

Helix Board 18 FireWire MKII
6-Mic/Line 4-Stereo 2-Group Mixer with DFX and FireWire Interface

Helix Board 18 Universal
6-Mic/Line 4-Stereo 2-Group Mixer with DFX and USB 2.0/FireWire Interface



Features

- ▶ Pre/post setting for swapping signals sent to computer from pre-low cut, -EQ to post-EQ, post-fader
- ▶ 96kHz interface for streaming 16 independent channels of audio to computer with near-zero latency
- ▶ 2 channels of monitoring from computer via interface, assignable to control room, main mix and aux 1
- ▶ Channel 15/16 routed to computer can be selected from main mix, group 1/2 and aux 2/3
- ▶ Eight low noise microphone preamps
- ▶ Six mic/line channels with inserts, 75 Hz low-cut filter and 3-band EQ with swept mid-range
- ▶ Four stereo line channels with 4-band EQ
- ▶ Three aux sends, one with Pre/Post switch
- ▶ Two stereo aux returns, one with effect to monitor level control
- ▶ DFX, our 32/40-bit high definition algorithm digital multi-effect processor with 100 programs plus tap delay, foot switch jacks and volume controls for sending processed signal to AUX send 1 & 2
- ▶ Global +48V phantom power on mic channels
- ▶ Solo feature on each input and output
- ▶ Stereo S/PDIF digital audio output
- ▶ Two true subgroups with Main L and R routing switches
- ▶ Built-in switching power supply with universal connector, 100-240 VAC, 50/60 Hz
- ▶ Rack-mounting kit included
- ▶ Compatible with Mac OSX and Windows XP, Vista & 7
- ▶ Steinberg's Cubase LE recording software included

Description

The Helix Board 18 FireWire MKIIs and Universals are part of the new generation of USB / FireWire mixers from Phonic. Each model features a 96 KHz USB and/or FireWire interface that lets you individually stream up to 16 independent channels of audio to the computer and return two channels to the mixer for monitoring – all with near-zero latency. Pre/post switches on each input channel ensure users can adjust the outgoing USB/FireWire signal between a pre fader and post fader signal with the utmost of ease. An onboard 32/40-bit digital multi-effect processor provides 100 popular programs, tap-delay, test tones (pink noise, 1 kHz, etc) and foot switch jacks. There are 8 extremely low noise Mic preamps, each with phantom power, spread across six mono Mic/Line channels with 75 Hz low cut filters, and four stereo Line channels. Each Mic channel has a 3-band EQ (six with swept mid), and two stereo channels have a 4-band EQ. A 10-band system graphic equalizer can be assigned to Main Outs or AUX 1. Stereo RCA inputs and outputs make the addition of digital and analog playback and recording devices effortless. Additional features include three AUX sends, two stereo AUX returns, input and output solo, two true subgroups and a rack mounting kit. Steinberg Cubase LE digital audio workstation software included.

HELIX BOARD 18 SERIES

Compact Mixers with USB and/or FireWire Interfaces

Specifications

	Helix Board 18 FireWire MKII	Helix Board 18 Universal
Inputs		
Total Channels	10	10
Balanced Mic / Line Channels	6	6
Balanced Stereo Mic / Stereo Line Channel	2	2
Balanced Stereo Line Channels	2	2
Aux Returns	2 stereo	2 stereo
2T Inputs	Stereo RCA	Stereo RCA
Outputs		
Main L/R Stereo	20 x 1/4" TRS, Bal. & 2 x XLR	20 x 1/4" TRS, Bal. & 2 x XLR
Subgroup Outputs	2 x 1/4" TRS, Bal.	2 x 1/4" TRS, Bal.
Aux Sends	3 x 1/4" TRS, Bal.	3 x 1/4" TRS, Bal.
CTRL RM L/R	2 x 1/4" TS	2 x 1/4" TS
Record Outputs	Stereo RCA	Stereo RCA
Phones	1	1
S/PDIF Digital Output	44.1 kHz	44.1 kHz
FireWire and USB Interface	16-in, 2-out, 24-bit/96 kHz, 2 FireWire ports	16-in, 2-out, 24-bit/96 kHz, 2 FireWire ports and 1 USB port
Channel Strips	10	10
Insert Points	6	6
Aux Sends	3	3
Pan/Balance Control	Yes	Yes
Channel On/Mute	Yes	Yes
Channel Solo with Metering	Yes	Yes
LED Indicators	On, Peak/Solo	On, Peak/Solo
Bus Assign Switches	1/2, L/R	1/2, L/R
Volume Controls	60 mm fader	60 mm fader
Master Section		
FireWire/USB Channel Routing Switch	Source from main mix, group 1/2, and aux 2/3	Source from main mix, group 1/2, and aux 2/3
Aux Send Masters	3	3
Master Aux Send Solo	3	3
Stereo Aux Returns	2	2
Aux Return Assign to Subgroup	2	2
Effect Return to Monitor	2	2
Global Pre/Post Solo Mode	Yes	Yes
Faders	Aux return 1 & 2, Subgroup 1 & 2, Main L & R	Aux return 1 & 2, Subgroup 1 & 2, Main L & R
Metering		
Number of Channels	2	2
Segments	12	12
Phantom Power Supply	+48V DC	+48V DC
Switches	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
10 Hz - 100 kHz	+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
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
Master @ unity, channel fader at unity	-84 dBu	-84 dBu
S/N ratio, ref to +4	>90 dB	>90 dB
Microphone Preamp E.I.N. (150 ohms terminated, max gain)	<-129.5 dBm	<-129.5 dBm
THD (Any output, 1 kHz @ +14 dBu, 20 Hz to 20 kHz, channel inputs)	<0.005%	<0.005%
CMRR (1 kHz @ -60dBu, gain at maximum)	80 dB	80 dB
Maximum Level		
Mic Preamp Input	+10 dBu	+10 dBu
All Other Inputs	+22 dBu	+22 dBu
Balanced Output	+28 dBu	+28 dBu
All Other Outputs	+22 dBu	+22 dBu
Impedence		
Mic Preamp Input	2 k ohms	2 k ohms
All Other Inputs (except insert)	10 k ohms	10 k ohms
RCA 2T Outputs	1.1 k ohms	1.1 k ohms
All Other Outputs	100 ohms	100 ohms
Equalization		
Low EQ	3-band, 4-band, +/-15 dB	3-band, 4-band, +/-15 dB
Mid EQ	80 Hz	80 Hz
Low Mid EQ (Channels 11-14)	100 Hz to 8 kHz, 2.5kHz (7-10)	100 Hz to 8 kHz, 2.5kHz (7-10)
High Mid EQ (Channels 11-14)	800 Hz	800 Hz
Hi-EQ	3 kHz	3 kHz
Low Cut Filter	12 kHz	12 kHz
Power Supply	75 Hz (-18 dB/oct)	75 Hz (-18 dB/oct)
Net Weight	100-240VAC, 50/60 Hz (switching power supply)	100-240VAC, 50/60 Hz (switching power supply)
Dimensions (WxHxD)	5.1 kg (11.2 lbs)	5.1 kg (11.2 lbs)
	412 x 103.5 x 363 mm (16.22" x 4.07" x 14.29")	412 x 103.5 x 363 mm (16.22" x 4.07" x 14.29")

Information in this document is subject to change without notice.

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Helix Board 18 Series Data Sheet 10/25/2011

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