# XTONE

## User Manual

**X**SONIC

RELOAD YOUR TONE

Visit **www.xsonicaudio.com** to
view the online manual

# Contents

# Quick Start

a.   Connect the smart device and the XTONE connecting indicator LED lights up;

b.   Open the effect APP and complete the settings;

c.   Connect your guitar, bass, keyboard;

d.   Connect the headphone or speaker, then adjust the volume;

e.   Rock out !


XTONE is a high-performance audio interface, but we prefer to call it smart stomp.
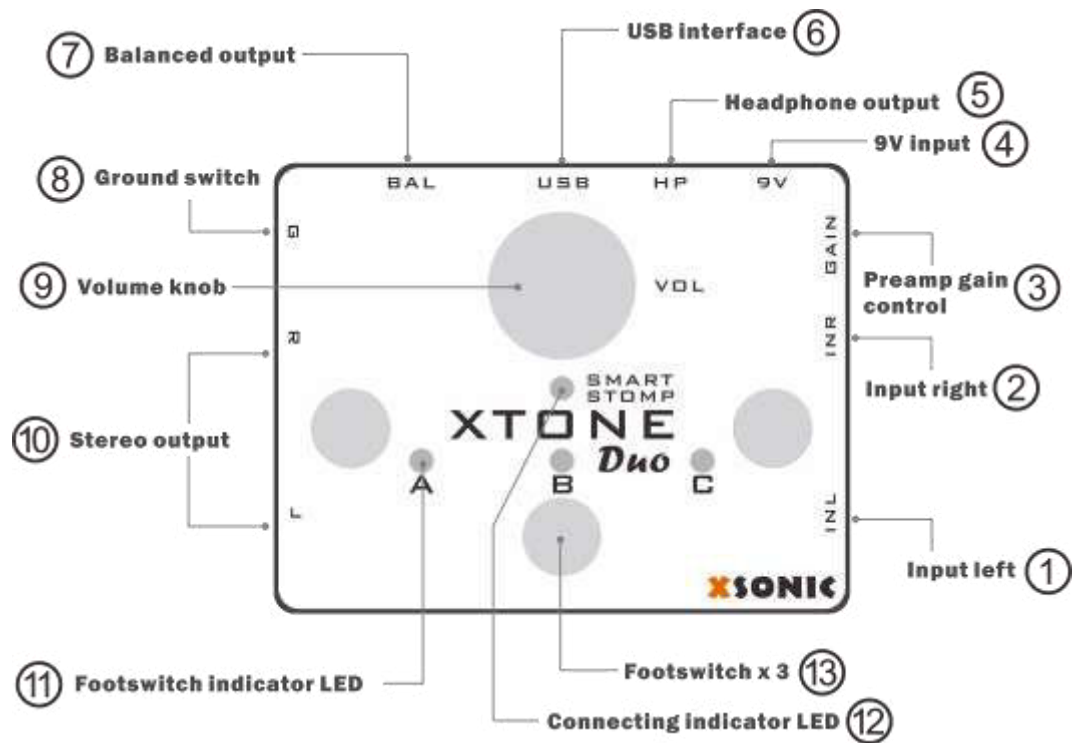
XTONE offers 192KHZ sampling rate for ultra HD audio. It also has foot switch and expression pedal. You can switch the presets, control the wah-wah and so on.

You can use XTONE to replace the traditional digital effects, The APP of running on the smart device has more top tones and more powerful additional features. Recommended APP: JamUp, BIAS, BIAS FX.

# Function Description
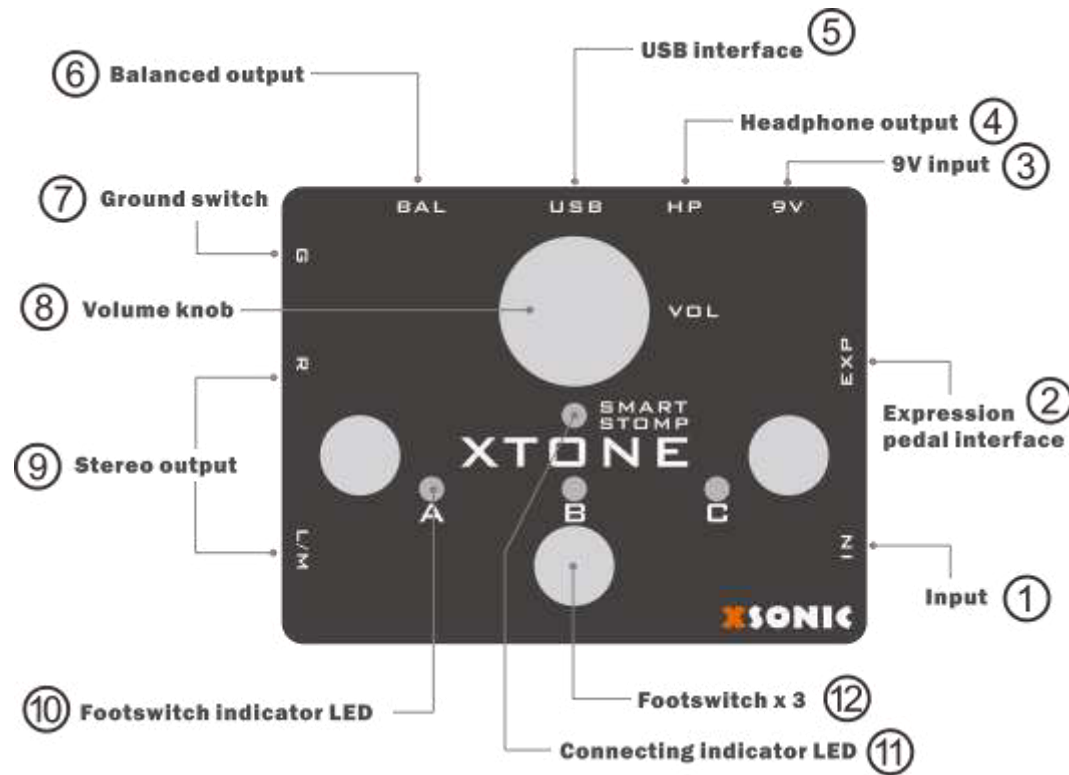
① **Guitar and line input:** Specialized input interface for guitar, bass, it is left channel. The interface does not pass any preamp, ensuring pure clear sound. This also means that the interface can be used for line input.

