EFX-10D

Audio Controller

OWNER'S MANUAL

Version 1.0x

Musicom LAB

Preserving Your Tone, Pure and Dynamic

Table of Contents

1. INTRODUCTION

Thank you for purchasing the Musicom Lab EFX-10D Audio Controller.
The EFX-10D Audio Controller is the ultimate floor-based all-in-one switching system.
The EFX-10D is a compact, easy to use, has 10 fully programmable loops, 4 function switches and a MIDI foot-controller. The EFX-10D has a powerful MIDI function, so it can also be used with rack-based rig.

1.1 Main Features

- 10 mono audio loops.
- 2 mono loops can be used as 1 stereo loop
- Programmable loop order per each preset
- Up to 2 loops can be assigned to Carry-over between presets
- One of 2 inputs is selectable using TRS jack
  Input buffer can be enabled/disabled by each IA switch
- Output L/R are capable using TRS jack
- Loop 5/6, loop 7/8 and loop 9/10 are capable using TRS jacks
- 4 function switches via two TRS jack
- Create up to 800 presets (200 banks x 4 presets) and 1 global preset
- Create up to 800 songs
- Organize the 800 Songs into 64 sets of 120 songs.
- Switches can be assigned to the user's preference
- Clickless function for reducing popping noise
- 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
- Nominal Audio Signal Level .... -10 dBu
- Maximum Audio Signal Level .... +18 dBu
- Current Draw .... 250 mA (DC9V Center Negative)
- Dimensions .... 263 mm(W) x 110 mm(D) x 68 mm(H)
  10.4 inches(W) x 4.3 inches(D) x 2.7 inches(H)
- Weight .... 1.0 kg / 2.2 lbs

1.3 Block Diagram
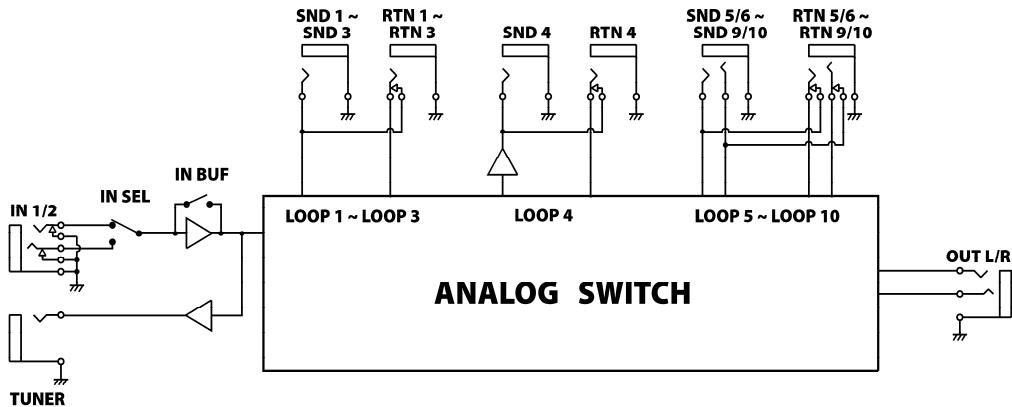
1.4 Front Panel
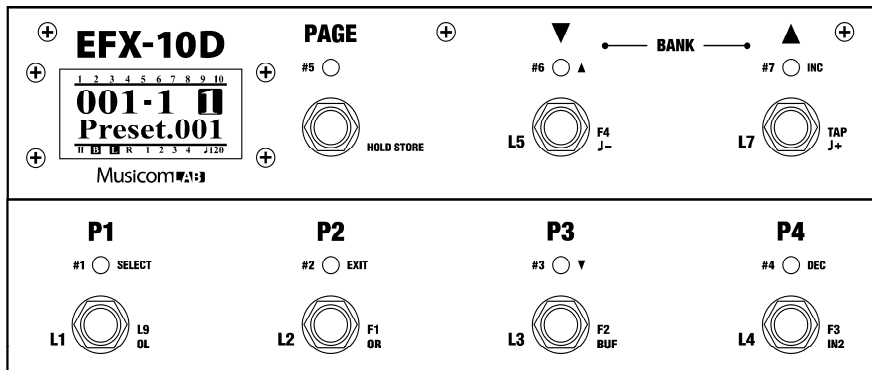
P1 through P4

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

PAGE

Pressing this switch puts the EFX-10D 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.

BANK▲ and BANK▼

The 800 presets in the EFX-10D are arranged in banks of 4, and these buttons allow you to select which bank of 4 you'd like to access. Pressing this switch in Preset mode increments/decrements the bank number.

1.5 Rear Panel

IN 1/2
This is the main input jack(TRS) where your two guitars plug in.
IN1 is connected to tip, IN2 is connected to ring, and TS plug can be inserted when only IN1 is used.
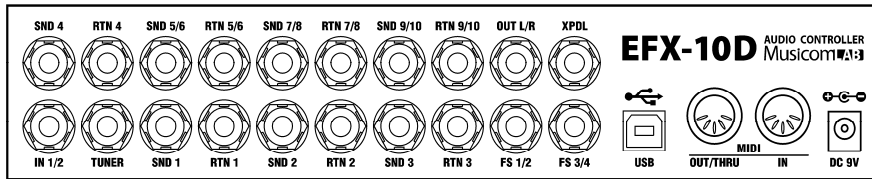The two inputs can be switched to the IA switch.
Refer to the **4.5.2 Audio > In.2** on page 23 of the manual.

TUNER
This jack is for connecting an external tuner.

SND 1~4 and RTN 1~4
These jacks provide mono-send / mono-return effect loops. SND 1~4 send signals to effect pedals and RTN 1~4 receive signals from effect pedals. Connect the SND 1~4 jacks to the INPUT jack of each effect pedal, and connect the RTN 1~4 jacks to the OUTPUT jack of each effect pedal. The SND 4 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 5~10 and RTN 5~10
These jacks provide 2 x mono-send / 2 x mono-return effect loop. SND 5~10 send signals to effect pedals and RTN 5~10 receive signals from effect pedals. Connect the SND 5~10 jacks to the INPUT jack of each effect pedal, and connect the RTN 5~10 jacks to the OUTPUT jack of each effect pedal.
Refer to the **4.5.2 Audio > Loop6, Loop8 and Loop10** on page 24 of the manual.

	SND 5/6	RTN 5/6	SND 7/8	RTN 7/8	SND 9/10	RTN 9/10
TIP	SND 5	RTN 5	SND 7	RTN 7	SND 9	RTN 9
RING	SND 6	RTN 6	SND 8	RTN 8	SND 10	RTN 10

OUT L/R
This is the main output jack(TRS) where your two amps plug in.
OUT L and OUT R can be turned on/off independently. OUT L is connected to tip, OUT R is connected to ring, and TS plug can be inserted when OUT R is disabled.
Refer to the **4.5.2 Audio > Out.R** on page 23 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 24 and **6.2 Function Switches** on the page 30 of the manual.

XPDL
An expression pedal or external dual foot-switch(momentary 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-10D. Refer to the **6.1 XPDL** on the page 30 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-10D'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-10D without any changes.
Refer to the **4.5.1 MIDI > IN/OUT** on the page 22 of the manual.

DC 9V

This is the main power input for the EFX-10D. The EFX-10D 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, or BPM for a short time, when the switch is pressed.

⑤ **Audio loops status**
   This area indicates which of the 10 audio loops are currently active.

⑥ **Input, buffer, outputs and function-switches status**
   This area indicates which of the input, buffer, outputs and function-switches are currently active.

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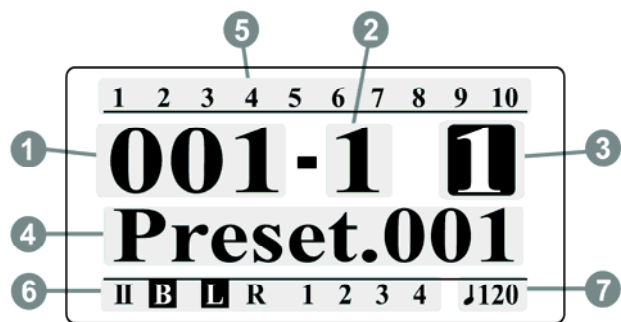
1.7 Characters around Switch

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.
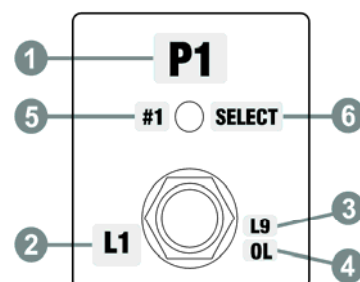
2. BASIC OPERATION (PRESET MODE)

2.1 Initial Power Up

The EFX-10D requires a DC9V power supply. At initial power-up, the EFX-10D displays the operating mode on the LCD display and starts with the first preset on bank 1 or song 1.

2.2 Page 1

Select a Preset

The EFX-10D has 800 presets and 1 global preset that you can choose from, and they're arranged in banks of five. When the EFX-10D 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 four switches (P1~P4) selects a preset in the new bank.

① Press/hold the BANK▼ or BANK▲ switch to scroll through the 200 available banks.

② The bank number on the LCD display will blink and the LEDs above P1~P4 switches will turn off.

