

# XD SERIES

## User Manual

**XILICA**

# Important Safety Information

## 1. READ THESE INSTRUCTIONS

All the safety and operating instructions should be read before the product is operated.

## 2. KEEP THESE INSTRUCTIONS

The safety and operating instructions should be retained for future reference.

## 3. HEED ALL WARNINGS

All warnings on the product and in the operating instructions should be adhered to.

## 4. FOLLOW ALL INSTRUCTIONS

All operating and use of instructions should be followed.

## 5. DO NOT USE THIS APPARATUS IN WATER.

Do not use the product near water. For example, near a bathtub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, and the like.

## 6. CLEAN ONLY WITH DRY CLOTH.

Unplug the unit from the wall outlet before cleaning.

## 7. DO NOT BLOCK ANY VENTILATION OPENINGS

Slots and openings in the cabinet back or bottom are provided for ventilation, to ensure reliable operation of the limit and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or similar surface. This product should never be placed near or over a radiator or heat source. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

## 8. DO NOT INSTALL NEAR ANY HEAT SOURCES

This product should be situated away from heat sources such as radiators, stoves or other products (including amplifiers) that produces heat.

## 9. DO NOT DEFEAT THE SAFETY PURPOSE OF THE POLARIZED OR GROUNDING-TYPE PLUG

A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prongs are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

## 10. PROTECT THE POWER CORD FROM BEING WALKED ON OR PINCHED PARTICULARLY AT PLUGS, CONVENIENCE RECEPTACLES, AND THE POINT WHERE THEY EXIT FROM THE APPARATUS.

## 11. ONLY USE ATTACHMENTS/ACCESSORIES SPECIFIED BY THE MANUFACTURER.

## 12. USE ONLY WITH CART, STAND, TRIPOD, BRACKET, OR TABLE SPECIFIED BY THE MANUFACTURER, OR SOLD WITH THE APPARATUS. WHEN A CART IS USED, USE WITH CAUTION WHEN MOVING THE CART/APPARATUS TO AVOID INJURY FROM TIP-OVER.

Do not place this unit on an unstable cart, stand, tripod, bracket, or table. The unit may fall, causing serious injury to someone, and serious damage to the appliance. A unit and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.

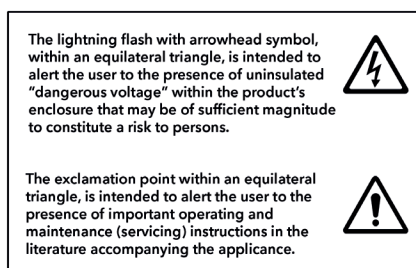
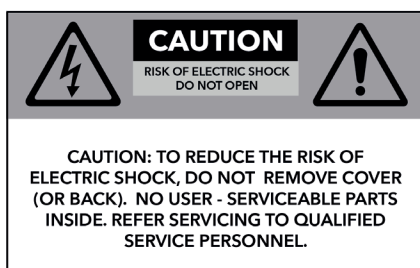
## 13. UNPLUG THIS APPARATUS DURING LIGHTNING STORMS OR WHEN UNUSED FOR LONG PERIODS OF TIME.

For added protection for this unit during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the unit due to lightning and power surges.

## 14. REFER ALL SERVICING TO QUALIFIED PERSONNEL. SERVICING IS REQUIRED WHEN THE APPARATUS HAS BEEN DAMAGED IN ANY WAY. SUCH AS, WHEN THE POWER SUPPLY CORD OR PLUG IS DAMAGED, LIQUID HAS BEEN SPILLED, OR OBJECTS HAVE FALLEN INTO THE APPARATUS, THE APPARATUS HAS BEEN EXPOSED TO RAIN OR MOISTURE, DOES NOT OPERATE NORMALLY, OR HAS BEEN DROPPED.

## 15. WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.

## 16. APPARATUS SHALL NOT BE EXPOSED TO DRIPPING OR SPLASHING AND NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHALL BE PLACED ON THE APPARATUS.