② **Expression pedal input:** This interface can be connected to the expression pedal using the TRS cable. You can specify any desired expression control in software effects. For more details, please refer to the MIDI chapter below.

③ **Auxiliary power input:** Usually not connected. Connect the 9V DC adaptor, then XTONE will stop taking power from the USB interface.

④ **Headphone output:** Used to connect headphones, support low and high impedance headphones.

⑤ **USB interface:** Used to connect iPhone, iPad, PC, Mac. XTONE can be powered directly by these devices. Use the USB cable to connect to your PC or Mac; use the OTG cable + USB cable to connect to your iPhone or iPad.

⑥ **Balanced Output:** For long-distance anti-jamming transmission with ground switch. Professional audio equipment such as mixers can be connected. Toggle the ground switch to eliminate noise caused by long-distance transmission.

⑦ **Ground switch:** Toggle the ground switch to eliminate noise caused by long-distance transmission.

⑧ **Output volume control:** This knob controls the output master volume, including stereo line, XLR, and headphone output.

⑨ **Stereo line output:** Unbalanced stereo line output for connecting monitors, guitar amps, mixers, etc.

⑩ **Footswitch LED indicator:** XTONE has 3 footswitches LED indicator(A, B, C).

⑪ **Working mode indicator:** If XTONE is to work normally, this indicator must light up, otherwise it will not enter the normal working condition. This indicator lights up when the smart device is connected. At the same time, the indicator has 3 light colors: green, blue and red, indicating that they are in different MIDI command groups. For more details, please refer to the MIDI chapter below.

⑫ **Footswitch:** When the foot switch is pressed, the corresponding LED lights up and XTONE sends MIDI commands outward. You can specify any features that you want to control via MIDI in software effects. For more details, please refer to the MIDI chapter below.

Balanced output ⑦

USB interface ⑥

Headphone output ⑤

9V input ④

Ground switch ⑧

Preamp gain control ③

Volume knob ⑨

Input right ②

Stereo output ⑩

Input left ①

Footswitch indicator LED ⑪

Footswitch x 3 ⑬

Connecting indicator LED ⑫

BAL   USB   HP   9V

VOL

SMART STOMP

XTONE Duo

A   B   C

XSONIC

① **Guitar and line input:** Specialized input interface for guitar, bass, it is left channel. The interface does not pass any preamp, ensuring pure clear sound. This also means that the interface can be used for line input.

② **Microphone Input:** Specialized interface for microphone input, it is right channel. The interface provides 4~50dB preamp and 48V phantom power, support dynamic or condenser microphone.

③ **Preamp gain control:** This knob is used to adjust the gain of the microphone preamp and only acts on the INR input. The gain range is 4 ~ 50dB.

④ **Auxiliary power input:** Usually not connected. Connect the 9V DC adaptor, then XTONE Duo will stop taking power from the USB interface.

⑤ **Headphone output:** Used to connect headphones, support low and high impedance headphones.

⑥ **USB interface:** Used to connect iPhone, iPad, PC, Mac. XTONE Duo can be powered directly by these devices. Use the USB cable to connect to your PC or Mac; use the OTG cable + USB cable to connect to your iPhone or iPad.

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⑬ **Footswitch:** When the foot switch is pressed, the corresponding LED lights up and XTONE sends MIDI commands outward. You can specify any features that you want to control via MIDI in software effects. For more details, please refer to the MIDI chapter below.

