



Architectural Specification

The Eflex Q5 is a four-channel system amplifier housed in a 2U lightweight steel chassis, that utilises class D amplifier technology to deliver 1250 w per output channel, while weighing just 9 kg. The amplifier package also includes full onboard 96 kHz DSP, real time monitoring and can be software controlled via a network or USB. Internally the channels are grouped in two channel modules which have an independent main's switch and power supply; as a consequence, channel pairs can be easily bridged. This function enables the amplifier to be configured as a four channel, three channel, or two channel unit dependent on the loudspeaker system requirements. Each channel pair also shares a common two in, two out DSP allowing flexibility on programming and product preset selection.

The Eflex Q5 benefits from the power density that can be achieved from modern class D switching topology but also combines this with true audiophile performance. A ground up rethink of the topology which has included the use of modern state of the art semiconductors, a short signal path and turning the inherently low level of negative feedback common with switching designs, from a disadvantage, to an advantage, has ensured that sonic issues common on older class D designs, have been eradicated. The result is a fast and open sound that is truly sonically transparent. An holistic approach to design has matched the units switch mode power supplies in harmony with the output stages. Potential sources of noise and distortion have been eliminated and a further benefit is the unit's ability to auto-select the mains voltage for global operation.



Eflex Q5

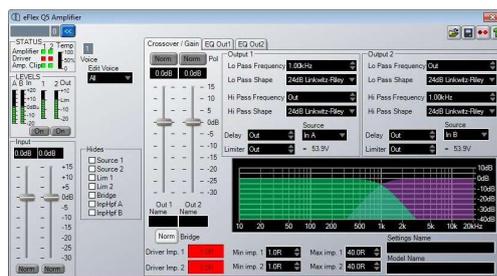
Technical Specification	
Input impedance:	10 k Balanced
Maximum input level:	+20 dBu
Input gain:	26.8 dB (32.8 dB bridged)
Frequency response:	20 Hz - 20 kHz +/- 0.5 dB
Output noise:	- 106 dB A weighted (Ref max output, 22 kHz BW)
Distortion:	<0.05% (1kHz, -3dB output, 22kHz BW)
Slew rate:	>80 V/us
Damping factor:	120 (ref 8 ohms)
Efficiency:	>90% typical
Power supply:	Dual, high current, high frequency, switch mode
Mains voltage:	115 v/230 v +/- 10%
Mains frequency:	45 - 65 Hz
Mains frequency:	Automatic
Other PSU features:	Automatic soft-start Automatic brownout recovery Remote shutdown Automatic over voltage protection
Temperature range:	0 to +40°C
Humidity range:	0 to 80% (non-condensing)
Thermal:	3 off variable speed fans
Output power (RMS, 20 Hz to 20 kHz, both channels driven)	
Per channel:	1250 w into 2 ohms 800 w into 4 ohms 450 w into 8 ohms
Per bridged pair:	2500 w into 4 ohms 1600 w into 8 ohms 900 w into 16 ohms

Software control

The Eflex Q5 uses 'System Engineer' control software and 'BV Net' network protocol; both tried and trusted industry standard tools that have been developed by Inspired Audio's technology partner Linea Research. Software connection can be via the rear panel USB connection or the RJ45 network socket utilizing a BV Net interface box. Alternative options for system control include an Ethernet bridge which allows WIFI connection and integration with the 'Dante' digital transmission protocol.

System Engineer will control a single amplifier or a network of up to 32 amplifiers linked under the BV Net protocol. Amplifiers within the network can be grouped together to allow universal parameter changes across selected amplifiers. The output DSP functions are locked to users and determined by factory preset files that cover all EQ, crossover, delay and limiter settings for the product range. On request custom files will also be supplied to cover customers with unforeseen needs or to allow customization within an installation.

System Engineer also allows a front end user interface that allows overlay adjustments to EQ, gain and delay, to compensate for local conditions or room acoustics. This function can be defeated via a front panel defeat button that restores the factory preset.



Regulatory compliance

This product complies with the EMC & LVD directives as issued by the Commission of the European Community. Compliance with these directives implies conformity with the following European standards:

- EN55103-1 Electromagnetic Interference (Emission)
- EN55103-2 Electromagnetic Susceptibility (Immunity)
- EN60065 Electrical safety

The Eflex Q5 also meets the requirements of FCC part 15B.

Physical

Height: 88 mm (2U)

Width: 482 mm (Front panel)

Depth: 360 mm (Rear of rack)
35 mm (Forward of rack)

Weight: 9 kg

Indicators and controls

Per channel: Sig, Limit -6 dB, Limit

Per channel pair: Power, Protect, Bridge, Network, User DSP active

Controls per channel pair: User DSP Defeat (can also be disabled with PodWare) Power switch

Monitoring facilities: Input signal level
Output signal level
Output current level
Temperature
Limiter operation
Protection system operation
Driver impedance

Protection systems

Output over current: Initially gain reduced to maintain control, persistent over current causes shutdown

Over temperature: Limiters applied, persistent over temperature causes shutdown

Mains brownout: Automatic protection and recovery

Switch on surge: Soft-start current inrush limiting

DC on output: Immediate shutdown, power cycle to recovery

Connections

Mains input: One off Neutrik 'Powercon'

Audio input: 3 pin female XLR, per CH

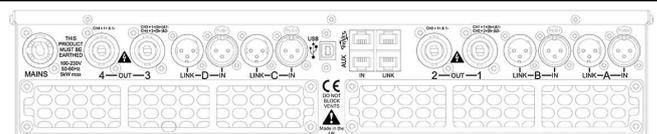
Audio Link: 3 pin male XLR, per CH

Output (per channel): Neutrik NL4 'Speakon'

USB: Type B (peripheral type)

Network (input & link): 2 off RJ45 sockets

Aux (input & link): 2 off RJ45 sockets



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