# The Engineers'



# Quick Start Guide













16 XLR Outputs, individually assignable to any mix bus or direct output



Dedicated Monitor / Control Room outputs for Studio Monitors or "Cue Wedge"





32 MIDAS Designed Programmable Mic Preamps with individually selectable phantom power





AES50

2 X AES50 Digital I/O for connectivity to S16 Digital Snake via standard Ethernet cable



6 Auxiliary Inputs / Outputs on TRS connectors (routable as inserts or aux ins/outs.

Aux 5/6 feature RCA connectivity)



### **Vital Specs**

- 32 MIDAS Designed Mic Preamps
  - Plus 6 AUX ¼" TRS Line Inputs
- 16 XLR Outputs
  - Plus 6 AUX 1/4" TRS Line Outputs
- 25 Mix Busses
  - Main LCR + 6 Matrix + 16 Mix Busses, with 6-band parametric EQ and dynamics processing
- 24 Bit, 44.1 or 48 kHz
- 2 x AES50 48 x 48 Channel Digital I/O, (use with S16 Digital Snake or for digital split to another X32)
- 32 x 32 USB/Firewire Recording Interface with DAW Control
- 8 Stereo FX Slots for 40+ effects plugins
- Separate 16 assignable outputs for use with P16 Personal Monitoring System via ULTRANET port
- In critical situations, as with all digital equipment, we strongly recommend that you use an Uninterruptible Power Supply with the X32
  - If you would like the full manual: http://www.behringer.com/EN/products/X32.aspx
  - If you have any problems with your X32, contact Music Group at 702-800-8290 (option 1 for tech support)



# Firmware Updates / USB Stick Recording



#### **To Update Firmware:**

- 1. Go to behringer.com/X32 and click the "Downloads" tab. Download the latest firmware to your computer and "unzip" the file. Copy the firmware file onto the root directory of a FAT formatted USB stick.
- 2. Insert the USB stick into the USB Recorder slot and switch on the console. During boot, the X32 will run a fully automatic firmware update.
- 3. Once complete, the console will boot to the normal operating screen.

#### To Record to the USB Stick:

- 1. Insert the USB Stick into the USB RECORDER and press the "view" button.
- 2. Press the 5th rotary encoder, under the screen, to begin recording.
- 3. Use the first encoder to stop. WAIT for the ACCESS light to turn off before removing the stick.

#### **Notes:**

- 4. Stick must be formatted for FAT file system.
- 5. Maximum record time is approximately 3 hours for each file, with a file size limit of 2GB.
- 6. Recording is at 16-bit, 44.1kHz or 48kHz depending on console sample rate.



### **Routing Menu**



- 1. The first page of the ROUTING menu is where you choose which inputs the X32 will route to the 32 input channels, (in banks of 8).
  - Local = Internal Mic Preamp on back of console.
  - Card Out/Card In = XUF Firewire/USB card, (or future expansion cards).
  - AES50 = S16 or digital split via AES50 to/from another X32.
- 2. All of the other ROUTING pages refer to Outputs. Use the "page select" button to select these Output Tabs in order to assign signals to the XLR & AUX outputs (individually), P16 Outputs, Card Outputs, and AES50 Outputs.
  - When assigning AES50 & Card outputs, "OUT 1-8" and "OUT 9-16" will reflect the outputs assigned on the "Analog Out" tab.



# **Editing Channel Strip LCDs**



- 1. Hold down the select button for the channel you wish to change and press UTILITY.
- 2. Use the rotary encoders below the screen to adjust parameters.
- 3. There is also a dedicated Scribble Strip Tab on the SETUP menu.
- 4. Select the channel while viewing this screen to edit

\*Previous to Firmware 1.08, you will need to select the channel, view its' CONFIG/PREAMP page and press UTILITY.



### **Using Busses**



#### **Bus Terminology Explained:**

Unlike other consoles, the X32 uses ONLY Busses for Sends (no AUX Sends).

You can use these 16 busses for whatever you require, FX sends, Monitor sends, Sub Groups, etc.

#### **Bus Setup:**

The X32 offers ultra flexible busing as each channels' bus sends can be independently Pre or Post Fader, (selectable in pairs of buses). Select a channel and press "view" in the BUS SENDS section on the channel strip.

Reveal options for Pre / Post / Subgroup by pressing the LAYER Down button by the screen.