③ The preset is selected via pressing any switches from P1 through P4.

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 4, 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 **4.5.3 Other >2nd.Press Pst** on the page 24 of the manual.

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.

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

|	SW1	SW2	SW3	SW4	SW5	SW6	SW7
Normal	Preset1	Preset2	Preset3	Preset4	Page+	BANK-	BANK+
Hold	None	None	None	None	IA Store	BANK-	BANK+

2.3 Page 2

Turn individual loops on and off

The audio loops(L1-L7) 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
Normal	L1	L2	L3	L4	Page+	L5	L7
Hold	None	None	None	None	IA Store	None	None

2.4 Page 3

Turn individual audio loops on and off
The audio loop(L9) 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.

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. 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.

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

	SW1	SW2	SW3	SW4	SW5	SW6	SW7
Normal	L9	F1	F2	F3	Page+	F4	Tap
Hold	None	None	None	None	IA Store	None	None

2.5 Page 4

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

Turn two outputs on and off
The two outputs(OL and OR) can be turned on of off individually by pressing the assigned switch on Page 4.

Select either IN1 or IN2
The two inputs(IN1 and IN2) can be selected 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
Normal	OUT L	OUT R	Input Buffer	IN2	Page+	Pst. BPM-	Pst. BPM+
Hold	None	None	None	Vol.A-	IA Store	Pst. BPM-	Pst. BPM+

3. SET MODE

The EFX-10D has up to 800 songs. A Song is a group of 4 presets (up to 7 presets) that are selected for use in a particular song. Each preset in a song can be selected from any of the 800 presets. Refer to the **4.2.1 Edit song** on the page 15 of the manual to edit a song.

The Set operating mode allows up to 120 songs of the EFX-10D's 800 songs to be arranged in any order to create a set. The EFX-10D has up to 64 different sets. Refer to the **4.2.2 Edit Set** on the page 15 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 24 of the manual to change the operating mode.

4. SETUP MODE

To enter the SETUP mode, press the #5(PAGE) and #7(BANK▲) switches simultaneously in the Page 1.
The LCD display will show the following picture.

```
          SETUP
  Presets                 ▶
  Songs/Sets              ▶
  Switches                ▶
  Titles                  ▶
  Global                  ▶
  Slots                   ▶
  Utility                 ▶
```
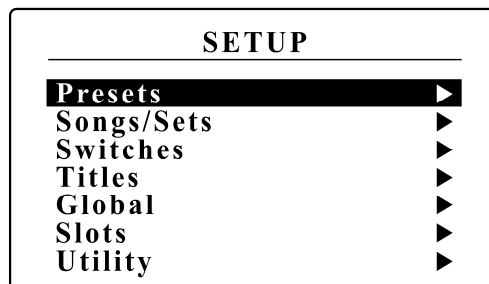
The switch functions in the picture below are common in SETUP mode.
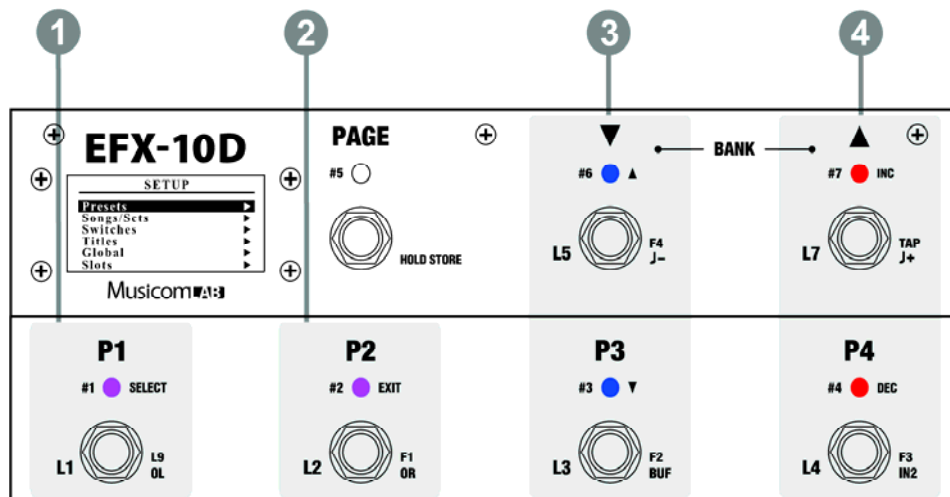
① **SW#1**
    Press : Enter the submenu of selected menu.
    Press and hold : Store any changes made. In the Utility menu, start copying or factory resetting.

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

② **SW#2** – Exit to the previous menu.

③ **SW#3 & SW#6** – Move up/down the selectable menu.

④ **SW#4 & SW#7** – Increase/decrease the parameter of the selected 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.

```
┌─────────────────────────┐      ┌─────────────────────────┐
│        Presets          │      │     P001:Preset.001     │
│ ─────────────────────── │      │ ─────────────────────── │
│ P001      Preset.001 ▶  │      │ MIDI                 ▶  │
│ P002      Preset.002 ▶  │  ➡   │ BPM/XPDL             ▶  │
│ P003      Preset.003 ▶  │      │ Preset Order         ▶  │
│ P004      Preset.004 ▶  │      │                         │
│ P005      Preset.005 ▶  │      │                         │
│ P006      Preset.006 ▶  │      │                         │
└─────────────────────────┘      └─────────────────────────┘
```
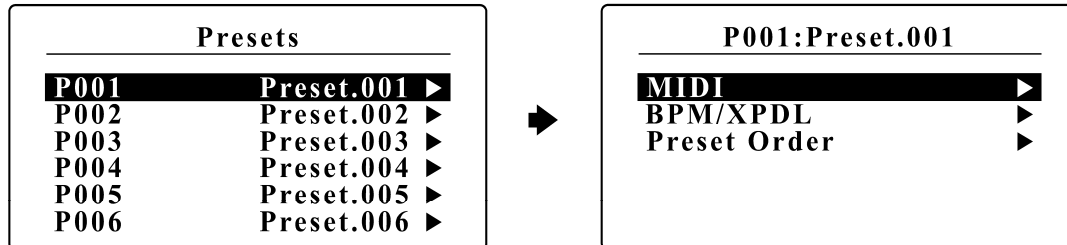
4.1.1 MIDI

EFX-10D 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.

```
┌─────────────────────────┐
│      P001 ▶ MIDI        │
│ ─────────────────────── │
│ MIDI01           PC ▶   │
│ MIDI02         None ▶   │
│ MIDI03         None ▶   │
│ MIDI04         None ▶   │
│ MIDI05         None ▶   │
│ MIDI06         None ▶   │
└─────────────────────────┘
```
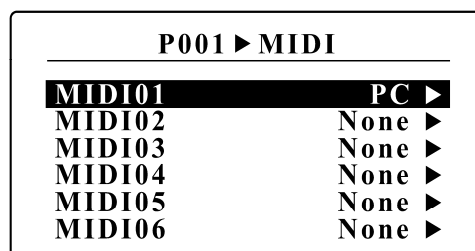
None

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 **4.6.1 Devices** on the page 25 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 **4.6.3 SysEx** on the page 26 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 BPM/XPDL

This menu allows assigning the BPM and XPDL to the current preset. The BPM can be set to use the global BPM or preset specific BPM. XPDL can be selects one of 64 XPDL slots.
Refer to **4.5.1 MIDI > XPDL.Src** on the page 22 and **4.6.2 XPDL** on the page 25 of the manual for choosing whether to use an expression pedal or two foot switches.

```
┌─────────────────────────────────┐
│      P001 ▶ BPM/XPDL            │
│  ▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬▬         │
│   BPM              ♩=120         │
│   XPDL             None          │
│                                  │
│                                  │
└─────────────────────────────────┘
```

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.

XPDL - Selects one of 64 XPDL slots.

4.1.3 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	1 2 ····· 10	Loop 1 ~ Loop 10
L R	Two Outputs (Left/Right)	1 2 ···· 10	Carry-Over Loop

There are several limitations below to change the signal routing :

• The **Input** and **Output** cannot be moved.
• If the signal is split from the previous, the signal cannot be split again after that.
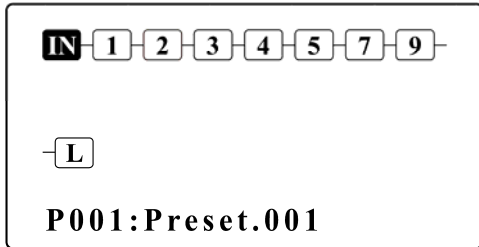
<table>
<tr>
<td>

IN–1–2–3–4–5–7–9–

–**L**

P001:Preset.001

</td>
<td>

IN–1–2–3–4–5–6–7–

–8–9–10–**L**

P001:Preset.001

</td>
</tr>
<tr>
<td align="center">Out.R, Loop6, Loop8 and Loop10 are disabled.</td>
<td align="center">Out.R, Loop6, Loop8 and Loop10 are enabled.</td>
</tr>
</table>
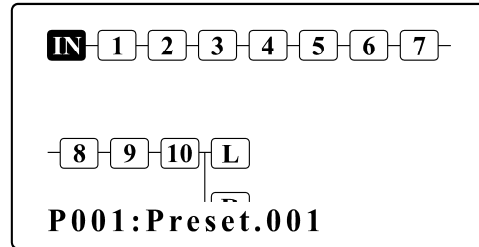
The switch functions in the Preset Order window are shown below.

