

**USER MANUAL** 

# **Table of Contents**

Contents	2
Front Panel Overview	3
Rear Panel Overview	5
Firmware update	6
Saving presets	7
External Control Setup	8
Expression pedal & single switch (creating macros)	8
Double switch	9
Expression pedal calibration	10
Reverb Models	11
SHIMMER 1	11
SHIMMER 2	13
HALL	15
ROOM	17
CHAMBER	19
CHURCH	21
PLATE	23
SPRING	25
SWELL	27
GATE	29
REVERSE	30
EARY REF	32
EXTREME	33
ETHEREAL	34
BLOOM	35
MAGNETIC	36
Global Setup	37
Preset Setup	40
Safe Mode	41
Temporary Mode	42
Interface Mode	43
Included applications	44
MIDI Specifications	45
Features	46
System Requirements	47
AmpliTube X-GEAR series	48

2 Contents

## **Front Panel Overview**



#### 1. MODEL encoder

**Turn** the MODEL encoder to select the preferred X-SPACE model among the 16 advanced algorithms available.

Push to go back when browsing menus.

#### 2. PRESET encoder

**Turn** the PRESET encoder to browse among the 300 preset slots available in the machine.

**Push** to save a preset and choose its name and bank position.

#### 3. PARAMETER encoder

Each model inside X-SPACE has its own parameter set.

**Push** the PARAMETER encoder to access the additional parameters of the selected model. The last edited parameter is always available by pressing or rotating the parameter encoder.

Hold the PARAMETER encoder to access the global and preset setups.

#### 4. TIME knob

The TIME knob controls the reverb tail length.

#### 5. PRE-DELAY knob

The PRE-DELAY knob controls mainly the pre-delay amount.

#### 6. COLOR knob

The COLOR knob controls the frequency response of the reverb.

#### 7. MOD knob

The MODULATION knob controls the amount of modulation happening in the reverb.

#### 8. MIX knob

The MIX knob controls the balance of dry and wet signal. At 0% the signal is fully dry, while at 100% the signal is fully wet. At around 85% the dry and wet signal have the same level.

#### 9. A, B & C LEDs

Green if preset is active.

Amber if preset has been edited.

Blinking amber when browsing among banks.

Off if bypassed.

#### 10. A, B & C footswitches

**Press** to engage or bypass preset of the current bank.

**Hold while preset is ON** to access the X-MODE for selected model.

**Hold while preset is OFF** to activate that preset temporary while the footswitch is held down.

Press A+B to select a lower bank.

Press B+C to select a higher bank.

## **Rear Panel Overview**



#### 1. INPUT L & R

Plug your instrument in here.

If you have a mono instrument use only the left input.

#### 2. OUTPUT L & R

Connect to an amplifier, stomp box, PA or other devices.

If you use X-SPACE with mono output use only the left output.

#### 3. MIDI IN

Connect to external MIDI controllers to automatically browse presets and modulate parameters via control changes.

#### 4. MIDI OUT

Connect to external MIDI devices.

Through this port X-SPACE can send out MIDI messages anytime a switch is pressed or a knob is turned.

#### 5. EXT. CONTROL

Hook up an external expression or single switch pedal to control any combinations of parameters with a single action.

Hook up a double switch pedal to easily move among banks or presets.

#### 6. USB

Use this port to connect X-SPACE to your Mac/PC as an audio interface and for using the Librarian app to organize and load presets. It can also be used to send or receive MIDI signals.

#### 7. POWER 9V DC

Power the pedal via a 9V DC center negative power supply.

At least 260mA.

# Firmware update

Before doing anything with your X-GEAR pedal it's highly recommended to hook it up to the X-GEAR Librarian and check if any firmware update is available to make sure you are running the most updated and stable firmware available.

#### To do so:

- 1. Install the X-GEAR librarian on your computer following the instructions found in the box.
- 2. Connect your pedal to your computer using the provided USB cable.
- 3. Launch the X-GEAR librarian and select the connected pedal.
- 4. Click the top right gear icon and click "Check for updates."
- 5. If the librarian or the X-GEAR need to be updated, you'll be asked to do so and by clicking "Update" you'll start the updating process.

After updating you can start using your X-GEAR pedal.

# **Saving presets**

To quickly save a preset, hold down the PRESET encoder until the display shows SAVED. The preset will be saved with the same name in the same location.

To change name or location when saving a preset:

- 1. Press the PRESET encoder to enter the saving process.
- 2. The first letter of the preset's name starts blinking indicating the cursor's position.
- 3. Rename the preset:
  - a. Turn the PRESET encoder to select a character.
  - b. Turn the MODEL encoder to change the cursor's position.
- 4. Push the PRESET encoder to confirm the name.
- 5. The display shows a location (bank-number and slot).
- 6. Rotate the PRESET encoder to select the desired location.
- 7. Push the PRESET encoder to select the location an save the preset with the chosen name in the chosen location.





N.B. When choosing a different location saving a preset will overwrite the preset that was previously stored in that location and the new one gets copied over it.

# **External Control Setup**

The EXT. CONTROL jack can be connected to various types of external pedals:

- Expression pedal
- Single switch
- · Double switch



#### Expression pedal & single switch (creating macros)

An expression pedal and a single switch pedal can be assigned to a parameter or to various parameters to create macros. A macro is an ensemble of parameters, which can be modulated simultaneously via the external control.

To setup a macro on the selected preset using an expression pedal or a single switch pedal, do as follows:

- 1. Hook it up to the EXT. CONTROL.
- 2. Hold the PARAMETER encoder and choose GLOBAL SETUP.
- 3. Select EXT. CTRL and choose one of the following:
  - a. TRS EXP PEDAL: if you are using a TRS type expression pedal.
  - b. RTS EXP PEDAL: if you are using a RTS type expression pedal.
  - c. N.O. SWITCH: if you are using a normally open single switch pedal.
  - d. N.C. SWITCH: if you are using a normally close single switch pedal.
- 4. Press the MODEL knob to go back and choose PRESET SETUP.
- 5. In the PRESET SETUP menu, select ON from the EXT. CTRL option.
- 6. Come back to the PRESET SETUP menu, select EXT. LEARN and choose LEARN.
- 7. While LEARN A is being displayed, position the parameters of the preset as you wish they would be when the external control is in position A, then press the PRESET encoder when the A setup is done.
- 8. While LEARN B is being displayed, position the parameters of the preset as you wish they would be when the external control is in position B, then press the PRESET encoder when the B setup is done.
- 9. Once the SAVE button (PRESET encoder) is pressed, the pedal returns to its default behavior and the macro is assigned to the external control.

