EFX MK-VI
Audio Controller

OWNER'S MANUAL

Version 3.6x

Musicom LAB
Preserving Your Tone, Pure and Dynamic

Table of Contents

1. INTRODUCTION

Thank you for purchasing the Musicom Lab EFX MK-VI Audio Controller.
The EFX MK-VI Audio Controller is the ultimate floor-based all-in-one switching system.
The EFX MK-VI is a compact, easy to use, has 12 fully programmable loops, 4 function switches and a MIDI foot-controller. The EFX MK-VI has a powerful MIDI function, so it can also be used with rack-based rig.

1.1 Main Features

- 12 audio loops. 11 mono loops and 1 mono-send/stereo-return loop.
- Programmable loop order per each preset.
  The order of Loop 1 and loop 2 is fixed.
- 3 buffers. Input buffer, output buffer and buffer in loop 6.
  Input and Output buffers can be enabled/disabled by each IA switch.
- 2 internal Mixers/Volume-controllers.
  Volume-controllers also are used for Carry-over between presets.
  2 volume values can be stored for each preset.
- 4 function switches via two TRS jack.
- Create up to 900 presets (180 banks x 5 presets) and 1 global preset.
- Create up to 900 songs.
- Organize the 900 Songs into 64 sets of 120 songs.
- Switches can be assigned to the user's preference.
- Clickless function for reducing popping noise.
- ISO OUT that prevent to occur ground hum noise and phase issue.
- Transmits 16 MIDI (PC, CC, Note, etc) messages, when a preset is changed.
  Transmits 8 MIDI (PC, CC, Note, etc) messages when the switch assigned to page is pressed.
- Transmits MIDI Time Clock and synchronizes with Function Switches.
  Tap tempo for both MIDI-compatible pedals and any pedals that have external tap input jack.
  BPM can be stored in each bank preset and song preset.
- Two foot switches can be connected to the XPDL jack.
- USB Connection to a PC or MAC.
- Easily copy presets, songs, sets and switches.
- Graphic LCD display that can display preset/song titles and other status.

1.2 Specifications

- Buffer Input Impedance .... 1 MΩ
- Buffer Output Impedance .... 100 Ω
- Volume-Controller Input Impedance.............. 1 MΩ / 44 kΩ
- Volume-Controller Output Impedance........... 100 Ω
- Nominal Audio Signal Level .... -10 dBu
- Maximum Audio Signal Level .... +18 dBu
- Current Draw .... 250 mA (DC9V Center Negative)
- Dimensions .... 388 mm(W) x 110 mm(D) x 68 mm(H)
  15.3 inches(W) x 4.3 inches(D) x 2.7 inches(H)
- Weight .... 1.4 kg / 3.1 lbs

1.3 Block Diagram
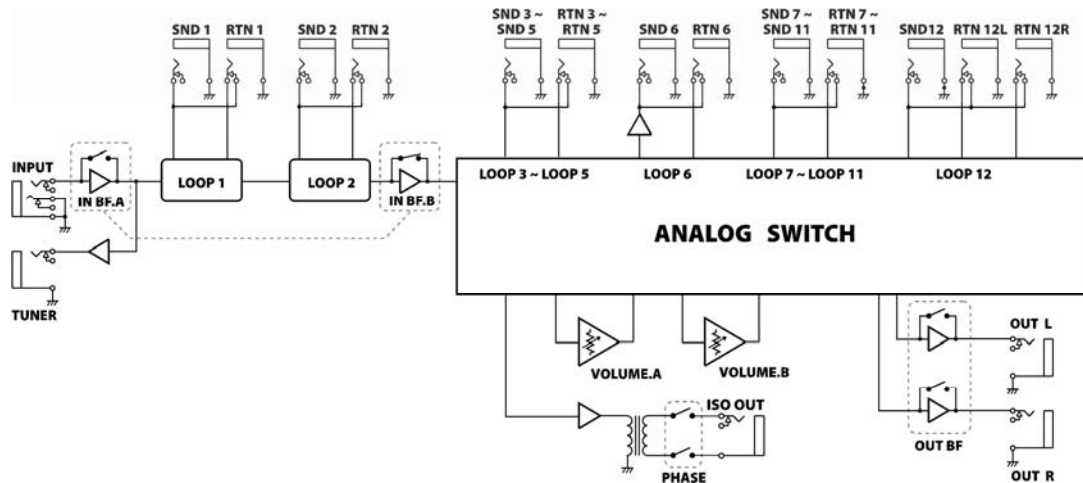
1.4 Front Panel
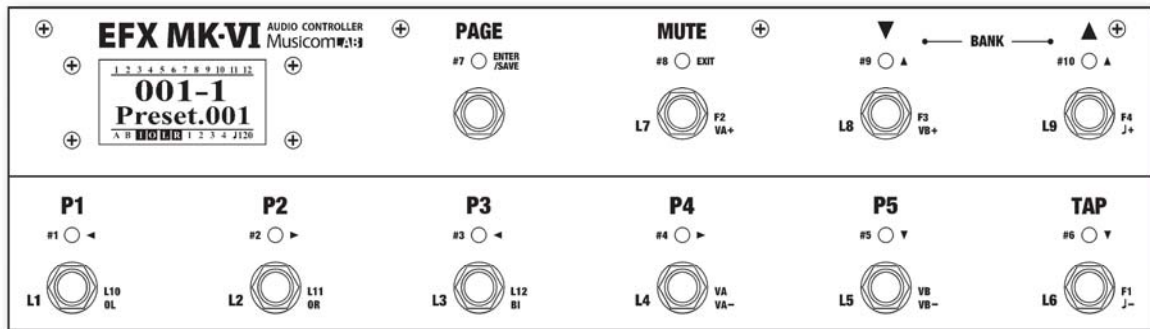
P1 through P5

On the page 1, these switches are used to recall one of the five presets. When on other pages, pressing these switches turns on/off individual effect loops, function switches, outputs, buffers, etc.

TAP

The TAP switch can be synchronized with MIDI Time Clock or Function Switches(F1~F4). The Function Switches support for devices that only have an analog tap tempo input. Also you can select whether or not to send the MIDI Time Clock. Tapping the TAP switch will change the MIDI Time Clock or F1~F4 rate to the tempo of your taps. At this time, the Global BPM will be changed to the tempo of your taps. The Global BPM changed by tapping the TAP switch is applied to the current bank or song. In other words, the Preset BPM stored in the current bank or song is ignored. When the EFX MK-VI powers up, the Global BPM is 120.

PAGE

Pressing this switch puts the EFX MK-VI into the other page, where you can turn individual loops on and off, and store their settings to presets.
Pressing & holding this switch for 1 second will store the IA edit and return to the page 1.
Factory setting provides 4 pages. Up to 8 pages can be used depending on the user's preference.
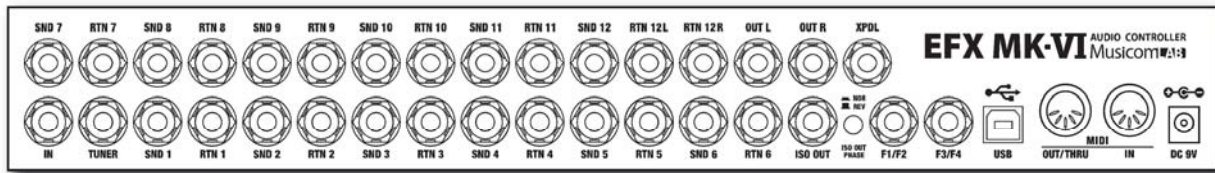
MUTE

Turn on/off the left and right output signals.

BANK▲ and BANK▼

The 900 presets in the EFX MK-VI are arranged in banks of 5, and these buttons allow you to select which bank of 5 you'd like to access. Pressing this switch in Preset mode increments/decrements the bank number.

1.5 Rear Panel

IN

This is the main input jack where your guitar plugs in.

TUNER

This jack is for connecting an external tuner.

SND 1~11 and RTN 1~11

These jacks provide mono-send/mono-return effect loops. SND 1~11 send signals to effect pedals. RTN 1~11 receive signals from effect pedals. Connect the SND 1~11 jacks to the INPUT jack of each effect pedal, and connect the RTN 1~11 jacks to the OUTPUT jack of each effect pedal. The SND 6 is a buffered signal.
This is useful for connecting a volume pedal or for maintaining impedance in your system.
Refer to the **1.3 Block Diagram** on page 4 of the manual.

SND 12, RTN 12L and RTN 12R

These jacks provide a mono-send/stereo-return effect loop. This loop can be used at the beginning of the stereo signal chain. It is possible to set whether the return of the loop 12 is mono or stereo.
Refer to the **4.5.2 Audio > Lp12 Rtn** on page 27 of the manual.

OUT L and OUT R

These are the output jacks. OUT L and OUT R can be turned on/off independently. If the last stage of the chain is the mono output, the OUT L signal is split up in to the OUT R.

ISO OUT and ISO OUT PHASE switch

There is an isolation transformer before the ISO OUT jack. The isolation transformer may help reduce hum that can occur when using two amps or 4CM. If the ISO OUT are used, ISO OUT can also be inverted the phase by pressing the ISO OUT PHASE switch. Refer to the **4.5.2 Audio > Iso-Out** on the page 27 of the manual.

F1/F2 and F3/F4

Latched or momentary function switch jacks for amplifier channel switching or on/off controlling of reverb.
Each function switch can be assigned to the BPM tempo. Refer to the **4.5.2 Audio > Func1~Func4** on the page 27 and **6.2 Function Switches** on the page 32 of the manual.

XPDL

An expression pedal or 2 external foot-switches(normally open type) can be connected to this jack using a 1/4" TRS cable. The TRS cable must be connected before supplying power to the EFX MK-VI. Refer to the **6.1 XPDL** on the page 32 of the manual for cabling.

USB

This USB connector is used to connect this device to your PC or MAC to send and receive data or to update the firmware. No driver installation is required because EFX MK-VI's USB uses the HID class or USB Audio Device.

MIDI IN and MIDI OUT/THRU

MIDI IN connector receives MIDI signals from an external MIDI device. MIDI OUT/THRU connector is used to feed MIDI signals to external MIDI devices. When the MIDI OUT/THRU has been set to 'THRU', MIDI signals received at MIDI IN pass through the EFX MK-VI without any changes.
Refer to the **4.5.1 MIDI > IN/OUT/Dup.PC** on the page 25 of the manual.

DC 9V

This is the main power input for the EFX MK-VI. The EFX MK-VI requires a DC9V power supply.
The current draw is approximately 250mA at DC9V (Center Negative).

1.6 LCD Display

① **Bank/song number**
This area indicates a current bank/song number.

② **Preset number**
This area indicates a current preset number in the bank/song.

③ **Page number**
This area indicates a current page number.

④ **Title**
This area indicates the preset title of the current preset. Also this area indicates the switch title, volume or BPM for a short time, when the switch is pressed.

⑤ **Audio loops status**
This area indicates which of the 12 audio loops are currently active.

⑥ **Volume-controllers, buffers, outputs and function-switches status**
This area indicates which of the volume-controllers, buffers, outputs and function-switches are currently active.