SW#3 & SW#6 – Move the highlighted area left/right to select audio loop.

SW#4 & SW#7 – **Press** : Move the selected audio loop left/right.
                Hold : Move the selected audio loop up/down.

SW#5 – **Press** : Split the signal, or remove if it is already split.
        Hold : Set the selected loop to the carry-over or disable it if it is already set.

SW#1 – **Press** : Store any changes made.

SW#2 – Exit to the previous menu.

Ex1) Move loop 5 to the next position on loop 6

<table>
<tr>
<td>

IN–1–2–3–4–**5**–6–7–

–8–9–10–**L**

</td>
<td>➡</td>
<td>

IN–1–2–3–4–6–**5**–7–

–8–9–10–**L**

</td>
</tr>
</table>
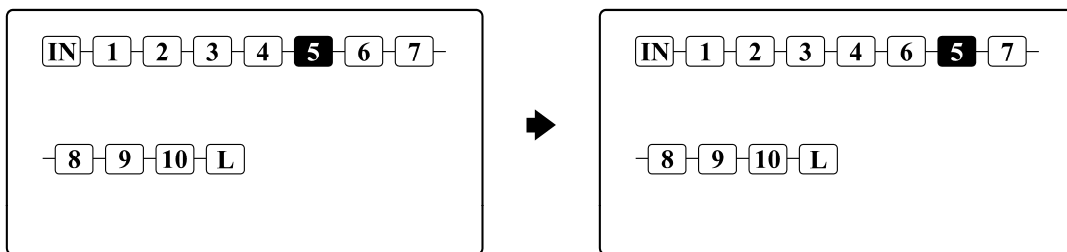
Select the Loop 5 and press switch #7 to move the right.

Ex2) Set loop10 to Carry-over

<table>
<tr>
<td>

IN–1–2–3–4–6–5–7–

–8–9–**10**–**L**

</td>
<td>➡</td>
<td>

IN–1–2–3–4–6–5–7–

–8–9–**10**–**L**

</td>
</tr>
</table>
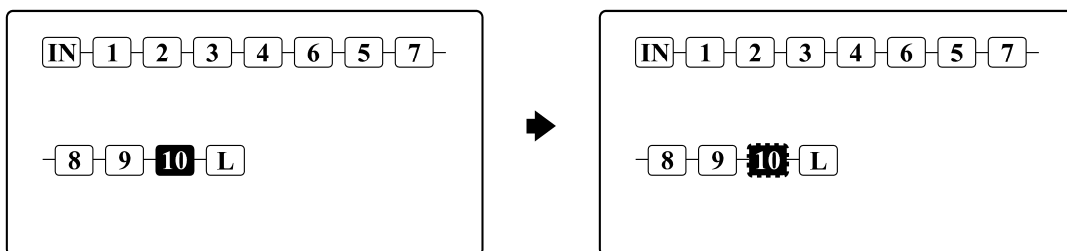
Select the Loop10 and press and hold the switch #6 to set to the carry-over.

Ex.3) Using four mono-loops as two stereo-loops
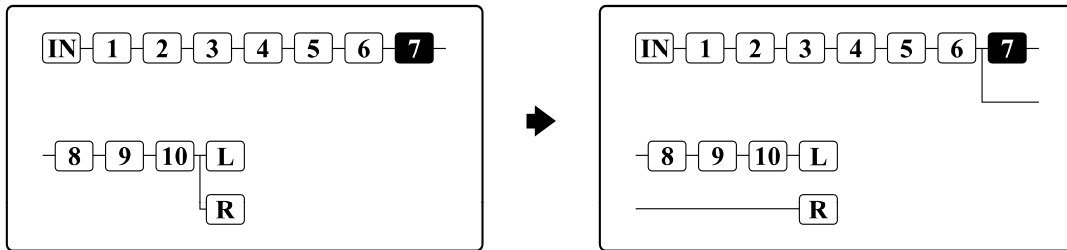
1. Select the loop 7.
2. Press and hold the Switch #6 to split the signal.
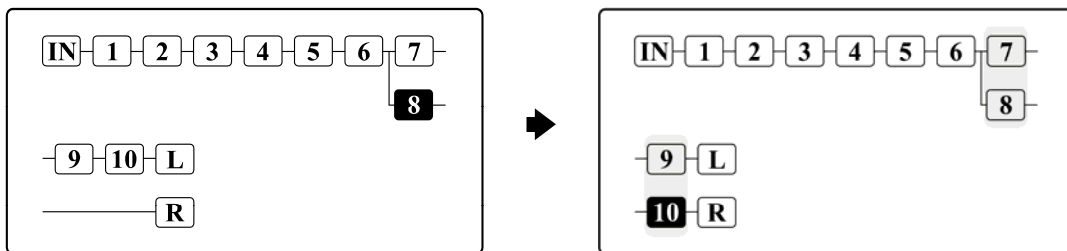
3. Select the loop 8 and press and hold Switch #4 to move it to the lower line.
4. Select the loop 10 and press and hold Switch #10 to move it to the lower line.

To assign two audio loops to one IA switch, Refer to the **4.3.2 Assign as IA switch > Audio** on the page 18 of the manual.

4.2 Songs/Sets

The Songs/Sets menu allows for the EFX-10D'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.

```
          SETUP                                    Songs/Sets

   Presets          ▶                       Songs                 ▶
   Songs/Sets       ▶            ➡          Sets                  ▶
   Switches         ▶
   Titles           ▶
   Global           ▶
   Slots            ▶
```
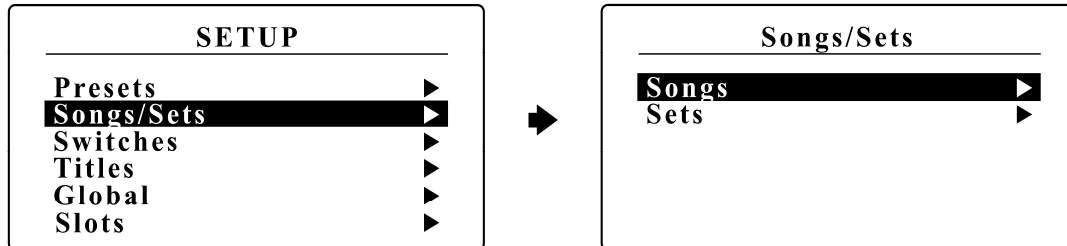
4.2.1 Edit Song

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.

```
   Songs/Sets ▶ Songs                          S001:Song.001

   S001      Song.001 ▶                   Preset in Song        P1
   S002      Song.002 ▶          ➡        Origin Preset       P001
   S003      Song.003 ▶                   BPM          ♩=Global
   S004      Song.004 ▶
   S005      Song.005 ▶
   S006      Song.006 ▶
```
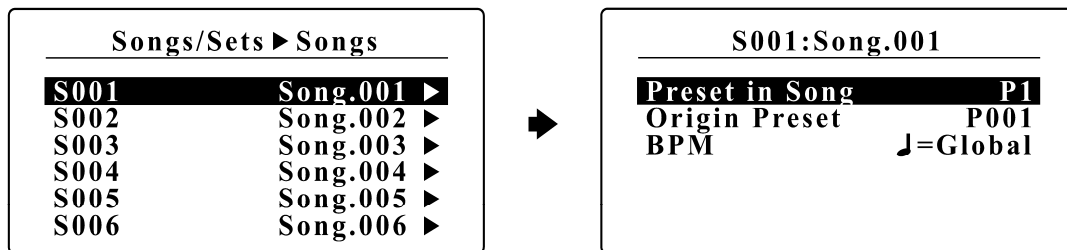
Preset in Song – The preset in song that is going to be edited. (up to P7)

Origin Preset – The original preset number to be used in the song. (P001~P800)

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.