#### N.B.

In a single switch pedal position A refers to the off status. In an expression pedal position A refers to the heel status.

In a single switch pedal position B refers to the on status. In an expression pedal position B refers to the tip status.

The only difference between a single switch or an expression pedal is that with the first one changing from position A to position B is an instant transition (pressing the footswitch), while the second one is a smooth transition (moving the expression pedal).

#### Double switch

Connect a double switch pedal to browse among presets or banks more easily.

To setup a double switch pedal do as follows:

- 1. Hook it up to the EXT. CONTROL.
- 2. Hold the PARAMETER encoder and choose GLOBAL SETUP.
- 3. Select EXT. CTRL and choose N.O. DUAL SWITCH, if your double switch pedal is normally open or N.C. DUAL SWITCH, if your double switch pedal is normally closed.
- 4. In the GLOBAL SETUP browse to DUAL SWITCH MODE and choose BANK, if you want to use your double switch pedal to move among banks or PRESET, if you want it to move among presets.

# **Expression pedal calibration**

If you feel that your expression pedal doesn't work as expected, you may need to calibrate it to get its full functionality.

To calibrate an expression pedal do as follows:

- 1. Hook it up to the EXT. CONTROL in the rear panel.
- 2. Hold the PARAMETER encoder and choose GLOBAL SETUP.
- 3. In the GLOBAL SETUP select EXP. CALIBRATION.
- 4. While HEEL is being displayed move your expression pedal to its heel position then press the PARAMETER encoder to confirm.
- 5. While TIP is being displayed move your expression pedal to its tip position then press the PARAMETER encoder to confirm.
- 6. When the display shows DONE, the calibration is set.

### **Reverb Models**

#### SHIMMER 1

A complex shimmer that offers increasing feedback. The pitch can go from 1/4 semitone up to an octave creating many different customizable shifting voicings.

#### **Parameters**

- **TIME**: controls the reverb tail length. From 5 s to 20 s.
- PRE-DELAY: not available.
- **COLOR**: controls the frequency response of the reverb. At minimum the reverb gets darker, at maximum the reverb gets brighter. Set in the middle the reverb is flat.

  From -10 to +10.
- MOD: controls the amount of modulation of the reverb.
   From 0% to 100%.
- MIX: controls the balance of dry and wet signal. At 0% the signal is fully dry, while at 100% the signal is fully wet. At around 85% the dry and wet signal have the same level. From 0% to 100%.
- **SHIFT**: controls the pitch of the note generated by the shimmer. It can be set to perfect pitch or fine-tuned with 1/8 of a tone.

From -12 semitones to +12 semitones.

- **SIZE**: controls the dimension of the ambience from which the reverb is generated. With size set to minimum the pitch build up is quicker, set to max the pitch build up is slower. From 50% to 150%.
- MOD RATE: controls the rate of the reverb modulation.

From 0.1 Hz to 7 Hz.

- MODE: chooses among 3 modes.
  - NO PICH: offers the shimmer characteristics without the feedback build up.
  - SINGLE: the pitch of the feedback keeps building up according to the SHIFT parameter.
  - DUAL: the pitch of the feedback keeps building up according to the SHIFT parameter both upwards and downwards.
- X-MODE: engages the most possible tail length.

ON or OFF.

11

## **SHIMMER 1 Control Changes**

Parameter	Control Change #	Values
TIME	21	0 – 127
COLOR	23	0 – 127
MOD	24	0 – 127
MIX	25	0 - 127
SHIFT	46	0 - 127
SIZE	47	0 - 127
MOD RATE	48	0 - 127
MODE	49	0 - 127
X-MODE	13	0 - 127

When a parameter range is not linear its values are equally divided among the 128 steps of a Control Change value.

#### SHIMMER 2

Shimmer 2 differs from the first one because there is no buildup in the feedback and the two different pitched voices can be set in parallel to create custom harmonizations.

#### **Parameters**

TIME: controls the reverb tail length.
 From 6 s to 20 s.

PRE-DELAY: not available.

COLOR: controls the frequency response of the reverb. At minimum the reverb gets darker, at maximum
the reverb gets brighter. Set in the middle the reverb is flat.
 From -10 to +10.

• **MOD**: controls the amount of modulation of the reverb. From 0% to 100%.

- MIX: controls the balance of dry and wet signal. At 0% the signal is fully dry, while at 100% the signal is fully wet. At around 85% the dry and wet signal have the same level. From 0% to 100%.
- **SHIFT 1**: controls the pitch of the note generated by the shimmer of the first voice. It can be set to perfect pitch or fine-tuned with 1/8 of a tone.

From -12 semitones to +12 semitones.

GAIN 1: controls the level of the first voice.
 From 0 to 10.

• **SHIFT 2**: controls the pitch of the note generated by the shimmer of the second voice. It can be set to perfect pitch or fine-tuned with 1/8 of a tone.

From -12 semitones to +12 semitones.

• GAIN 2: controls the level of the second voice.

From 0 to 10.

• **SIZE**: controls the dimension of the ambience from which the reverb is generated. From 50% to 150%.

• MOD RATE: controls the rate of the reverb modulation.

From 0.1 Hz to 7 Hz.

- MODE: chooses among 3 modes.
  - DUAL: the shimmer offers both pitched voices.
  - SINGLE: the shipper offers only the first pitched voice.
  - NO PITCH: the shimmer offers its characteristics without the pitched voices.
- **X-MODE**: engages the most possible tail length.

ON or OFF.

# **SHIMMER 2 Control Changes**

Parameter	Control Change #	Values
TIME	21	0 – 127
COLOR	23	0 – 127
MOD	24	0 – 127
MIX	25	0 - 127
SHIFT 1	46	0 - 127
GAIN 1	47	0 - 127
SHIFT 2	48	0 - 127
GAIN 2	49	0 - 127
SIZE	47	0 - 127
MOD RATE	48	0 - 127
MODE	49	0 - 127
X-MODE	13	0 - 127

When a parameter range is not linear its values are equally divided among the 128 steps of a Control Change value.

#### HALL

This model recreates the ambience of a live concert hall with controlled decay and a reverb time range from 1 to 9 seconds to replicate from smaller venues up to larger clubs. With an advanced parameter set that features a 3-band decay trimmer, the sound of the hall can be highly tweaked to always find the perfect tail in which to place the instrument.