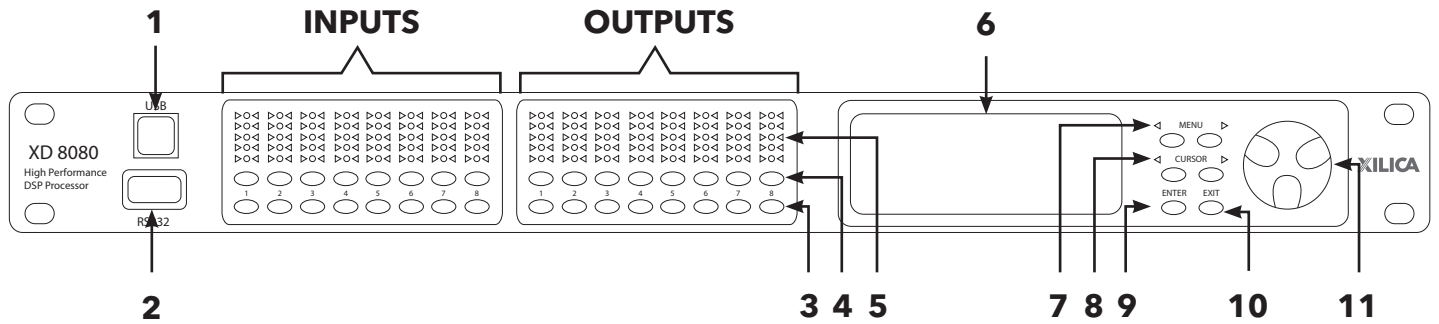


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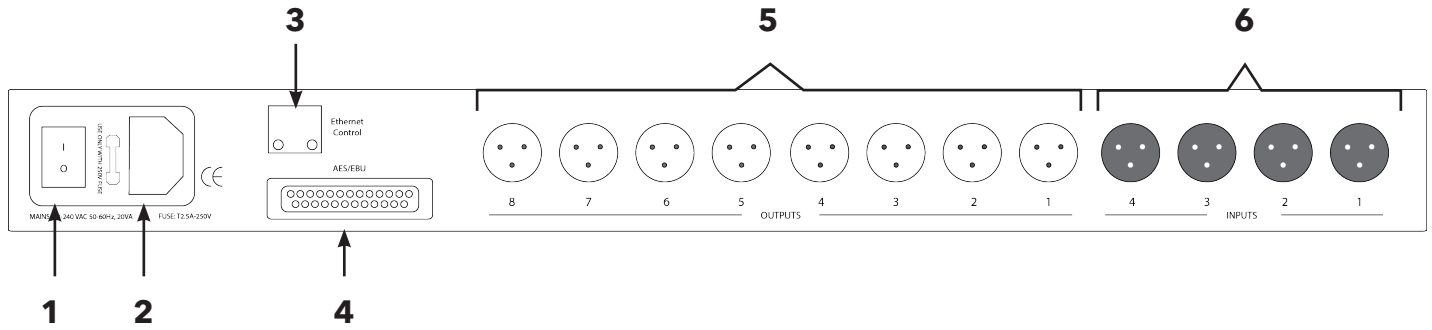
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# Front Panel



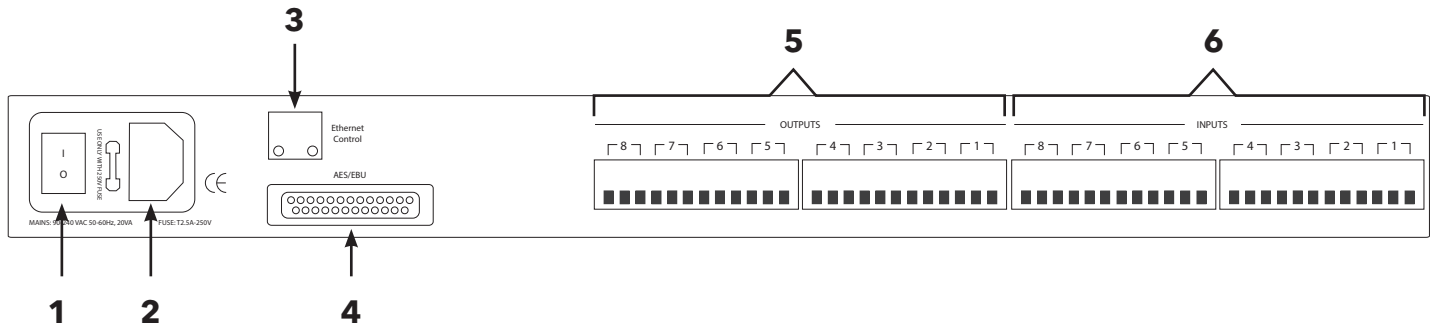
- 1 **USB** A standard Type B USB connector. The device USB driver must be installed.
- 2 **RS232** A standard female DB9 socket. A straight through cable is required for connection.
- 3 **Channel** A button used to select input and output channel(s). Selected channels will light in Green. Channel linking is accomplished by pressing and holding the first channel key, then selecting the other desired channels. Inputs and outputs are linked separately.
- 4 **Mute** A mute button for input and output channels. When a channel is muted, the mute button will light in Red.
- 5 **Signal level** This indicates the current peak of the signal: -12dB, -6dB, -3dB, over limit. The input limit LED references to the device's maximum headroom. The output limit LED references to the threshold of the output limiter.
- 6 **LCD display** The LCD display shows device information and settings.
- 7 **Menu** The Menu (Left and Right) buttons are used to scroll through the device menus.
- 8 **Cursor** The Cursor (Left and Right) buttons are used to scroll through device parameters.
- 9 **Enter** The Enter button is used to confirm actions.
- 10 **Exit** The Exit buttons is used to exit out of menus and return to the home screen.
- 11 **Jog Wheel** The Jog Wheel is used to adjust values.

# Rear Panel (XD 4080)



- 1 Power switch** Power ON/OFF the processor using this switch.
- 2 Power supply** Insert the plug connector into the socket. Connect the cord into a 90-240 VAC 50-60Hz power source.
- 3 Ethernet** Connect the device to the network using a standard RJ45 (Ethernet) Cat5 cable.
- 4 AES/EBU** Transport 4x8 AES/EBU digital audio channels over a DB-25 connector (Yamaha protocol).
- 5 Outputs** Output connections are established using XLR connectors.
- 6 Inputs** Input connections are established using XLR connectors.