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.

```
   Songs/Sets ▶ Sets                           S01:Setlist.01

   S01      Setlist.01 ▶                   Song in Set          S001
   S02      Setlist.02 ▶          ➡        Origin Song          S001
   S03      Setlist.03 ▶
   S04      Setlist.04 ▶
   S05      Setlist.05 ▶
   S06      Setlist.06 ▶
```
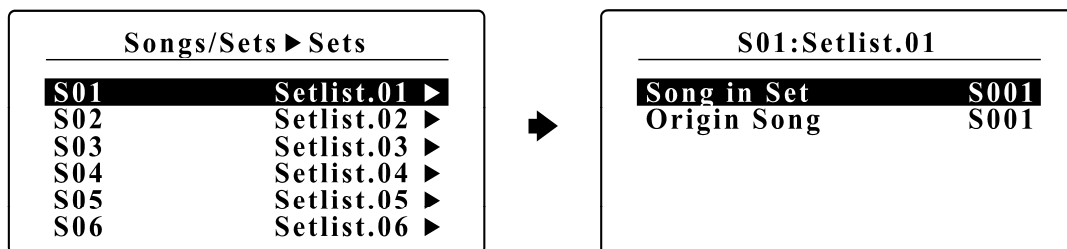
Song in Set – The song in set that is going to be edited. (S001~S120)

Origin Song – The original song number to be used in the set. (S001~S800)

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 four 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
Page1	Normal	P1	P2	P3	P4	Page+	Bank-	Bank+	x	x
	Hold	x	x	x	x	Store	Bank-	Bank+	x	x
Page2	Normal	L1	L2	L3	L4	Page+	L5	L7	x	x
	Hold	x	x	x	x	Store	x	x	x	x
Page3	Normal	L9	F1	F2	F3	Page+	F4	TAP	x	x
	Hold	x	x	x	x	Store	x	x	x	x
Page4	Normal	OL	OR	BUF	IN2	Page+	P.BPM-	P.BPM+	x	x
	Hold	x	x	x	x	Store	P.BPM-	P.BPM+	x	x

• SW#8 and SW#9 means when two external footswitches are connected to the XPDL jack.
  Refer to the **4.5.1 MIDI > XPDL.Src** on the page 22 and **6.1 XPDL** on the page 30 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
Pst.BPM+	Increases Preset BPM
Pst.BPM-	Decreases Preset BPM

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 ▶
Slots             ▶           PG6        Page.6 ▶
```
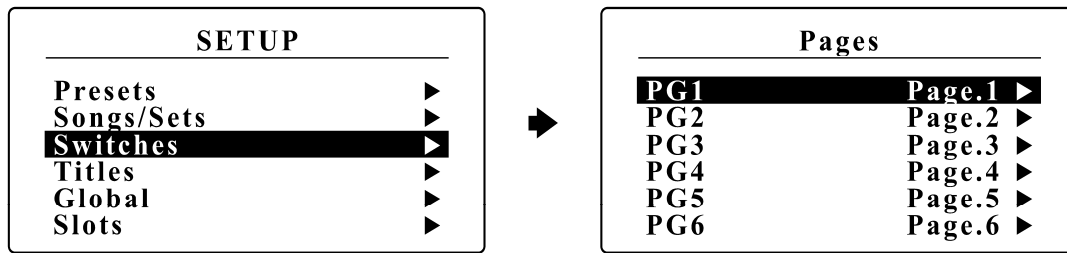
Select the switch you want to edit, it moves to the submenu where you can edit the details. When you select the switch you want to edit, the switch title is displayed together.

```
     PG1 ▶ Switches                    PG1 ▶ SW1

SW1          Preset1 ▶         Press           Normal
SW2          Preset2 ▶         Type            Preset
SW3          Preset3 ▶         Preset#              1
SW4          Preset4 ▶         LED Color         Blue
SW5        PG+/Store ▶         MIDI                 ▶
SW6           Bank- ▶
```
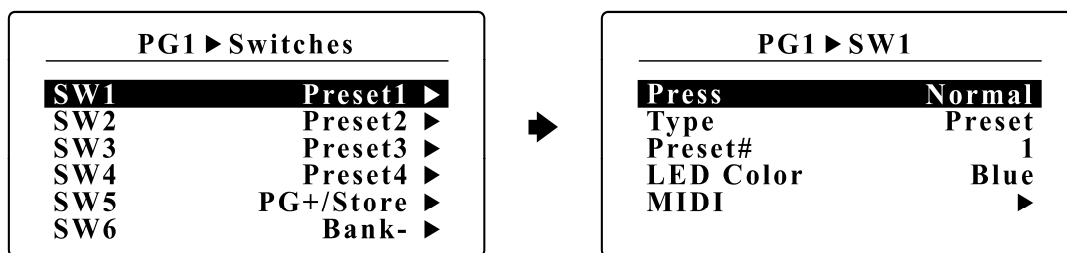
Press - Depending on how you press on one switch, you can set up two functions:

    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 ▶ SW1

Press           Normal
Type            Preset
Preset#              1
LED Color         Blue
MIDI                 ▶
```
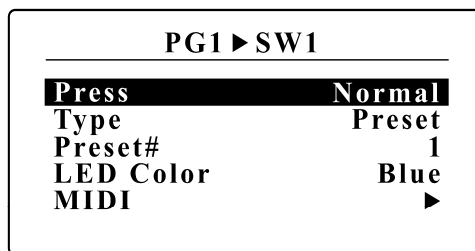
Preset# - The preset number for which the switch is used in the bank or song. (1~7)

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

MIDI - EFX-10D 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 11 of the manual.

```
   PG1 ▶ SW1N ▶ MIDI              PG1 ▶ SW1N ▶ MIDI1

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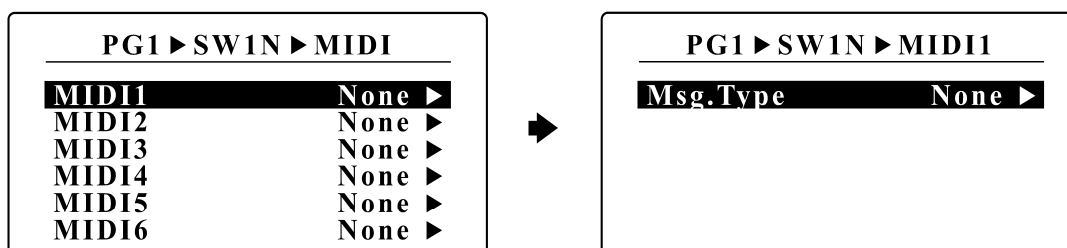
4.3.2 Assign as IA switch

```
        PG2 ▶ SW1
       ─────────────────────
       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.

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 ▶ SW1N ▶ Audio              PG2 ▶ SW1N ▶ Audio1
  ───────────────────────         ───────────────────────
  Audio1        Loop.1 ▶          Assign           Loop.1
  Audio2         None ▶           Polarity         Normal
  Audio3         None ▶
  Audio4         None ▶
  Audio5         None ▶
  Audio6         None ▶
```
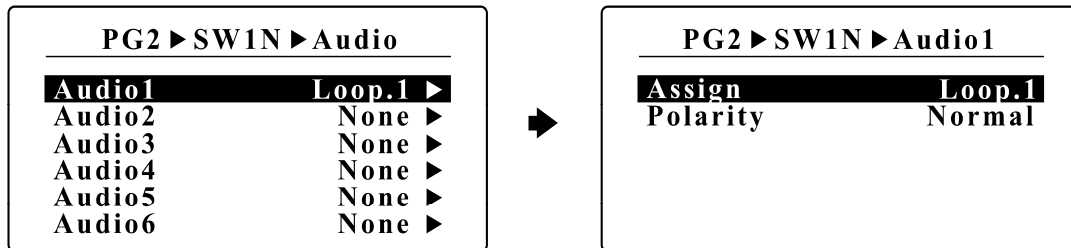
IA Setting - IA Setting allows you to set the properties for IA switch.

```
   PG2 ▶ SW1N ▶ IA Setting
  ─────────────────────────
  SW Action        Latched
  Pst Change          Link
  Group               None
```

	Latched	Acts as latched type.
Sw Func	Momentary	Acts as momentary type.
Pst Change	Link	The initial value is the same as the IA value stored when a new preset is recalled.
	Float/Clr	The initial value is OFF when a new preset is recalled. IA value is not store in the preset.
	Float/NC	There is no change when a new preset is recalled. IA value is not store in th preset.
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, page, switch, device, XPDL and SysEx. 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
  Presets              ▶
  Songs/Sets           ▶
  Switches             ▶
  Titles               ▶
  Global               ▶
  Slots                ▶
```
➡
```
        Titles
  Preset               ▶
  Song                 ▶
  Setlist              ▶
  Page                 ▶
  Switch               ▶
  Device               ▶
  XPDL                 ▶
  SysEx                ▶
```

4.4.1 Preset Title

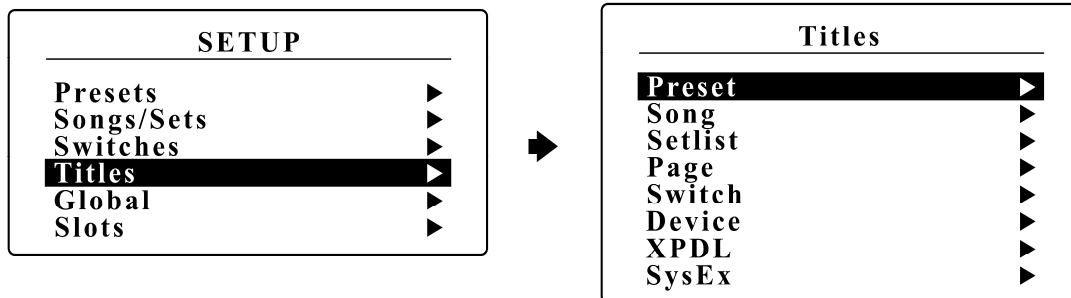Select the preset to edit the title. The preset title is displayed together, making it easier to select the preset. The LCD display will show the submenu.
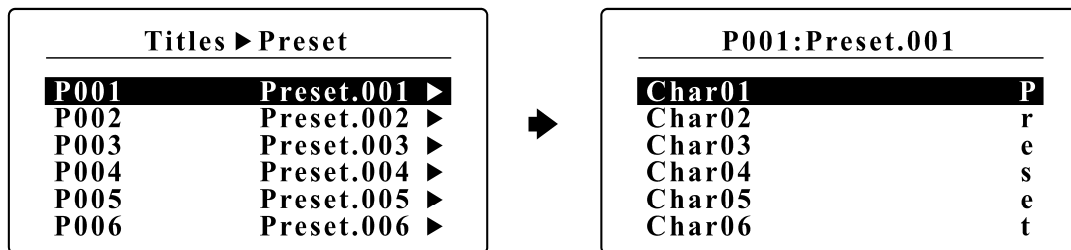
```
     Titles ▶ Preset
  P001      Preset.001 ▶
  P002      Preset.002 ▶
  P003      Preset.003 ▶
  P004      Preset.004 ▶
  P005      Preset.005 ▶
  P006      Preset.006 ▶
```
➡
```
    P001:Preset.001
  Char01               P
  Char02               r
  Char03               e
  Char04               s
  Char05               e
  Char06               t
```

SW#3 & SW#6 – Move up/down the selectable menu.
SW#4 & SW#7 – Move/Scroll through the available characters.
SW#1 – Press and hold to store any changes made.
SW#2 – Exit to the previous menu.