#### **Parameters**

• TIME: controls the reverb tail length.

From 1 s to 9 s.

· PRE-DELAY: controls the pre-delay amount.

From 0 ms to 1000 ms.

• **COLOR**: controls the frequency response of the reverb. At minimum the reverb gets darker, at maximum the reverb gets brighter. Set in the middle the reverb is flat.

From -10 to +10.

• MOD: controls the amount of modulation of the reverb.

From 0% to 100%.

• MIX: controls the balance of dry and wet signal. At 0% the signal is fully dry, while at 100% the signal is fully wet. At around 85% the dry and wet signal have the same level. From 0% to 100%.

• HPF: controls the cut-off frequency of the high-pass filter.

From 22 Hz to 1000 Hz.

• MOD RATE: controls the rate of the reverb modulation.

From 0.1 Hz to 7 Hz.

• **SIZE**: controls the dimension of the ambience from which the reverb is generated. From 50% to 150%.

· L DECAY: controls the low-frequency band decay.

From -10 to 10.

M DECAY: controls the mid-frequency band decay.

From -10 to 10.

• **H DECAY**: controls the high-frequency band decay.

From -10 to 10.

• X-MODE: engages the most possible tail length.

ON or OFF.

## **HALL Control Changes**

Parameter	Control Change #	Values
TIME	21	0 – 127
PRE-DELAY	22	0 – 127
COLOR	23	0 – 127
MOD	24	0 – 127
MIX	25	0 - 127
HPF	46	0 - 127
MOD RATE	47	0 - 127
SIZE	48	0 - 127
L DECAY	49	0 - 127
M DECAY	50	0 - 127
H DECAY	51	0 - 127
X-MODE	13	0 - 127

When a parameter range is not linear its values are equally divided among the 128 steps of a Control Change value.

#### **ROOM**

This model adds the third dimension of a room to the direct sound in order to place it in a physical space and obtain a more natural sounding performance. Thanks to the 3-band decay trimmer any room can be recreated giving infinite possibilities. Its time range goes from 0.2 to 3 seconds offering a great option for a reverb that adds character without noticing the reverb itself.

#### **Parameters**

• **TIME**: controls the reverb tail length. From 0.2 s to 3 s.

• PRE-DELAY: controls the pre-delay amount.

From 0 ms to 1000 ms.

COLOR: controls the frequency response of the reverb. At minimum the reverb gets darker, at maximum
the reverb gets brighter. Set in the middle the reverb is flat.
 From -10 to +10.

• MOD: controls the amount of modulation of the reverb.

From 0% to 100%.

• MIX: controls the balance of dry and wet signal. At 0% the signal is fully dry, while at 100% the signal is fully wet. At around 85% the dry and wet signal have the same level. From 0% to 100%.

• HPF: controls the cut-off frequency of the high-pass filter.

From 22 Hz to 1000 Hz.

• MOD RATE: controls the rate of the reverb modulation.

From 0.1 Hz to 7 Hz.

• **SIZE**: controls the dimension of the ambience from which the reverb is generated. From 50% to 150%.

· L DECAY: controls the low-frequency band decay.

From -10 to 10.

• M DECAY: controls the mid-frequency band decay.

From -10 to 10.

• **H DECAY**: controls the high-frequency band decay.

From -10 to 10.

• X-MODE: engages the most possible tail length.

ON or OFF.

## **ROOM Control Changes**

Parameter	Control Change #	Values
TIME	21	0 – 127
PRE-DELAY	22	0 – 127
COLOR	23	0 – 127
MOD	24	0 – 127
MIX	25	0 - 127
HPF	46	0 - 127
MOD RATE	47	0 - 127
SIZE	48	0 - 127
L DECAY	49	0 - 127
M DECAY	50	0 - 127
H DECAY	51	0 - 127
X-MODE	13	0 - 127

When a parameter range is not linear its values are equally divided among the 128 steps of a Control Change value.

#### **CHAMBER**

This model offers the typical chamber sound found in many professional recording studios and provides a highly reflected and bright tail that's perfect for aggressive reverb tones. Its time range goes from 0.6 to 3 seconds like the hall model, but the chamber has way more character and vibe.

#### **Parameters**

• **TIME**: controls the reverb tail length. From 0.6 s to 3 s.

• **PRE-DELAY**: controls the pre-delay amount. From 0 ms to 1000 ms.

• **COLOR**: controls the frequency response of the reverb. At minimum the reverb gets darker, at maximum the reverb gets brighter. Set in the middle the reverb is flat.

From -10 to +10.

• **MOD**: controls the amount of modulation of the reverb. From 0% to 100%.

- MIX: controls the balance of dry and wet signal. At 0% the signal is fully dry, while at 100% the signal is fully wet. At around 85% the dry and wet signal have the same level. From 0% to 100%.
- HPF: controls the cut-off frequency of the high-pass filter.
   From 22 Hz to 1000 Hz.
- MOD RATE: controls the rate of the reverb modulation.
   From 0.1 Hz to 7 Hz.
- **SIZE**: controls the dimension of the ambience from which the reverb is generated. From 50% to 150%.
- L DECAY: controls the low-frequency band decay.
   From -10 to 10.
- M DECAY: controls the mid-frequency band decay.
   From -10 to 10.
- H DECAY: controls the high-frequency band decay.
   From -10 to 10.
- **X-MODE**: engages the most possible tail length.
- ON or OFF.

# **CHAMBER Control Changes**

Parameter	Control Change #	Values
TIME	21	0 – 127
PRE-DELAY	22	0 – 127
COLOR	23	0 – 127
MOD	24	0 – 127
MIX	25	0 - 127
HPF	46	0 - 127
MOD RATE	47	0 - 127
SIZE	48	0 - 127
L DECAY	49	0 - 127
M DECAY	50	0 - 127
H DECAY	51	0 - 127
X-MODE	13	0 - 127

When a parameter range is not linear its values are equally divided among the 128 steps of a Control Change value.

#### **CHURCH**

This model has the longest tail in order to reproduce the typical reverb sound found in churches. Its reverb time has a range from 3 to 20 seconds to replicate from the smallest chapel to the biggest cathedrals.