⑦ **BPM**
This area indicates the currently operating BPM.
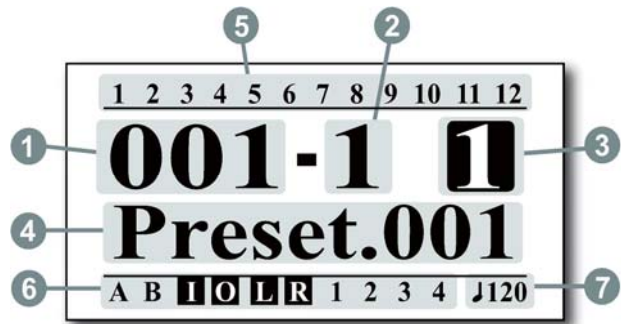
1.7 Characters around Switch

① Switch function assigned to page 1

② Switch function assigned to page 2.

③ Switch function assigned to page 3.

④ Switch function assigned to page 4.

⑤ Switch unique number used to set switch function.

⑥ Switch function used in setup mode.

2. BASIC OPERATION (PRESET MODE)

2.1 Initial Power Up

The EFX MK-VI requires a DC9V power supply. At initial power-up, the EFX MK-VI tests that the correct power is applied and displays the result and operating mode on the LCD display. If there is no problem with the power test, the EFX MK-VI starts with the first preset on bank 1.

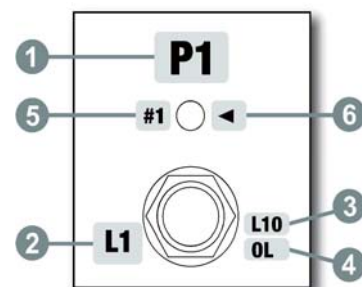EFX MK-VI operates normally on 8.4V to 9.6V power. EFX MK-VI resets at any time outside this voltage range. This is to prevent damage to internal components due to over-current or over-voltage.

When power is applied, power is applied/blocked twice to the analog circuit for power testing. At this point, two click sounds are output. If possible, connect the EFX MK-VI's output jack to the amplifier after the power test.

2.2 Page 1

Select a Preset

The EFX MK-VI has 900 presets and 1 global preset that you can choose from, and they're arranged in banks of five. When the EFX MK-VI powers up, it selects Page 1, Preset 1 and Bank 1.
Press/hold BANK▼ or BANK▲ switch to shift other banks, pressing one of the five switches (P1~P5) selects a preset in the new bank.

① Press/hold the BANK▼ or BANK▲ switch to scroll through the 180 available banks.

② The bank number on the LCD display will blink and the LEDs above P1~P5 switches will turn off.

③ The preset is selected via pressing any switches from P1 through P5.

④ The bank number on the LCD display will stop blinking and the LED above the switch will be turned on in blue.

The Global Preset is a preset with all the capabilities of Preset 1 through 5, but is the same for all banks. Pressing the switch of a preset that is already on selects the global preset and will cause the LED above the switch to be turned off. To enable/disable the Global Preset, refer to the **2nd.Press Pst** on the page 28 of the manual.

BPM change

Tapping the TAP switch will change the MIDI Time Clock or F1~F4 rate to the tempo of your taps.
At this time, the Global BPM will be changed to the tempo of your taps and the changed BPM is display on the LCD for 2 seconds. While the BPM is displayed on the LCD, you can increase/decrease the BPM one by one with the BANK▼ or BANK▲ switch. The changed Global BPM is applied to the current bank or song. In other words, the Preset BPM stored in the current bank or song is ignored.

Page change

The Page switch is set to have two functions. Press for a short time to increase the page number, and hold to save the changed IA combination to the current preset.

Mute/Unmute

Pressing the Mute switch will mute/unmute the guitar signal. The Mute switch is set to an IA switch that controls left and right output. When the Mute function is turned on the left and right output signals are not output. Because the audio action is reversed.

The table below shows the functions of the switches in Page 1.

	SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8	SW9	SW10
Normal	Preset1	Preset2	Preset3	Preset4	Preset5	Tap Tempo	Page+	IA (MUTE)	BANK-	BANK+
Hold	None	None	None	None	None	None	IA Store	None	BANK-	BANK+

2.3 Page 2

Turn individual loops on and off

The audio loops(L1-L9) can be turned on of off individually by pressing the assigned switch on Page 2.

The table below shows the functions of the switches in Page 2.

	SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8	SW9	SW10
Normal	L1	L2	L3	L4	L5	L6	Page+	L7	L8	L9
Hold	None	None	None	None	None	None	IA Store	None	None	None

2.4 Page 3

Turn individual audio loops on and off

The audio loops(L10~L12) can be turned on of off individually by pressing the assigned switch on Page 3.

Turn two volume-controllers on and off

The volume-controllers(Volume.A and Volume.B) can be turned on of off individually by pressing the assigned switch on Page 3.

Turn individual function switches on and off

The function switches(F1~F4) can be turned on of off individually by pressing the assigned switch on Page 3.

The table below shows the functions of the switches in Page 3.

	SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8	SW9	SW10
Normal	L10	L11	L12	Vol.A	Vol.B	F1	Page+	F2	F3	F4
Hold	None	None	None	None	None	None	IA Store	None	None	None

2.5 Page 4

Turn input buffer on and off

The input buffer(BI) can be turned on of off by pressing the assigned switch on Page 4.

Turn two outputs on and off

The two outputs(OUT L and OUT R) can be turned on of off individually by pressing the assigned switch on Page 4.

Increase/decrease two volume values

The two volume values(Vol.A and Vol.B) can be increased/decreased individually by pressing the assigned switch on Page 4.

Increase/decrease BPM

The BPM(Preset BPM) can be increased/decreased by pressing the assigned switch on Page 4.

The table below shows the functions of the switches in Page 4.

	SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8	SW9	SW10
Normal	OUT L	OUT R	Input Buffer	Vol.A-	Vol.B-	Pst. BPM-	Page+	VOL.A+	VOL.B+	Pst. BPM+
Hold	None	None	None	Vol.A-	Vol.B-	Pst. BPM-	IA Store	VOL.A+	VOL.B+	Pst. BPM+

2.6 Page 5

Turn output buffer on and off

The input buffer(BO) can be turned on of off by pressing the assigned switch on Page 5.

Factory default settings allow scrolling up/down to page 4. Refer to the **4.5.3 Others > Max.Page Scrl** on the page 28 of the manual to access above page 4.

The table below shows the functions of the switches in Page 5.

	SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8	SW9	SW10
Normal	Output Buffer	None	None	None	None	None	Page+	None	None	None
Hold	None	None	None	None	None	None	IA Store	None	None	None

3. SET MODE

The EFX MK-VI has up to 900 songs. A Song is a group of 5 presets (up to 9 presets) that are selected for use in a particular song. Each preset in a song can be selected from any of the 900 presets. Refer to the **4.2.1 Edit song** on the page 17 of the manual to edit a song.

The Set operating mode allows up to 120 songs of the EFX MKVI's 900 songs to be arranged in any order to create a set. The EFX MK-VI has up to 64 different sets. Refer to the **4.2.2 Edit Set** on the page 18 of the manual to edit a setlist.

Each switch in set mode performs the same function as in preset mode. However the BANK▼ and BANK▲ switches move from song to song instead of moving from bank to bank.
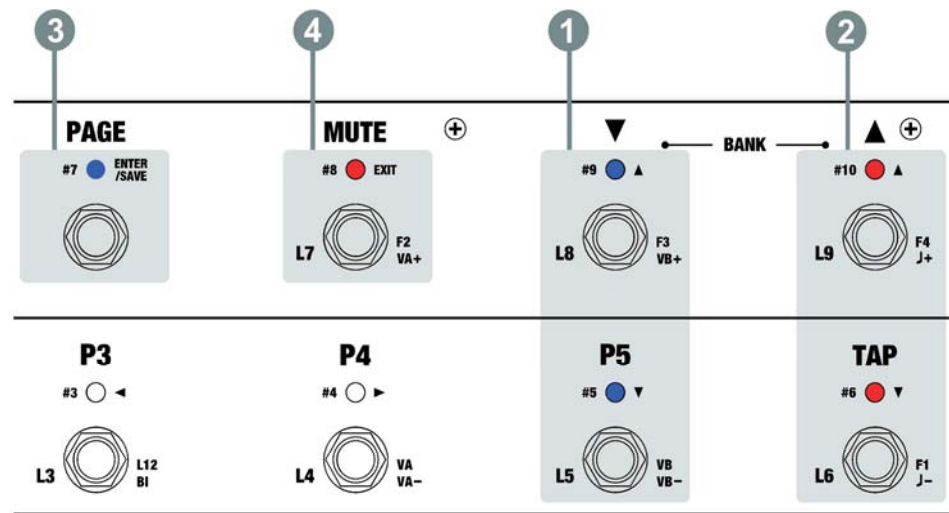
Refer to the **4.5.3 Others > Op.Mode** on the page 28 of the manual to change the operating mode.

4. SETUP MODE

To enter the SETUP mode, press the #7(PAGE) and #10(BANK▲) switches simultaneously in the Page 1.
The LCD display will show the following picture.
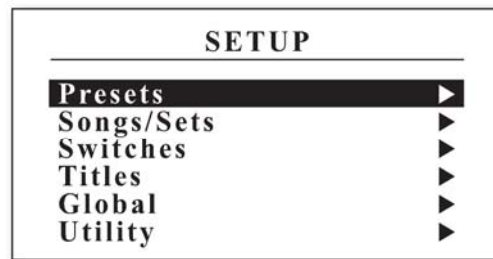
The switch functions in the picture below are common in SETUP mode.

① **SW#5 & SW#9** – Move up/down the selectable menu.

② **SW#6 & SW#10** – Increase/decrease the parameter of the selected menu.

③ **SW#7**
   Press : Enter the submenu of selected menu.
   Hold : Store any changes made. In the Utility menu, start copying or factory resetting.

   • If there is a triangle character on the right side of the selected menu, it means that a submenu exists.

④ **SW#8** – Exit to the previous menu.

4.1 Presets

Select a preset you want to edit. The preset title is displayed together, making it easier to select a preset.
The LCD display will show the submenu.
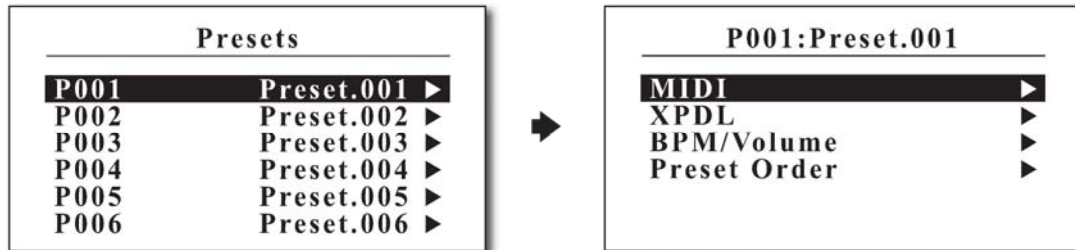
From this menu, you can move the other preset you want to edit using #1 and #2 switches.
This is to avoid the hassle of moving to the previous menu to edit other presets.

① **SW#1** – Decrease the preset number by one.
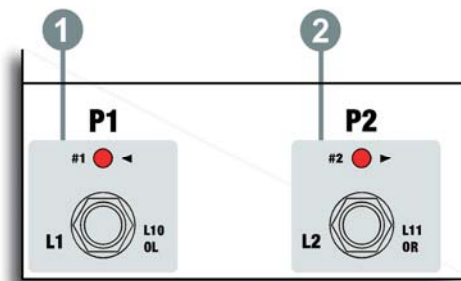
② **SW#2** – Increase the preset number by one.