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

SW#3 & SW#6 – Move up/down the selectable menu.
SW#4 & SW#7 – Move/Scroll through the available characters.
SW#1 – Press and hold to store any changes made.
SW#2 – Exit to the previous menu.

4.4.3 Setlist 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 ▶ Setlist                      S01:Setlist.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#3 & SW#6 – Move up/down the selectable menu.
SW#4 & SW#7 – Move/Scroll through the available characters.
SW#1 – Press and hold to store any changes made.
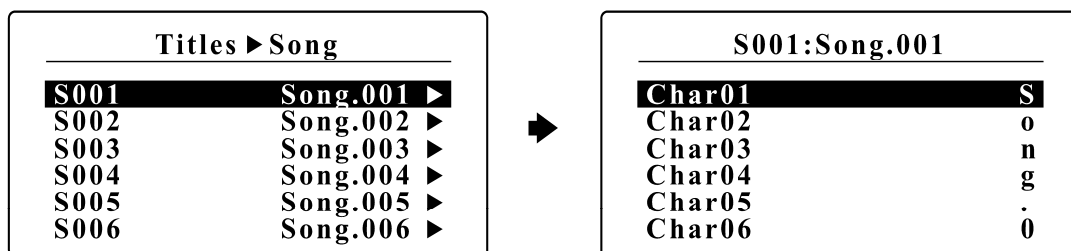**SW#2** – Exit to the previous menu.
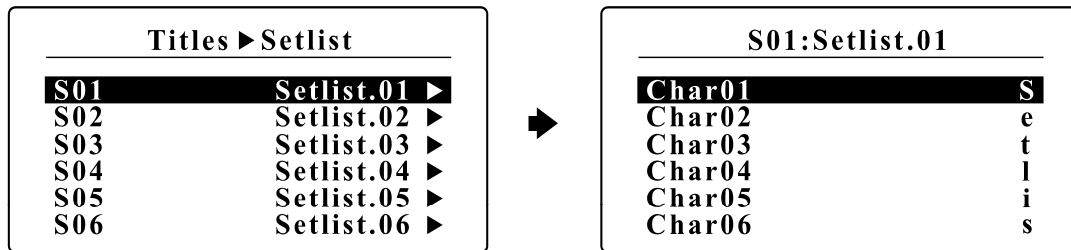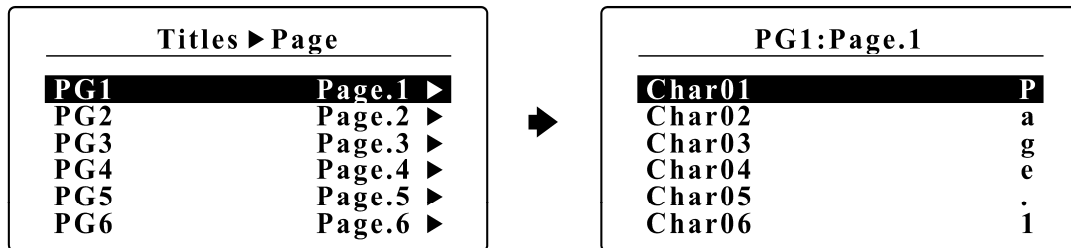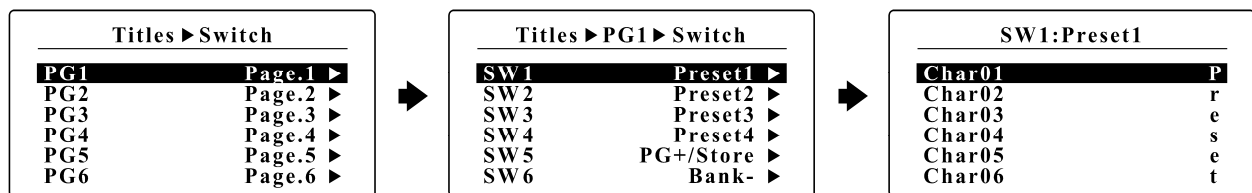
4.4.4 Page Title

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#3 & SW#6 – Move up/down the selectable menu.
SW#4 & SW#7 – Move/Scroll through the available characters.
SW#1 – Press and hold to store any changes made.
SW#2 – Exit to the previous menu.

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              SW1:Preset1
 ┌─────────────────┐          ┌─────────────────┐          ┌─────────────────┐
 │ PG1   Page.1 ▶  │          │ SW1   Preset1 ▶ │          │ Char01        P │
 │ PG2   Page.2 ▶  │    ▶     │ SW2   Preset2 ▶ │    ▶     │ Char02        r │
 │ PG3   Page.3 ▶  │          │ SW3   Preset3 ▶ │          │ Char03        e │
 │ PG4   Page.4 ▶  │          │ SW4   Preset4 ▶ │          │ Char04        s │
 │ PG5   Page.5 ▶  │          │ SW5  PG+/Store ▶│          │ Char05        e │
 │ PG6   Page.6 ▶  │          │ SW6    Bank- ▶  │          │ Char06        t │
 └─────────────────┘          └─────────────────┘          └─────────────────┘
```

SW#3 & SW#6 – Move up/down the selectable menu.
SW#4 & SW#7 – Move/Scroll through the available characters.
SW#1 – Press and hold to store any changes made.
SW#2 – Exit to the previous menu.

4.4.6 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#3 & SW#6 – Move up/down the selectable menu.
SW#4 & SW#7 – Move/Scroll through the available characters.
SW#1 – Press and hold to store any changes made.
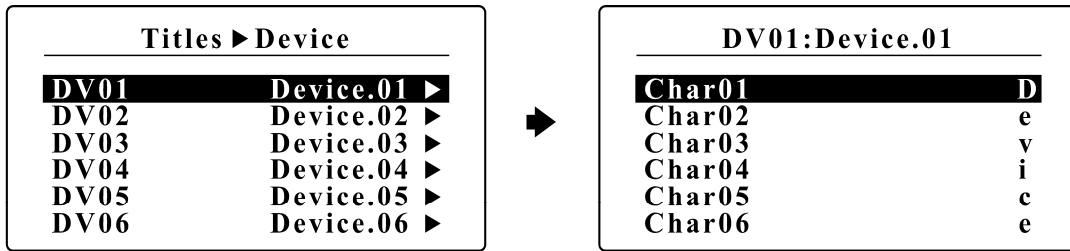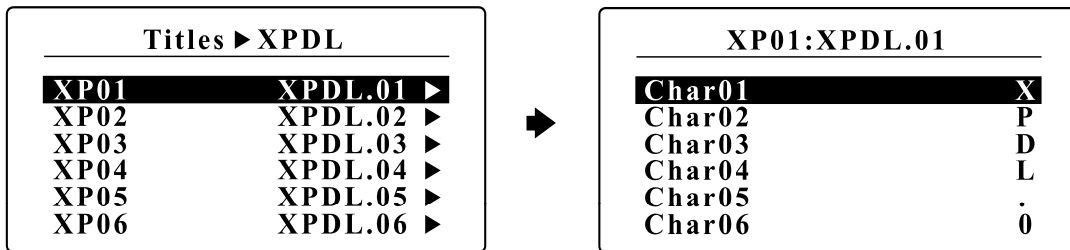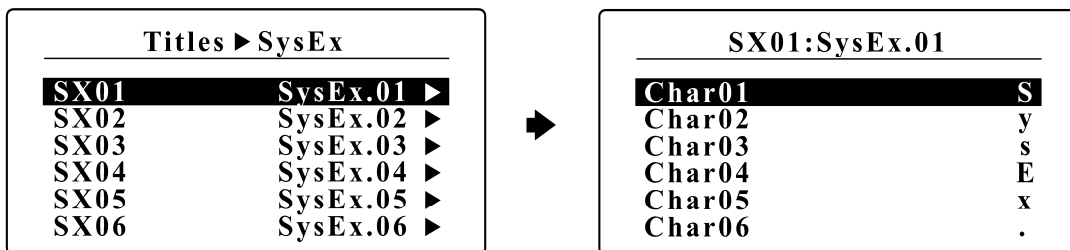**SW#2** – Exit to the previous menu.

4.4.7 XPDL Title

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

Titles ▶ XPDL		XP01:XPDL.01	
XP01	**XPDL.01 ▶**	**Char01**	**X**
XP02	XPDL.02 ▶	Char02	P
XP03	XPDL.03 ▶	Char03	D
XP04	XPDL.04 ▶	Char04	L
XP05	XPDL.05 ▶	Char05	.
XP06	XPDL.06 ▶	Char06	0

SW#3 & SW#6 – Move up/down the selectable menu.
SW#4 & SW#7 – Move/Scroll through the available characters.
SW#1 – Press and hold to store any changes made.
SW#2 – Exit to the previous menu.

4.4.8 SysEx Title

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

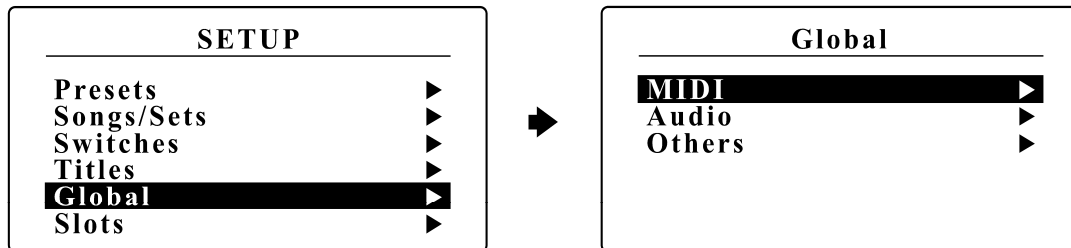| Titles ▶ SysEx		SX01:SysEx.01	
SX01	**SysEx.01 ▶**	**Char01**	**S**
SX02	SysEx.02 ▶	Char02	y
SX03	SysEx.03 ▶	Char03	s
SX04	SysEx.04 ▶	Char04	E
SX05	SysEx.05 ▶	Char05	x
SX06	SysEx.06 ▶	Char06	.

SW#3 & SW#6 – Move up/down the selectable menu.
SW#4 & SW#7 – Move/Scroll through the available characters.
SW#1 – Press and hold to store any changes made.
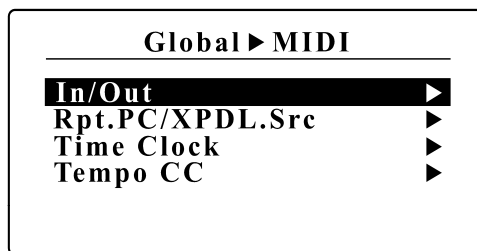**SW#2** – Exit to the previous menu.

4.5 Global

The Global menu allows configuring the EFX-10D'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.
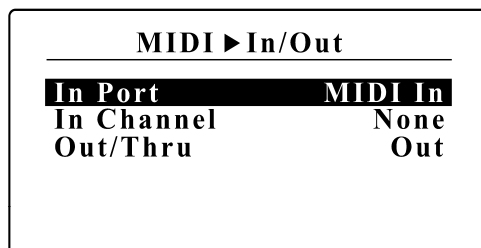
```
        SETUP                              Global
   ─────────────────                  ─────────────────
   Presets         ▶                  MIDI            ▶
   Songs/Sets      ▶                  Audio           ▶
   Switches        ▶                  Others          ▶
   Titles          ▶
   Global          ▶
   Slots           ▶
```

4.5.1 MIDI

The MIDI menu allows configuring the EFX-10D's general MIDI functionality and is divided into the following 4 detailed menus.