#### **Parameters**

- **TIME**: controls the reverb tail length. From 3 s to 20 s.
- PRE-DELAY: controls the pre-delay amount.
   From 100 ms to 1000 ms.
- COLOR: controls the frequency response of the reverb. At minimum the reverb gets darker, at maximum
  the reverb gets brighter. Set in the middle the reverb is flat.
   From -10 to +10.
- MOD: controls the amount of modulation of the reverb.
   From 0% to 100%.
- MIX: controls the balance of dry and wet signal. At 0% the signal is fully dry, while at 100% the signal is fully wet. At around 85% the dry and wet signal have the same level.
   From 0% to 100%.
- HPF: controls the cut-off frequency of the high-pass filter.
   From 22 Hz to 1000 Hz.
- MOD RATE: controls the rate of the reverb modulation.
   From 0.1 Hz to 7 Hz.
- **SIZE**: controls the dimension of the ambience from which the reverb is generated. From 50% to 200%.
- L DECAY: controls the low-frequency band decay.
   From -10 to 10.
- M DECAY: controls the mid-frequency band decay.
   From -10 to 10.
- H DECAY: controls the high-frequency band decay.
   From -10 to 10.
- X-MODE: engages the most possible tail length. ON or OFF.

## **CHURCH Control Changes**

Parameter	Control Change #	Values
TIME	21	0 – 127
PRE-DELAY	22	0 – 127
COLOR	23	0 – 127
MOD	24	0 – 127
MIX	25	0 - 127
HPF	46	0 - 127
MOD RATE	47	0 - 127
SIZE	48	0 - 127
L DECAY	49	0 - 127
M DECAY	50	0 - 127
H DECAY	51	0 - 127
X-MODE	13	0 - 127

When a parameter range is not linear its values are equally divided among the 128 steps of a Control Change value.

#### **PLATE**

This model can recreate different iconic plate reverbs. Its time has a range from 0.5 to 5 seconds and the flavor is highly customizable through custom parameters, which let you emulate different types of plates by emphasizing the decay of certain frequencies and dampening others.

#### **Parameters**

• **TIME**: controls the reverb tail length. From 0.5 s to 5 s.

• **PRE-DELAY**: controls the pre-delay amount. From 0 ms to 1000 ms.

• **COLOR**: controls the frequency response of the reverb. At minimum the reverb gets darker, at maximum the reverb gets brighter. Set in the middle the reverb is flat.

From -10 to +10.

• **MOD**: controls the amount of modulation of the reverb. From 0% to 100%.

• MIX: controls the balance of dry and wet signal. At 0% the signal is fully dry, while at 100% the signal is fully wet. At around 85% the dry and wet signal have the same level. From 0% to 100%.

HPF: controls the cut-off frequency of the high-pass filter.
 From 22 Hz to 1000 Hz.

• **MOD RATE**: controls the rate of the reverb modulation. From 0.1 Hz to 7 Hz.

• **SIZE**: controls the dimension of the ambience from which the reverb is generated. From 50% to 200%.

L DECAY: controls the low-frequency band decay.
 From -10 to 10.

M DECAY: controls the mid-frequency band decay.
 From -10 to 10.

H DECAY: controls the high-frequency band decay.
 From -10 to 10.

 X-MODE: engages the most possible tail length. ON or OFF.

## **PLATE Control Changes**

Parameter	Control Change #	Values
TIME	21	0 – 127
PRE-DELAY	22	0 – 127
COLOR	23	0 – 127
MOD	24	0 – 127
MIX	25	0 - 127
HPF	46	0 - 127
MOD RATE	47	0 - 127
SIZE	48	0 - 127
L DECAY	49	0 - 127
M DECAY	50	0 - 127
H DECAY	51	0 - 127
X-MODE	13	0 - 127

When a parameter range is not linear its values are equally divided among the 128 steps of a Control Change value.

#### **SPRING**

This is a customizable spring reverb model, which emulates the vintage spring modules typically installed on guitar amplifiers.

#### **Parameters**

- **TIME**: controls the reverb tail length. From 0.2 s to 4 s.
- PRE-DELAY: controls the pre-delay amount.
   From 0 ms to 1000 ms.
- COLOR: controls the frequency response of the reverb. At minimum the reverb gets darker, at maximum
  the reverb gets brighter. Set in the middle the reverb is flat.
   From -10 dB to +10 dB.
- MOD: controls the amount of modulation of the reverb.
   From 0% to 100%.
- MIX: controls the balance of dry and wet signal. At 0% the signal is fully dry, while at 100% the signal is fully wet. At around 85% the dry and wet signal have the same level.

  From 0% to 100%.
- HPF: controls the cut-off frequency of the high-pass filter.
   From 22 Hz to 1000 Hz.
- MOD RATE: controls the rate of the reverb modulation.
   From 0.1 Hz to 7 Hz.
- **HI DAMP**: controls the dampness of the high-frequency diffusion. From 0% to 100%.
- **WIDTH**: controls the stereo spread of the reverb. From 0% to 100%.
- X-MODE: engages the most possible tail length. ON or OFF.

## **SPRING Control Changes**

Parameter	Control Change #	Values
TIME	21	0 – 127
PRE-DELAY	22	0 – 127
COLOR	23	0 – 127
MOD	24	0 – 127
MIX	25	0 - 127
HPF	46	0 - 127
MOD RATE	47	0 - 127
HI DAMP	48	0 - 127
WIDTH	49	0 - 127
X-MODE	13	0 - 127

When a parameter range is not linear its values are equally divided among the 128 steps of a Control Change value.

#### **SWELL**

This is a swell processor that can automatically create fantastic fading swell effects followed by a customizable reverb trail to create dreaming pads or string-like sounds.

#### **Parameters**

- **TIME**: controls the reverb tail length. From 1 s to 4 s.
- PRE-DELAY: sets the length of the swell cycle.
   From 10 ms to 3000 ms.
- COLOR: controls the frequency response of the reverb. At minimum the reverb gets darker, at maximum
  the reverb gets brighter. Set in the middle the reverb is flat.
   From -10 dB to +10 dB.
- MOD: controls the amount of modulation of the reverb.
   From 0% to 100%.
- MIX: controls the balance of dry and wet signal. At 0% the signal is fully dry, while at 100% the signal is fully wet. At around 85% the dry and wet signal have the same level.

