





Featuring internal processing up to 192 kHz as standard, high-end studio-grade analogue circuit designs and mastering-grade compressors, the new Intelliseries sets the new benchmark in system management and speaker processing design.

Whether the application is for a standalone system controller or crossover, configured using front panel controls, or a comprehensive wireless networked system for Stadium or Arena sized tours, the Intelli-X<sup>2</sup> is designed to provide the solution that our clients demand. With comprehensive preset library provided as standard, implementing the Intelli-series into your system couldn't be easier.

#### Electrical specifications

## Balanced line level inputs

Connectors: 3-pin XLR (software switch-able between analog and AES-3)

Type: electronically balanced Impedance: >10k ohms, balanced

Common mode rejection: >90dB

Max input level: 18, 21, 24 or 27 dBu software selectable, balanced, 1% THD+N

Frequency response: 20 Hz - 20 kHz, ±0.5 dB

THD+N: less than 0,005%, +4 dBu, 20Hz- 20 kHz, 22 kHz BW

Dynamic range: 120 dB, 20 Hz to 20kHz, un-weighted at +21dBu headroom settings

Crosstalk: >90 dB

AD conversion: 24-bit, sigma-delta

## Balanced line level outputs

Connector: 3-pin XLR (software switch-able between analog and AES-3)

Type: electronically balanced Impedance: <50 ohms, balanced

Max output level: 15, 18, 21, 24 dBu software selectable, into 600 ohms, balanced, 1%

THD+N

Frequency response: 20 Hz - 20 kHz, ±0.5 dB

THD+N: less than 0,005%, +4 dBu, 20Hz- 20 kHz, 22 kHz BW

Dynamic range: 120 dB, 20 Hz to 20kHz, un-weighted at +21 dBu headroom settings

Crosstalk: >90 dl DA conversion resolution: 24-bit

**AES-3 inputs** 

Connector: 3-pin XLR (software switch-able between analog and AES-3)

Type: transformer isolated

Impedance: 110 ohms or 75 ohms selectable (internal jumper), balanced

Supported formats: AES-3 and SPDIF up to 24-bit

Supported sample rates: 32 to 192 kHz

**AES-3 outputs** 

Connector: 3-pin XLR (software switch-able between analog and AES-3)

Type: transformer isolated

Impedance: 110 ohms or 75 ohms selectable (internal jumper), balanced

Word-clock input

Connector: BNC

Termination: 75 ohms switch-able

Input level: 1 to 10 Vpp

Word clock output

Connector: BNC Impedance: 75 ohms Output level: TTL 5 Vpp

Apex nv ° Schoebroekstraat 62 ° 3583 Beringen ° Belgium



#### Electrical specifications

Digital processing

Sample rate: 44,1kHz, 48kHz, 88,2kHz, 96kHz, 176,4kHz or 192kHz selectable

Internal processing: 32-bit floating point
Input / output channel: Intelli-X² 26: 2 in x 6 out
Intelli-X² 48: 4 in x 8 out

**Network remote control** 

Built-in Ethernet switch: IEEE 802.3 10Base-T/100Base-TX
Connectors: 3 x Neutrik EtherCon, Auto MDI-MDIX
Protocol: Proprietary UDP/IP based, SNMP

RS-232

Connector: D-sub 9-pin female

Mains

Connector: Neutrik PowerCon

Voltage: Auto-detect 100-240 Vac (+/- 10 %) - 50-60 Hz

Power consumption: Intelli-X<sup>2</sup> 26 < 60 VA Intelli-X<sup>2</sup> 48 < 60 VA

Input channels functions

Gain: -80 to +15dB, 0,1dB steps
Polarity: normal / inverted

Delay:

Duration: 0 to 1500ms, sample rate depend steps,

Distance: 0 to 500m

Temperature: -20 to 50°C, 0,1° steps Relative humidity: 0 to 100%, 1% steps

GEQ: 30-band ISO centred, +/-15 dB, proportional-Q or constant-Q mode

selectable

PEQ:

Bands 12

Filter types: Bell-Symmetrical, Bell-Asymmetrical, Notch, Low-Shelving 6dB/oct, Low-

