it comes to Peak or Loudness metering, allowing you to view your audio in the way that fits you best.

The DK T7 flexibility in setup is unrivaled and not only features custom metering styles, scales and instrument combinations, but also allows complete customization of touch buttons, enabling you to tailor the exact controls that you want at hand during your work.



3G SDI Picture Preview

Be sure that you are monitoring the correct SDI feed. The Confidence monitor feature allows you to check the incoming SD, HD or 3G SDI picture in an instant.

By the push of a button DK T7 instantly turns into a mini video confidence monitor along side the on-going metering and Logging facilities.

Multi Touch - As easy as it gets

DK T7 features a high resolution multi touch screen enabling an extremely responsive and flexible User Interface that allows you to touch, hold and swipe your way through the setup routine in a matter of seconds.

Each instrument area, allows you to simply touch in order to alter the specific settings of that particular function.

Additionally, the on-screen buttons may be configured to virtually any combination and function of your liking - How to set it up? Simply pressing and holding the desired button instantly brings up the list of button functions available.

Change StarFish Settings Set Scale & Loudness Select Input Source Set Text Readouts



Set Phase Meter Customize Button Functions Define BarGraph Hit Function Buttons



Loudness Automation & Reporting

With a complete and compliant Loudness functionality, DK T7 is set to ease and document your Loudness workflow.

The Graphical Loudness view allows for instant view of the historical loudness development along side standard PPM bargraphs as well as high accuracy loudness text readouts.

As a further facility, DK T7 offers the ability to timecode automate the Loudness tracking, removing one of the major loudness workflow obstacles.



Loudness Logging & Reporting

The Logging Application (PC) enables detailed logging and reporting of any loudness as well as True Peak events. The Loudness measurement is tracked and instantly stored to a local database.

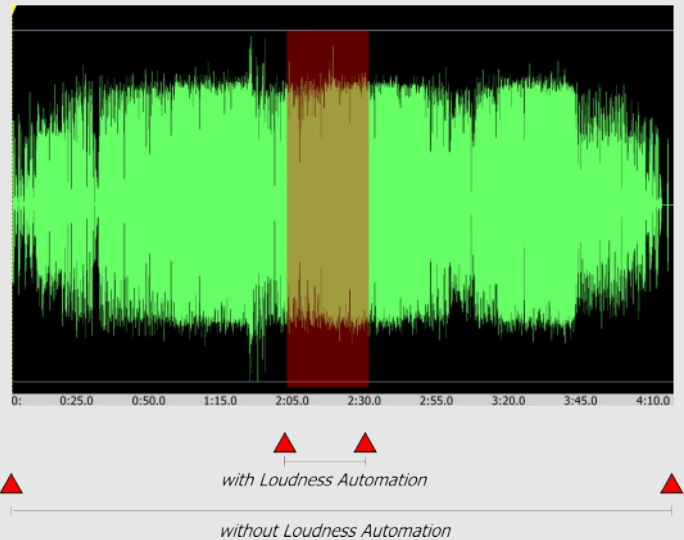
Any Logging session and Report may be searched, analysed and graphically displayed for further investigation at any point in time.

Data may be exported as PDF or CSV files for further data treatment.

Overall, the Logging Application makes up the perfect background tool allowing you full hindsight on every session.

Loudness Industry Standards Compliance

DK T7 adheres to all of the loudness industry standards i.e. BS 1770-3, R128, A/85, ARIB etc.



Loudness Automation – Instant Loudness Results

As the only Loudness meter in the world, DK T7 features the unique ability to automate the loudness data and instantly recalculate the Loudness results after editing smaller sections of a given audio file.