To configure a bus globally, press its' select button and then press "view" near the CONFIG / PREAMP section on the channel strip. Use the third rotary encoder to change configurations. This will affect all channel sends to this bus.

Note: Mix buses can be linked in odd-even adjacent pairs to form stereo mix buses. To link buses together, select one and press the "view" button near the CONFIG/PREAMP section of the channel strip. Press the first encoder to link. When sending to these buses, the odd BUS SEND encoder will adjust send level and even BUS SEND encoder will adjust pan/balance.



### **Matrix Mixes**



- Matrix mixes can be fed from any mix bus as well as the MAIN LR and Center/Mono bus.
- To send to a Matrix, first press the select button above the bus you want to send. Use the 4 rotary encoders in the BUS SENDS section of the channel strip. Encoders 1-4 will send to Matrix 1-4. Press the 5-8 button to use the first two encoders to send to Matrix 5-6. If you press the "view" button, you will get a detailed view of the 6 Matrix sends for the selected Bus.
- Access the Matrix mixes using layer 4 on the output faders. Select a Matrix mix in order to access its' channel strip, including dynamics with 6-band parametric EQ and x-over.
- For a stereo Matrix, select a Matrix and press the "view" button near the CONFIG/PREAMP section of the channel strip. Press the first encoder near the screen to link, forming a stereo pair. Note, stereo panning is handled by even BUS SEND encoders as described on the "Using Buses" page in this guide.



## **Using DCA Groups**



Use DCA Groups to control the volume of multiple channels with a single fader.

- 1. To assign a channel to a DCA, first be sure you have the GROUP DCA 1-8 layer selected.
- 2. Press and hold the select button of the DCA group you wish to edit.
- 3. Simultaneously press the select buttons of a channel you wish to add / remove.
- 4. When a channel is assigned, its select button will light up when you press the select button of it's DCA as shown in the photo above.



### **Sends on Fader**



#### To use "Sends on Faders," press the "Sends on Faders" button located near the middle of the console.

You can now use "Sends On Faders" in one of two different ways.

#### 1. Using 16 input faders:

• Select a buss on the output fader section on right and the input faders on the left will reflect the mix being sent to the selected bus.

#### 2. Using 8 bus faders:

- Press the select button of an input channel on the input section on the left.
- Raise the bus fader on the right side of the console to send the channel to that bus.



### **Mute Groups**



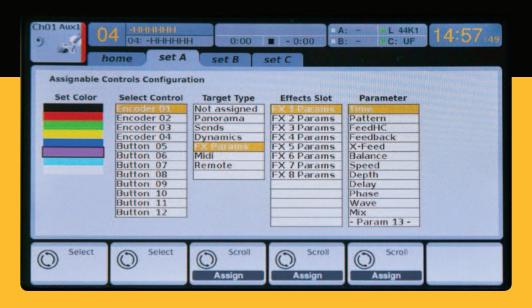


- 1. To assign/remove a channel from a Mute Group, press the MUTE GRP button near the screen. You will know you are in edit mode when the MUTE GRP button lights and the 6 Mute Groups appear on the 6 rotary encoders.
- 2. Now press and hold one of the 6 Mute Group buttons you wish to use and simultaneously press the select button of the channel you wish to add/remove to that Mute Group.
- 3. When complete, press the MUTE GRP button again to reactivate the dedicated Mute Group buttons on the X32.
- 4. Your Mute Groups are ready to use.



### **Assignable Controls**





- 1. The X32 features user-assignable rotary encoders and buttons in 3 layers. To assign them, press the "view" button near the ASSIGN section.
- 2. Use the PAGE SELECT button to select a "Set" or layer of controls. These will correspond to the "SET A, B and C" buttons on the console.
- 3. Use the rotary encoders to select the control and choose its function.
- 4. Note that the LCD Scribble Strips will change to indicate the controls for which they are set.



