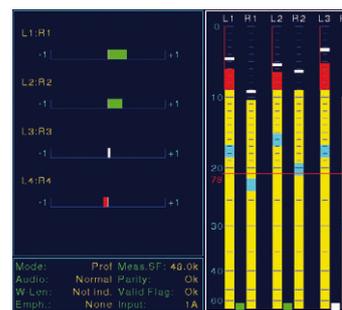


The perfect choice for professionals  
DigitalMonitor 8ch 10689-PLUS



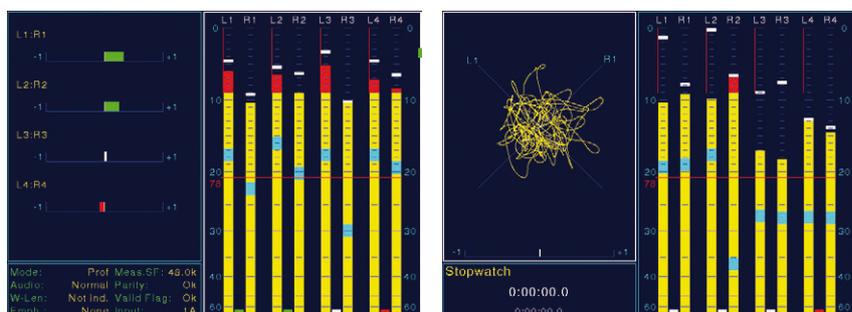
# DigitalMonitor 8ch 10689-PLUS



## Facts and Figures

### Digital 8-Channel Peak Program Meter with Audio Vectorscope

For monitoring level, correlation and loudness of DIGITAL stereo and multi-channel signals and mix outputs in fully-digital studio environments.





- Up to 8-channel peak level and loudness meters
- Multi-fold correlator display
- Stereo vectorscope for freely selectable channel pairs
- AES3 status monitor
- Stopwatch
- Presets for scales, ballistics and colors.  
Settings can be locked
- Four AES3 inputs via 25-pin Sub-D-F connector
- Compact table-top unit with 6.5" color TFT display (VGA)
- Remote control interface
- VGA-output for an optional external VGA display

## Audio monitoring in digital environments

The DigitalMonitor 8ch 10689 is a sophisticated and budget-friendly display system for monitoring digital stereo and multi-channel audio signals. This eight-channel unit with four AES3 inputs comes in an attractive table-top unit that also can be fitted with an optional table stand.

Based on the 10600 hardware, the unit has been extended to eight digital inputs and stripped off the surround functionality. It has been developed especially for monitoring multi-channel audio signals and mix outputs, i. e. in network control rooms or at PC workstations.

The DigitalMonitor 8ch 10689 has four AES3 signal inputs for seamless integration into fully digital studio environments. Eight multi-standard peakmeters with integrated loudness display, a stereo vectorscope for freely selectable channel pairs, as well as an informative status monitor for the digital input signals are clearly presented on a large VGA display. An optional VGA monitor can be connected to the unit. Up to eight user-specific channel and display configurations can be stored as presets and recalled at any time.

# Specifications

## Functions

	Up to 8-channel digital Peak Program Meter, Multi Correlator, Audio Vectorscope 2/0, Digital Over, Mute detection and AES3 status display, Stopwatch
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## Digital Inputs

Quantity	4 (Stereo), AES3, transformer balanced, 110 Ohm (internal detachable), Sampling frequency range 32 kHz – 96 kHz
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## Digital Outputs

Quantity	4 (Stereo), AES3, input signal looped through, unbuffered
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## Digital Peak Program Meter (PPM)