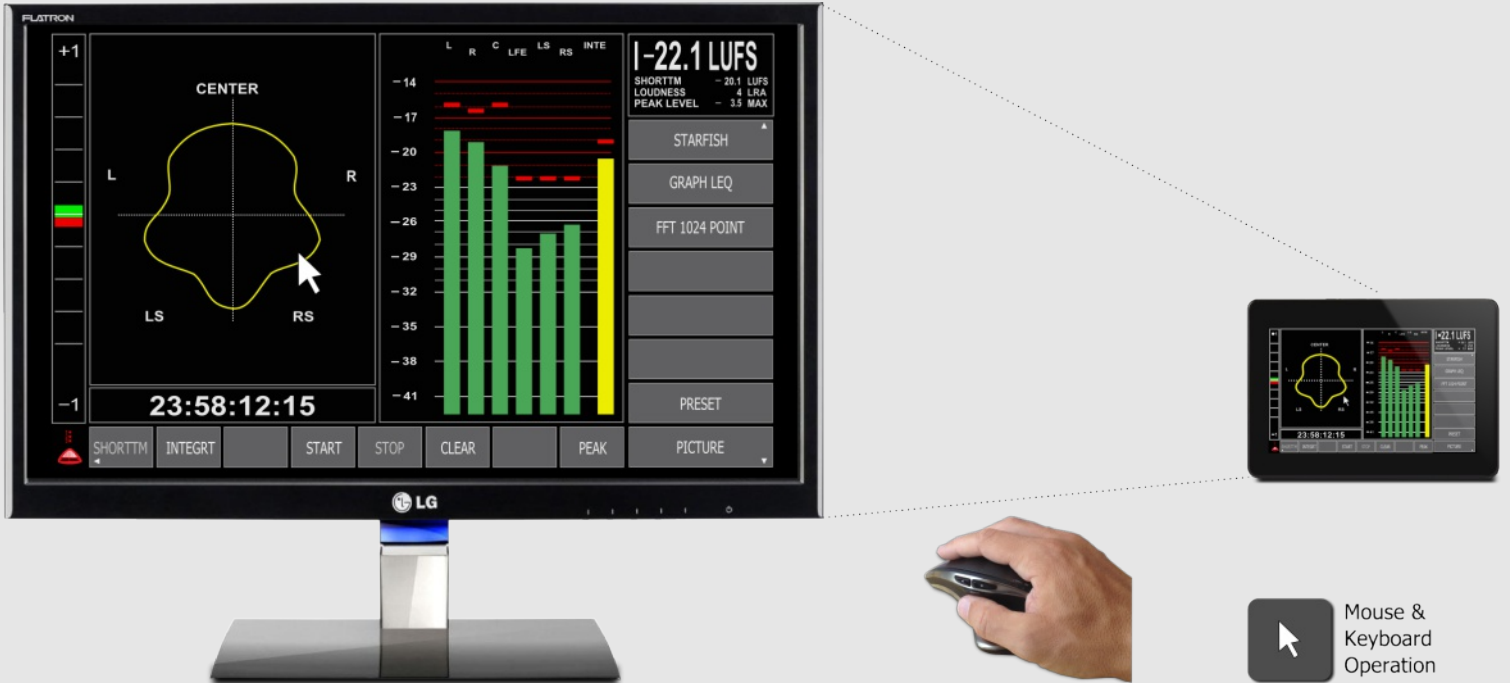
By feeding DK T7 timecode during a loudness tracking session, DK T7 will remember Loudness data of up to 4 hours back in time and any edit performed will instantly calculated into the overall Loudness result rendering an immediate Loudness reading, rather than having to spend time on tedious re-runs of the entire audio file as with competitive meters.

The above clip shows how editing a few seconds of a complete audio file, will normally force you to playback the entire file to re-measure the complete loudness results.

With Loudness Automation you will simply play the edited audio section and the DK T7 will instantly show you the resulting Loudness Result for the entire audio file.