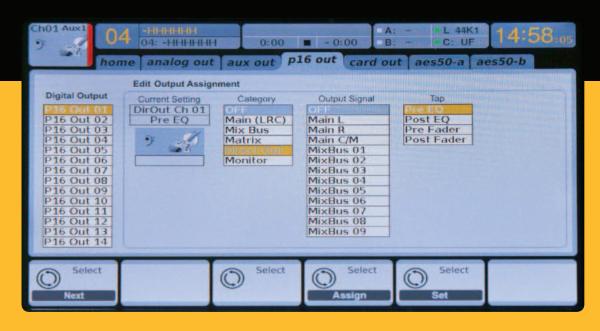
### **FX Rack**



- 1. Press the EFFECTS button near the screen to see an overview of the 8 stereo FX processors. Keep in mind that FX slots 1-4 are for "Send" type FX and slots 5-8 are for "Insert" type FX.
- 2. To edit the FX, use the 6th rotary encoder to select an FX slot.
- 3. While a FX slot is selected, use the 5th rotary encoder to change which effect is in that slot. Press the encoder to edit the parameters for that effect.
- 4. Over 40 effects include Reverbs, Delay, Chorus, Flanger, Limiter, 31-Band GEQ, and more.



### **Setting up P16**



- 1. Setup the P16 outputs by pressing the ROUTING button and paging over to "P16 Out".
- 2. Select an output channel and then select a signal source.
- 3. By default, direct outputs from channels 1-16 are assigned.
- 4. If you are working with more than 16 channels, you can utilize any of your 16 mix busses to create sub-groups which can also be assigned to P16 channels.
- 5. Other potential sources: Main LRC, Matrix Mixers, Monitor Bus, AUX & FX Return Direct Out, and Talkback.



### **Setting up S16 Stagebox**



- 1. Connect the AES50 (A) port on the back of the X32 to the AES50 (A) port on the back of the S16 stagebox. If using two S16s, connect the AES50 (B) port on the first S16 to the AES50 (A) port on the second S16. This allows the X32 to control the S16 preamps remotely. Note that you will need to configure the S16s for external sync and the X32 for local sync, set this on the "config" tab of the SETUP menu. You will also need the first S16 in Operational Mode 1 and the second S16 in Operational Mode 2, (other modes are available). Please check the S16 Ouick Start Guide for more information.
- 2. Press the ROUTING button and while viewing the "home" page, press UTILITY.
- 3. Use the 2nd rotary encoder to select the AES50 A Inputs preset and press the encoder to load.
- 4. Page right to AES50 (A) output. Check that "Out 1-8" and "Out 9-16" are assigned to the first two banks of outputs. These outputs will mirror the 16 analog outs on the X32, configured from the "analog out" tab of the ROUTING menu.
- 5. The P16 signal is carried over AES50 outputs 32-48 by default to the ULTRANET port on the S16.
  - 32 x 16 plus 16 channels for P-16 Personal Monitoring, over a SINGLE ETHERNET CABLE!.



### iPad Configuration







- 1. Download the Xi Control app for free from the Apple App Store.
- 2. Connect the X32 "Ethernet" jack to an available port on a wireless router (NOT the WAN / Internet port).
- 3. On your iPad, open the Wi-Fi settings and connect to the wireless router.
- 4. Launch Xi Control and take note of the IP address of your iPad. For this example, let's say it's 192.168.1.2
- 5. On the X32, press the SETUP button and page over to the "network" tab.
- 6. For IP address use the iPad's IP address noted in step 4 above **EXCEPT** change the last number. For this example, try 192.168.1.58.
- 7. Next set the subnet mask to 255.255.255.0.
- 8. The gateway field can often be left blank, but fill it in with your router's IP address if you are having trouble.
- 9. On the iPad, enter the IP address for your X32 and tap connect.



### **PC / Mac Control Configuration**



- 1. Download the latest version of Xcontrol from www.behringer.com/x32.
- 2. Connect the X32 "Ethernet" jack to a wireless router (for wireless use), or directly to your computer's Ethernet port.
- 3. Open your computer's Network Settings and connect to the wireless network, or verify your wired Ethernet connection is enabled when using a direct Ethernet connection.
- 4. On your computer, launch the XControl app and take note of the computer's IP address (as shown in photo above).
- 5. On the X32, press the SETUP button and page over to the "network" tab.
- 6. For IP address use the Computer's IP address noted in step 4 above **EXCEPT** change the last number.
- 7. Next set the subnet mask to 255.255.255.0.
- 8. The gateway field can often be left blank. If using a router, fill it in with the router's' IP address if you are having trouble connecting.
- 9. On your computer, input the X32's IP address into XControl and click Connect.



