

#### Helix Board 12 Plus

4-Mic/Line 2-Stereo Compact Mixer with DFX and USB 2.0 Interface

#### Helix Board 12 FireWire MKII

4-Mic/Line 2-Stereo Compact Mixer with DFX and FireWire Interface

#### Helix Board 12 Universal

4-Mic/Line 2-Stereo Compact Mixer with DFX and USB 2.0/FireWire Interface



## Features

- ▶ 12-input small-format analog mixer with extremely low noise circuitry
- ▶ Sampling rate selectable up to 96 KHz in 24-bit resolution
- ▶ Four mono Mic/Line channels
- ▶ Two stereo channels, two stereo AUX returns, two AUX sends
- ▶ 3-band EQ on each channel
- ▶ 75 Hz low-cut filter on mono channel
- ▶ A pre/post switch is available on each channel for swapping channel sends to computer from pre-low cut, -EQ to post-EQ, post-fader signals
- ▶ DFX, our 32-bit digital multi-effect processor with 100 programs plus tap delay, tone generator and foot switch jacks
- ▶ Channel 9/10 routed to computer can be selected from main mix, ALT 3/4 and AUX 1/2
- ▶ Inserts on channel 1 & 2
- ▶ +48V phantom power on Mic channels
- ▶ Stereo AUX send 1 cue for monitoring individual channel
- ▶ Master AUX section with EFX to Monitor
- ▶ Extra ALT 3-4 stereo bus
- ▶ Control room/Phones source matrix
- ▶ Balanced master output with 60 mm fader control
- ▶ High-volume headphone output
- ▶ Compatible with Mac OSX and Windows XP, Vista & 7
- ▶ Bundled with Steinberg's Cubase LE digital audio workstation software

## Description

Helix Board 12 Plus, Helix Board 12 FireWire MKII and Helix Board 12 Universal are part of the new generation of digital interfaces from Phonic. Each model features a 24-bit, 96 KHz USB or FireWire interface that let you stream up to 10 independent channels of audio to the computer and return two channels to the mixer for monitoring - all with near-zero latency. Users are also able to utilize the main mix, ALT 3/4 and AUX 1 & AUX 2 signal for recording on the final two channels. Four extremely low noise Mic/Line preamps, each with 75 Hz low cut filters, inserts and phantom power, and two stereo Line channels offer a variety of input options. While compatible with the most popular DAW programs on both OSX- and Windows-based machines, the Helix Boards come bundled with Steinberg's Cubase LE digital audio workstation software.