HDMI - On Screen 'blow up' Display + Mouse & Keyboard operation

The HDMI 1024 x 600 px display output enables both video and audio (2ch.) from the DK T7 to be monitored as an 'on-screen' blow up display image - no trouble in following your metering in every detail. As an extra handy facility, the DK T7 offers full mouse and keyboard operation allowing you to control everything from a distance.



Mouse & Keyboard Operation

Mounting & Dimensions

The DK T7 includes desktop mounting bracket and may also be mounted in a 19" 3U rack setup or Tektronix WFMRAK-S2 (PT0T7).



PT0T7



DK T7

DK T7 Inputs & Outputs

The DK T7 includes an impressive arsenal of inputs and outputs that may be routed in numerous ways.

Here is the quick overview of the available connections.

DK T7 Stereo I/O

Just like its cousin, the DK T7 Stereo is well equipped when it comes to connectivity. See the overview here:



	DK1 / DK2	DK5	DK T7 Stereo	DK T7
Tools Included				
Peak Metering	Bargraph, Moving Coil Emulation, Numerical	Bargraph, Moving Coil Emulation, Numerical	Bargraph, Moving Coil Emulation, Numerical	Bargraph, Moving Coil Emulation, Numerical
Loudness Metering	Bargraph, Moving Coil Emulation, Numerical, Historical	Bargraph, Moving Coil Emulation, Numerical, Historical	Bargraph, Moving Coil Emulation, Numerical, Historical	Bargraph, Moving Coil Emulation, Numerical, Historical
Logging Loudness & True Peak	Yes, Log to ext. database	Yes, Log to ext. database	Yes, Log to ext. database	Yes, Log to ext. database
Spectrum Analysis FFT	Yes, 1024 band	Yes, 1024 band	Yes, 1024 band	Yes, 1024 band
SMPTE Time code reading	Readout + Logging	Readout + Logging	Readout + Logging	Readout + Logging
Vector Scope Surround	StarFish / JellyFish (DK2)	StarFish / JellyFish	No	StarFish / JellyFish
Gonio Meter Stereo	Yes	Yes	Yes	Yes
Phase Correlation	Yes	Yes	Yes	Yes
Picture Preview	No	Yes, SD / HD / 3G	No	Yes, SD / HD / 3G
Eye Width SDI Quality	No	Yes	No	Yes
DK Matrix PC Editor	Yes	Yes	Yes	Yes
Screen Grabber	Yes	Yes	Yes	Yes
Mouse & Keyboard	No	No	Yes	Yes