4.1.1 MIDI

EFX MK-VI can send up to 16 MIDI messages when a preset is recalled. 16 MIDI messages are displayed as MIDI01 to MIDI16, each of which can be assigned a variety of MIDI messages, including Program Change, Control Change, Note On/Off and even SysEx. This menu allows assigning up to 16 MIDI messages (MIDI01– MIDI16) to the selected preset.
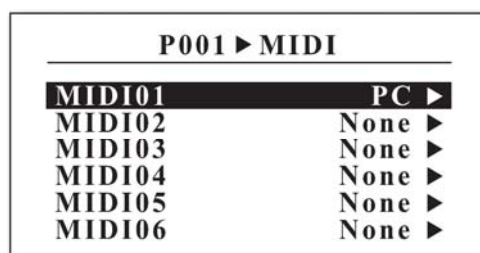
None

   It does not send any MIDI message.

PC (Program Change)

   Device : Selects the device to receive this program change message.
   PC# : Selects the program number to be sent.

   • Refer to the **4.5.1 MIDI > Devices** on the page 26 of the manual to edit MIDI devices.

CC (Control Change)

Device : Select the device to receive this control change message.
CC# : Selects the controller number to be sent.
Value : Selects the controller value to be sent.

Note On/Off

Device : Selects the device to receive this Note On/Off message.
Note# : Selects the note number to be sent.
Velocity : Selects the velocity of the note.

SysRT (System Real-Time)

Port : Selects the output port for the SysRT message. (MIDI OUT or USB)
Message : Selects one of the following : None, Start, Continue, Stop

SysEx (System Exclusive)

Message : Selects one of 64 System Exclusive slots.

• Refer to the **4.5.1 MIDI > SysEx** on the page 27 of the manual to edit the System Exclusive slots.

Delay

Time : Select the amount of time to pause up to 99ms before sending the next MIDI message.
Some MIDI devices do not recognize continuous input MIDI messages. In this case, you can use a time delay to resolve the problem.

4.1.2 XPDL

This menu allows assigning the XPDL to the current preset. Refer to **4.5 Global > XPDL** on the page 26 of the manual for choosing whether to use an expression pedal or two foot switches.

```
         P001 ▶ XPDL

  Select            Preset
  Device            Device.01
  CC#               None
  Max.Value         127
  Min.Value         000
  Beg.Value         None
```

Select

Global : The XPDL works with global settings when the current preset is recalled.
Preset : The XPDL works with current settings in this menu when the current preset is recalled.

Device - Select the device to receive the control change message by XPDL.

**CC# (CC Number)** - Selects the controller number to be sent.

Max.Value - Highest controller value that the XPDL can send when its pedal is moved.

Min.Value - Lowest controller value that the XPDL can send when its pedal is moved.

Beg.Value (Begin Value) - Initial controller value that the XPDL sends when the current preset is recalled.

4.1.3 BPM/Volume

This menu allows assigning the BPM and two volume values. The BPM can be set to use the global BPM or preset specific BPM.
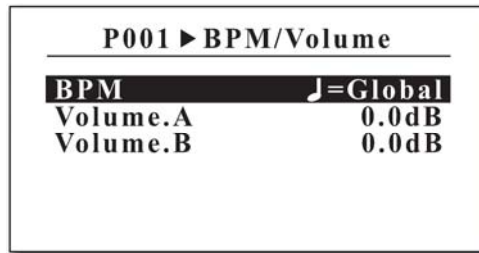
```
P001 ► BPM/Volume

BPM              ♩=Global
Volume.A           0.0dB
Volume.B           0.0dB
```

BPM

> **Global** : The BPM works with global BPM when the current preset is recalled.
> **40 - 209** : The BPM works with current value in this menu when the current preset is recalled.
> **Same** : The BPM works with previous preset BPM.
> **None** : The BPM is not working.

Volume.A and Volume B – Increase/Decrease each volume value (min:-48.5dB max:+15.0dB, 0.5dB steps).
> • Each volume controller can be bypassed like other audio loops. The IA switch (Vol.A/B) must be turned on when using the volume controller.

4.1.4 Loop Order

This menu allows changing loop order and signal routing you can make the following settings.

• Change the connection order of effect loops

• Create a split connection

• Specify Carry Over

Symbol	Description	Symbol	Description
IN	Input		
▷	Input Buffer	L R	Two Outputs (Left/Right)
1,2	Loop 1 and Loop2		
3 4 ····· 12	Loop 3 ~ Loop 12	⌐3⌐ ⌐4⌐ ····· ⌐12⌐	Carry-Over Loop
vA vB	Volume-controller A and B		

There are several limitations below to change the signal routing :

• The **Input** and **Output** cannot be moved.

• The **Input Buffer** and **Loop 1, 2** can only be repositioned with each other.

• If the signal is split from the previous, the signal cannot be split again after that.

• When you set up a specific loop as the carry-over function, the volume-controller(vA or vB) must be at the next position. When a specific loop is set to the carry-over function with the volume-controller, the outline of the loop box is displayed as a **dotted line**.
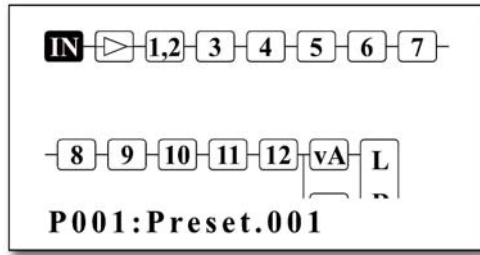
The switch functions in the Preset Order window are shown below.

SW#1 & SW#2 – Move the highlighted area left/right to select audio loop.
When the highlighted area is located in IN, the information about the currently selected preset is displayed at the bottom of the LCD. you can move to another preset you want to edit using #5 and #9 switches.

SW#3 & SW#4 – Move the selected audio loop left/right.

SW#5 & SW#9 – Move the selected audio loop up/down.

SW#6 – Set the selected loop to the carry-over or disable it if it is already set.

SW#10 – Split the signal, or remove if it is already split.

Ex1) Move the input buffer before loop 3
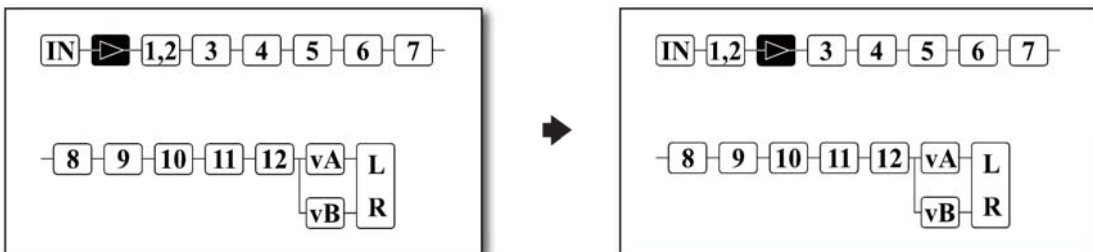
Select the **Input Buffer** as the highlight area and use switch #4 to move the right.
This is useful when using the fuzz pedals in loop 1 and 2.

Ex2) Move loop 8 to the next position on loop 9
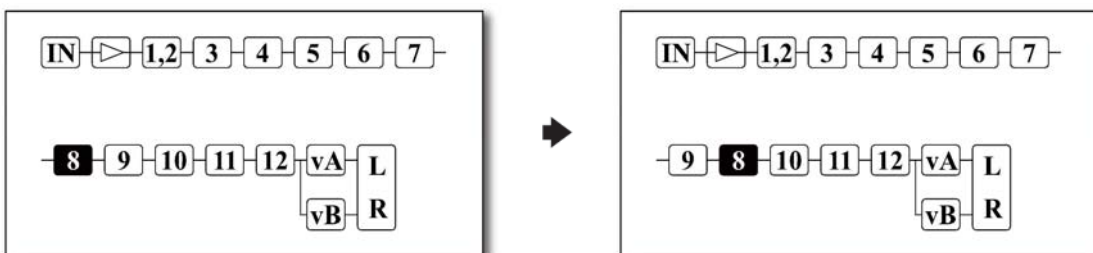
Select the **Loop 8** as the highlight area and use switch #4 to move the right.

Ex3) Set stereo loop 12 to Carry-over
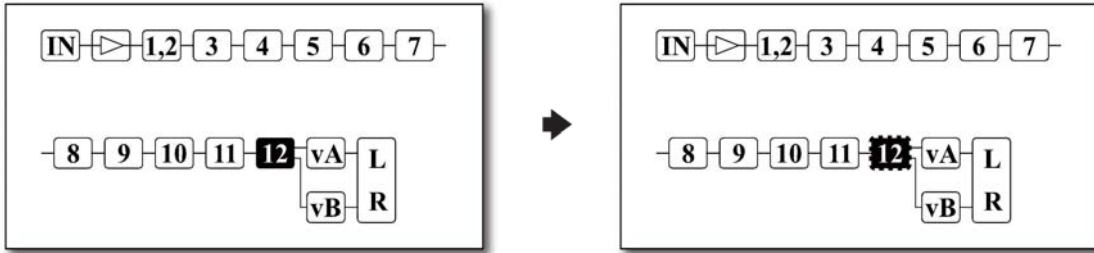
Loop 12 return must be changed from mono to stereo first.
Refer to the **4.5.2 Audio > Lp12 Rtn** on the page 27 of the manual.

Select the **Loop 12** as the highlight area and use switch #6 to change to the carry-over.

Ex.4) Using two mono-loop as one stereo
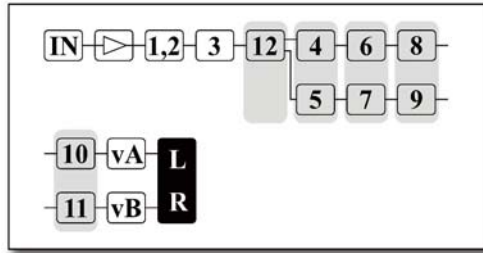
Up to five stereo loops can be configured, and two audio loops can be assigned to one IA switch.

Refer to the **4.3.2 Assign as IA switch > Audio** on the page 21 of the manual.