  From 0% to 100%.
- HPF: controls the cut-off frequency of the high-pass filter.
   From 22 Hz to 1000 Hz.
- MOD RATE: controls the rate of the reverb modulation.
   From 0.1 Hz to 7 Hz.
- **SWELL DEPTH**: sets the depth of the volume swell. By default, the depth is at max position, meaning that the volume will start from silence. By lowering this control you'll set the effect to start the swell phase from a level which is higher than silence, up to min position that sets the effect to have no action. From -90 dB to 0.
- SWELL SENS: this control sets the sensitivity for the swell to recognize a new note or chord and therefore start a new swell cycle. Set it higher if you want the swell cycle to start even at the beginning of softer passages or set it lower if you want the swell cycle to only start for louder strikes.
   From 0% to 100%.
- X-MODE: engages the most possible tail length. ON or OFF.

## **SWELL Control Changes**

Parameter	Control Change #	Values
TIME	21	0 – 127
PRE-DELAY	22	0 – 127
COLOR	23	0 – 127
MOD	24	0 – 127
MIX	25	0 - 127
HPF	46	0 - 127
MOD RATE	47	0 - 127
SWELL DEPTH	48	0 - 127
SWELL SENS	49	0 - 127
X-MODE	13	0 - 127

When a parameter range is not linear its values are equally divided among the 128 steps of a Control Change value.

#### **GATE**

This is a customizable gated reverb that cuts off the reverb trail as desired in order to add textured groove to your playing.

#### **Parameters**

- **TIME**: controls the reverb tail length. From 0 s to 0.6 s.
- PRE-DELAY: controls the pre-delay amount.
   From 0 ms to 1000 ms.
- COLOR: controls the frequency response of the reverb. At minimum the reverb gets darker, at maximum
  the reverb gets brighter. Set in the middle the reverb is flat.
   From -10 dB to +10 dB.
- MOD: controls the amount of modulation of the reverb.
   From 0% to 100%.
- MIX: controls the balance of dry and wet signal. At 0% the signal is fully dry, while at 100% the signal is fully wet. At around 85% the dry and wet signal have the same level.

  From 0% to 100%.
- HPF: controls the cut-off frequency of the high-pass filter.
   From 22 Hz to 1000 Hz.
- MOD RATE: controls the rate of the reverb modulation.
   From 0.5 Hz to 10 Hz.
- **SIZE**: controls the dimension of the ambience from which the reverbs is generated. From 0% to 100%.
- X-MODE: engages the maximum time and size producing a dramatic timbre change.
   ON or OFF.

#### **GATE Control Changes**

Parameter	Control Change #	Values
TIME	21	0 – 127
PRE-DELAY	22	0 – 127
COLOR	23	0 – 127
MOD	24	0 – 127
MIX	25	0 - 127
HPF	46	0 - 127
MOD RATE	47	0 - 127
SIZE	48	0 -127
X-MODE	13	0 - 127

When a parameter range is not linear its values are equally divided among the 128 steps of a Control Change value.

#### **REVERSE**

This model is perfect to create reverse delay trails that fade in while you are playing. The reverse envelope can be set to 3 different modes to better fit the part.

#### **Parameters**

- **TIME**: controls the reverb tail length. From 0% to 100%.
- **PRE-DELAY**: controls the pre-delay amount. From 0 ms to 1000 ms.
- COLOR: controls the frequency response of the reverb. At minimum the reverb gets darker, at maximum
  the reverb gets brighter. Set in the middle the reverb is flat.
   From -10 dB to +10 dB.
- MOD: controls the amount of modulation of the reverb.
   From 0% to 100%.
- MIX: controls the balance of dry and wet signal. At 0% the signal is fully dry, while at 100% the signal is fully wet. At around 85% the dry and wet signal have the same level.

  From 0% to 100%.
- **TYPE**: chooses from the three available reverse shapes to achieve the desired flavour. From 1 to 3.
- **SIZE**: controls the dimension of the ambience from which the reverb is generated. From 50% to 150%.
- MOD RATE: controls the rate of the reverb modulation.
   From 0.5 Hz to 10 Hz.
- HPF: controls the cut-off frequency of the high-pass filter.
   From 22 Hz to 1000 Hz.
- X-MODE: engages the most possible tail length. ON or OFF.

## **REVERSE Control Changes**

Parameter	Control Change #	Values
TIME	21	0 – 127
PRE-DELAY	22	0 – 127
COLOR	23	0 – 127
MOD	24	0 – 127
MIX	25	0 - 127
TYPE	46	0 - 127
SIZE	47	0 - 127
MOD RATE	48	0 - 127
HPF	49	0 - 127
X-MODE	13	0 - 127

When a parameter range is not linear its values are equally divided among the 128 steps of a Control Change value.

#### **EARY REF**

This model emulates the typical short reflections that can be heard in a small room or space. It's fully customizable to bring it from a sort of traditional delay to a buzzing early reflection sound.

#### **Parameters**

- **TIME**: controls the reverb tail length. From 0.1 s to 0.8 s.
- PRE-DELAY: controls the pre-delay amount.
   From 0 ms to 100 ms.
- COLOR: controls the frequency response of the reverb. At minimum the reverb gets darker, at maximum
  the reverb gets brighter. Set in the middle the reverb is flat.
   From -10 dB to +10 dB.
- MOD: controls the amount of modulation of the reverb.
   From 0% to 100%.
- MIX: controls the balance of dry and wet signal. At 0% the signal is fully dry, while at 100% the signal is fully wet. At around 85% the dry and wet signal have the same level.

  From 0% to 100%.
- HPF: controls the cut-off frequency of the high-pass filter.
   From 22 Hz to 1000 Hz.
- **MOD RATE**: controls the rate of the reverb modulation. From 0.1 Hz to 7 Hz.
- **SIZE**: controls the dimension of the ambience from which the reverbs is generated. From 50% to 200%.
- X-MODE: engages the most possible tail length. ON or OFF.

#### **EARLY REF Control Changes**

Parameter	Control Change #	Values
TIME	21	0 – 127
PRE-DELAY	22	0 – 127
COLOR	23	0 – 127
MOD	24	0 – 127
MIX	25	0 - 127
SIZE	46	0 - 127
HPF	47	0 - 127
MOD RATE	48	0 - 127
X-MODE	13	0 - 127

When a parameter range is not linear its values are equally divided among the 128 steps of a Control Change value.

#### **EXTREME**

This is a combination of two processors in one model. One is a plate reverb that gets modulated by the second one, which is a vintage phaser to add extreme modulated tails.