# HELIX BOARD 12 SERIES

## Specifications

## Compact Mixers with USB and/or FireWire Interfaces

	Helix Board 12 Plus	Helix Board 12 FireWire MKII	Helix Board 12 Universal
Inputs			
Total Channels	6	6	6
Balanced Mic / Line Channels	4	4	4
Balanced Stereo Line Channels	2	2	2
Aux Returns	2 stereo	2 stereo	2 stereo
2T Inputs	Stereo RCA	Stereo RCA	Stereo RCA
Outputs			
Main L/R Stereo	2 x 1/4" TRS, Bal.	2 x 1/4" TRS, Bal.	2 x 1/4" TRS, Bal.
Aux Sends	2 x 1/4" TRS, Bal.	2 x 1/4" TRS, Bal.	2 x 1/4" TRS, Bal.
ALT 3-4	2 x 1/4" TRS, Bal.	2 x 1/4" TRS, Bal.	2 x 1/4" TRS, Bal.
CTRL RM L/R	2 x 1/4" TS	2 x 1/4" TS	2 x 1/4" TS
Record Outputs	Stereo RCA	Stereo RCA	Stereo RCA
Phones	1	1	1
FireWire and USB Interface	10-in, 2-out, 24-bit / 192 kHz, 1 USB port	10-in, 2-out, 24-bit / 96 kHz, 2 FireWire ports	10-in, 2-out, 24-bit / 96 kHz, 2 FireWire ports and 1 USB port
Channel Strips	6	6	6
Insert Points	2	2	2
Aux Sends	2	2	2
Pan/Balance Control	Yes	Yes	Yes
LED Indicators	Peak	Peak	Peak
Volume Controls	Rotary	Rotary	Rotary
Master Section			
FireWire/USB Channel Routing Switch	Source from main mix, alt 3-4, aux 1/2	Source from main mix, alt 3-4, aux 1/2	Source from main mix, alt 3-4, aux 1/2
Aux Send Masters	1	1	1
Stereo Aux Returns	2	2	2
Effect Return to Monitor	1	1	1
Faders	Main L/R, 60 mm fader	Main L/R, 60 mm fader	Main L/R, 60 mm fader
Metering			
Number of Channels	2	2	2
Segments	8	8	8
Phantom Power Supply	+48V DC	+48V DC	+48V DC
Switches	Master	Master	Master
Effect Processor (32/40-bit DSP)	High definition algorithm: 100 programs plus tap delay and test tones; foot switch jacks (effect on/off, tap)		
Frequency Response (Mic input to any output)			
20 Hz - 60 kHz	+0/-1 dB	+0/-1 dB	+0/-1 dB
10 Hz - 100 kHz	+0/-3 dB	+0/-3 dB	+0/-3 dB
Crosstalk (1 kHz @ 0dBu, 20 Hz to 20 kHz bandwidth, channel in to main L/R outputs)			
Channel fader down, other channels at unity	<-90 dB	<-90 dB	<-90 dB
Noise (20 Hz - 20 kHz; measured at main output, Channels 1-4 unit gain; EQ flat; all channels on main mix; channels 1/3 as far left as possible, channels 2/4 as far right as possible. Reference=+6 dBu)			
Master @ unity, channel fader down	-86.5 dBu	-86.5 dBu	-86.5 dBu
Master @ unity, channel fader at unity	-84 dBu	-84 dBu	-84 dBu
S/N ratio, ref to +4	>90 dB	>90 dB	>90 dB
Microphone Preamp E.I.N. (150 ohms terminated, max gain)	<-129.5 dBm	<-129.5 dBm	<-129.5 dBm
THD (Any output, 1 kHz @ +14 dBu, 20 Hz to 20 kHz, channel inputs)	<0.005%	<0.005%	<0.005%
CMRR (1 kHz @ -60dBu, gain at maximum)	80 dB	80 dB	80 dB
Maximum Level			
Mic Preamp Input	+10 dBu	+10 dBu	+10 dBu
All Other Inputs	+22 dBu	+22 dBu	+22 dBu
Balanced Output	+28 dBu	+28 dBu	+28 dBu
Impedance			
Mic Preamp Input	2 k ohms	2 k ohms	2 k ohms
All Other Inputs (except insert)	10 k ohms	10 k ohms	10 k ohms
RCA 2T Outputs	1.1 k ohms	1.1 k ohms	1.1 k ohms
Equalization	3-band, +/-15 dB	3-band, +/-15 dB	3-band, +/-15 dB
Low EQ	80 Hz	80 Hz	80 Hz
Mid EQ	2.5 kHz	2.5 kHz	2.5 kHz
Hi-EQ	12 kHz	12 kHz	12 kHz
Low Cut Filter	75 Hz (-18dB/oct)	75 Hz (-18dB/oct)	75 Hz (-18dB/oct)
Power Supply	100VAC, 120VAC, 200-240VAC, 50/60Hz (depends on region)	100VAC, 120VAC, 200-240VAC, 50/60Hz (depends on region)	100VAC, 120VAC, 200-240VAC, 50/60Hz (depends on region)
Net Weight	2.5 kg (5.5 lbs)	2.5 kg (5.5 lbs)	2.5 kg (5.5 lbs)
Dimensions (WxHxD)	248 x 86 x 273 mm (9.76" x 3.4" x 10.75")	248 x 86 x 273 mm (9.76" x 3.4" x 10.75")	248 x 86 x 273 mm (9.76" x 3.4" x 10.75")

Information in this document is subject to change without notice.

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