Ex.5) Mix Loop 4 and Loop 5
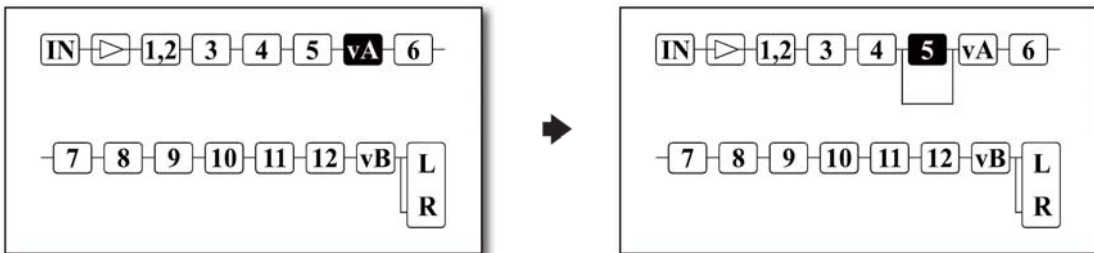
1. Position the vA or vB behind loop 5.
2. Select the loop 5, press switch 10 for 1 second to turn on the MIX function.
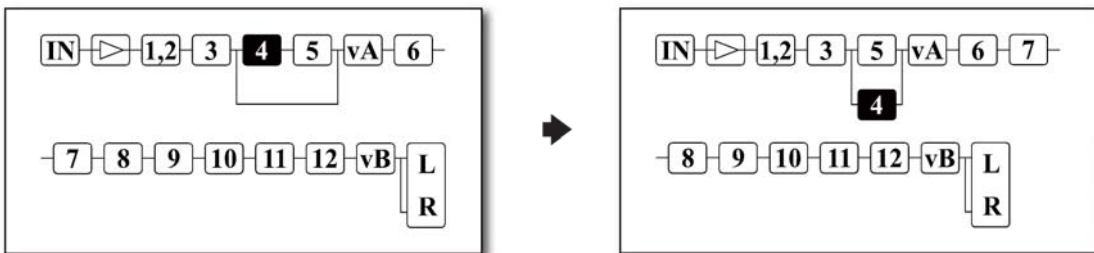
1. Select the loop 4 and press Switch #4 to move it into the mixer.
2. Press switch #5 to move loop 4 down.

4.2 Songs/Sets

The Songs/Sets menu allows for the EFX MK-VI's regular presets to be organized in a custom bank to edit a song (or custom bank of presets). Multiple songs can then be arranged in a bank in order to create a set.

Selecting Songs/Sets from the main SETUP menu allows you to go to the submenu where you can choose whether to edit a songs or sets. The LCD display will show the submenu.
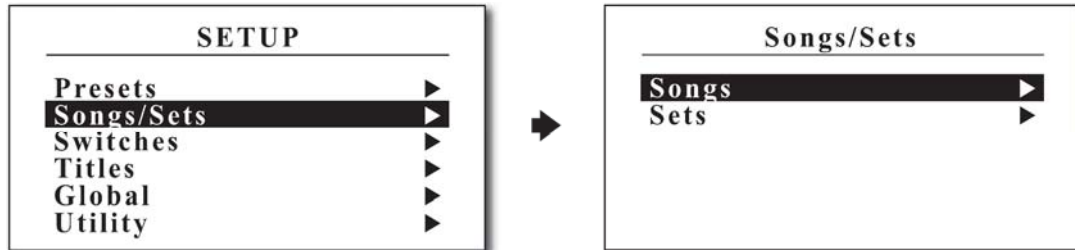
4.2.1 Edit Song

Select a song you want to edit. The song title is displayed together, making it easier to select a song.
The LCD display will show the submenu.
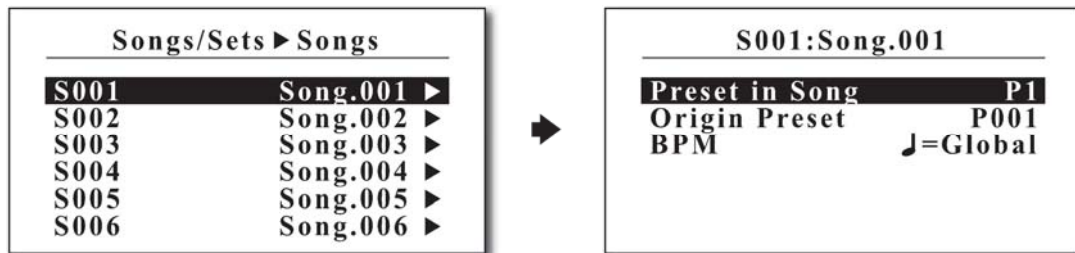
Preset in Song – The preset in song that is going to be edited. (up to P9)

Origin Preset – The original preset number to be used in the song. (P001~P900)

BPM

> Global : The BPM works with global BPM when the current preset is recalled.
> 40 - 209 : The BPM works with current value in this menu when the current song preset is recalled.
> Same : The BPM works with previous preset BPM.
> None : The BPM is not working.

From this menu, you can move the other song you want to edit using #1 and #2 switches.
This is to avoid the hassle of moving to the previous menu to edit other songs.

SW#1 – Decrease the song number by one.

SW#2 – Increase the song number by one.

4.2.2 Edit Set

Select a set you want to edit. The set title is displayed together, making it easier to select a set.
The LCD display will show the submenu.
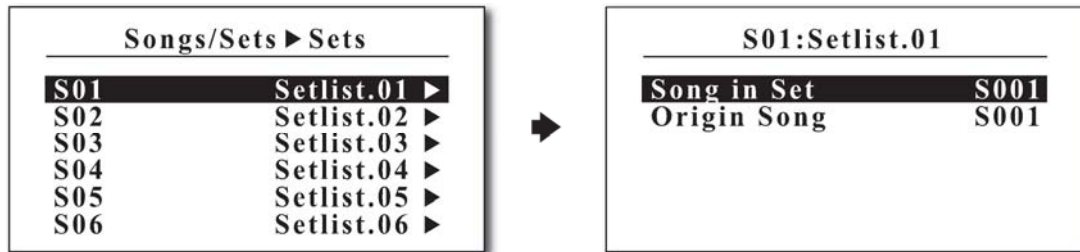
Song in Set – The song in set that is going to be edited. (S001~S120)

Origin Song – The original song number to be used in the set. (S001~S900)

From this menu, you can move the other set you want to edit using #1 and #2 switches.
This is to avoid the hassle of moving to the previous menu to edit other sets.

SW#1 – Decrease the set number by one.

SW#2 – Increase the set number by one.

4.3 Switches

This Switches menu allows you to set the functionality of the switch assigned to each page. You can set a completely different function on the switch for up to 8 pages. You can also assign switch functions differently when you press(express as **Normal**) and press/hold(express as **Hold**) the switch. By factory default, there are five pages, and for each switch function, refer to the table below.

|		SW#1	SW#2	SW#3	SW#4	SW#5	SW#6	SW#7	SW#8	SW#9	SW#10	SW#11	SW#12
Page1	Normal	P1	P2	P3	P4	P5	Tap	Page+	Mute	Bank-	Bank+	x	x
	Hold	x	x	x	x	x	x	Store	x	Bank-	Bank+	x	x
Page2	Normal	L1	L2	L3	L4	L5	L6	Page+	L7	L8	L9	x	x
	Hold	x	x	x	x	x	x	Store	x	x	x	x	x
Page3	Normal	L10	L11	L12	VA	Vol.B	F1	Page+	F2	F3	F4	x	x
	Hold	x	x	x	x	x	x	Store	x	x	x	x	x
Page4	Normal	OL	OR	BI	VA-	VB-	P.BPM-	Page+	VA+	VB+	P.BPM+	x	x
	Hold	x	x	x	VA-	VB-	P.BPM-	Store	VA+	VB+	P.BPM+	x	x
Page5	Normal	BO	x	x	x	x	x	Page+	x	x	x	x	x
	Hold	x	x	x	x	x	x	Store	x	x	x	x	x

- SW#11 and SW#12 means when two external footswitches are connected to the XPDL jack.
  Refer to the **4.5.1 MIDI > XPDL** on the page 26 and **6.1 XPDL** on the page 32 of the manual.

Each switch can be assigned one of the ones listed in the table below.

None	No function
Preset	Selects a preset
IA	Instant Access switch which turns certain functions on or off
Tap Tempo	Changes BPM by tapping the switch.
IA Store	Stores the combination of IA switches.
Goto Page	Moves to specified page
Page+	Increases page number
Page-	Deceases page number
Bank+	Increases bank number
Bank-	Deceases bank number
Inc+	Increases specific parameter
Dec-	Decreases specific parameter
Volume.A+	Increases Volume.A value in 0.5 dB steps
Volume.A-	Decreases Volume.A value in 0.5 dB steps
Volume.B+	Increases Volume.B value in 0.5 dB steps
Volume.B-	Decreases Volume.B value by in 0.5 dB steps
Pst.BPM+	Increases Preset BPM
Pst.BPM-	Decreases Preset BPM

- Preset and IA cannot be assigned to **Hold** type switch.

Selecting the Switches menu from the main SETUP menu allows you to go to the submenu where you can select the page with the switch you want to edit. When you select the page with switch you want to edit, the page title is displayed together.

```
            SETUP                              Pages

  Presets              ▶            PG1           Page.1 ▶
  Songs/Sets           ▶            PG2           Page.2 ▶
  Switches             ▶            PG3           Page.3 ▶
  Titles               ▶            PG4           Page.4 ▶
  Global               ▶            PG5           Page.5 ▶
  Utility              ▶            PG6           Page.6 ▶
```
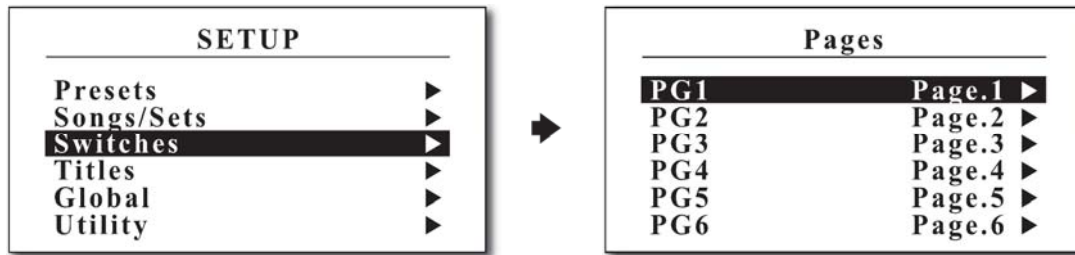
Select the switch you want to edit, it moves to the submenu where you can edit the details. When you select the switch you want to edit, the switch title is displayed together.

```
      PG1 ▶ Switches                      PG1 ▶ SW01

  SW01           Preset1 ▶          Press          Normal
  SW02           Preset2 ▶          Type           Preset
  SW03           Preset3 ▶          Preset#             1
  SW04           Preset4 ▶          LED Color        Blue
  SW05           Preset5 ▶          MIDI               ▶
  SW06              Tap  ▶
```
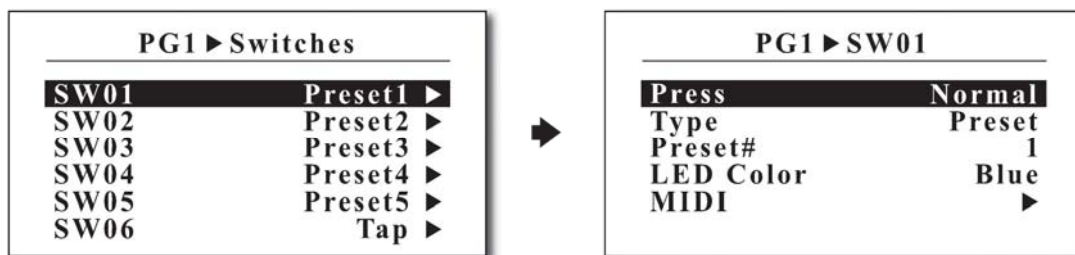
Press - Depending on how you press on one switch, you can set up two functions:

      Normal : Pressing the switch for a short period of time
      Hold   : Press and hold the switch for more than 1 second.