Shelving 12dB/oct, High-Shelving 6dB/oct, High-Shelving 12dB/oct, All-Pass 90°, All-Pass 180°, High-Pass 6dB/oct, High-Pass 12dB/oct, High-Pass Vari-Q 12dB/oct, Low-Pass 6dB/oct, Low-Pass 12dB/oct, Low-Pass Vari-Q

12dB/oct, Band-Pass

Frequency: 10Hz to 22kHz, 0,1Hz steps

Gain:
-40 to +15dB, 0,1dB steps (when applicable)
Q:
0,1 to 48, 0,01dB steps (when applicable)

Compressor:

Threshold:
-80 to OdBfs, 0,1dB steps
Ratio:
1:1 to 50:1, 1 steps
Knee:
hard or soft

Attack time: 0,5 to 100ms, 0,1ms steps Release time: 5 to 5000ms, 0,1ms steps

Side-chain mode: flat, high-pass or band-pass mode

Make-up gain: -20 to +20dB, 0,1 steps

Mix matrix functions

Gain: -80 to +15dB, 0,1dB steps Routing: enabled/disabled

Output channel functions

Delay:

Duration: 0 to 1500ms, sample rate depend steps,

Distance: 0 to 500m

Temperature: -20 to 50°C, 0,1° steps Relative humidity: 0 to 100%, 1% steps

Driver alignment:

Duration: 0 to 30ms, sample rate depend steps,

Distance: 0 to 10000cm, 0,1cm steps
Temperature: -20 to 50°C, 0,1° steps
Relative humidity: 0 to 100%, 1% steps



















## Electrical specifications

PEQ:

Bands 12

Filter types: Bell-Symmetrical, Bell-Asymmetrical, Notch, Low-Shelving 6dB/oct, Low-

Shelving 12dB/oct, High-Shelving 6dB/oct, High-Shelving 12dB/oct, All-Pass 90°, All-Pass 180°, High-Pass 6dB/oct, High-Pass 12dB/oct, High-Pass Vari-Q 12dB/oct, Low-Pass 6dB/oct, Low-Pass 12dB/oct, Low-Pass Vari-Q

12dB/oct, Band-Pass 10Hz to 22kHz, 0,1Hz steps

Gain:
-40 to +15dB, 0,1dB steps (when applicable)
Q:
0,1 to 48, 0,01dB steps (when applicable)

High-pass and low-pass crossover:

Filter types: Butterworth 6 to 48dB/octave, 6dB steps

Linkwitz-Riley 12 to 48dB/octave, 12dB steps

Bessel 12 to 48dB/octave, 6dB steps

Frequency: 10Hz to 20kHz, 0,1Hz steps

FIR filters:

Frequency:

At 48 kHz: 5 x 1024 taps or 8 x 512 taps
At 96 kHz: 3 x 1024 taps or 8 x 512 taps
Gain: -80 to +15 dB, 0,1 dB steps

Polarity: normal / inverted

Limiter:

Type: Dual-stage, RMS + Peak limiter

RMS threshold:
-80 to 0 dBfs (or dBu equivalent), 0,1 dB steps
Peak threshold:
-80 to 0 dBfs (or dBu equivalent), 0,1 dB steps

RMS attack: 0,5 to 100 ms, 0,1 ms steps

Peak attack: 0ms

Release: 5 to 10000 ms, 0,1 ms steps

## **Environment**

Operating

Temperature: 0° to 50° C

Relative humidity: 10 to 60 %, non-condensing

Storage
Temperature: -20° to 70° C

# **Mechanical specifications**

#### **Dimensions**

Unit

Width: 483 mm (19-inch) Height: 43,6 mm (1,75-inch - 1U)

Depth: 286 mm

Package

 Width:
 575 mm

 Height:
 110 mm

 Depth:
 355 mm

Weight

Unit (Nett): Intelli-X<sup>2</sup> 26 3,75 kg

| Intelli-X² 48 3,75 kg | Package (Shipping): | Intelli-X² 26 5,5 kg | Intelli-X² 48 5,5 kg