```
        Global ▶ MIDI
   ────────────────────
   In/Out              ▶
   Rpt.PC/XPDL.Src     ▶
   Time Clock          ▶
   Tempo CC            ▶
```

In / OUT

```
      MIDI ▶ In/Out
   ────────────────────
   In Port        MIDI In
   In Channel        None
   Out/Thru           Out
```

In Port/Channel - The MIDI port/channel that the EFX-10D will respond to incoming MIDI messages on.

Out/Thru - When set to Out, MIDI messages generated by the controls on EFX-10D are sent to the MIDI output. When set to THRU, MIDI messages that arrive at the MIDI input are sent to the MIDI output.

Rpt.PC / XPDL.Src

```
   MIDI ▶ Rpt.PC/XPDL.Src
   ────────────────────────
   Repeated.PC        Send
   XPDL Source    Disabled
```
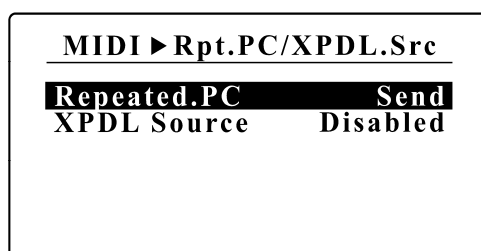
Repeated.PC : Selects whether sending MIDI program change messages or not when the current MIDI program change number is the same as the previous one.

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

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.

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.

4.5.2 Audio

The Audio menu allows configuring the EFX-10D's general audio functionality and is divided into the following 10 detailed menus.

```
      Global ▶Audio
 ───────────────────────
 Clickless      Disabled
 In.2           Disabled
 Out.R          Disabled
 Loop.6         Disabled
 Loop.8         Disabled
 Loop.10        Disabled
 Func.1          Latched
 Func.2          Latched
 Func.3          Latched
 Func.4          Latched
```

Clickless

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

Disabled - Disable the Clickless control.
Enabled - Clickless control is enabled when any audio status is changed.

In.2

Select whether to enable or disable IN2 with ring on IN1/2 jack.

Out.R

Select whether to enable or disable OUT R with ring on OUT L/R jack.

Loop.6/Loop.8/Loop10

Select whether to enable or disable Loop6, Loop8, Loop10 with ring of each loop jack.

Func1~Func4

The Func1 to Func4 will act as footswitch like those used for amp channel switching.
The EFX-10D 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.

4.5.3 Others

The Others menu allows configuring the EFX-10D's general other functionalities and is divided into the following 9 detailed menus.

```
        Global ▶ Others

 Op.Mode              Preset
 2nd.Press Pst        Glb.Pst
 Pst/BankSong            4
 Max.BankSong          200
 Max.Page Scrl           4
 Max.Page Exct           4
 Hold Sw Time        1000ms
 Hold Sw Scrl        Enabled
 LCD Bright              5
```

Op.Mode (Opearating Mode)

Determines EFX-10D 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.

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.
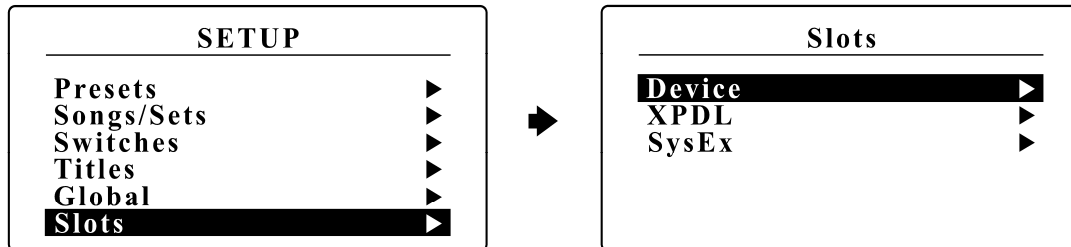
LCD Bright (LCD Brightness)
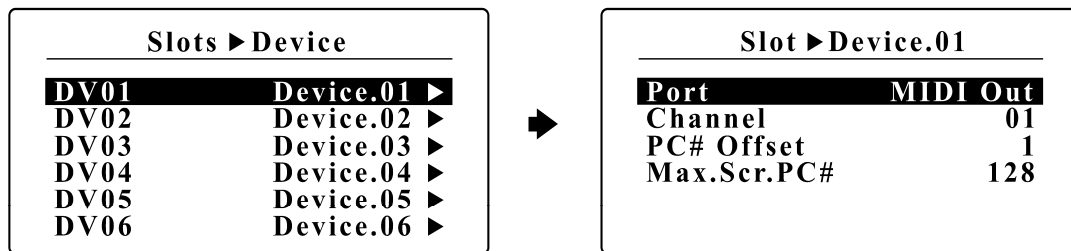
Adjusts LCD brightness in 10 steps.

4.6 Slots

The Slots menu allows Device, XPDL and SysEx slots to facilitate MIDI message setup.

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

```
┌─────────────────────────────┐     ┌─────────────────────────────┐
│           SETUP             │     │           Slots             │
│  ─────────────────────────  │     │  ─────────────────────────  │
│  Presets              ▶     │     │  Device               ▶     │
│  Songs/Sets           ▶     │  ▶  │  XPDL                 ▶     │
│  Switches             ▶     │     │  SysEx                ▶     │
│  Titles               ▶     │     │                             │
│  Global               ▶     │     │                             │
│  Slots                ▶     │     │                             │
└─────────────────────────────┘     └─────────────────────────────┘
```

4.6.1 Device

EFX-10D 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#.