# Connection Example
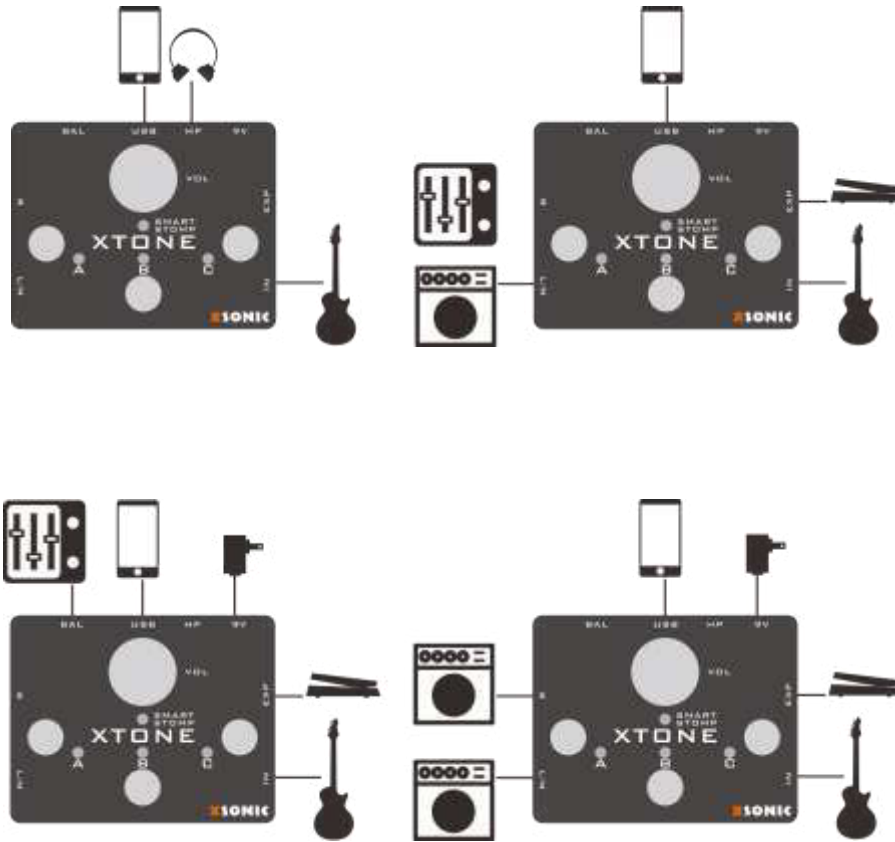
# Install Driver

Windows PC need to install the driver for XTONE&XTONE Duo, please visit www.xsonicaudio/pages/support to download the driver.

**Step 1.** Install the"XSONIC XTONE Original driver", after the installation, connect your XTONE Series product to your computer, and if you see this, just ignore all the remain part of this document and ENJOY :



If you see this, GO NEXT:

**Step 2.** Install the XTONE-Driver(old).exe (XMOS Driver) in the pack.

**Step 3.** Make sure you have plugged your XTONE Series product to you computer. Then open this in the DFU folder of the pack.

The current firmware should be 1.08 or 1.09，and the upgrade windows should show "Device opened."



**Step 4 .**Click "Browse"，and load "xtone-update-1.1.0.bin" from the pack, then click Start. The upgrade process should be finished in a few seconds.If it shows "upgrade finished successfully, click "exit". If the process is stuck, re-plug XTONE and repeat this step.

**Step 5.** If the new driver panel shows as the picture below, ENJOY!



You can set the sample rate as high as you want ,and the buffer size (lower means lower latency) even can be set to 8 samples if your computer can handle.

Now enjoy the low latency on Windows! If you prefer a more steady audio behavior than the extreme low latency, please drag the safe mode.

# Compatible Device

| | |
|---|---|
| **iOS device** | All iPhone/iPad/iPod that has Lightning and USB-TypeC interface |
| **Windows device** | Windows 7, 8, 8.1, 10 |
| **Mac device** | OS X 10.6 and above |
| **Android device** | Not supported |

# Commonly Used Software

XTONE(Duo) can connect all kinds of effect APP on the smart device. They have more top tones and richer features, give you more creative inspiration and the desire to play.

| Software | Used For |
|----------|----------|
| BIAS FX | Guitar/Bass |
| JamUp | Guitar/Bass |
| BIAS AMP | Guitar/Bass |
| Revalver | Guitar/Bass |
| VocaLive | Vocal |
| Voice Rack | Vocal |
| Quantiloop | Loop machine |
| MIDI Guitar | Simulate any instrument |
| X Drummer | Drum machine |

Usually, the first time you use the effect APP, you need to set its audio parameters, see the method behind.

Use the foot switch and the expression pedal, need to specify their function in the APP, see the method behind.
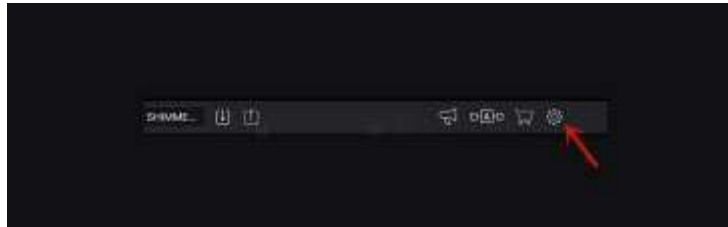
# Software Settings

When the XTONE(Duo) is used with the software, some necessary settings need to be made to achieve the best use.