Technical Specification

	DK1	DK2	DK5	DK T7 Stereo	DK T7
Audio Connectors					
Analogue input	2 XLR input	2 XLR input	2 XLR input	2 XLR input	2 XLR input
AES Input	6. ch. AES3 Inputs BNC (AES3-4-2009)	6. ch. AES3 Inputs BNC (AES3-4-2009)	6. ch. AES3 Inputs BNC (AES3-4-2009)	2 ch. AES3 – Balanced 110ohm/Unbalanced 75ohm	8 ch. AES3 Unbalanced 75ohm
AES Output	-	-	-	2 ch. AES3 Unbalanced (75ohm)	8 ch. AES3 Unbalanced (75ohm)
AES I/O connector	BNC	BNC	BNC	BNC / XLR	BNC /XLR
Headphone out	No	No	No	Yes	Yes
Video Connectors					
SDI In / 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	24 bit	24 bit
Group Delay	1.75msec	1.75msec	1.75msec	1.75msec	1.75msec
Nominal input imp.	75 ohm	75 ohm	75 ohm	75 ohm	75 ohm
S-rate int. / ext.	48kHz	48kHz	48kHz	48kHz	48kHz
Analogue Input					
Input type	Balanced (electronic)	Balanced (electronic)	Balanced (electronic)	Balanced (electronic)	Balanced (electronic)
Dynamic range	>103dB	>103dB	>103dB	>103dB	>103dB
Crosstalk	<96dB	<96dB	<96dB	<96dB	<96dB
SNR	Typ. 93dB relative to -1dBFS	Typ. 93dB relative to -1dBFS	Typ. 93dB relative to -1dBFS	Typ. 93dB relative to -1dBFS	Typ. 93dB relative to -1dBFS
Nominal input Imp.	>20kOhm	>20kOhm	>20kOhm	>20kOhm	>20kOhm
Maximum input level	24dBu	24dBu	24dBu	24dBu	24dBu
Freq. resp. 20Hz-20kHz	+/-0.3dB	+/-0.3dB	+/-0.3dB	+/-0.3dB	+/-0.3dB
Control Interface					
Computer Interface	USB	USB	USB	USB, Ethernet	USB, Ethernet
GPIO	No	No	No	Yes – 3 functions	Yes – 3 functions
Screen & Operation					
TFT	4.3"	4.3"	4.3"	7"	7"
Operation	Touch Buttons	Touch Buttons	Touch Buttons	Multi Touch Screen	Multi Touch Screen
Screen Output	No	No	No	HDMI 1024 x 600	HDMI 1024 x 600
Number of Display ch.	4	8	16	16	16
Loudness					
Compliant with...	ITU BS1770-3, EBU R128, A/85, ARIB	ITU BS1770-3, EBU R128, A/85, ARIB	ITU BS1770-3, EBU R128, A/85, ARIB	ITU BS1770-3, EBU R128, A/85, ARIB	ITU BS1770-3, EBU R128, A/85, ARIB
Reference Level digital	-12dBFS & -24dBFS	-12dBFS & -24dBFS	-12dBFS & -24dBFS	-12dBFS & -24dBFS	-12dBFS & -24dBFS
Dynamic gate level	-2LU dB to -20LU/Off	-2LU dB to -20LU/Off	-2LU dB to -20LU/Off	-2LU dB to -20LU/Off	-2LU dB to -20LU/Off
Momt./Short trm/Sliding	0,4 – 3 – 10 – 30 sec.	0,4 – 3 – 10 – 30 sec.	0,4 – 3 – 10 – 30 sec.	0,4 – 3 – 10 – 30 sec.	0,4 – 3 – 10 – 30 sec.
Numerical Read-Outs	Intgr. Momnt, Shorttrm, LRA, True Peak, Reclaim Factor	Intgr. Momnt, Shorttrm, LRA, True Peak, Reclaim Factor	Intgr. Momnt, Shorttrm, LRA, True Peak, Reclaim Factor	Intgr. Momnt, Shorttrm, LRA, True Peak, Reclaim Factor	Intgr. Momnt, Shorttrm, LRA, True Peak, Reclaim Factor
True Peak	Flying peak & Num.	Flying peak & Num.	Flying peak & Num.	Flying peak & Num.	Flying peak & Num.
Peak thrs. / hold time	-2dBFS / >0.5sec	-2dBFS / >0.5sec	-2dBFS / >0.5sec	-2dBFS / >0.5sec	-2dBFS / >0.5sec
Power					
Consumption	1.7W	1.7W	2.5W	10W	10W
Power Supply	Plugtop, 100-240V, 5VDC, 500mA May be powered from Computer or USB hub	Plugtop, 100-240V, 5VDC, 500mA May be powered from Computer or USB hub	Plugtop, 100-240V, 5VDC, 500mA May be powered from Computer or USB hub	Plugtop, 100-240V, 15VDC, 1500mA	Plugtop, 100-240V, 15VDC, 1500mA
Mechanical					
Dimensions	88 x 132 x 18 mm Aluminium Chassis	88 x 132 x 18 mm Aluminium Chassis	88 x 132 x 18 mm Aluminium Chassis	132 x 186 x 24 mm Aluminium Chassis	132 x 186 x 24 mm Aluminium Chassis
19" Rack mountable	Yes	Yes	Yes	Yes	Yes
Desk Top Bracket	Included	Included	Included	Included	Included