```
┌─────────────────────────────┐     ┌─────────────────────────────┐
│      Slots ▶ Device         │     │    Slot ▶ Device.01         │
│  ─────────────────────────  │     │  ─────────────────────────  │
│  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 ▶    │     │                             │
└─────────────────────────────┘     └─────────────────────────────┘
```

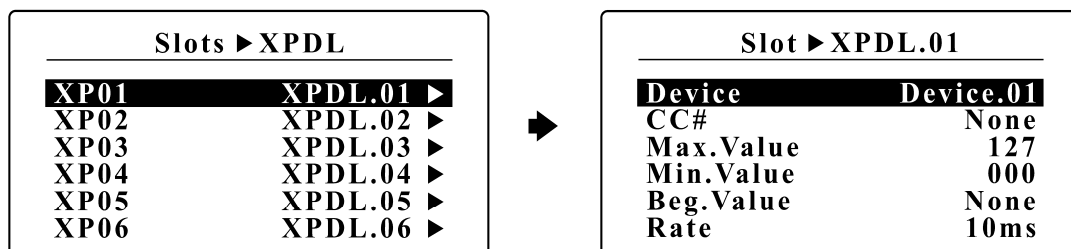**Port** - Selects the MIDI Port(MIDI Out or USB) to be sent to each device.

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

4.6.2 XPDL

EFX-10D can have up to 64 XPDL slots. One of the 64 XPDL slots can be assigned to a preset.

```
┌─────────────────────────────┐     ┌─────────────────────────────┐
│      Slots ▶ XPDL           │     │    Slot ▶ XPDL.01           │
│  ─────────────────────────  │     │  ─────────────────────────  │
│  XP01        XPDL.01 ▶      │     │  Device          Device.01  │
│  XP02        XPDL.02 ▶      │  ▶  │  CC#                 None   │
│  XP03        XPDL.03 ▶      │     │  Max.Value            127   │
│  XP04        XPDL.04 ▶      │     │  Min.Value            000   │
│  XP05        XPDL.05 ▶      │     │  Beg.Value           None   │
│  XP06        XPDL.06 ▶      │     │  Rate                10ms   │
└─────────────────────────────┘     └─────────────────────────────┘
```

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

CC# - Selects the controller number to be sent.

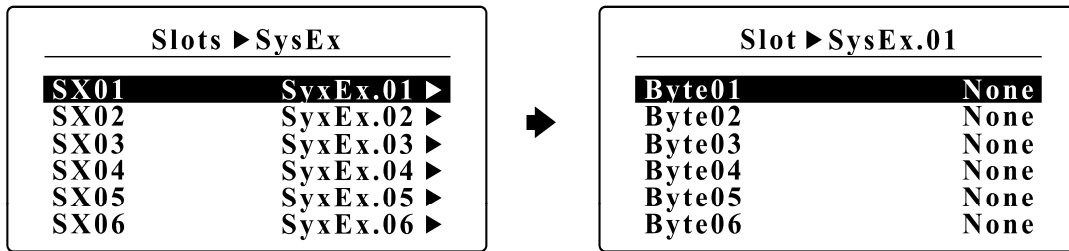**Max.Value** - Highest controller value that the XPDL can send when its pedal is moved.

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

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

Rate - Selects the minimum time interval between XPDL CCs.
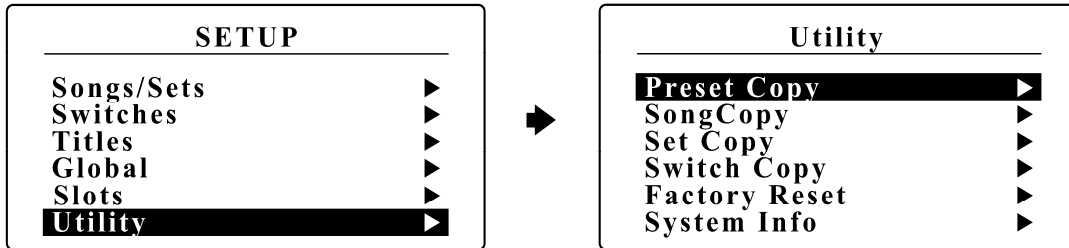
4.6.3 SysEx

EFX-10D 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.

```
┌─────────────────────────┐        ┌─────────────────────────┐
│      Slots ▶ SysEx      │        │     Slot ▶ SysEx.01     │
│                         │        │                         │
│ SX01        SyxEx.01 ▶  │   ▶    │ Byte01          None    │
│ SX02        SyxEx.02 ▶  │        │ Byte02          None    │
│ SX03        SyxEx.03 ▶  │        │ Byte03          None    │
│ SX04        SyxEx.04 ▶  │        │ Byte04          None    │
│ SX05        SyxEx.05 ▶  │        │ Byte05          None    │
│ SX06        SyxEx.06 ▶  │        │ Byte06          None    │
└─────────────────────────┘        └─────────────────────────┘
```
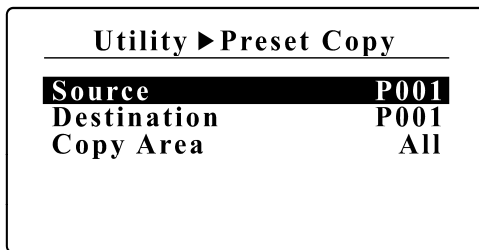
4.7 Utility

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
  ─────────────────            ─────────────────────
  Songs/Sets      ▶            Preset Copy       ▶
  Switches        ▶            SongCopy          ▶
  Titles          ▶            Set Copy          ▶
  Global          ▶            Switch Copy       ▶
  Slots           ▶            Factory Reset     ▶
  Utility         ▶            System Info       ▶
```

4.7.1 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~P800)

Destination – Destination preset number
(P001~P800 or All)

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

4.7.2 Song Copy

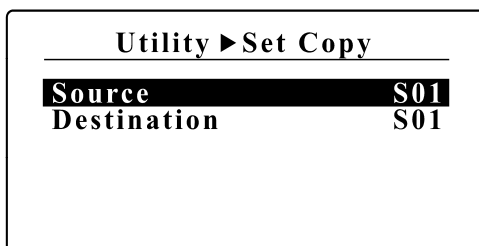The Song Copy allows copying from one song to another.

```
  Utility ▶ Song Copy
  ─────────────────────
  Source            S001
  Destination       S001
```
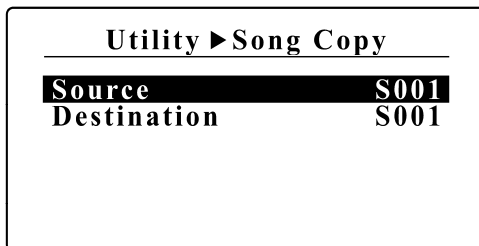
Source – Source song number (S001~S800)

Destination – Destination song number (S001~S800)

4.7.3 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)

4.7.4 Switch Copy

The Switch Copy allows copying from one switch to another.

```
   Utility ▶Switch Copy
  Source          PG1.SW1
  Destination     PG1.SW1
```

Source – Source switch number
          (PG1.SW1~PG8.SW9)

Destination – Destination switch number
          (PG1.SW1~PG8.SW9)

4.7.5 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#1 for 1 second to initiate factory reset.

4.7.6 System Info

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

```
   Utility ▶System Info
  Serial No.        N123456
  Firmware            1.00
  Data Format         1.00
  Hardware            1.00
```

Serial No. - Serial number of your unit

Firmware – Firmware version of your unit

Data Fomat – Data format version of your unit

Hardware – Hardware version 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-10D Editor** software from the link below. Install **EFX-10D Editor** file and run it.
  http://musicomlab.com/efx-10d.htm

② Connect a USB cable to your EFX-10D 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-10D 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.

XPDL — TIP / RING / SLEEVE — **Expression Pedal**

CW —— Sleeve
Wiper — Tip
CCW —— Ring
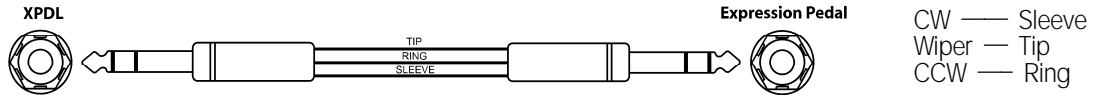
• Do not use an active volume pedal or expression pedal.

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.

XPDL — TIP / RING / SLEEVE

TIP / SLEEVE — **Volume Pedal Input**

TIP / SLEEVE — Volume Pedal Output
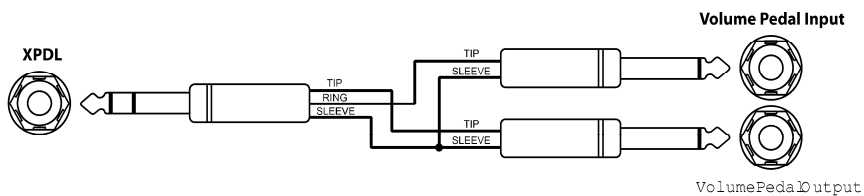
• Do not use an active volume pedal or expression pedal.