# Rear Panel (XD 8080)



- |   |                     |   |
|---|---------------------|---|
| 1 | <b>Power switch</b> | Power ON/OFF the processor using this switch.   |
| 2 | <b>Power supply</b> | Insert the plug connector into the socket. Connect the cord into a 90-240 VAC 50-60Hz power source. |
| 3 | <b>Ethernet</b>     | Connect the device to the network using a standard RJ45 (Ethernet) Cat5 cable.                      |
| 4 | <b>AES/EBU</b>      | Transport 8x8 AES/EBU digital audio channels over a DB-25 connector (Yamaha protocol).              |
| 5 | <b>Outputs</b>      | Output connections are established using Euro/Phoenix 5.08mm type connectors.                       |
| 6 | <b>Inputs</b>       | Input connections are established using Euro/Phoenix 5.08mm type connectors.                        |

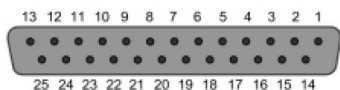
## Technical Specifications

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<b>Input impedance</b>	>10k Ohms
<b>Output impedance</b>	50 Ohms
<b>Maximum level</b>	+20dBu
<b>Mic/Line</b>	Mic (+40dB Fixed gain)/Line (0dB)
<b>Type</b>	Electronically balanced
<b>Frequency response</b>	+/-0.1dB (20 to 30kHz)
<b>Dynamic range</b>	115dB typ (unweighted)
<b>CMRR</b>	>60dB @ 1kHz
<b>Crosstalk</b>	<-80dB @1kHz
<b>Distortion</b>	0.002% (1kHz @ +4dBu)
<b>Processor</b>	40-bit floating point
<b>Sampling rate</b>	96kHz
<b>Propagation delay</b>	1.5ms
<b>Analog converters</b>	High-performance 24-bit
<b>Connectors</b>	<b>XD 4080:</b> XLR, DB-25, USB, RS232, RJ45 Ethernet, IEC power socket <b>XD8080:</b> Phoenix connector (included), DB-25, USB, RS232, RJ45 Ethernet, IEC power socket
<b>Power</b>	90-240 VAC (50-60Hz)
<b>Mounting</b>	1RU, with vent between units
<b>Dimensions</b>	19"x1.75"x9" (483x44x229mm)
<b>Weight</b>	11lbs / 5kg
<b>Warranty</b>	2 years, parts and labor

## AES/EBU Pinout Information

XD Series models with AES/EBU digital audio use a DB-25 connector (female) with the YAMAHA protocol. AES/EBU inputs can handle any sample rate up to 192kHz. The unit acts as a slave so it expects your AES/EBU to be master. The pinout details are as follows:



Pin Description	Revision A	Revision B (Yamaha standard)
Input 1+	14	1
Input 1-	2	14
Input 2+	3	2
Input 2-	16	15
Input 3+		3
Input 3-		16
Input 4+		4
Input 4-		17
Output 1+		5
Output 1-	8	18
Output 2+	9	6
Output 2-	22	19
Output 3+	23	7
Output 3-	11	20
Output 4+	12	8
Output 4-	25	21
Ground	1 4 7 10 13 15 18 21 24	10 11 12 13 22 23 24 25
No connect		9

Revision A or B can be found when powering on the unit. It is appended to version number.



# Install XConsole

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The XConsole software provides optimum configuration of XD and XP Series processors.

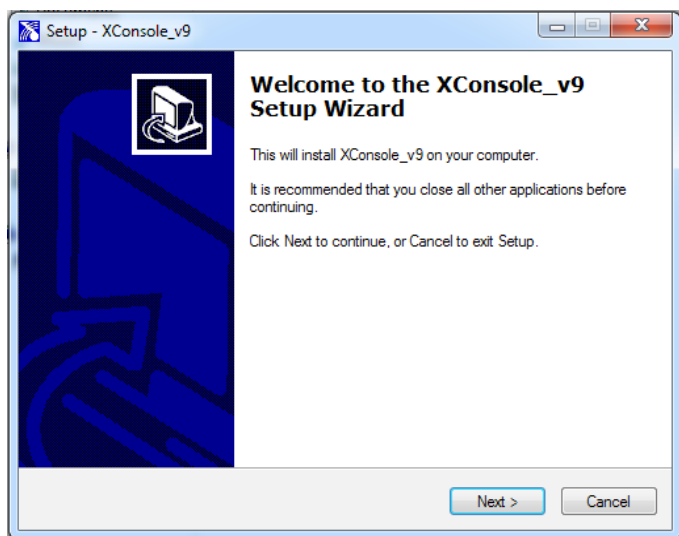
## Windows Installation

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### System Requirements

PC computer with a processor 1GHz or higher  
Windows 7 or higher  
500MB of available space  
1GB graphics card  
4GB RAM

1. Download the latest version of XConsole from the Xilica website ([www.xilica.com](http://www.xilica.com)).
2. Open the downloaded .zip file.
3. Then open the **XConsoleSetup\_v0904.exe** file.
4. An installation window will appear. Click **Install** to continue.



5. Allow the program to complete the installation process. This may take a several minutes.
6. When complete, Windows will ask for permission to allow firewall access. The suggested setting is to allow XConsole to communicate in Private networks, such as home or work. Allow access to public networks at your own discretion. Check the appropriate boxes, then click **Allow Access** to finish.
7. XConsole is now installed.

## Launch XConsole

Locate the XConsole application on your Desktop or Applications folder.  
Double click the application to launch the software.



Devices will display as a list on the left. Double click a device to open the device parameters.

# Connection Troubleshoot

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Please make sure that you are using the latest version of XConsole (v9.04).

## For serial port/USB,

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1. Open up the XConsole software.
2. Under the **Setup** tab at the top, select **Port Connection**.
3. A window will appear. Click on **Device Manager**.
4. Under **Ports (COM & LPT)**, a Silicon Labs device will display.  
If this is not displayed, try reconnecting the device (Disconnect and reconnect cable).
5. Please note the **COM port** of the device.
6. Navigate back to the Connection Setup window in XConsole and change the COM Port to the **COM Port #** that was listed in Device Manager. Make sure that the Online box is checked. Then click **OK**.
7. Restart XConsole and the device will now be connected.