This section takes the effect software BIAS FX as an example, Explain the corresponding setting method. Other software can be set by referring to this method.
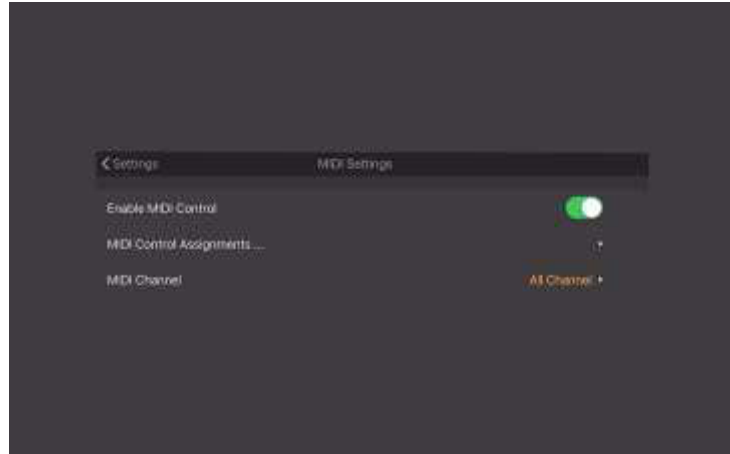
**Settings of BIAS FX on iOS:**

①Open BIAS FX, and enter the settings.



②Select the input channel. If XTONE(Duo)'s INL input is connected, select channel 1; if XTONE(Duo)'s INR input is connected, select channel 2. Then enable the ultra low latency and background audio mode.
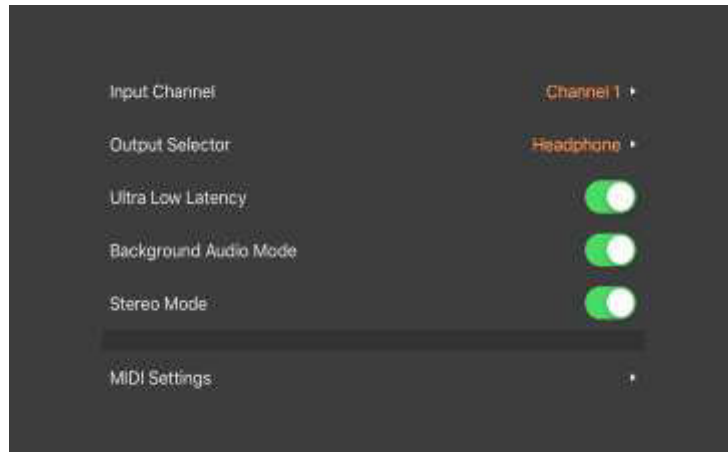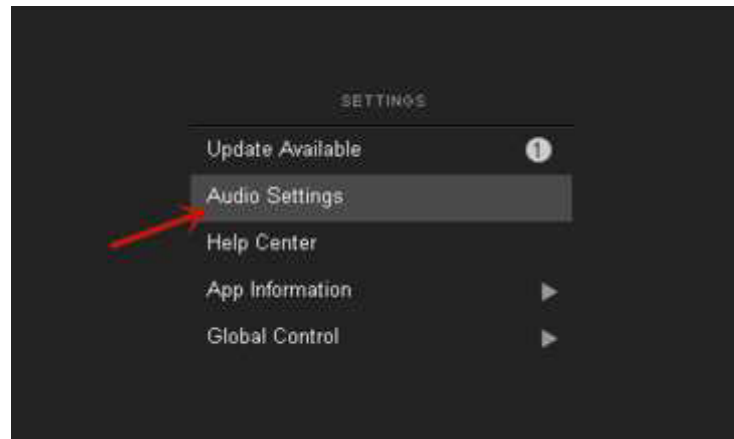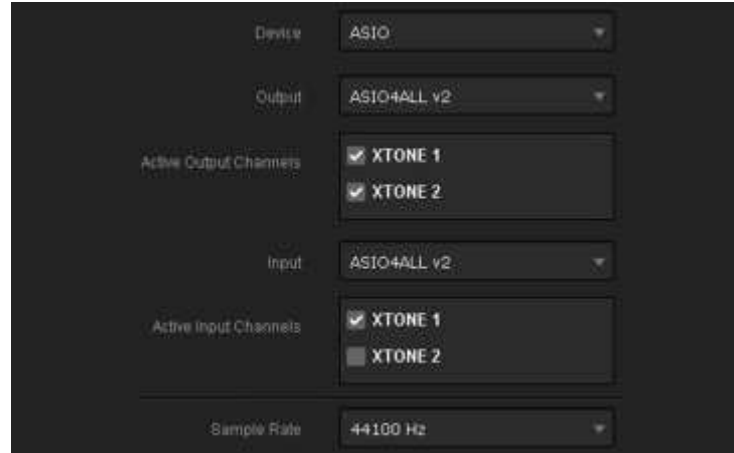
③Enter MIDI settings, and enable MIDI control.



④The basic settings are complete. Read the MIDI chapters below for more MIDI setting details.
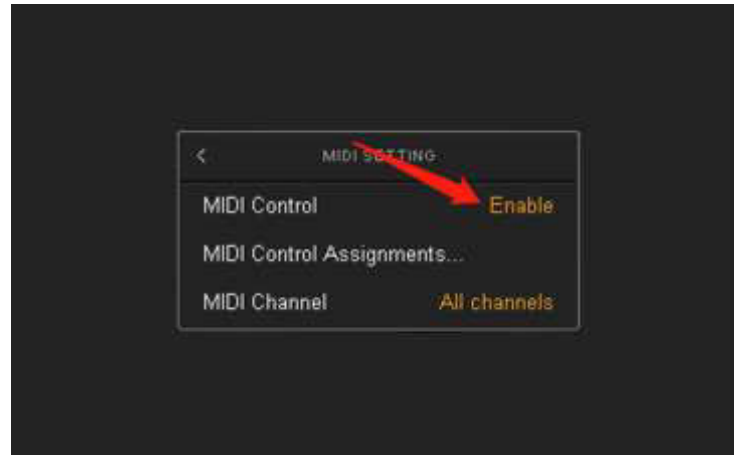
**Settings of BIAS FX on PC:**

①Open BIAS FX, and enter the settings.

