Digital Chameleon. Ultimate Flexibility.

16 balanced low -noise XLR microphone preamplifiers

Insert points for adding signal processors to channels

PAD buttons for helping to handle difficult input signals

Peak indicators to help avoid excessive incoming signals

Dedicated headphone output for detailed monitoring

Directional and 'enter' buttons for extended GUI control

Illuminated gel-touch 'select,' 'solo' and 'on' buttons

17 completely automated faders with control surface functionality

IS16

Specifications

Analog Inputs	MIC In : 16 x XLR Balanced (ch 1-16) Line In : 16 x TRS Balanced jacks (Ch 1-16)
Insert I/O	16 x Phone jacks (Unbalanced)
2TR IN Analog	2 x RCA (Unbalanced)
Stereo Output	2 x XLR Balanced 2 x RCA (Unbalanced)
Main Output	2 x XLR Balanced
Control Room Output	2 x XLR Balanced
Multi Outputs	8 x TRS Balanced
AUX/Group Output	8 x TRS Balanced (Shared through Multi)
Phones	1 x Stereo Phone jack (TRS Unbalanced)
Digital I/O	(AES/EBU) 2 x XLR Balanced
Sampling Frequency	44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz (40-Bit Floating Point Mixing)
Signal Delay (CH INPUT to STEREO OUT)	Fs=48 kHz <1.2ms, Fs=96 kHz <0.6ms
Faders	17 x 100mm motorized faders
Word Clock I/O	2 x BNC Connectors
Distortion (THD + N)	THD+N less than 0.007%, +4 dBu, 20-20 kHz, unity gain, 20 kHz BW
Frequency Response (CH INPUT to STEREO OUT)	Fs=48, 96kHz, 0/-1.5dBu, 20 Hz – 20 kHz @ +4dBu into 600Ω
Hum & Noise	(20 Hz – 20 kHz), Rs=150, -128dBu (EIN), -90dBu (residual output noise)
mREC Optional Expansion Card	A standalone 16-channel PCM WAV recorder and a Firewire/USB 2.0 multitrack recording audio interface; USB 3.0 flash drives compatible
Onboard USB/FireWire	16-in, 16-out USB 2.0 / FireWire Interface
VGA Monitor output	D-Sub 15 pin: Progressive scan up to 1024x768p@60Hz (XGA)
Ethernet 10/100 Base	RJ45
USB 2.0 (Mouse and Wi-Fi)	Type A x 2; Optional USB Wi-Fi dongle model number UTD10
Power Supply Unit	100V – 240V, 50/60 Hz, 90W
Dimensions (H x W x D)	164 x 495 x 534 mm (6.46" x 1935" x 21")
Weight	17.0 kg (37.5 lbs)

DIGITAL CHAMELEON

Combining the best of both analog and digital technologies, the IS16 provides the warmth and familiarity of analog consoles with the aptitude and flexibility of modern digital audio. The combination of these technologies makes the IS16 truly adaptable to any and all environments. Take it out on the road as a live stage mixer and make use of the multitude of routing possibilities, delay circuits, real-world effects and graphic equalizers. Install the IS16 in a home or project studio and use the mREC expansion option to perform multi-track recordings on the computer or to connected USB drives. Its flexible design, including multi configurable I/O and onboard processor integration, makes the Phonic IS16 suitable for a variety of live and recording scenarios.

ULTIMATE FLEXIBILITY

The IS16's 40-bit floating point processor provides the mixer with extraordinary flexibility. Without the processor and its intricate programming, you wouldn't be able to take advantage of such phenomenal features as extensive effect processors, parametric 4-band equalizers, fully-loaded dynamic processors or the versatile multi-output matrix. VGA and USB mouse connections are included to incorporate monitors and pointing devices for a flexible, virtual audio workstation experience. Extensive networking options allow you to control the IS16 through your local network using a computer, tablet or smart phone.

FEATURES

- 16 mono mic/line with inserts and grouped phantom power
- Internal digital sampling rate up to 96 kHz in 24-bit resolution
- Compact design achieved through three layers (Channel, Aux/Group, Multi)
- 17 ultra-smooth 100 mm motorized faders arranged in a familiar analog mixer arrangement
- User interface accessed through a full-color touch-screen
- 4-band parametric EQs can be found on all input channels and multi outputs
- 31-band graphic equalizers on EFX 1 and Main
- 15-band graphic equalizer on EFX2
- Digital AES/EBU input and output
- Eight balanced 1/4" phone jack 'multi' outputs
- 8 aux and 8 group buses assignable to 'multi' outputs
- Dual true algorithm-based multi-effects processor
- Effects can applied to any input channel or aux send, and the stereo effect signals can be assigned to main stereo mix or eight of the multi outputs
- 25 dynamic processors available on input channels, 'multi' outputs and main mix
- Save and instantly recall scenes at the touch of a button
- Stereo headphone mix with independent level control
- Networking capabilities for remote operation via PC, Mac, smart phone or tablet
- Optional USB Wi-Fi dongle (model number UTD10) for wireless networking
- Includes multi-track recording expansion card for USB 2.0 / FireWire connectivity to PC and Mac computers
- VGA D-Sub output: Progressive scan up to 1024x768@60Hz (XGA)
- Processing accomplished through a high quality 40-bit floating point digital signal processor
- Optional mREC expansion card features a standalone 16-channel PCM WAV recorder and a FireWire/USB 2.0 multi-track audio interface
- Included gooseneck lamp illuminates the board in dark areas
- Rack mounting kit included