### Firewire / USB Card





- 1. Press the SETUP button near the screen, and use the PAGE SELECT buttons to select the "card" tab.
- 2. Choose either USB or Firewire and the desired configuration.
- 3. Press the ROUTING button and use page over to the "card out" tab to verify what signals are feeding your DAW
- 4. By default, the card will output the direct out signals of the 32 on-board XLR inputs, (ex. "Local 1-8"). When using the S16 you will need to select the AES50 options, (ex. "AES50 A1-8").
- 5. If using a PC, go to www.behringer.com/x32 to download and install the latest drivers.
- 6. Power down your computer, connect the X32 via USB or Firewire, and power back on the computer.

**Note:** The X32 will work with Core Audio on MAC and WDM / ASIO Drivers on PC, making it compatible with virtually all major DAWs. It is also compatable with live sound plugin hosts such as Waves MultiRack.



### **DAW Control**



- 1. Press the SETUP button and page right to the "remote" tab.
- 2. Enable the Remote Selection button by pressing the first rotary encoder.
- 3. Choose Mackie Ctrl or HUI protocol and set the interface to Card MIDI to use the XUF Interface to transmit MIDI over the same USB / Firewire cable as the audio.
- 4. Setup either a Mackie Control or HUI control surface in your DAW.
- 5. Press the REMOTE button on the left side of the X32 to control your DAW.
- 6. The 8 Output Faders now control the DAW, use the layer switches to toggle the mute buttons between the following functions: Mute, Transport, Banking and Channel Selection. "Select" and "Solo" buttons will also work.
- 7. Buttons and Encoders in the ASSIGN section can be assigned to MIDI commands on their setup page.



# **Using the Talkback Section**





- 1. The X32 has the option of using the built in talkback mic or external mic.
- 2. To begin, press view near the Talkback Section on the console.
- 3. Press the 2nd rotary encoder to switch between internal and external mic.
- 4. Use the 4th rotary encoder to route the talkback to the appropriate mix busses.



### Saving a Scene





- 1. Access the SCENE menu by pressing the "view" button.
- 2. Use the 4th rotary encoder below the screen to select a scene location number and click the encoder to save into the selected slot.
- 3. Use the 5th encoder to save your scene directly to USB.
- 4. Pressing UTILITY in this menu will allow you to import / export scenes and entire shows via USB.

**Note:** The Scenes vs Shows: It should be noted that a "show" is an entire group of "scenes". The X32 has only one show loaded at all times, containing 100 scenes. If you import a "show" from USB, you will overwrite any "scenes" already loaded on the X32.



### **Using Preset Libraries**



- 1. The X32 has separate preset libraries for Channel Strip, Effects, and Routing. To access them, use the LIBRARY button near the screen.
- 2. From this window, you can use the rotary encoders to load/save/delete presets. By pressing the UTILITY button you can import/export presets from the USB drive.
- 3. Libraries can also be accessed by pressing the UTILITY button while viewing a channel strip, effects, or routing page.



### Copy / Paste



- 1. Copy and Paste functions can be accessed from the UTILITY button.
- 2. To copy settings for a specific processor, such as a channel compressor, press UTILITY while viewing the compressor screen of the channel you wish to copy.
- 3. Press the 5th rotary encoder to copy the settings.
- 4. Press the select button of the channel to which you want to copy to.
- 5. Press the 6th rotary encoder to paste the settings.
- 6. To copy an entire channel strip, repeat this procedure from the HOME screen of a channel.

**Note:** You can copy/paste an entire channel strip, FX settings, Compressor, Gate, and EQ.



# X32 as Monitor Console Setting up a "Cue Wedge"





The Solo Options determine what signal arrives at the monitor outputs. As you cycle through the solo options using the 2nd rotary encoder, a description will appear describing what that option does. Options include the ability to "Use Master Fader" for solo, which is handy when using the X32 as a Monitor console.

- 1. Press view near the Monitor section of the console to access the Monitor options.
- 2. Use the second rotary encoder to highlight "Use Master Fader" and click. When using a "Cue Wedge" you may want to try "exclusive solo". This allows you to quickly switch your monitoring source by pressing the SOLO button on any individual mix bus or channel.
- 3. Connect your "Cue Wedge" to the dedicated monitor output on the X32, remember that this monitor wedge's volume is controlled by the Monitor Level knob in the Master section.

**Note:** Alternatively, assign the Monitor output to any of the 16 XLR outputs via the "analog out" page of the ROUTING Menu. This will bypass the dedicated monitor volume control.