**In addition, the COM port has to be COM1 to COM8. To check if there is another software running taking the COM port:**

1. Open Terminal (Either click Command Prompt in XConsole or type Command at the Windows start button Search programs and files area.
2. Close XConsole if it is opened.
3. Type Mode COM# where COM# is the Com Port# shown in Device Manager for Silabs.  
If the port is available, it will show the serial port settings. (Don't worry about the values, they are not important.) If it says it is unavailable, then some software is taking up the port.

If the port is available, then set this port number in XConsole. The device should connect successfully.

**If the device is still not connecting, try assigning an manual static IP Address to the device. Please note that this connection is done via Ethernet Cat5 cable.**

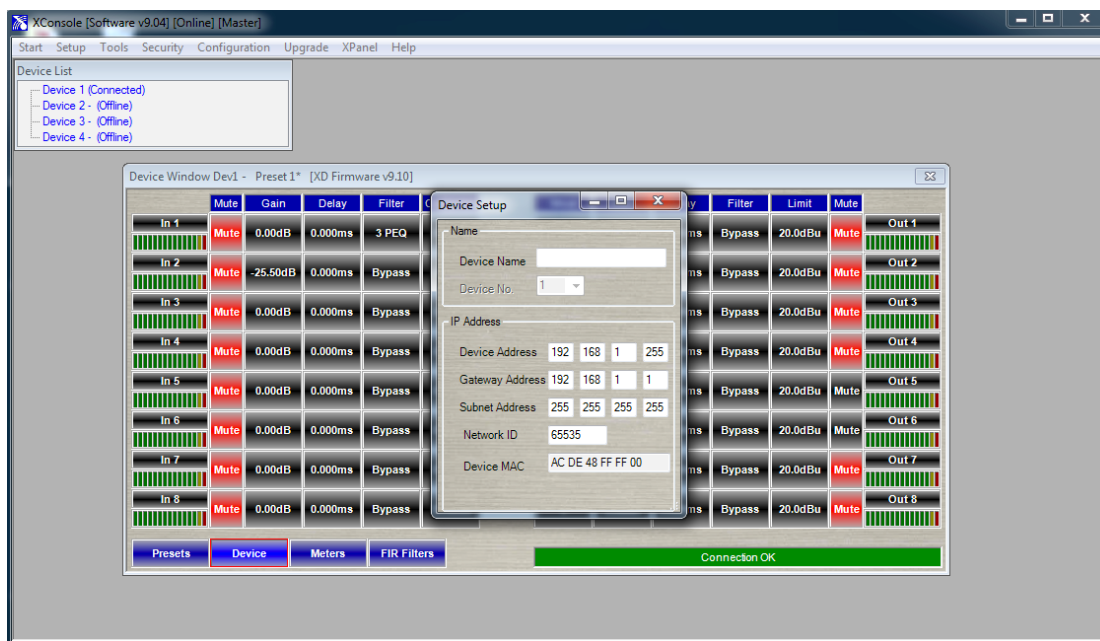
## Cat5 Ethernet connection

X Series IP Address can be configured on the **front panel** of the device or in the software.

1. On the front panel of the device, click the **Enter** button to enter the **System menu**.
2. Use the **Menu** arrows to navigate to the Ethernet menu.  
The device IP Address can be viewed. To configure the device network settings, use the cursor arrows and jog wheel to change the values.
3. Click **Enter** to save changes.

To view the IP address in XConsole,

1. Open XConsole.
2. Double click the connected device in the Device list. The device window will pop up.
3. Select the **Device** button located at the bottom left of the window. The device IP Address and network settings are displayed.



# Firmware Upgrade

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Please note that using an older version of software with a newer firmware or newer software with an older firmware will work but some of the features may not be available and bugs could exist. **We recommend upgrading the software and firmware to the latest versions.**

Before you begin, **check your software and firmware versions.**

**The device firmware version can be found on the front panel of the device.** Upon boot up of the device, the current device firmware version will briefly display on the front panel or enter the System menu using the **Enter** key and navigate to the **Information** tab to view the current device firmware.

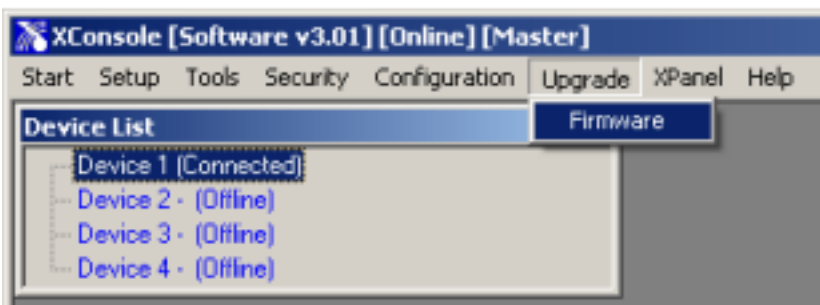
**To view the current software version,** click on the **About** tab at the top of the software.