②Select active input channels. If XTONE(Duo)'s INL input is connected, select XTONE1; if XTONE(Duo)'s INR input is connected, select XTONE2. Then adjust the Audio Buffer Size to 64 samples and activate XTONE as MIDI Inputs.



③Enable MIDI control.



④The basic settings are complete. Read the MIDI chapters below for more MIDI setting details.

**Settings of BIAS FX on Mac:**

① Enter Preferences-Audio, choose XTONE as the input and output device, and adjust the I/O buffer size to the minimum.



② Tick XTONE in the Preferences-MIDI-Input. (If there is no input option in the MIDI field, please enter the advanced settings to enable the additional MIDI

options)



③ Basic settings are completed.

# MIDI Control

XTONE has 3 smart foot switches and 1 expression pedal interface for playing control. When you press them, XTONE(Duo) sends MIDI CC commands out via the USB and MIDI OUT interface.

The expression pedal recommended ZOOM FP02M.

Nowadays, software effects have very powerful MIDI control systems. With XTONE's foot switches and expression pedal, you can do whatever control you want. For details, read the MIDI specification chapter below.

## MIDI Command Group

XTONE(Duo) has three MIDI command groups, each group corresponds to 4 different value of MIDI CC commands.

Long press A, B, C foot switch can be switched to the corresponding group, different groups show different LED colors: A group - green; B group - blue; C group - red.

Different MIDI command groups, 3 foot switches + 1 expression pedal can send 4 different MIDI commands, which means XTONE Pro can send 3 x 4 = 12 different MIDI commands, control 12 different parameters in the software.

The following lists the MIDI CC values corresponding to the foot switch and expression pedal in the three MIDI command groups.

| A group - green | | B group - blue | | C group – red | |
|---|---|---|---|---|---|
| FS A | CC 10 | FS A | CC 22 | FS A | CC 30 |
| FS B | CC 20 | FS B | CC 24 | FS B | CC 43 |
| FS C | CC 11 | FS C | CC 25 | FS C | CC 42 |
| EXP | CC 7 | EXP | CC 4 | EXP | CC 1 |

## MIDI Command Mode

XTONE(Duo) has 3 MIDI command modes, press A+B switch to mode 1, press A+C to mode 2, press B+C to mode 3. When the switch is successful, mode 1 blinking green, mode 2 blinking blue, mode 3 blinking red.

Different APP may use different command modes, **If you find an abnormality when using foot switch, you should try switching to the other two control modes.**

**Mode 1**，For JamUp, BIAS FX, AmpKit+, etc. **Most other software effects also work for this mode.**

**Mode 2**，For Guitar Rig(Disable Hold Mode), Amplitube(Switch Presets), VocaLive(Switch Presets), etc.

**Mode 3**，For Guitar Rig(Enable Hold Mode), ToneStack, AmpliTube(Toggle Mode), VocaLive(Toggle Mode), etc.

| Mode 1 Blinking Green | Mode 2 Blinking Blue | Mode 3 Blinking Red |
|---|---|---|
| Press A+B | Press A+C | Press B+C |
| For JamUp, BIAS FX, AmpKit+, etc. | For Guitar Rig(Disable Hold Mode), Amplitube(Switch Presets), VocaLive(Switch Presets), etc. | For Guitar Rig(Enable Hold Mode), ToneStack, AmpliTube(Toggle Mode), VocaLive(Toggle Mode), etc. |

**Expression Pedal**

Polarity of the EXP IN of XTONE/XTONE Pro
Tip: Input
Ring: Output
Sleeve: Ground



XTONE/XTONE Pro needs to use RTS expression pedal. Please refer to http://expressionpedals.com/list-of-expression-pedals to ensure that the polarity of your expression pedal is consistent with XTONE / XTONE Pro. Mismatched polarity may result in damage to the XTONE / XTONE Pro.

We recommend ZOOM FP02M as the expression pedal of XTONE/XTONE Pro. Also,the expression pedal with polarity switch such as Nektar NX-P works, too.

If you can't confirm the polarity of the expression pedal, please MIDI map a wah or volume parameter in the effects app you use, and then step on the expression pedal from the beginning to the end at a constant speed, and determine whether the range of the parameter matches and whether the control is linear. If not, it means the polarity does not match.

## MIDI PC Control Commands

XTONE can switch to the MIDI PC (Program Change) control commands. If you don't need MIDI PC to control your effects, please ignore this part.