4.3.1 Assign as Preset switch

```
              PG1 ▶ SW01

      Press             Normal
      Type              Preset
      Preset#                1
      LED Color           Blue
      MIDI                   ▶
```
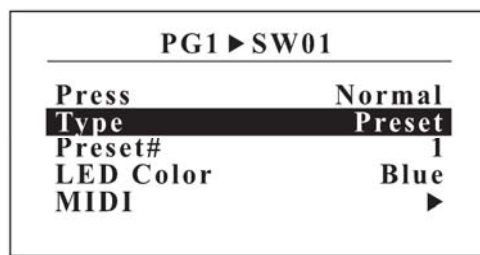
Preset# - The preset number for which the switch is used in the bank or song. (1~9)

LED Color – The LED color that turns on when the switch is pressed. (None, Blue, Red or Purple)

MIDI - EFX MK-VI can send up to 8 MIDI messages when the switch is pressed. The 8 MIDI messages are displayed as MIDI01 to MIDI08. The procedure for assigning MIDI is the same as the **4.1.1 MIDI**. Refer to the **4.1.1 MIDI** on the page 12 of the manual.

```
    PG1 ▶ SW01N ▶ MIDI                PG1 ▶ SW01N ▶ MIDI1

  MIDI1          None ▶           Msg.Type          None ▶
  MIDI2          None ▶
  MIDI3          None ▶
  MIDI4          None ▶
  MIDI5          None ▶
  MIDI6          None ▶
```
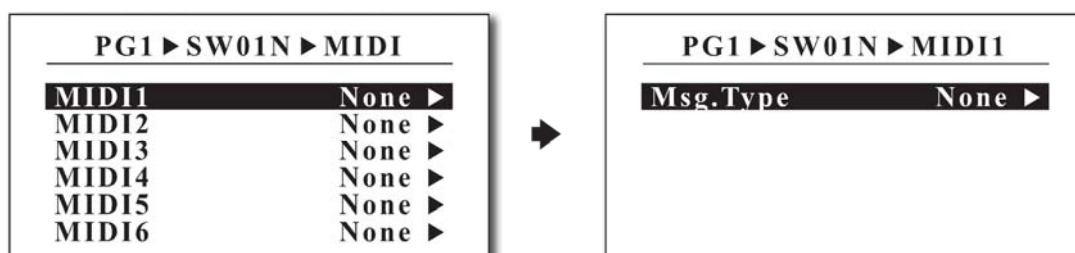
4.3.2 Assign as IA switch

```
        PG2 ▶ SW01
  ─────────────────────
  Press           Normal
  Type                IA
  LED Color          Red
  MIDI                 ▶
  Audio                ▶
  IA Setting           ▶
```

LED Color – The LED color that turns on when the switch is pressed. (None, Blue, Red or Purple)

MIDI – The procedure for setting the MIDI is the same as the preset switch.
Rcv.CC# is added only at the bottom of the MIDI menu on the IA switch. Incoming CC messages can remotely control the IA switches. Rcv.CC# can be set from 80 to 127.

```
     PG1 ▶ SW01N ▶ MIDI
  ─────────────────────
  MIDI4         None ▶
  MIDI5         None ▶
  MIDI6         None ▶
  MIDI7         None ▶
  MIDI8         None ▶
  Rcv.CC#         None
```

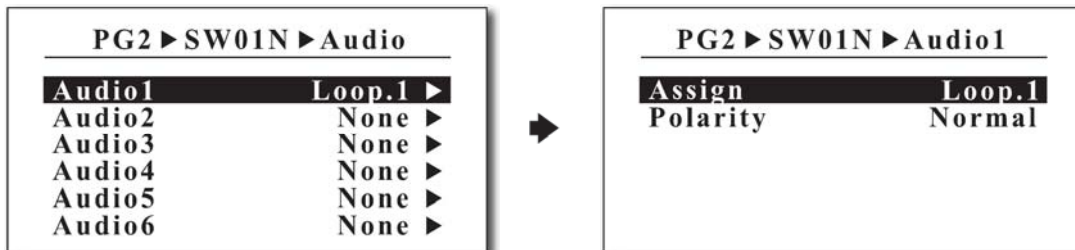**Audio** - IA switches can be assigned up to eight audio actions. 8 audio actions are displayed as Audio1 to Audio8. You can also set the polarity of the audio action.

```
   PG2 ▶ SW01N ▶ Audio            PG2 ▶ SW01N ▶ Audio1
  ─────────────────────          ─────────────────────
  Audio1      Loop.1 ▶           Assign        Loop.1
  Audio2       None ▶            Polarity      Normal
  Audio3       None ▶
  Audio4       None ▶
  Audio5       None ▶
  Audio6       None ▶
```

IA Setting - IA Setting allows you to set the properties for IA switch.

```
   PG2 ▶ SW01N ▶ IA Setting
  ─────────────────────
  SW Action      Latched
  Change         Link/Pst
  Group            None
```

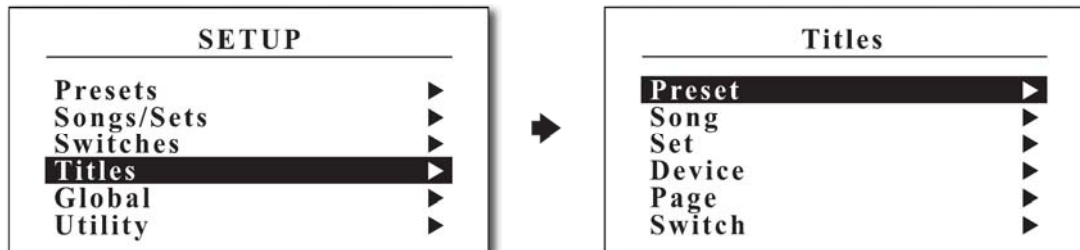|		
Sw Func	Latched	Acts as latched type.
	Momentary	Acts as momentary type.
Change	Link/Pst	The initial value is the same as the IA value stored when a new preset is recalled.
	Clr/Pst	The initial value is OFF when a new preset is recalled.
	NC/Pst	There is no change when a new preset is recalled.
Group		The group to which the IA switch belongs.

4.3.3 Assign as other switches

The procedure for assigning other switches is the same as the preset or IA switch.
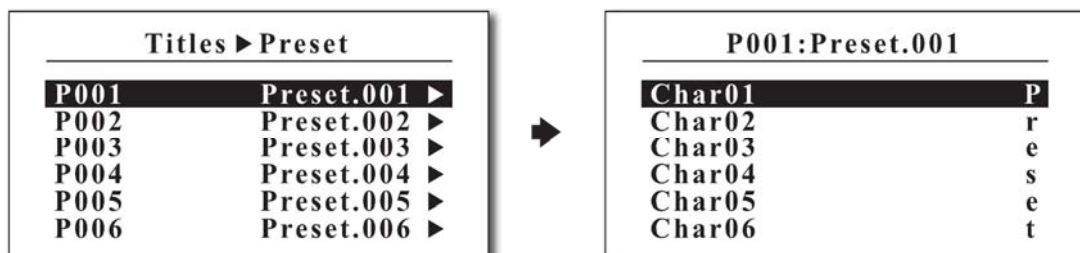
4.4 Titles

The Titles menu allows custom titles to be entered for each preset, song, set, device, page and switch. Each custom title can be up to 16 characters in length.

Selecting the Titles menu from the main SETUP menu allows you to move to the submenu where you can choose which title to edit. The LCD display will show the submenu.

```
         SETUP                              Titles

Presets            ▶              Preset                ▶
Songs/Sets         ▶              Song                  ▶
Switches           ▶              Set                   ▶
Titles             ▶              Device                ▶
Global             ▶              Page                  ▶
Utility            ▶              Switch                ▶
```

4.4.1 Preset Title

Select the preset to edit the title. The preset title is displayed together, making it easier to select the preset. The LCD display will show the submenu.

```
   Titles ▶ Preset                        P001:Preset.001

P001        Preset.001 ▶        Char01                   P
P002        Preset.002 ▶        Char02                   r
P003        Preset.003 ▶        Char03                   e
P004        Preset.004 ▶        Char04                   s
P005        Preset.005 ▶        Char05                   e
P006        Preset.006 ▶        Char06                   t
```

SW#1 & SW#2 – Decrease/increase the preset number by one.

SW#5 & SW#9 – Move up/down the selectable menu.

SW#6 & SW#10 – Move/Scroll through the available characters.

4.4.2 Song Title

Select the song to edit the title. The song title is displayed together, making it easier to select the song. The LCD display will show the submenu.

```
   Titles ▶ Song                          S001:Song.001

S001        Song.001 ▶          Char01                   S
S002        Song.002 ▶          Char02                   o
S003        Song.003 ▶          Char03                   n
S004        Song.004 ▶          Char04                   g
S005        Song.005 ▶          Char05                   .
S006        Song.006 ▶          Char06                   0
```

SW#1 & SW#2 – Decrease/increase the song number by one.

SW#5 & SW#9 – Move up/down the selectable menu.

SW#6 & SW#10 – Move/Scroll through the available characters.

4.4.3 Set Title

Select the set to edit the title. The set title is displayed together, making it easier to select the set.
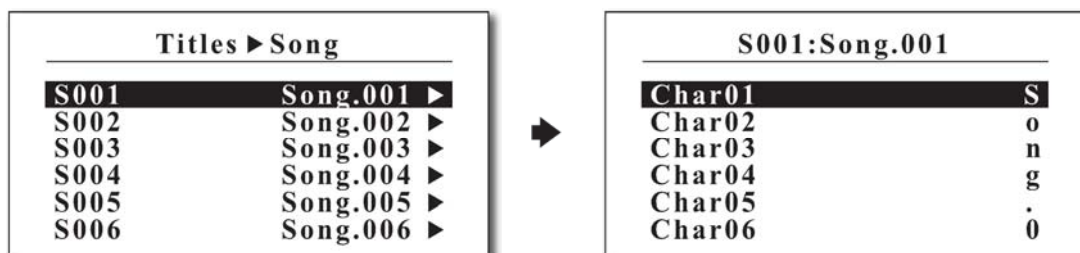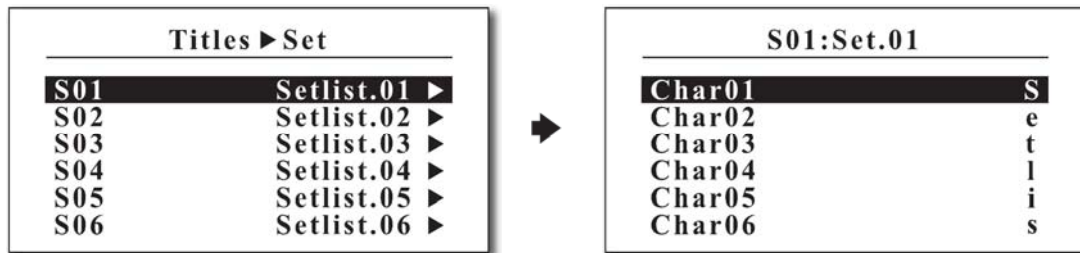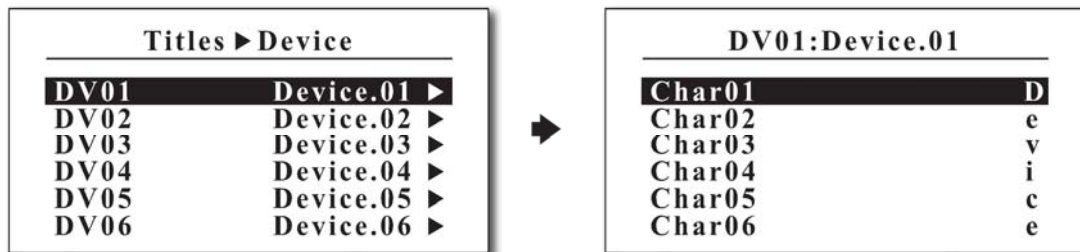The LCD display will show the submenu.