## Firmware Upgrade Procedure:

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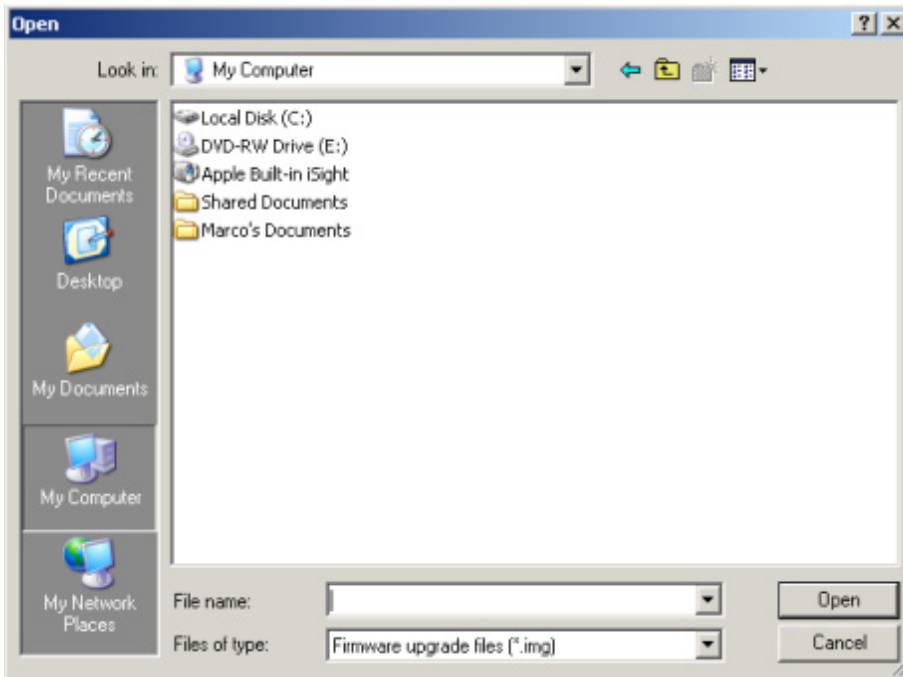
**Save any design files from the device onto your computer as all programmed data on the device will be erased during the upgrade process.** After the firmware upgrade is completed, the design file can be loaded back into your device.

1. The device must be online and connected via USB or RS232 in order to perform a firmware upgrade.
2. Download the latest firmware version for your device from the Xilica website ([www.xilica.com](http://www.xilica.com)).
3. Select the device you would like to upgrade. At the top of the software, select **Upgrade > Firmware**. Make sure your device data is saved before proceeding.



Click **Yes** to continue.

Navigate to the file in which you downloaded the new Firmware file. Click **Open**.



The green status bar in the device window will display the Firmware Upgrade process. This may take several minutes. **DO NOT POWER OFF THE DEVICE.** Powering off the device during a Firmware Upgrade can result in a complete corruption of the processor.

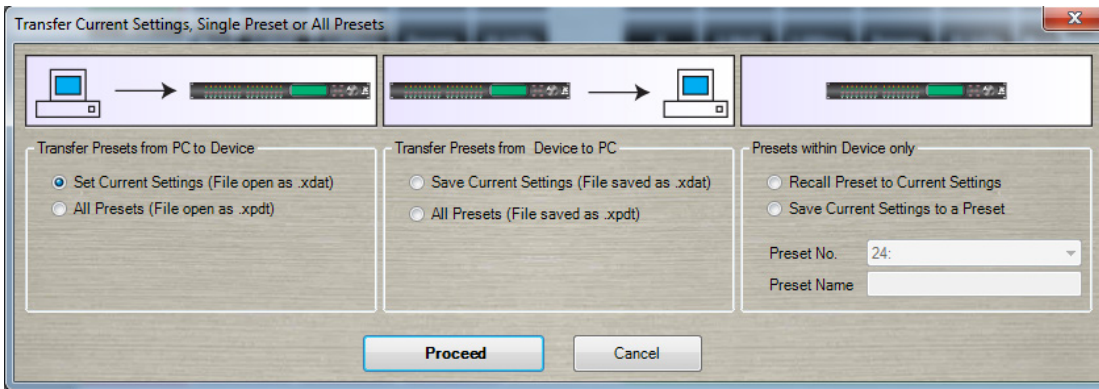
**Once the Firmware file has completed, the device will need to be manually switched Off and On again. The software will also need to be rebooted.**

## Export/Import Files and Going Online

To load device settings from the computer to the device, or save settings from the device to the computer,

1. Open the device parameters.
2. Click **Preset** located at the bottom left of the window.
3. There are three options:  
**Transfer Presets from PC to Device.**  
**Transfer Presets from Device to PC.**  
**Presets within Device only.**

Select an option and click **Proceed**.



**It is recommended to back up project files to an external location.**

Saved project files will have a **.xdat** extension at the end of the file name.

## Navigate Front Panel

---

Upon powering up the unit, the unit will start up and display the device model and firmware version.

```
***** XILICA XD-4080 *****  
* LOUDSPEAKER CONTROLLER *  
XD-4080 v9.00B  
-----INITIALIZING -----
```

Once initialized, the device screen will display the current program number and program name assigned to the unit.

```
***** XILICA XD-4080 *****  
* LOUDSPEAKER CONTROLLER *  
DEVICE: _____  
PRESET: 01 _____
```

If the program number ends with \*, it means that no program is assigned, the last data before previous power down is recalled instead.

## Channel Menus

---

### Channel Linking

If the user presses one of the input or output Channel menu buttons, holds it down and presses any other channel menu button(s) in the input/output group, then the channels are linked together. The green menu LEDs for the linked channels are lit. Any modification of the data for the selected linked channel will be applied to the linked channels as well. To cancel linking, just press any other Channel menu key or the Exit key after releasing the held key.

When a channel(s) is selected, the front panel menu will display the settings.

**Use the Menu buttons to navigate menus, Cursor buttons to navigate parameters, enter to save to settings and exit to close the menu.**



## Input microphone gain (Only available for XD 4080-M and XD 8080-M models)

---

IN\_1: \_\_\_\_\_ MENU: Mic Gain  
LEVEL: 0dB

**LEVEL** The level (or gain) ranges from 0dB to +45dB in 3dB steps. This level will only have an affect on the input channel when Mic input is selected from the system menu.