When your product is not powered on (not connected to any device or external power), press and hold the Footswitch A and then power on (connect to the device) to turn on the XTONE MIDI PC command mode. After the indicator blinks green one time, release the footswitch. The MIDI PC values are as follows:

| A group - green | | B group - blue | | C group – red | |
|---|---|---|---|---|---|
| FS A | PC 0 | FS A | PC 3 | FS A | PC 6 |
| FS B | PC 1 | FS B | PC 4 | FS B | PC 7 |
| FS C | PC 2 | FS C | PC 5 | FS C | PC 8 |
| EXP | CC 7 | EXP | CC 4 | EXP | CC 1 |

If you want to turn off the MIDI PC (Program Change) function and back to default MIDI CC Mode, just repeat the above steps to switch back.

# MIDI Specification

Most of the APP has a MIDI control function. To make the foot switch and expression pedal control the APP, you need to specify their functions in the APP's MIDI control function list.
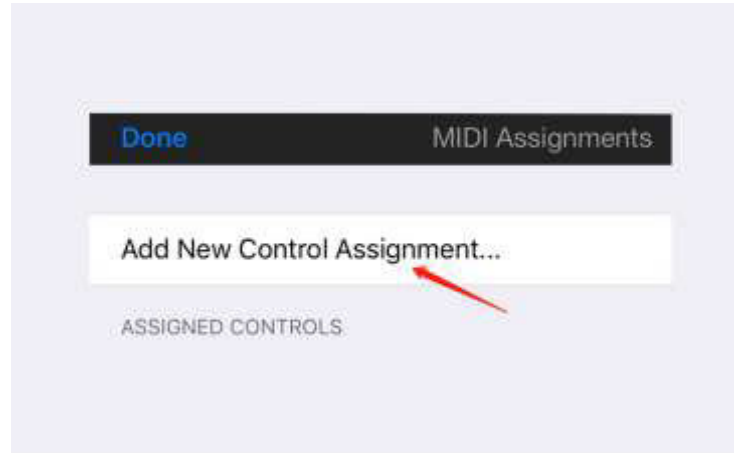
Take BIAS FX as an example to explain how to specify MIDI function, and other software effects refer to this please.
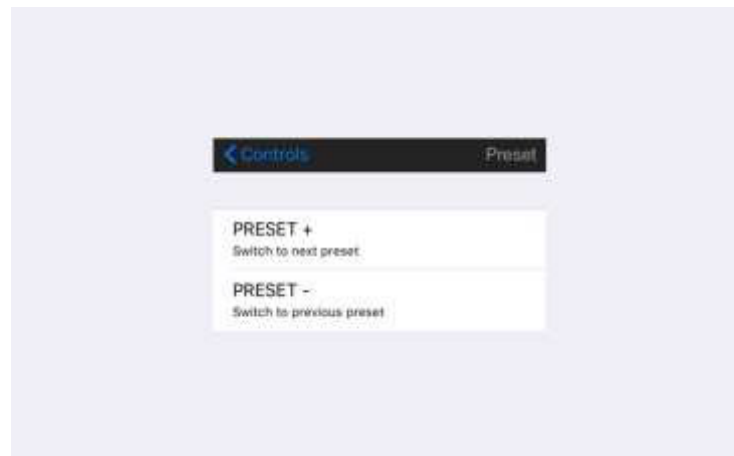
**MIDI Specification of BIAS FX on iOS:**

**Example 1 - Switch Presets**

①Open BIAS FX, go to Settings, enter MIDI Setup, click MIDI Control Assignments, and click Add New Control Assignment.

②Click Preset, then click Preset +.



③Click MIDI Learn, the"Waiting for MIDI CC" appears on the screen. Press the foot switch on XTONE(Duo) that you want to use to switch presets. Then MIDI function is successfully specified. Go back to the main page and you can press the foot switch to switch presets.

Waiting for MIDI CC...

| Done | MIDI Assignments | Edit |
|---|---|---|
| Add New Control Assignment... | | |
| ASSIGNED CONTROLS | | |
| Switch to next preset | | CC 11 |

## Example 2 - Toggle Pedal

①Use XTONE(Duo)'s foot switch to toggle a stomp box. Enter main page of BIAS FX, select the pedal that you want to control.

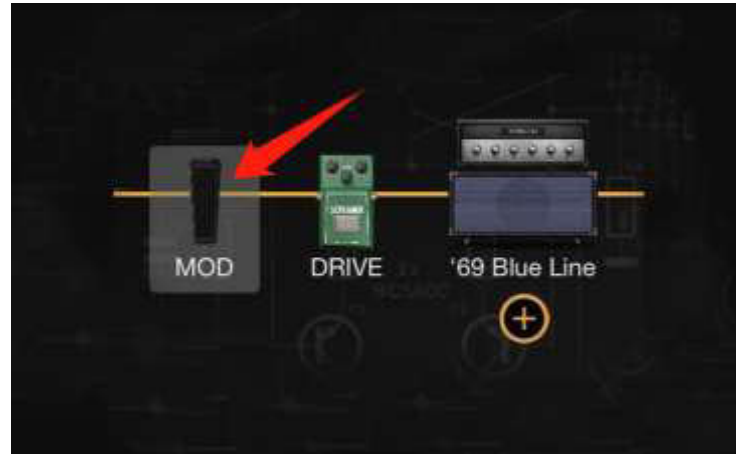②Long press the indicator position of the pedal to open the MIDI specification.