Titles ▶ Set		S01:Set.01	
S01	**Setlist.01 ▶**	**Char01**	**S**
S02	Setlist.02 ▶	Char02	e
S03	Setlist.03 ▶	Char03	t
S04	Setlist.04 ▶	Char04	l
S05	Setlist.05 ▶	Char05	i
S06	Setlist.06 ▶	Char06	s

SW#1 & SW#2 – Decrease/increase the set number by one.

SW#5 & SW#9 – Move up/down the selectable menu.

SW#6 & SW#10 – Move/Scroll through the available characters.
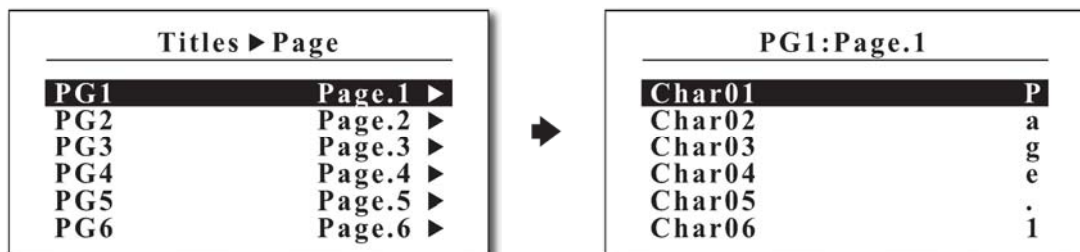
4.4.4 Device Title

Select the device to edit the title. The device title is displayed together, making it easier to select the device.
The LCD display will show the submenu.

Titles ▶ Device		DV01:Device.01	
DV01	**Device.01 ▶**	**Char01**	**D**
DV02	Device.02 ▶	Char02	e
DV03	Device.03 ▶	Char03	v
DV04	Device.04 ▶	Char04	i
DV05	Device.05 ▶	Char05	c
DV06	Device.06 ▶	Char06	e

SW#1 & SW#2 – Decrease/increase the device number by one.

SW#5 & SW#9 – Move up/down the selectable menu.

SW#6 & SW#10 – Move/Scroll through the available characters.
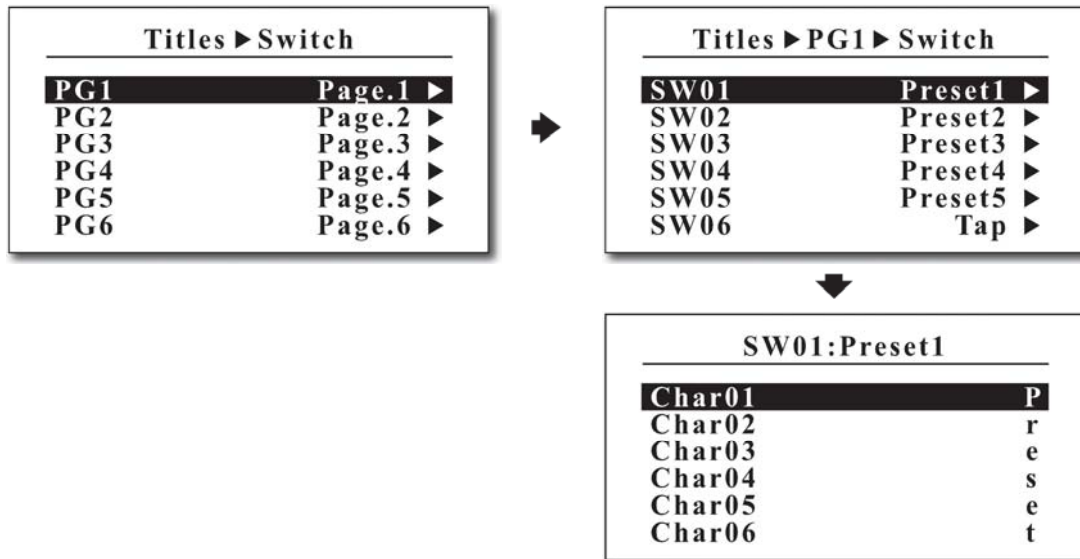
4.4.5 Page Title

Select the page to edit the title. The page title is displayed together, making it easier to select the page.
The LCD display will show the submenu.

Titles ▶ Page		PG1:Page.1	
PG1	**Page.1 ▶**	**Char01**	**P**
PG2	Page.2 ▶	Char02	a
PG3	Page.3 ▶	Char03	g
PG4	Page.4 ▶	Char04	e
PG5	Page.5 ▶	Char05	.
PG6	Page.6 ▶	Char06	1

SW#1 & SW#2 – Decrease/increase the page number by one.

SW#5 & SW#9 – Move up/down the selectable menu.

SW#6 & SW#10 – Move/Scroll through the available characters.

4.4.5 Switch Title

Select the page where the switch exists. And then, select the switch to edit the title. The switch title is displayed together, making it easier to select the switch. The LCD display will show the submenu.

```
  Titles ▶ Switch                          Titles ▶ PG1 ▶ Switch
┌─────────────────────┐               ┌─────────────────────┐
│ PG1        Page.1 ▶ │               │ SW01      Preset1 ▶ │
│ PG2        Page.2 ▶ │      ➡        │ SW02      Preset2 ▶ │
│ PG3        Page.3 ▶ │               │ SW03      Preset3 ▶ │
│ PG4        Page.4 ▶ │               │ SW04      Preset4 ▶ │
│ PG5        Page.5 ▶ │               │ SW05      Preset5 ▶ │
│ PG6        Page.6 ▶ │               │ SW06         Tap  ▶ │
└─────────────────────┘               └─────────────────────┘
                                                  ⬇
                                       ┌─────────────────────┐
                                       │    SW01:Preset1     │
                                       │ Char01            P │
                                       │ Char02            r │
                                       │ Char03            e │
                                       │ Char04            s │
                                       │ Char05            e │
                                       │ Char06            t │
                                       └─────────────────────┘
```

SW#1 & SW#2 – Decrease/increase the switch number by one.

SW#5 & SW#9 – Move up/down the selectable menu.

SW#6 & SW#10 – Move/Scroll through the available characters.
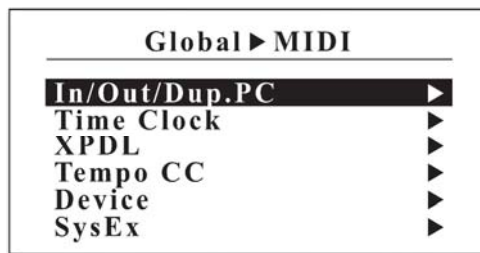
4.5 Global

The Global menu allows configuring the EFX MK-VI's general functionality by selecting its MIDI, Audio and Others.

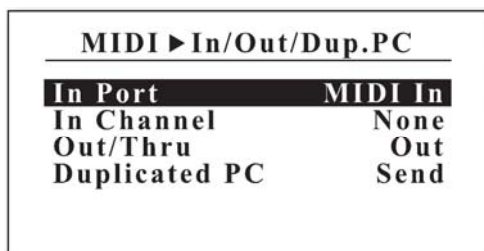Selecting Global from the main SETUP menu allows you to move to the submenu. The LCD display will show the submenu.

```
        SETUP                          Global
 Presets          ▶          MIDI                    ▶
 Songs/Sets       ▶          Audio                   ▶
 Switches         ▶          Others                  ▶
 Titles           ▶
 Global           ▶
 Utility          ▶
```

4.5.1 MIDI

The MIDI menu allows configuring the EFX MK-VI's general MIDI functionality and is divided into the following 6 detailed menus.

```
        Global ▶ MIDI
 In/Out/Dup.PC    ▶
 Time Clock       ▶
 XPDL             ▶
 Tempo CC         ▶
 Device           ▶
 SysEx            ▶
```

In/OUT/Dup.PC

```
   MIDI ▶ In/Out/Dup.PC
 In Port           MIDI In
 In Channel           None
 Out/Thru              Out
 Duplicated PC        Send
```

In Port/Channel - The MIDI port/channel that the EFX MK-VI will respond to incoming MIDI messages on.

Out/Thru - When set to Out, MIDI messages generated by the controls on EFX MK-VI are sent to the MIDI output. When set to THRU, MIDI messages that arrive at the MIDI input are sent to the MIDI output.

Duplicated PC : Selects whether sending MIDI program change messages or not when the current MIDI program change number is the same as the previous one.

Time Clock

```
   MIDI ▶ Time Clock
 Send            Disabled
 Receive         Disabled
```
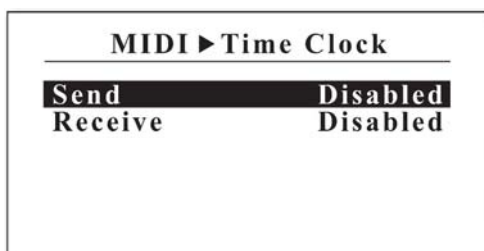
Send - Selects whether MIDI Time Clock is sent to MIDI Out, USB or Disable.

Receive - Selects whether MIDI Time Clock is received or not.

XPDL

```
MIDI ▶ XPDL

Source          Expression
Device          Device.01
CC#             None
Max.Value       127
Min.Value       000
Rate            10ms
```

Source - Selects whether an expression pedal or two foot-switches is connected to the XPDL jack.

Device - Selects the device to receive this control change message.

CC# - Selects the controller number to be sent.

Max.Value - Highest controller value that the XPDL can send when its pedal is moved.

Min.Value - Lowest controller value that the XPDL can send when its pedal is moved

Rate - Selects the minimum time interval between XPDL CCs.

Tempo CC

```
MIDI ▶ Tempo CC

Device          Device.01
CC#             None
On.Value        127
Off.Value       000
```

Some MIDI devices receive MIDI Control Change, not MIDI TIME CLOCK, as the tempo message. This page lets you set the MIDI Control Change as a tempo for these units.

Device - Selects the device to receive this control change message.

CC# - Selects the controller number to be sent.

On.Value/Off.Value - Divide the quarter note into two and send the ON value first and OFF value second.

Devices

EFX MK-VI can set up to 16 devices. 16 devices are displayed as Device01 to Device16, each of which can be assigned a Port, MIDI channel, PC# Offset and Maximum Scroll PC#.

```
MIDI ▶ Devices              MIDI ▶ Device01

DV01      Device.01 ▶       Port            MIDI Out
DV02      Device.02 ▶       Channel              01
DV03      Device.03 ▶   ➡   PC# Offset            1
DV04      Device.04 ▶       Max.Scr.PC#         128
DV05      Device.05 ▶
DV06      Device.06 ▶
```

Port - Selects the MIDI Port(MIDI Out or USB) to be sent to each device.

Channel - Selects the MIDI channel to be sent to each device.

PC# Offset - Selects whether to display the minimum value of the program number as 0 or 1.

