

Double Up

With DB4 MKII & DB8 MKII, you simply get more of everything compared to the original versions

DB4 MKII and DB8 MKII ensure that you always conform to EBU, ATSC and ITU Loudness and True-peak level standards across all platforms and all formats. You also get the broadcast world's highest resolution, lowest latency and lowest distortion with DB4 MKII and DB8 MKII.

More Metering

The MKII versions feature EBU R128 and ATSC A/85 compliant new LM6 Loudness Meters, new SNMP functions and you can always 'go back in time', reviewing one full week of detailed logging, even without connection to a computer. In DB4 MKII, the LM6 meter is always available in addition to its two multichannel audio processors.

More Redundancy

With several thousand units operating constantly all over the world, there is plenty of proof that the original DB4 and DB8 processors rarely fail. On the other hand, live broadcasting always calls for the ultimate level of 'operational safety', so we made sure that DB4 MKII & DB8 MKII will never be without power. You simply get the same power supply as with the original units, but two of them. Also, you get double up on fuses, mains inlets and even on the Swiss-made Papst fans. If one of the power supplies should fail, the other will take over instantly, and you could even feed the power supplies from independent power sources.

More Compatibility

Our DB2, DB4 and DB8 processors are famous for their preset compatibility, allowing installations of any size to use the same settings. DB4 MKII and DB8 MKII are just as user-friendly and you can run any preset from the original DB4 and DB8 units straight out of the box.

More Trickle-Down

DB4 and DB8 processors have a record of introducing novel solutions that facilitate multi-platform broadcast ("Trickle-Down processing") from one, low latency frame. The MKII's continue on the same path with generous new functions that work regardless if metadata has been correctly set upstream or not.

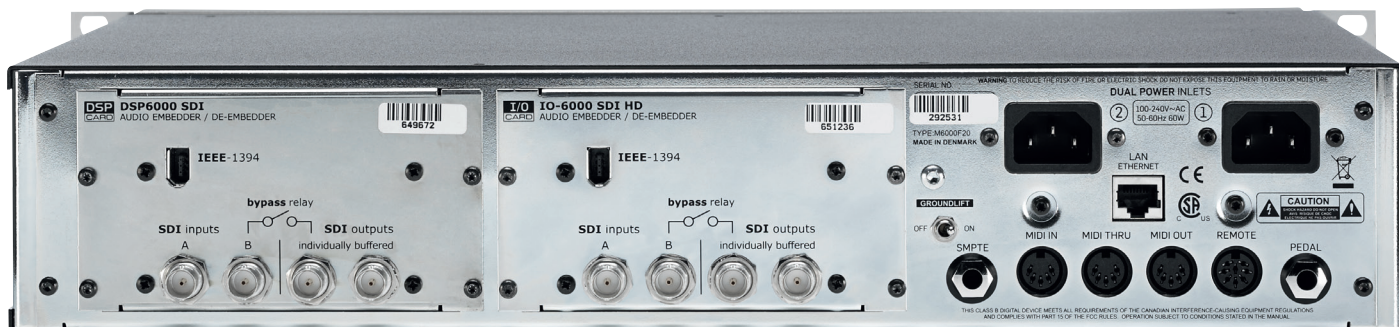
Mastering Quality

Synchronous 48 kHz sampling and 48 bit processing throughout, in combination with massive jitter rejection, ensures high audio resolution and perfect timing, even if you have long transmission lines feeding a processor. In fact, you could cascade hundreds of DB processors without degrading the sound as much as a single pass through HDTV data reduction.



*LM6 Loudness Radar Meter
The DB4/DB8 MKII feature the new
EBU R128 and ATSC A/85 compliant
LM6 Loudness Meter*

DB8 MKII / DB4 MKII



With DB4 MKII and DB8 MKII you get the same power supply as with the original units, but two of them. Also, you get double up on fuses, mains inlets and even on the Swiss-made Papst fans. The picture shows the dual SDI configuration; also AES balanced and AES3-id unbalanced configurations are available.