③Click to start MIDI Learn. "Waiting for MIDI CC" appears on the screen. Press the foot switch on XTONE(Duo) that you want to use to toggle this pedal. Then MIDI function is successfully specified.



**Example 3 - Control Wah Pedal**

①Use the expression pedal to control the wah. Connect the expression pedal to XTONE, enter the BIAS FX main page, open and select the wah pedal.



②Long press the position of the pedal to open the MIDI specification.



③Click to start MIDI Learn, the"Waiting for MIDI CC" appears on the screen. Press the expression pedal, then MIDI function is successfully specified.
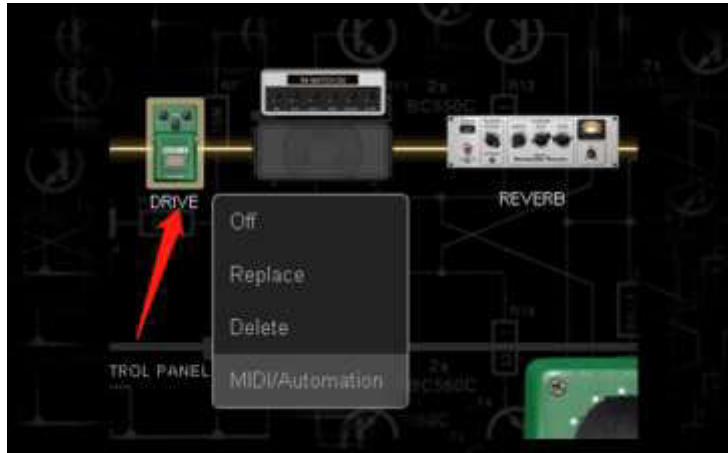
**MIDI Specification of BIAS FX on PC:**

**Example 1 - Switch Presets**

The MIDI specification settings of switching presets for PC is the same as iOS. Please refer to the previous explanation.

**Example 2 - Toggle Pedal**

①Use XTONE(Duo)'s foot switch to toggle a stomp box. Enter the main page of BIAS FX, Right click on the pedal that you want to control.
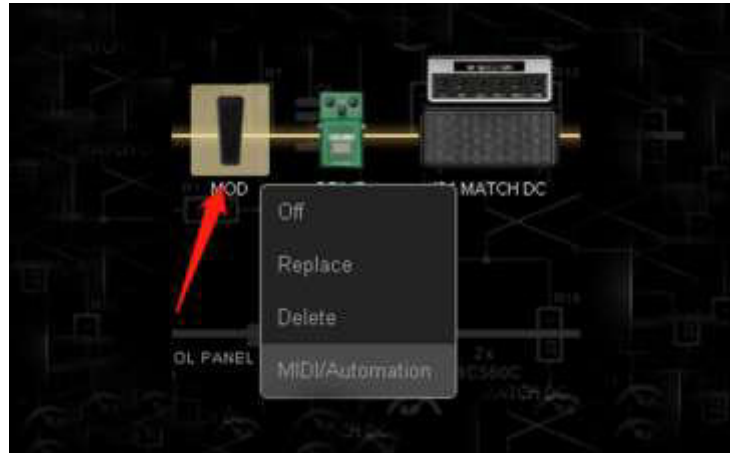
② Then click MIDI/Automation to open MIDI specification.
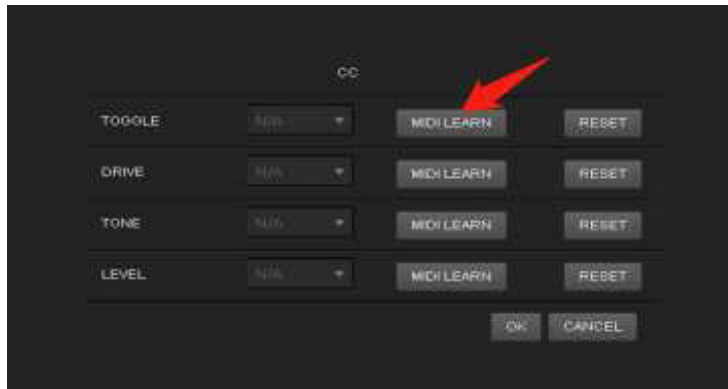


③Click "MIDI Learn" at TOGGLE to start MIDI specification. the"Waiting for MIDI CC" appears on the screen. Press the foot switch on XTONE(Duo) that you want to use to toggle this pedal. Then MIDI function is successfully specified.

**Example 3 - Control Wah Pedal**

①Use the expression pedal to control the wah. Connect the expression pedal to XTONE, enter the BIAS FX main page, open the wah pedal, and right click on it.



②Then click MIDI/Automation to open MIDI specification.



③ Click "MIDI LEARN" at WAH to start MIDI specification, Waiting for MIDI CC appears on the screen. Press the expression pedal, then MIDI function is successfully specified.

**MIDI Specification of BIAS FX on Mac:**

① Create a new software instrument track and chose BIAS FX2 in AU MIDI-controlled effects.



Set as shown below, then click 〝Create〞.



② Open BIAS FX2 plugin.

Click on the "Side Chain" column in the upper right corner and tick the input you want to set.