Max.Scr.PC# - Selects the maximum value when increasing or decreasing program numbers

SysEx (System Exclusive)

EFX MK-VI can have up to 64 MIDI System Exclusive slots. One MIDI system exclusive slot is consist of up to 16 bytes(except first F0 and last F7). System Exclusive slots can be assigned when MIDI is set to presets or switches.
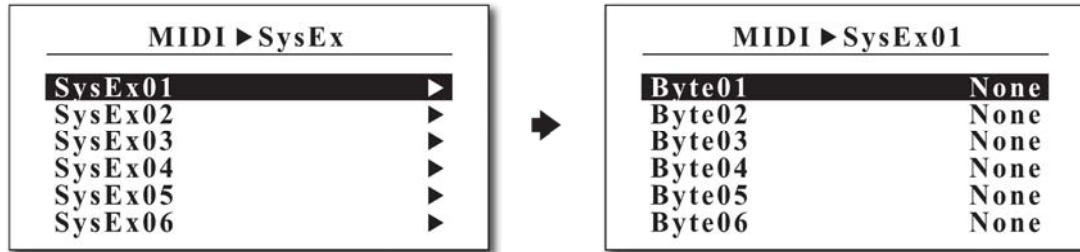
4.5.2 Audio

The Audio menu allows configuring the EFX MK-VI's general audio functionality and is divided into the following 7 detailed menus.

Clickless

The Clickless control is excellent for reducing a popping noise when audio loops status are changed.

Disabled - Disable the Clickless control.
Buf/L1/L2 – Clickless control is enabled only when buffers, loop1 or loop2 status is changed.
Any Change - Clickless control is enabled when any audio status is changed.

Lp12 Rtn

Selects whether the effect loop 12 is mono-return or stereo-return.

Func1~Func4

The Func1 to Func4 will act as footswitch like those used for amp channel switching.
The EFX MK-VI supports three types of switch.

Latched – The function switch act as latched switch.
Momentary.A – The function switch act as momentary switch that operates when IA switch is turn on and off.
Momentary.B – The function switch act as momentary switch that operates only when IA switch is turn on.
Tempo Sync - The function switch is synchronized with the BPM.

Iso-Out

Sets the signal to split with the ISO-OUT jack on signal flow.
You can select can be selected one of None, Lp3 Snd ~ Lp12 Snd, OUT.L or OUT.R.

4.5.3 Others

The Others menu allows configuring the EFX MK-VI's general other functionalities and is divided into the following 10 detailed menus.

Op.Mode (Opearating Mode)

Determines EFX MK-VI Operating mode (Preset mode or SET01~SET64 mode).
For Set mode, the set title is displayed.

2nd.Press Pst (2nd Press Preset)

Determines whether or not to use the global preset when you press the switch in a preset that is already on.

Pst/BankSong (Presets per Bank/Song)

Determines how many presets to use for a bank or song.

Max.BankSong (Maximum Bank)

Determines how many banks/songs to access through the BANK ▼ and BANK ▲ switches.

Max.Page Scrl (Maximum Page Scroll)

Determines how many pages to access through the Page+ and Page- switches.

Max.Page Exct (Maximum Page Execute)

Determines how many pages to execute when changing a preset.

Page Display

Determines whether to display the current page number on the LCD.
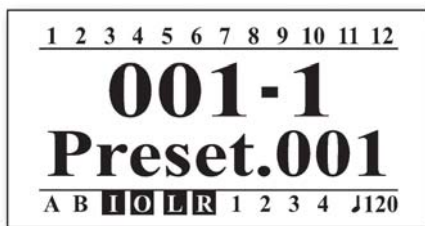
Page Display : Disabled   Page Display : Enabled

Hold Sw Time (Hold Switch Time)

Determines the time required for the Hold Switch function to execute. (1,000 ~ 3,000 msec)

Hold Sw Scrl (Hold Switch Scrl)

Determines whether the hold switch function is executed only once or continuously.

LCD Bright (LCD Brightness)

Adjusts LCD brightness in 10 steps.

4.6 Utility

The Utility menu allows configuring copying, factory reset and check the system information of your unit.
Selecting the Utility menu from the main SETUP menu allows you to move to the submenu. The LCD display will show the submenu.

```
        SETUP                          Utility
 Presets            ▶          Preset Copy         ▶
 Songs/Sets         ▶          SongCopy            ▶
 Switches           ▶     ▶    Set Copy            ▶
 Titles             ▶          Switch              ▶
 Global             ▶          Factory Reset       ▶
 Utility            ▶          System Info         ▶
```
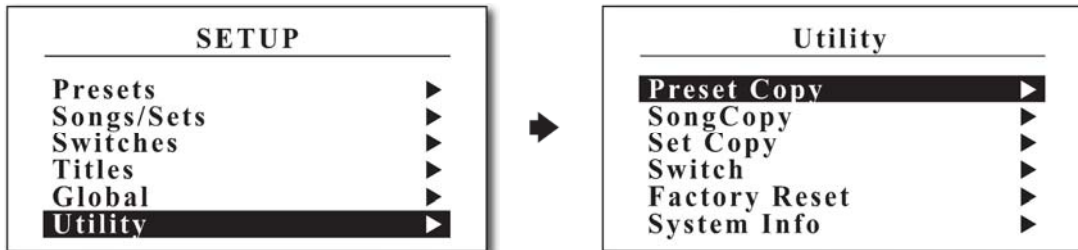
4.6.1 Preset Copy

The Preset Copy allows copying part or all of the data from one preset to another.

```
 Utility ▶Preset Copy

 Source              P001
 Destination         P001
 Copy Area           All
```
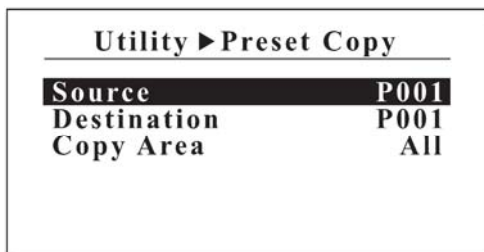
Source – Source preset number (P001~P900)

Destination – Destination preset number
            (P001~P900 or All)

Copy Area – Select part or all of the source preset
            (All, Audio, MIDI or Title)

4.6.2 Song Copy

The Song Copy allows copying from one song to another.

```
 Utility ▶Song Copy

 Source              S001
 Destination         S001
```
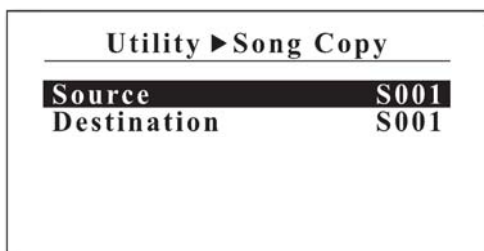
Source – Source song number (S001~S900)

Destination – Destination song number (S001~S900)

4.6.3 Set Copy

The Set Copy allows copying from one set to another.

```
 Utility ▶Set Copy

 Source              S01
 Destination         S01
```
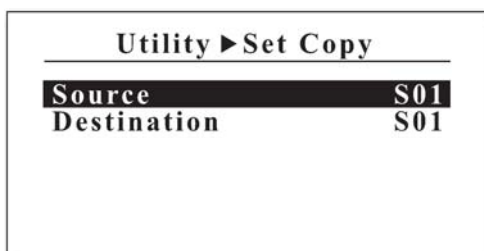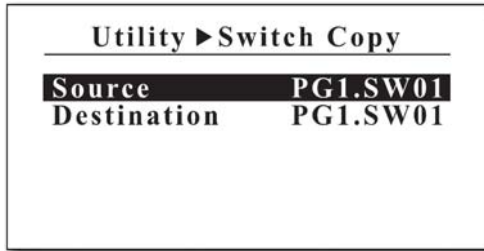
Source – Source set number (S01~S64)

Destination – Destination set number (S01~S64)

4.6.4 Switch Copy

The Switch Copy allows copying from one switch to another.

Utility ▶ Switch Copy

Source   PG1.SW01
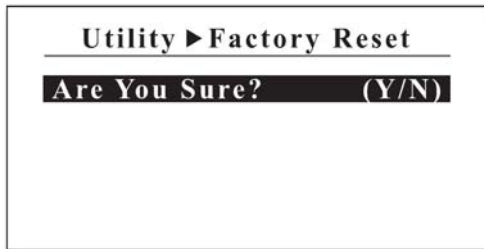Destination   PG1.SW01

Source – Source switch number
        (PG1.SW01~PG8.SW12)

Destination – Destination switch number
        (PG1.SW01~PG8.SW12)

4.6.5 Factory Reset
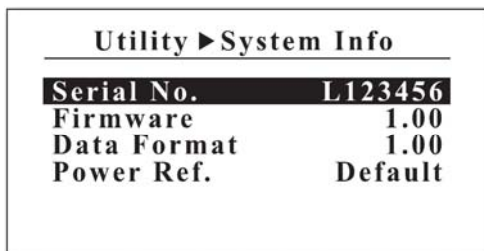
The Factory Reset allow erasing user data area in th internal EEPROM memory.

Utility ▶ Factory Reset

Are You Sure?   (Y/N)

Press/hold SW#7 for 1 second to initiate factory reset.

4.6.6 System Info

The System Info allows checking the system information of your unit.

Utility ▶ System Info

Serial No.   L123456
Firmware   1.00
Data Format   1.00
Power Ref.   Default

Serial No. - Serial number of your unit

Firmware – Firmware version of your unit

Data Fomat – Data format version of your unit

Power Ref. – Power check reference of your unit

5. FIRMWARE UPDATE

When new features are added or bugs are fixed, new firmware will be released periodically.
Follow the procedure below to update the new firmware.

① Download the **new firmware** and **EFX MK-VI Editor** software from the link below. Install **EFX MK-VI Editor** file and run it.
   http://musicomlab.com/efx-mkvi.htm

② Connect a USB cable to your EFX MK-VI and PC/Mac

③ To enter firmware update mode, plug in power while holding **BANK ▼** and **BANK ▲** switches down.

④ Wait until '**Connected SN:xxxxxxx Update Mode**' is displayed on the progress bar at the top of the EFX MK-VI editor.

⑤ Click the '**FILE/TRANSFER**' tab at the top of the editor screen.

⑥ Click the '**OPEN**' button in the '**FIRMWARE UPDATE**' area to load the new firmware file.

⑦ Press the '**UPDATE**' button to start updating.
   • Be careful not to let your PC/Mac go to SLEEP.
   • It takes about 4~7 minutes.

6. CABLES

6.1 XPDL

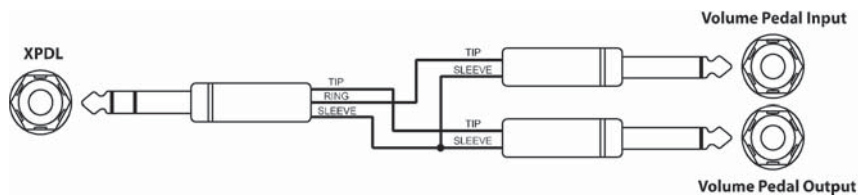### XPDL & Expression Pedal

The cable required is a stereo (TRS) to a stereo (TRS) 1/4" phone plugs.
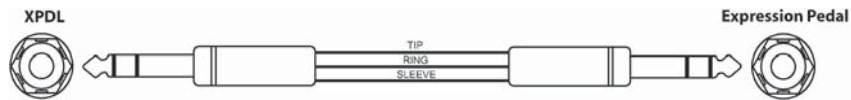
• Do not use an active volume pedal or expression pedal.