#### **Parameters**

- **TIME**: controls the reverb tail length. From 0.8 s to 12 s.
- PRE-DELAY: controls the pre-delay amount.
   From 0 ms to 1000 ms.
- COLOR: controls the frequency response of the reverb. At minimum the reverb gets darker, at maximum the reverb gets brighter. Set in the middle the reverb is flat.
   From -10 dB to +10 dB.
- MOD: controls the amount of modulation of the reverb.
   From 0% to 100%.
- MIX: controls the balance of dry and wet signal. At 0% the signal is fully dry, while at 100% the signal is fully wet. At around 85% the dry and wet signal have the same level.

  From 0% to 100%.
- MOD RATE: controls the rate of the reverb modulation.
   From 0 to 100.
- X-MODE: engages the most possible tail length. ON or OFF.

#### **EXTREME Control Changes**

Parameter	Control Change #	Values
TIME	21	0 – 127
PRE-DELAY	22	0 – 127
COLOR	23	0 – 127
MOD	24	0 – 127
MIX	25	0 - 127
MOD RATE	46	0 - 127
X-MODE	13	0 - 127

When a parameter range is not linear its values are equally divided among the 128 steps of a Control Change value.

#### ETHEREAL

This is a highly modulated plate that recreates moving airy trails and adds magic to your lines.

#### **Parameters**

• **TIME**: controls the reverb tail length. From 6 s to 18 s.

• **PRE-DELAY**: controls the pre-delay amount. From 0 ms to 1000 ms.

 COLOR: controls the frequency response of the reverb. At minimum the reverb gets darker, at maximum the reverb gets brighter. Set in the middle the reverb is flat.
 From -10 dB to +10 dB.

• **MOD**: controls the amount of modulation of the reverb. From 0% to 100%.

- MIX: controls the balance of dry and wet signal. At 0% the signal is fully dry, while at 100% the signal is fully wet. At around 85% the dry and wet signal have the same level. From 0% to 100%.
- **MOD RATE**: controls the rate of the reverb modulation. From 0.1 Hz to 7 Hz.
- **HPF**: controls the cut-off frequency of the high-pass filter. From 22 Hz to 1000 Hz.
- X-MODE: engages the most possible tail length. ON or OFF.

#### **ETHEREAL Control Changes**

Parameter	Control Change #	Values
TIME	21	0 – 127
PRE-DELAY	22	0 – 127
COLOR	23	0 – 127
MOD	24	0 – 127
MIX	25	0 - 127
MOD RATE	46	0 - 127
HPF	47	0 - 127
X-MODE	13	0 - 127

When a parameter range is not linear its values are equally divided among the 128 steps of a Control Change value.

#### **BLOOM**

This reverb makes your simple lead parts bloom up and become very rich and noticeable. It is a swell-like effect to give movement and vibe to your parts.

#### **Parameters**

- **TIME**: controls the reverb tail length. From 4 s to 12 s.
- **PRE-DELAY**: controls the pre-delay amount. From 0% to 100%.
- COLOR: controls the frequency response of the reverb. At minimum the reverb gets darker, at maximum
  the reverb gets brighter. Set in the middle the reverb is flat.
   From -10 dB to +10 dB.
- MOD: controls the amount of modulation of the reverb.
   From 0% to 100%.
- MIX: controls the balance of dry and wet signal. At 0% the signal is fully dry, while at 100% the signal is fully wet. At around 85% the dry and wet signal have the same level.

  From 0% to 100%.
- DIFFUSION: controls the diffusion of the reverb adding fullness and width.
   From 0% to 100%.
- MOD RATE: controls the rate of the reverb modulation.
   From 0.1 Hz to 7 Hz.
- X-MODE: engages the most possible tail length. ON or OFF.

#### **BLOOM Control Changes**

Parameter	Control Change #	Values
TIME	21	0 – 127
PRE-DELAY	22	0 – 127
COLOR	23	0 – 127
MOD	24	0 – 127
MIX	25	0 - 127
DIFFUSION	46	0 - 127
MOD RATE	47	0 - 127
X-MODE	13	0 - 127

When a parameter range is not linear its values are equally divided among the 128 steps of a Control Change value.

#### **MAGNETIC**

This is a spatial reverb that has an airy tone with an accentuated modulation effect, which at low rates creates an effect of space floating.

#### **Parameters**

- **TIME**: controls the reverb tail length. From 0.8 s to 12 s.
- PRE-DELAY: controls the pre-delay amount.
   From 0 ms to 1000 ms.
- COLOR: controls the frequency response of the reverb. At minimum the reverb gets darker, at maximum
  the reverb gets brighter. Set in the middle the reverb is flat.
   From -10 dB to +10 dB.
- MOD: controls the amount of modulation of the reverb.
   From 0% to 100%.
- MIX: controls the balance of dry and wet signal. At 0% the signal is fully dry, while at 100% the signal is fully wet. At around 85% the dry and wet signal have the same level.

  From 0% to 100%.
- MOD RATE: controls the rate of the reverb modulation.
   From 0 to 100.
- MOD COLOR: set the frequency zone where the modulation is acting.
   From -10 to +10.
- X-MODE: engages the most possible tail length. ON or OFF.

#### **MAGNETIC Control Changes**

Parameter	Control Change #	Values
TIME	21	0 – 127
PRE-DELAY	22	0 – 127
COLOR	23	0 – 127
MOD	24	0 – 127
MIX	25	0 - 127
MOD RATE	46	0 - 127
MOD COLOR	47	0 - 127
X-MODE	13	0 - 127

When a parameter range is not linear its values are equally divided among the 128 steps of a Control Change value.

# **Global Setup**

The global setup menu features different settings to manage the global behavior of the pedal independent of which preset is active.

To access the Global Setup menu, hold down the PARAMETER encoder and select GLOBAL SETUP.

### NAME MODE

Changes the way preset names are displayed:

- **NAME**: the display shows only the preset's name.
- PC+NAME: the display shows the program change number followed by its name.
- BNK+NAME: the display shows the currently selected preset bank followed by its name.

#### **EXT. CTRL**

Selects which type of external controller pedal is attached to the EXT. CONTROL jack.