③ At this time, audio signal output is enabled, and BIAS FX2 now can be controlled through MIDI. Use MIDI Learn to set the pedals. The method is not

repeated here. Since the software instrument track itself does not have a real-time audio recording function, we need to send audio signal to an audio track for recording via Bus. Click Bus to select the bus you want to use (here Bus 5 is taken as an example).

④ Create a new audio track, select the bus you set in the previous step for audio input, and click "Create".
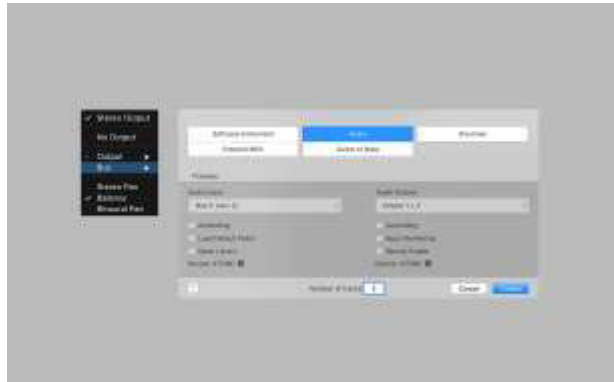


⑤ Turn on the record enable button and the input monitoring button. All the settings are completed.
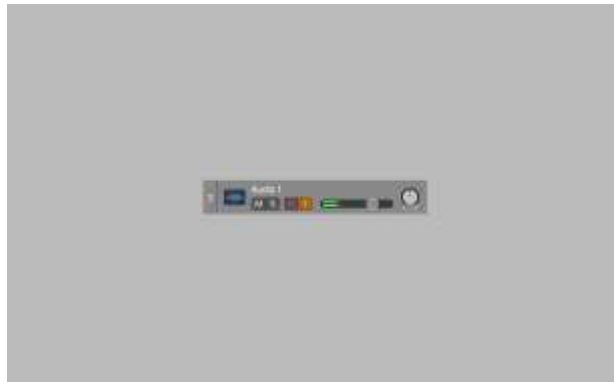
# XTONE Duo Instructions

The function and performance of XTONE Duo are the same as XTONE, so most of the methods of use can refer to XTONE. The only difference between it and XTONE is that it replaces the original expression pedal interface with the microphone input interface.

This means that the XTONE Duo has two audio input channels, one for guitar input (left channel, INL), one for microphone input (right channel, INR), and the microphone input channel with up to 50dB gain adjustment knob.
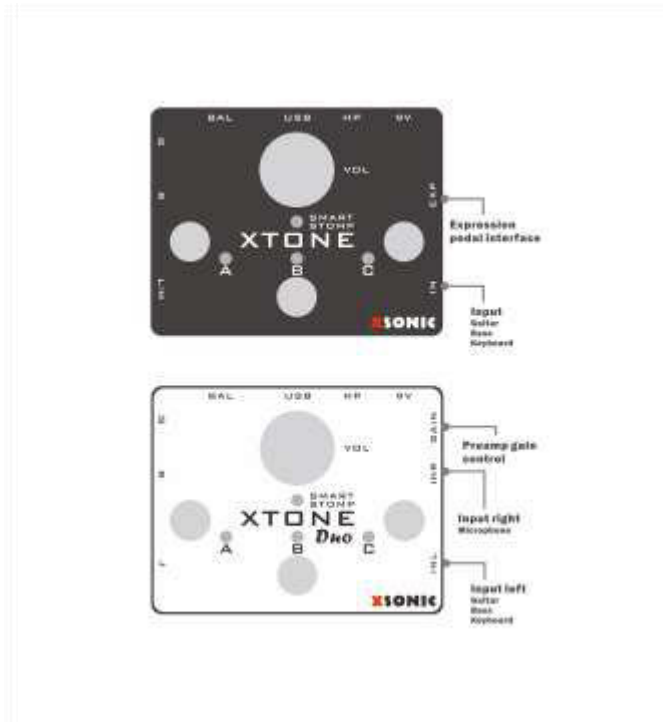


**Phantom Power:**

The microphone input channel has phantom power output, that means you can use the condenser mic.

**Long press button A for 5 seconds will toggle the power.** Four LED lights green means turn on the power; Four LED lights red means turn off the power; Default is turn off. When not using a condenser microphone, please turn off the phantom power for reducing the noise.

**XLR Adapter:**

You can plug in the XLR adapter for the microphone that has XLR interface.

# Parameters

**XTONE**

Input impedance：1M ohms

Unbalanced output impedance：100 ohms

Balanced output impedance：200 ohms

Frequency response：10Hz ~ 21kHz

Sampling Rate：44.1k, 48k, 88.2k, 96k, 176.4k, 192kHz

Sampling depth：24bit

Dynamic Range：108dB ;

THD+N：0.001%

USB Power input：5V DC

9V Power input：9V ⊕—◖—⊖ DC

Power consumption：100mA

Dimensions：129mm(D) x 98(W) x 54mm(H)

Weight：355g

**XTONE Duo**

Input impedance：1M ohms(INL) ; 100K ohms(INR)

Unbalanced output impedance：100 ohms

Balanced output impedance：200 ohms

Frequency response：10Hz ~ 21kHz

Sampling Rate：44.1k, 48k, 88.2k, 96k, 176.4k, 192kHz

Sampling depth：24bit

Dynamic Range：108dB ;

THD+N：0.001%

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