Recording
Record directly to any modern PC or Mac computer using the IS16. Up to 16 tracks can be simultaneously recorded and returned to the mixer, all in 24-bit resolution at sampling rates up to 96 kHz. The optional mREC expansion card is also available that allows multi-track recording directly to external USB flash drives and hard drives. Using the mREC expansion card, each channel is recorded as its own individual WAV file and can later be imported into your computer's DAW software.

Networking
Control the IS16's software through any wired or wireless LAN network. This feature allows for remote operation using any computer, tablet or smartphone. This is all accomplished by adding the IS16 to your network and opening up its IP address in your web browser. A security function is included for setting a password and subverting any unauthorized adjustments.

Equalizer
A parametric 4-band equalizer is offered on each and every one of the IS16's input and output channels. Simply drag the individual bands on the plotted EQ graph to adjust the level and frequency, or use the onboard rotary control to adjust the "Q" of any band. Bands 1 and 4 can be adjusted between peaks, cuts and shelves for more versatile operation. Instead of the 4-band EQ, a 31-band GEQ can be found on the main mix.

Meters
Your input and output levels are important, so the IS16 has full range meters for each and every input and output channel, not to mention your aux, group and effect mixes. Full on-screen meter bridges are available and easily accessible for users to peruse their pre- and post-fader signal levels. Users are also able to monitor the status of all dynamic processors for each individual channel.

Signal Generator
Setup of the IS16 is made easy with a versatile signal generator. A number of preset signals are available, including a 100 Hz, 1 kHz and 10 kHz sine waves, as well as a pink noise signal. These signals can be assigned to any one of the AUX or Group mixes, or can be sent directly to the main stereo mix. A virtual level control is also included to better allow the user to adjust the signal to a suitable level for their purposes.

Digital Effects
The IS16 offers a multitude of effects ideal for enhancing any performance. Each effect offers a series of adjustable parameters to better refine your sound. EFX1 also offers an additional 24 reverb effects, again offering multiple parameters for maximum versatility. Depending on the selected effect, parameters such as pre-delay, low frequency oscillation, reverb density, intensity, feedback gain, modulation frequency, and wave shape can be selected by the user. To help better enhance your live setup, EFX1 incorporates a 31-band graphic equalizer while EFX2 features a 15-band graphic equalizer. With unlimited potential for effect stylings, the IS16 includes professional digital effects for real-world application.

Dynamic Processors
There are a whopping 25 dynamic processors available in total. Each of the input channels and each of the 'multi' outputs have their own dynamic processor – which can be set to expander, compressor, limiter, or gate with a host of adjustable parameters. The main mix also has its own stereo dynamic processor. Can you even imagine how much space all those dynamic processors would take up in a rack?

Delay
The distance between front and rear speakers can cause an unusual echoing sound that can completely ruin the audience's experience. Phonic solves this problem with the output delay. Any of the IS16's outputs can have a slight delay added to it, helping to compensate for the distance between the front and rear speakers. If that wasn't enough, the delay is also available on inputs to add a bit of zest to guitars and other instruments. Delay can be adjusted in milliseconds, meters or feet, with a temperature setting to ensure precise adjustment.
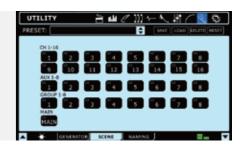
Soloing
All of the IS16's channels can be soloed, allowing the engineer or artist to listen to the raw source material during the performance or between takes. Users can turn soloing on and off through the Control Room menu, as well as switch channels between After Fader Listens (AFL) and Pre-fader Listens (PFL). The menu can also be used to enable 'safe soloing' to ensure soloed signals are still sent to the main mix when soloing is activated.

Scene
Save a scene directly to your SD card. In this menu, users are able to select the channels they wish to save the settings of and save these directly to an SD card. These saved files can then be used to transfer to other IS16 consoles, or simply kept handy for future use. You can select choose to select only one or two channels, or the entire console - it's up to you. When recalled, only the previously saved settings will be changed; your other settings will remain intact!

VGA
Turn the IS16 into a fully functional audio workstation with just a simple monitor and pointing device. The VGA output enhances the functionality by allowing any standard definition or high definition display device to project the graphical interface. All features and functions of the IS16 are then visible and can be accessed through the use of a USB mouse or trackball. Both full screen and wide screen modes are available, with optimal high definition resolution of 720p.