- TRS EXP PEDAL: select this if the pedal connected to the EXT. CONTROL jack is a TRS type expression pedal.
- RTS EXP PEDAL: select this if the pedal connected to the EXT. CONTROL jack is a RTS type expression pedal.
- N.O. SWITCH: select this if the pedal connected to the EXT. CONTROL jack is a normally open single footswitch pedal.
- N.C. SWITCH: select this if the pedal connected to the EXT. CONTROL jack is a normally close single footswitch pedal.
- N.O. DUAL SWITCH: select this if the pedal connected to the EXT. CONTROL jack is a normally open double footswitch pedal.
- N.C. DUAL SWITCH: select this if the pedal connected to the EXT. CONTROL jack is a normally close double footswitch pedal.

#### **DUAL SWITCH MODE**

Selects the operative mode for the double switch pedal connected to the EXT. CONTROL jack.

- BANK: select this if you want to use the connected double switch pedal to browse among banks.
- PRESET: select this if you want to use the connected double switch pedal to browse among presets.

### **EXP. CALIBRATION**

Starts the calibration process for the connected expression pedal.

Refer to the expression pedal calibration paragraph to learn more about calibrating an expression pedal with X-GEAR.

### **MIDI CHANNEL**

Selects on which MIDI channel the X-GEAR pedal operates, from 1 to 16. By default X-GEAR pedals operate to channel 1.

### **MIDI THRU**

Selects which MIDI signals are sent to the MIDI outputs (MIDI and USB ports).

- OFF: no MIDI signals are sent to the MIDI outputs.
- THRU: the MIDI signals arriving to the X-GEAR MIDI input are sent to the X-GEAR MIDI outputs.
- **MERGE**: the MIDI signals arriving to the X-GEAR MIDI input and the MIDI signals generated by the pedal are merged and sent to the X-GEAR MIDI outputs.

### **MAIN VOL**

Controls the master volume of the pedal from -40 dB to +3 dB.

### **INTERFACE VOL**

Controls the master volume when the pedal is set in interface mode from -40 dB to +3 dB.

By default, the volume is set to -20 dB.

#### MIDI CLOCK

Sets the MIDI CLOCK function.

- OFF: no MIDI CLOCK function is active.
- **DIN**: the MIDI CLOCK is set by the incoming MIDI clock from the MIDI input.
- USB: the MIDI CLOCK is set by the incoming MIDI clock from the USB input.

N.B. When the MIDI CLOCK is coming from outside the TAP Tempo footswitch is disabled and is synced with the incoming tempo, its led becomes amber to get visual feedback of this status.

#### **CAB SIM**

Activates and selects the cabinet simulator.

- · OFF: disables Cab Sim.
- CAB 1: activates the Cab Sim with the first cabinet IR.
- CAB 2: activates the Cab Sim with the second cabinet IR.
- CAB 3: activates the Cab Sim with the third cabinet IR.
- CAB 4: activates the Cab Sim with the fourth cabinet IR.
- BASS: activates the Cab Sim with the fifth cabinet IR.

N.B. If you also want the Cab Sim when the pedal is bypassed, the BUFFER BYPASS MODE is required.

### **SPILLOVER**

Sets the spillover function of the pedal.

- **ON**: the spillover is active (the tail persists when bypassing a preset). This option requires the BUFFER BYPASS MODE.
- OFF: the spillover is not active.

#### **USB OUT**

Sets what signals are sent to the USB OUT.

- STEREO: the signals sent to the USB OUT are a copy of the Left & Right Outputs.
- **DUAL**: on USB OUT 1 is sent a copy of the Left & Right Outputs summed to mono, while on USB OUT 2 is sent the dry clean DI signal of the instrument (bypassing the pedal effect).

### **BYPASS MODE**

Sets the bypass technology for the pedal.

- TRUE: selects the true bypass technology.
- BUFFER: selects the buffered bypass technology. This option is required to use the spillover function and the cab simulator.

### **OPERATION MODE**

Sets the operative mode of the pedal to be used for live gigs or as an audio interface.

- **LIVE**: in live mode, the audio signal is taken from the analog jack inputs, processed by the DSP and sent to all outputs.
- **INTERFACE**: in interface mode, the signal is taken from the analog jack inputs, processed, and then sent to the USB outputs to a computer.

Then the signal coming out from the computer goes back into the pedal in its USB inputs and sent to the Left & Right outputs, which can be connected to a monitoring system.

See the Interface Mode paragraph to learn more.

### **FACTORY RESET**

After a confirmation this option resets the pedal to its factory status.

### **FW VERSION**

Displays the currently installed firmware version.

# **Preset Setup**

The preset setup menu features different settings to manage the selected preset.

To access the Preset Setup menu, hold down the PARAMETER encoder and select PRESET SETUP.

### EXT. CTRL

Sets if the preset is using the External Control or not.

- ON: enables the external control connected (single switch or expression pedal) for the selected preset.
- **OFF**: disables the external control connected (single switch or expression pedal) for the selected preset. This is to avoid that a connected external control could potentially modify the preset.

### **EXT. LEARN**

Starts the process of assigning the external control pedal and creating macros. See the External Control Setup paragraph for more information.

40 Preset Setup

## Safe Mode

SAFE MODE is very useful for playing live since it locks all the knobs to be sure that your sound does not change, if you accidentally move a knob or hit your pedal.

To activate and deactivate the SAFE MODE, press simultaneously the MODEL and PRESET encoders. A display confirmation (LOCKED and UNLOCKED) will confirm you that the mode has been activated/deactivated.

Safe Mode

# **Temporary Mode**

By holding down a preset's footswitch while it's off, the preset gets activated temporarily and is deactivated when the footswitch is released.

You can do this operation both when the pedal is bypassed to engage a certain effect only for a little time or while another preset is on.

If you do it while another preset is on, this mode will allow you to quickly change to the other preset by holding down its footswitch and coming back to the previous one once you release the footswitch.

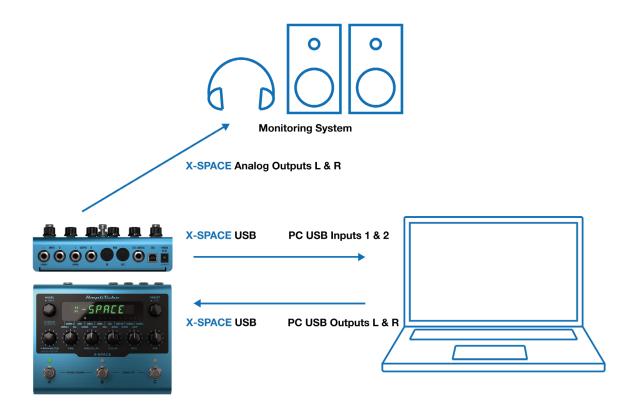
### **Interface Mode**

Using the interface mode of the pedal you can hook it up to your computer and a monitoring system to jam and playback music directly from X-GEAR.