XPDL & Volume Pedal

Passive volume pedals can be used as an expression pedal. The cable required is a stereo (TRS) to two mono (TS) 1/4" phone plugs. Connect the tip(stereo plug) to the pedal output, ring to the pedal input and sleeve to ground on all 3 plugs.

• Do not use an active volume pedal or expression pedal.

XPDL & Two Foot-switches
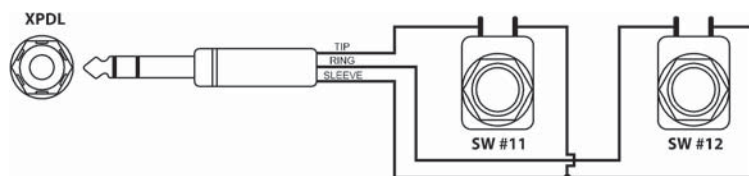
• Connect the Momentary Normally Open or Closed switches when connecting external switches.
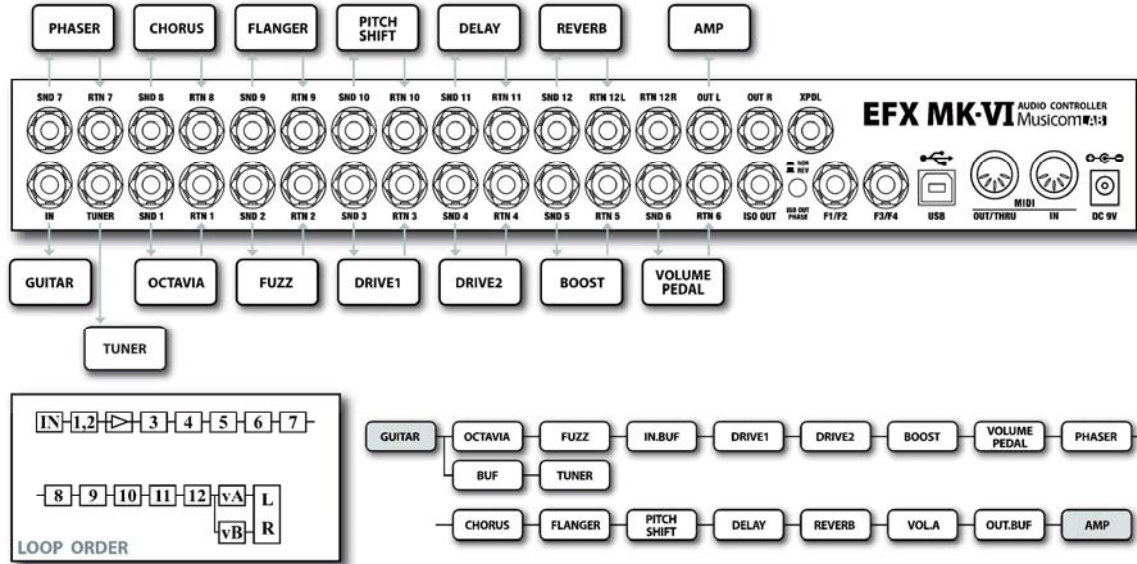 Refer to the **4.5.1 MIDI > XPDL** on the page 26.

6.2 Functions Switches

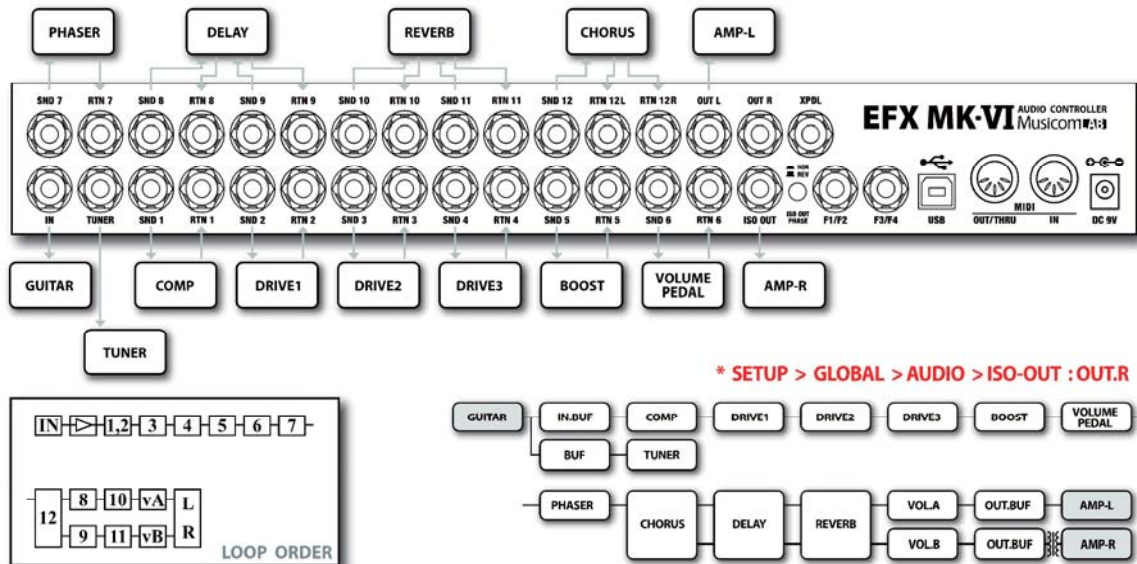The cable required is a stereo (TRS) to two mono 1/4" phone plugs.
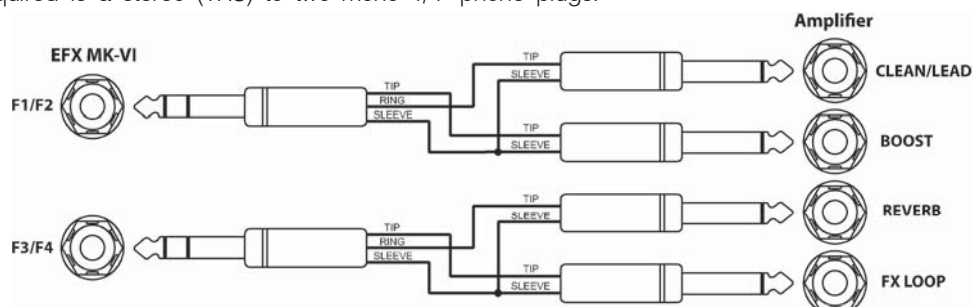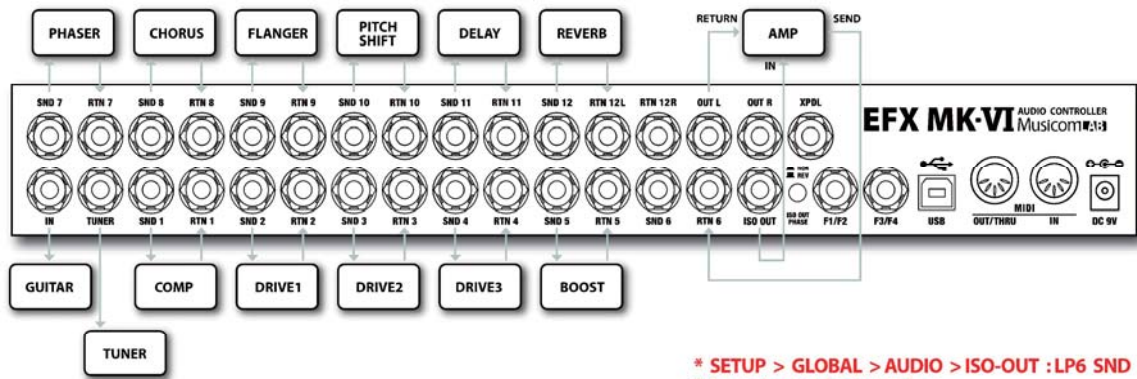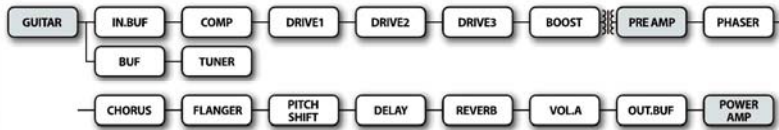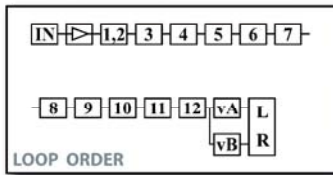
7. CONNECTION EXAMPLES

Basic Mono Connection

Stereo Connection with 3 Stereo FXs

Mono Connection for 4CM

8. MIDI IN SPECIFICATION

MIDI Preset Changes

MIDI access to these presets is available as MIDI program change messages.
Via MIDI, the presets are numbered sequentially.

PRESET MODE		SET MODE	
CC# : 000 VALUE : 000		**CC# : 000 VALUE : 000**	
PRESET 001	PC # 001	SONG 001 - P1	PC # 001
PRESET 002	PC # 002	SONG 001 - P2	PC # 002
PRESET 003	PC # 003	SONG 001 - P3	PC # 003
•••	•••	SONG 001 - P4	PC # 004
PRESET 128	PC # 128	SONG 001 - P5	PC # 005
CC# : 000 VALUE : 001		**CC# : 000 VALUE : 001**	
PRESET 129	PC # 001	SONG 002 - P1	PC # 001
•••	•••	•••	•••
PRESET 256	PC # 128	SONG 002 - P1	PC # 005
•••		•••	
		CC# : 000 VALUE : 118	
CC# : 000 VALUE : 006		SONG 119 - P1	PC # 001
PRESET 769	PC # 001	•••	•••
•••	•••	SONG 119 - P5	PC # 005
PRESET 896	PC # 128		
		CC# : 000 VALUE : 119	
CC# : 000 VALUE : 007		SONG 120 - P1	PC # 001
PRESET 897	PC # 001	SONG 120 - P2	PC # 002
PRESET 898	PC # 002	SONG 120 - P3	PC # 003
PRESET 899	PC # 003	SONG 120 - P4	PC # 004
PRESET 900	PC # 004	SONG 120 - P5	PC # 005

- **CC#000** is MIDI Bank Select MSB message.
- **Preset mode**   :   **Preset #** = (MSB x 128) + PC #
- **Set mode**   :   **Song #** = MSB + 1 ,   Preset = PC #

SAFETY PRECAUTIONS

WARNING
• To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.
• Do not cause electrostatic discharge (ESD) to the device.

CAUTION
• To reduce the risk of fire or electric shock, do not remove screws.
• There are no user serviceable parts inside.
• This device includes components which are susceptible to damage by electrostatic discharge (ESD).
• Refer servicing to qualified service personnel.

WARRANTY

Musicom Lab warrants this product against any defects that are due to defective parts or faulty workmanship for a period of one year from the date of original retail purchase. During this one year period, Musicom Lab will repair it without charge for parts or labor. However shipping charges to and from the repair location must be paid by the owner.

• This warranty applies only to the original owner and is not transferable.

• This warranty does not include damage to the product resulting from accident or misuse.

• This warranty shall not apply to any goods that have been repaired or altered by anyone other than the manufacturer.

Contact the following for support and/or repair service.

Mail   : Musicom Lab

              15-4, Seooreung-ro 15-gil, Eunpyeong-gu, Seoul, 03426, South Korea

Website   : http://www.musicomlab.com

Email   : support@musicomlab.com

Facebook : www.facebook.com/musicomlab