## Input/Output Signal

---

IN\_1: \_\_\_\_\_ MENU: Signal  
LEVEL: 0.00dB  
POL: +  
DELAY: 0 (000.000ms)

**LEVEL** The level (or gain) ranges from -40dB to +15dB in 0.25dB steps.

**POL** The polarity (or phase) can be normal (+) or inverted (-)

**DELAY** The maximum delay permitted is 62400 samples. Each sample is approximately 10us (1/96k). The equivalent delay time is displayed to the right in parenthesis. The delay time unit can be set to ms, ft or m in the **System menu**.

## Input/Output Equalizers

---

IN\_1: \_\_\_\_\_ MENU: EQ  
EQ#:1 FRQ:1000Hz  
BYP: Off BW: 0.33 Q=4.36  
TYP: PEQ LVL:0.00dB

- EQ#** The level (or gain) ranges from -40dB to +15dB in 0.25dB steps.
- BYP** The polarity (or phase) can be normal (+) or inverted (-)
- TYP** The maximum delay permitted is 62400 samples. Each sample is approximately 10us (1/96k). The equivalent delay time is displayed to the right in parenthesis. The delay time unit can be set to ms, ft or m in the **System menu**.
- FRQ** The EQ centre frequency ranges from 20Hz to 30kHz in either 1Hz steps or 1/36 octave steps. The frequency steps can be selected in the **System Menu**.
- BW** The EQ bandwidth ranges from 0.02 to 3.61 octaves in steps of 0.01 octave. The equivalent Q value is automatically shown besides the octave value. For first degree all-pass (AP-1) filter, the bandwidth will set the phase shift at the centre frequency. The phase shift is gradually changed from 180 degrees above the centre frequency to the specified value.
- LVL** The EQ level (or gain) ranges from -30dB to +15dB in 0.25dB steps.

## Input Graphic Equalizer

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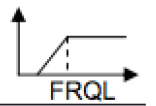
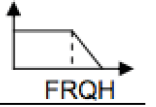

IN\_1: \_\_\_\_\_ MENU: GEQ  
GEQ#:1 (f=20Hz)  
LEVEL: +0.25dB  
BYPASS: Off

- GEQ#** The graphic equalizer has 31 bands of equalization from 20Hz to 20kHz. This control selects one of the 31 available bands. The frequency corresponding to each band is also shown.
- LEVEL** The GEQ level (or gain) ranges from -30dB to +15dB in 0.25dB steps.
- BYPASS** This control will un-bypass (Off) or bypass (On) the entire GEQ for this channel.

## Input/Output IIR Crossover

IN\_1: \_\_\_\_\_ MENU: XOvr IIR  
 TYPL: Off TYPH: Off  
 FRQL: 1000Hz FRQH: 1000Hz  
 SLPL: 24dB SLPH: 24dB

- TYPL** The three available filter types for the low frequency crossover point (high pass) are: Butterworth, Linkwitz-Riley or Bessel.
- FRQL** The filter cut-off frequency for the low frequency crossover point (high pass) ranges from 20Hz to 30kHz in either 1Hz steps or 1/36 octave steps. The frequency steps can be selected in the System menu.
- SLPL** The filter slope for low frequency crossover point (high pass) ranges from 6 to 48dB/octave. If the selected filter type is Linkwitz-Riley, the available slopes are 12, 24, 36 or 48dB/octave only.
- TYPH** The three available filter types for the high frequency crossover point (low pass) are: Butterworth, Linkwitz-Riley or Bessel.
- FRQH** The filter cut -off frequency for the high frequency crossover point (low pass) ranges from 20Hz to 30kHz in either 1Hz steps or 1/36 octave steps. The frequency steps can be selected in either the System menu.
- SLPH** The filter slope for high frequency crossover point (low pass) ranges from 6 to 48dB/octave. If the selected filter type is Linkwitz-Riley, the available slopes are 12, 24, 36 or 48dB/octave only.

Filter configuration	Low crossover point	High crossover point	
None	FTRL Off	FTRH Off	
Highpass	FTRL not Off	FTRH Off	
Lowpass	FTRL Off	FTRH not Off	
Bandpass	FTRL not Off	FTRH not Off	

## Input Compressor

---

IN\_1: \_\_\_\_\_ MENU: Comp  
THRESH: 0.0dBu  
ATTACK: 10ms RATIO 1:40  
RELEASE: 8x (80ms)

**THRESH** The compressor threshold ranges from -20dBu to +20dBu in 0.5dB steps.

**ATTACK** The compressor attack time ranges from 0.3ms to 1ms in 0.1ms steps, then ranges from 1ms to 100ms in 1ms steps.

**RELEASE** The compressor release time can be set at 2X, 4X, 8X, 16X, or 32X the attack time.

**RATIO** The compressor ratio is the slope in which the signal is compressed. It ranges from 1:1 to 1:40.

## Input/Output Channel Name

---

IN\_1: \_\_\_\_\_ MENU: Name  
NAME: \_\_\_\_\_

**NAME** A six character name can be assigned to each channel.

## Output Limiter

---

OUT\_1: \_\_\_\_\_ MENU: Limit  
THRESH: 0.0dBu  
ATTACK: 10ms  
RELEASE: 8x (80ms)

**THRESH** A limiter threshold ranges from -20dBu to +20dBu in 0.5dB steps.

**ATTACK** The limiter attack time ranges from 0.3ms to 1ms in 0.1ms steps, then ranges from 1ms to 100ms in 1ms steps.

**RELEASE** The limiter release time can be set at 2X, 4X, 8X, 16X, or 32X the attack time.

## Output Source

---

OUT\_1: \_\_\_\_\_ MENU: Source  
1: 0.00      4: Off      7: Off  
2: Off      5: Off      8: Off  
3: Off      6: Off