Technical Specifications

Platform	
Number of audio channels:	Max 16 inputs, 16 outputs
Number of processing engines:	4 in DB8, 2 in DB4
Processing Delay:	0.15 ms + 0.21 ms per engine @ 48 kHz
Adjustable delay:	0-4 sec per audio channel
Output Dither:	HPF/TPDF 8-24 bit and Off
Frequency Response DIO:	DC to 23.9 kHz \pm 0.01 dB @ 48 kHz
Internal sample rate:	48.0 kHz, 44.1 kHz
Internal clock precision:	+/- 30 ppm
Jitter rejection at external sample rates:	42.5 to 45.5 kHz, 46.5 to 48.5 kHz
Rejection filter (4th order):	< -3 dB @ 50 Hz, < -65 dB @ 500 Hz, < -100 dB @ 1.4 kHz
Rejection filter peak (jitter gain):	< 1 dB @ 2 Hz
PCMCIA Interface	
Connector:	PC Card, 68 pin type 1 cards
Standards:	PCMCIA 2.0, JEIDA 4.0
Card Format:	Supports up to 2 MB SRAM
Control Interface	
MIDI/Serial:	In/Out/Thru: 5 Pin DIN, 31.25 or 19.2 kbaud
GPI control input:	Change between 2, 4 or 8 presets
SMPTE:	Timecode input (LTC)
Ethernet, SNMP and remote control:	10/100 Mbits/s, Base-T
EMC	
Complies with:	EN 55103-1 and EN 55103-2, FCC part 15 class B, CISPR 22 class B
Safety	
Certified to:	IEC 60065, EN 60065, UL 6500 and CSA E65
Environment	
Operating Temperature:	32° F to 122° F (0° C to 50° C)
Storage Temperature:	-22° F to 167° F (-30° C to 70° C)
Humidity:	Max. 90 % non-condensing
General	
Front indicators:	PSU 1 OK, PSU 2 OK, Frame Status
Finish:	Natural color anodized aluminum face plate. Painted and plated steel chassis
Dimensions:	19 x 3.5 x 12 inches (483 x 89 x 305 mm), 2 RU
Weight:	16.8 lbs. (7.6 kg), 2 SDI cards
Mains voltage:	100 to 240 VAC, 50-60 Hz auto-select
Power supply function:	Dual Power Supply Redundancy

Fan:	Dual Fan Redundancy
Power consumption:	25 to 50 W typ., 60 W max, depending on I/O configuration
Backup Battery Life:	>10 years
Warranty, Parts and labor:	1 year
IO configurations:	
AES balanced	
Number of audio channels:	8 channel In, 8 channel Out
Connectors:	SUB-D, 25 pole, 110 Ohm, AES/EBU in/out
Formats:	AES/EBU (24 bit)
Word clock input:	BNC, 75 Ohm or Hi-Z, 0.6 to 10 Vpp
Intrinsic interface jitter :	< 1 ns peak, BW : 700 Hz to 100 kHz
Digital output phase:	Less than 3% of sample period
Input variation before sample slip:	+27 % / -73 % of sample period
Interface function:	Synchronous, bit transparent
AES3-id unbalanced	
Number of audio channels:	8 channel In, 8 channel Out
Connectors:	BNC, 75 Ohm, 0.1 to 10 Vpp, AES3-id in/out
Bypass Relay:	Inputs to outputs while powered off and during boot-up
Formats:	AES/EBU (24 bit)
Word clock input:	BNC, 75 Ohm or Hi-Z, 0.6 to 10 Vpp
Intrinsic interface jitter:	< 1 ns peak, BW : 700 Hz to 100 kHz
Digital output phase:	< 3 % of sample period
Input variation before sample slip:	+27 % / -73 % of sample period
Interface function:	Synchronous, bit transparent
SDI	
Number of audio channels:	8 channel In, 8 channel Out
Connectors:	BNC, 75 Ohm, 0.1 to 10 Vpp, AES3-id in/out
Bypass Relay:	Input B to output while powered off and during boot-up
Function:	Audio de-embed/embed, video thru
Formats supported:	SD and HD. 143 - 1485 MHz
Input selection:	Input 1 or 2, SDI group 1-4
Outputs:	2 is a replicate of 1. Outputs are individually buffered.
Audio embed + de-embed delay:	1.77 ms @ SD, 0.83 ms @ HD
Video delay:	22.3 us @ SD, 15.4 us @ HD
Interface function:	Synchronous, bit transparent video and audio