You can activate the INTERFACE MODE from the GLOBAL SETUP.

Connect X-GEAR to your computer using the provided USB cable and use the left and right outputs to connect the pedal to a monitoring system such as a power amplifier, active monitors, or a headphone preamplifier.

AmpliTube (or your DAW) sees the X-GEAR as a regular interface, and you can playback songs from the computer and jam along using AmpliTube (or the DAW) to monitor your session.



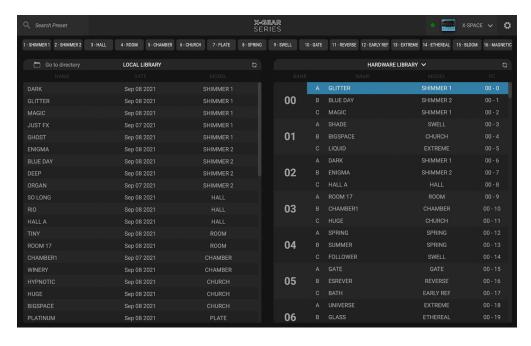
To tweak the volume of the X-GEAR when used as audio interface browse to the GLOBAL SETUP and edit the INTERFACE VOL parameter. After tweaking the volume for the first time the INTERFACE VOL parameter will be quickly accessible using the PARAMETER encoder until you select another parameter.

# **Included applications**

Along with your X-GEAR you get a Librarian App to manage your presets and AmpliTube 5 SE to edit your presets from your computer and use them inside AmpliTube.

Follow the instructions found in the box to get the X-GEAR Librarian and AmpliTube 5 SE.





# **MIDI Specifications**

X-SPACE presents 100 numbered banks with 3 presets each for a total of 300 presets.

Since MIDI program changes can only go up to 127 the presets are split into 3 MIDI Patch Banks:

MIDI BANK 0 (CC#0 Value=0) = PRESETS 00A-63B MIDI BANK 1 (CC#0 Value=1) = PRESETS 64A-127B MIDI BANK 2 (CC#0 Value=2) = PRESETS 128A-149B

In each MIDI PATCH BANK, the presets are numbered sequentially:

PRESET 00A = MIDI Program #0 PRESET 00B = MIDI Program #1

PRESET 01A = MIDI Program #2

PRESET 01B = MIDI Program #3

... up to MIDI Program #127

X-SPACE always powers up in MIDI Patch Bank 0, therefore if you stay withing the first 127 presets (00A-63B), simply send a standard MIDI Program Change message to load a preset.

If you plan to use presets above the 127th you should send a standard MIDI Bank Change message (MIDI CC# 0) with a value equal to the MIDI Bank you'd like to use before each MIDI Program Change.

### MIDI Control Change Table

Parameter	Control Change #	Values
Expression	11	0 – 127
Preset ON/OFF	12	ON = 127, OFF = 0
X-MODE for the current preset	13	Bypass=0, Engaged=12
Model selector	14	1 - 16
MIDI Patch Bank	0	0 - 2

For individual parameter control changes, see each reverb model in the Reverb Models paragraph.

When a parameter range is not linear its values are equally divided among the 128 steps of a Control Change value.

### **Features**

### **AmpliTube X-SPACE**

- Breakthrough software and hardware integration for guitarists
- · State-of-the-art DSP in a road-worthy anodized aluminum chassis
- 16 different algorithms, 50 factory presets (300 storable presets)
- Iconic sounds to pristine, modern reverbs + Spillover/Trails function
- Includes exclusive virtual X-SPACE version for use in AmpliTube 5
- USB port for preset management and use as a recording interface (up to 48 Khz)
- · Designed and made in Italy for a lifetime of playing and gigging
- Ultra-low noise, 24-bit/192kHz converters for class-leading sound quality
- 5 Hz-24 kHz frequency response to capture the full scope of your guitar's sound
- 112 dB dynamic range provides whisper-quiet operation at any gain setting
- A pure analog dry path and selectable true or soft bypass for maximum control
- 5Hz to 24kHz frequency response to record the full range of your guitar or bass
- · Versatile routing options let you send the wet or dry signal to your DAW
- · Stereo out for monitoring sound between the X-SPACE pedal and your computer
- Full MIDI implementation to map control of AmpliTube and/or any compatible DAW
- · Fast, intuitive interface and control knobs to tweak your sound on the fly
- · High-contrast LED display keeps you informed on everything, indoors and out
- Expression pedal input adds additional control over any parameter you choose
- Full MIDI implementation is built-in for even the most complex setups
- 5 cabinet impulse responses let you connect directly to a powered cab or PA

### Package includes

- X-SPACE pedal
- USB A-Type to USB B-Type connection cable (1.5m/4.32ft)
- Power Supply Unit
- Plug-in and Preset Librarian serial number

#### **Dimensions**

- Size: 17.5cm/6.88" x 14.5cm/5.7" x 5.8cm/2.28"
- Weight: 906g/31.96oz

46 Features

## **System Requirements**

### AmpliTube 5

AmpliTube is a 64-bit application and requires a 64-bit CPU and Operating System.

### Mac® (64-bits)

- Minimal: Intel® Core™ 2 Duo (Intel Core i5 suggested), 4 GB of RAM (8 GB suggested), macOS 10.10 or later. 3 GB of hard drive space.
- Requires an OpenGL 2 compatible graphics adapter.
- Supported Plug-in formats (64-bit): Audio Units, VST 2, VST 3, AAX.

### Windows® (64-bits)

- Minimal: Intel® Core™ 2 Duo or AMD Athlon™ 64 X2 (Intel Core i5 suggested), 4 GB of RAM (8 GB suggested). Windows® 7 or later. 3 GB of hard drive space.
- Requires an ASIO compatible sound card.
- Requires an OpenGL 2 compatible graphics adapter.
- Supported Plug-in formats (64-bit): VST 2, VST 3, AAX.

To use X-GEAR as audio interface on Windows devices, Windows® 10 or later is required.

# **AmpliTube X-GEAR series**

Discover the full AmpliTube X-GEAR series:



**X-DRIVE**Distortion



X-SPACE Reverb



X-TIME Delay



**X-VIBE**Modulation

Learn more at www.ikmultimedia.com/xgear

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All specifications are subject to change without further notice.

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