**1-8** This sets the input channel source for the current output channel. It can be used to mix the input source (in dB) or disable it (Off). If more than one input sources are enabled, they will be added together as the source for the current output channel.  
**(5-8 available for XD8080 model only)**

## Output FIR Crossover

---

OUT_1: _____	MENU: XOvr FIR
TYPL: Off	TYPH: Off
FRQL: 1000Hz	FRQH: 1000Hz

- TYPL**      The only available filter type for low frequency crossover point (high pass) is FIR.
- FRQL**      Filter cut-off frequency of low frequency crossover point (high pass). Ranges from 20Hz to 30kHz in either 1Hz steps or 1/36 octave steps. The frequency steps and FIR Taps can be selected in the **System menu**.
- TYPH**      The only available filter type for high frequency crossover point (low pass) is FIR.
- FRQH**      Filter cut-off frequency of high frequency crossover point (low pass). Ranges from 20Hz to 30kHz in either 1Hz steps or 1/36 octave steps. The frequency steps and FIR Taps can be selected in the **System menu**.

## System Menu

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The System menu allows the user to control and change parameters that are related to the system behaviour and general operation.

To access the system menu,

Make sure you are first in the main menu. (Press the Exit button to return to the main menu any time). Press the **Enter** key.

### Preset Recall

---

SYSTEM-SETUP MENU: Recall  
PRESET: 1  
NAME: \_\_\_\_\_

The XD has a built-in non-volatile memory that can store up to 30 different preset set-ups.

**PRESET** This control selects which program to recall from the non-volatile memory. The program name is displayed to the right of the program #.

**NAME** This shows the name of the program. This is read-only. The user has no access to them.



## Preset Store

---

SYSTEM-SETUP MENU: Store  
PRESET: 1  
NAME: \_\_\_\_\_

The XD has a built-in non-volatile memory that can store up to 30 different program (or preset) set-ups. A program can be stored using this menu. The old program with the same program number will be replaced. Once the program is stored in the flash memory, it can be recalled at a later time, even after power down.

**PROG**      This control selects which location in the non-volatile memory to save the program to.

**NAME**      A descriptive name of up to twelve characters can be assigned to each program.

## Preset Store

SYSTEM-SETUP

1:50

2:50

3:50

MENU: FIR Taps

4:50

### 1-4

Number of FIR Taps for each pair of output channels (i.e.. Output 1&2, output 3&4, output 5&6, output 7&8.) The sum of all taps cannot exceed 1500 and maximum taps per pair is 1200. (Parameters 5-8 are also available for XD series v5.xx and v6.xx. The FIR filters have been changed to dual channel structure in v7.xx.)

For FIR filters, the higher the Taps the higher the slope in dB for the same frequency, or the lower the frequency the FIR can handle for the same slope. Generally speaking, higher frequencies require smaller number of Taps, and lower frequencies require a higher number of Taps.

# of Taps	Minimum frequency (Hz)
50	4800
100	2400
150	1600
200	1300
250	1000
300	850
350	700
400	625
450	550
500	500
550	450
600	425
650	400
700	390
750	385
800	340
850	310
900	285
950	275
1000	265
1050	250
1100	230
1150	220
1200	210

## Mic Pre-amps

---

SYSTEM-SETUP		MENU: Mic
1: Line	4: Line	7: Line
2: Line	5: Line	8: Line
3: Line	6: Line	

An optional microphone pre-amp can be added to the XD series. The user can select Line input or mic input from this menu. (Only available for XD4080M and XD 8080M models. Applies to Phantom power as well)

- 1-8** The user can choose between Line input or Mic input/ For Mic input, the input will receive a 30dB gain. Each input channel can be selected individually. (Input 5-8 only available for XD 8080 model. Applies to Phantom power as well.)

## Phantom Power

---

SYSTEM-SETUP		MENU: Phantom
1: Off	4: Off	7: Off
2: Off	5: Off	8: Off
3: Off	6: Off	

The option microphone pre-amp also comes with Phantom power, which can also be enabled or disabled from this menu.

- 1-8** A 48V DC voltage can be supplied to external microphone when the Phantom power is enabled. Phantom power cannot be enabled individually for each input channel. All Mic input channels will automatically receive at 48V DC voltage. This will not affect Line input since they are disconnected physically.

## Input and Output Node

---

SYSTEM-SETUP		MENU: I/O Mode	
I12: A	I34: A	I56: A	I78:A
O12: A	O34: A	O56: A	O78:A

The user can select analogue or digital signal for input and output channels. (I56 and I78 available for XD8080 revision B model only) If using AES/EBU, the XD accepts any sample rate on the inputs and will automatically up sample to its internal clock. The XD has a fixed output sample rate of 96kHz.

## Copy Channels

---

SYSTEM-SETUP	MENU: Copy
SOURCE: In1	
TARGET: In2	

Copy channels from the source to the target. When the source and targets are both inputs and outputs, all audio parameters will be copied. When the Source or the Target is an input while the other is an output, only the Level, Polarity, Delay, EQ, Crossover, and Channel name are copied.

**SOURCE** This is the channel to be copied from.

**TARGET** This is the channel to be copied to.

## General Settings

---

SYSTEM-SETUP      MENU: General  
FREQ MODE: All Freq  
DELAY UNIT: ms

Copy channels from the source to the target. When the source and targets are both inputs and outputs, all audio parameters will be copied. When the Source or the Target is an input while the other is an output, only the Level, Polarity, Delay, EQ, Crossover, and Channel name are copied.