Level display	Up to 8 ch. vertical bargraphs, Peak Hold and loudness indicator switchable
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Loudness meter	Additional spot indicator on the bargraphs: RTW mode or A, C, Leq (M) (CCIR-2k) weighting
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Display modes	2-ch. Stereo, 2 x 2-ch. Stereo, 3 x 2-ch. Stereo, 4 x 2-ch. Stereo, 2-ch., 4-ch., 6-ch., 8-ch.
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Peak value memory	Peak Memory, Peak Hold
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Scales	Digital 1 (0 dBFS to -60 dBFS), Digital 2 (0 dBFS to -20 dBFS), Digital 3 (-18 dB to +18 dB), Digital 4 (-2 dB to +18 dB), Digital 5 (+20 dB to -40 dB), Digital 6 (+9 dB to 0 dB to -60 dB), quasi DIN: DIN-5, DIN-10, Nordic, British Ila, I Ib, Zoom 2, Zoom 20
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Headroom	Adjustable from -5 dB to -20 dB in 1 dB steps
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Integration time (Attack)	Digital 1 - 6: Sample, 0.1 ms, 1 ms, 10 ms quasi analog: Norm, Sample, 0.1 ms, 1 ms
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Fall back time	According to the selected standard (1,5 s/20 dB for DIN)
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Gain	Digital 1 - 6: +40 dB; quasi analog scales: DIN, Zoom 2, Zoom 20: +20 dB, British, Nordic: +40 dB
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DC filter	Off, 5 Hz, 10 Hz, 20 Hz
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Peak Hold indicator	Integration time same as level display (see above) or 1 sample
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Digital Over indicator	Red spot indicators above each bargraph
Threshold	Full Scale, Full Scale-1LSB, Full Scale-2LSB, -0.1 dBFS, -0.5 dBFS, -1 dBFS, -2 dBFS, -3 dBFS

Attack time	1 - 15 samples
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Word length	16 - 24 bit
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Mute indicator	Red spot indicators below each bargraph
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Threshold	All bits digital "0"
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Attack time	50, 100, 200, 300 ms or 5 to 80 Samples (selectable in steps of 5 samples)
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## Total Loudness Meter

Display	in Stereo mode
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Calibration	SPL reference 72 to 80 dB (single channel)
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Total loudness/SPL	70 to 98 dB
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Weighting filters	Linear, A, C, Leq(M)(CCIR-2k), RTW mode, all RMS (fast/slow)
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## Multi-Correlator

Display	in 8-ch. mode up to 4 phase meters for up to 4 channel pairs
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Display mode	Spot indicator or bargraph
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Attack time	Fast: 1 s, Slow: 2.5 s
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Negative peak correlation memory included in Peak Memory	
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## Audio Vectorscope

Display	Stereo vectorscope for freely selectable channel pairs
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Modes	X/Y or M/S
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AGC	auto
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## AES3 Status Monitor

Status information	locked, decoded AES/EBU status, parity, validity
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## General

Supply voltage	24 V DC (21 V - 30 V DC)
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Current consumption	290 mA (24 V DC) nominal, switch-on current is much higher
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Power consumption	6.5 W maximum
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Operating temperature range	0° to 45° C
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Storage temperature range	-30° C to +85° C
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## Display

Type	color TFT, 6.5", VGA (640 x 480 pixel), visible area 132 x 99 mm
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## Connectors

Digital input	25-pin Sub-D-F socket
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Digital output	25-pin Sub-D-F socket
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Monitor output	15-pin Sub-D-F socket (VGA)
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Remote	15-pin Sub-D-F socket
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DC connector	Type "Binder 710" locking 4-pin low voltage connector
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## Design, Dimensions

Table-top unit	Case: graphite grey (RAL 7024), Scale, front: silver, labeling: black
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Dimensions	176.5 x 125,5 x 61.5 mm (W x H x D excl. table stand)
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Weight	approx. 750 g incl. table stand
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## Items delivered

10689-PLUS: manual, table stand, mains adapter

## Optional Accessories

1163 Snake cable 25-pin Sub-D-M to 8 XLR-M (output fan-out)

1186 Snake cable 25-pin Sub-D-M to 8 XLR-F (input fan-out)

13711 Adapter frame for mounting into 190 mm systems

13713 Panel mounting kit (for mounting 10600 in panel cut-outs)

1171-R wide voltage power supply 90 - 264 V AC/24 V DC, 0.63 A

1175-R wide voltage power supply 100 - 240 V AC/24 V DC, 2.7 A