**FREQ MODE**      This changes the frequency control mode for EQ and crossover filters. It can be 36 steps/octave or All frequencies (1Hz resolution).

**DELAY UNIT**      This sets the time unit for input and output delay to ms, ft, or m.

## Ethernet Settings

---

SYSTEM-SETUP      MENU: Ethernet  
IP ADR:      255.255.255.254  
GATEWAY:      255.255.255.255  
SUBNET:      255.255.255.255

**IP ADR**      A unique IP address should be assigned to each unit in the network.

**GATEWAY**      The gateway address of the network. Usually this should be the IP address of your router/switch/hub address.

**SUBNET**      This sets the subnet mask used by your network.

## Communication Settings

---

SYSTEM-SETUP      MENU: Comm  
BAUD RATE: 115200  
DEVICE ID:1        NET ID: 0

NOTE: The user must power cycle the unit for this setting to take effect.

**BAUD RATE** Sets the baud rate of the serial communication. XConsole uses a Baud rate of 115200. This should be left unchanged for most users.

**DEVICE ID** This control assigns a device ID from 1 to 16 to the unit.

**NETWORK ID** This control assigns a network ID from 0 to 60000 to the unit. The ID is used for future network expansion only. Please leave this at 0.

## Security Lock and Unlock

---

SYSTEM-SETUP      MENU: Security  
PASSWORD:\_\_\_\_\_

The password is four characters in length. The factory default of a new unit does not require a password. The device can be protected for unauthorized parameters and/or system abuse. The security settings can be controlled and stored in the device with the XConsole GUI only. When the correct password is entered in the device, all the locks are disabled. After re-entering the password or power cycling the device, the locks are automatically enabled again.

## Factory Settings

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SYSTEM-SETUP      MENU: Reset  
RESET CURRENT: Yes

**CURRENT**      This resets all the current parameters back to factory default settings only, while stored presets and system settings stay untouched.

## ISO Settings

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SYSTEM-SETUP      MENU: ISO  
THRESHOLD: 102  
BYPASS: Off

This internal system optimizer reduces ground floor noise if no signal is present. If unwanted noise gate effects are audible at low sound levels, it can be switched to bypass mode

## INFO

---

SYSTEM-SETUP      MENU: Info  
DEVICE NAME: \_\_\_\_\_  
FIRMWARE: v9.00  
SECURE CODE: 11110000

This menu displays the device name, firmware version and security code.  
When no password is set, the factory default code is 11110000. When another combination of characters is displayed, a password is set in the device and certain functions are disabled for the user to modify.

## Quick Reference

Parameters	Menu <<Menu>>	Field <<Cursor>>	Min	Max	Steps	Units
Mic level	Mic gain	LEVEL	0	+45	3	dB
Level	Signal	LEVEL	-40	+15	0.25	dB
Polarity	Signal	POL	+/-			
Delay	Signal	DELAY	0	62400	1	10us steps
EQ number	EQ	EQ#	1	8	1	
EQ bypass	EQ	BYP	Off/On			
EQ type	EQ	TYP	PEQ / LO-SH / HI-SH / AP-1 / AP-2			
EQ level	EQ	LEVEL	-30	+15	0.25	dB
EQ frequency	EQ	FREQ	20	30,000	1	Hz
EQ bandwidth	EQ	BW	0.02	3.61	0.01	Octave
GEQ number	GEQ	GEQ#	1	31	1	
GEQ level	GEQ	LEVEL	-30	+15	0.25	dB
GEQ bypass	GEQ	BYPASS	Off/On			
XOver-IIR low type	XOver IIR	FTRL	Off / Butterworth / Linkwitz-Riley / Bessel			
XOver-IIR low freq	XOver IIR	FRQL	20	30,000	1	Hz
XOver-IIR low slope	XOver IIR	SLPL	6	48	6	dB/octave
XOver-IIR high type	XOver IIR	FTRH	Off / Butterworth / Linkwitz-Riley / Bessel			
XOver-IIR high freq	XOver IIR	FRQH	20	30,000	1	Hz
XOver-IIR high slope	XOver IIR	SLPH	6	48	6	dB/octave
XOver-FIR low enable	XOver FIR	ENAL	Off/On			
XOver-FIR low freq	XOverFIR	FRQL	20	30,000	1	Hz
XOver-FIR high enable	XOver FIR	ENAH	Off/On			
XOver-FIR high freq	XOver FIR	FRQH	20	30,000	1	Hz
Compressor threshold	Comp	THRESH	-20	+20	0.5	dBu
Compressor attack	Comp	ATTACK	0.3	100	0.1/1	ms
Compressor release	Comp	RELEASE	2 / 4 / 8 / 16 / 32X attack time			
Compressor ratio	Comp	RATIO	1:1 to 1:40			
Limiter threshold	Limit	THRESH	-20	+20	0.5	dBu
Limiter attack	Limit	ATTACK	0.3	100	0.1/1	ms
Limiter release	Limit	RELEASE	2 / 4 / 8 / 16 / 32X attack time			
Source select	Source	1, 2, 3, 4, 5, 6, 7, 8	Off	+15	0.25	dB
Channel name	Name	NAME	6 characters			





## Customer Support

If you'd like to contact us regarding product support or technical designs, email **support@xilica.com** and we'll connect you with a solutions engineer. Alternatively, if you'd like to speak to someone, you can call the following numbers for immediate assistance:

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