XPDL & Two Foot-switches

XPDL — TIP / RING / SLEEVE

SW #8   **SW #9**
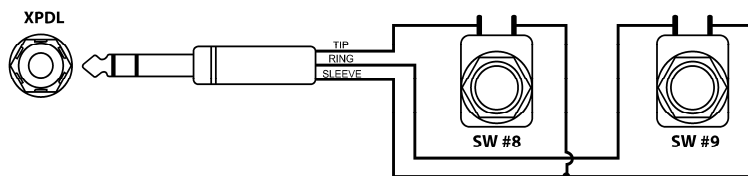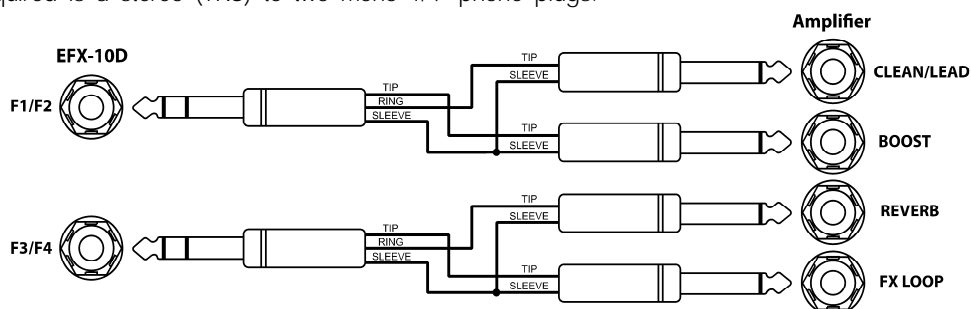
• Connect the Momentary Normally Open or Closed switches when connecting external switches.
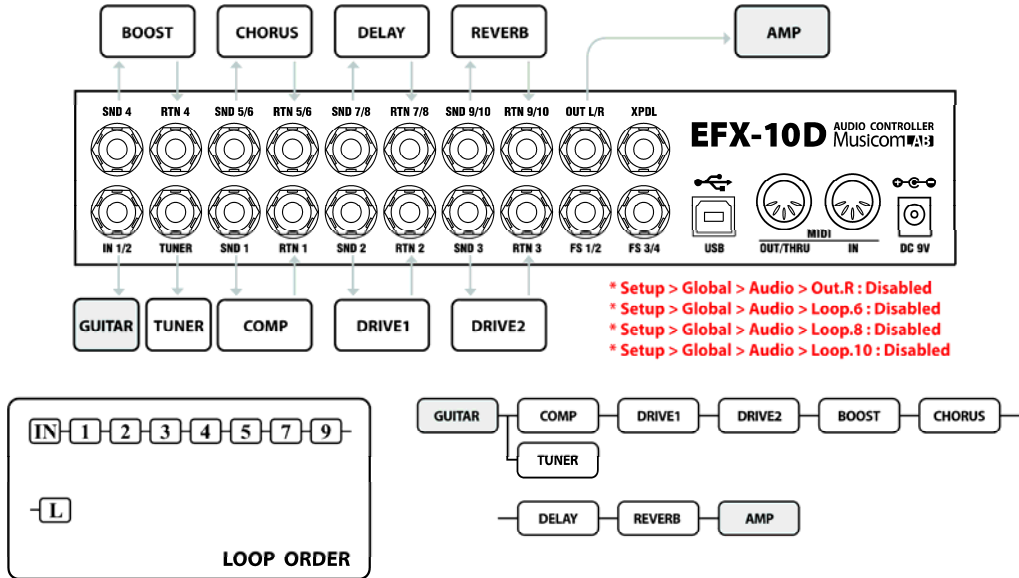 Refer to the **4.5.1 MIDI > XPDL.Src** on the page 22.

6.2 Functions Switches

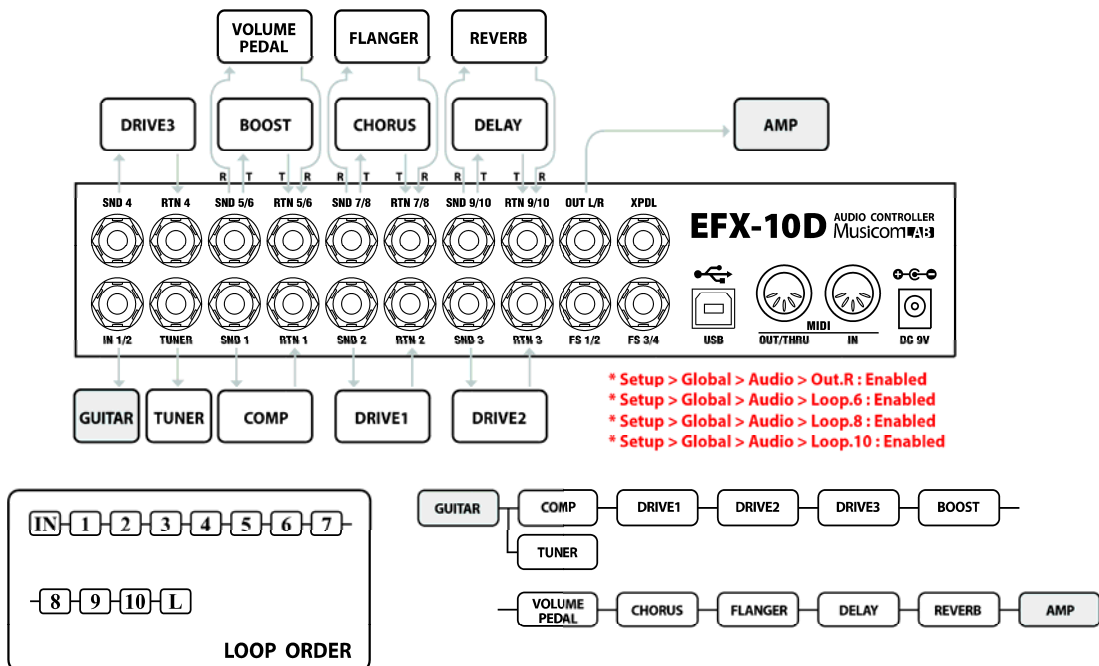The cable required is a stereo (TRS) to two mono 1/4" phone plugs.

EFX-10D

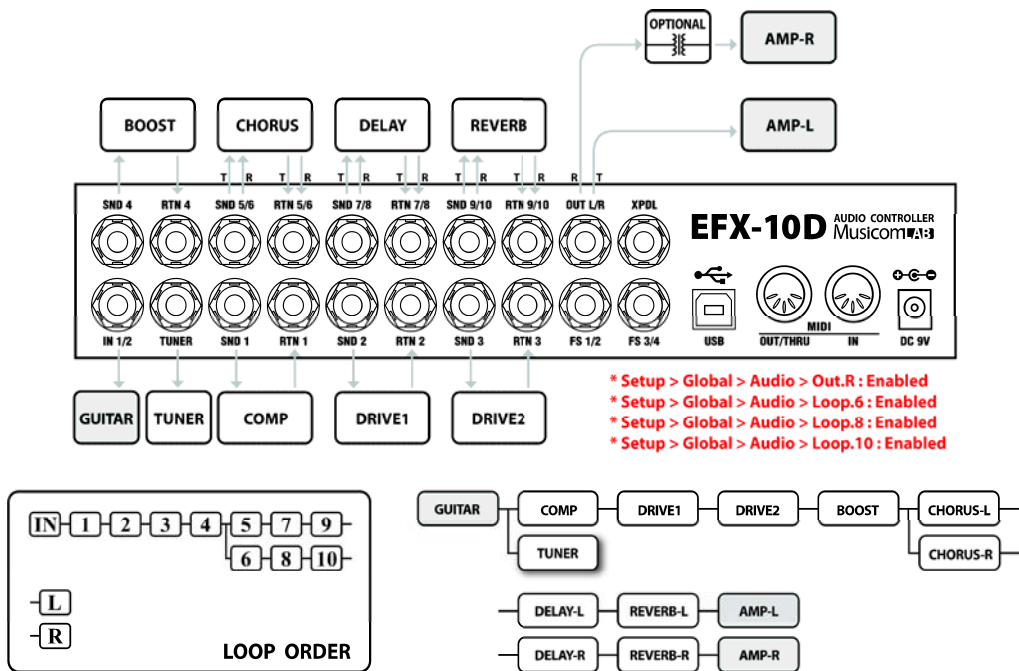**F1/F2** — TIP / RING / SLEEVE

TIP / SLEEVE — **CLEAN/LEAD**

TIP / SLEEVE — **BOOST**

Amplifier

F3/F4 — TIP / RING / SLEEVE

TIP / SLEEVE — **REVERB**

TIP / SLEEVE — **FX LOOP**

7. CONNECTION EXAMPLES

Basic Mono Connection with 7 loops

* Setup > Global > Audio > Out.R : Disabled
* Setup > Global > Audio > Loop.6 : Disabled
* Setup > Global > Audio > Loop.8 : Disabled
* Setup > Global > Audio > Loop.10 : Disabled

LOOP ORDER

Basic Mono Connection with 10 loops

* Setup > Global > Audio > Out.R : Enabled
* Setup > Global > Audio > Loop.6 : Enabled
* Setup > Global > Audio > Loop.8 : Enabled
* Setup > Global > Audio > Loop.10 : Enabled

LOOP ORDER

Stereo Connection with 3 Stereo FXs

* Setup > Global > Audio > Out.R : Enabled
* Setup > Global > Audio > Loop.6 : Enabled
* Setup > Global > Audio > Loop.8 : Enabled
* Setup > Global > Audio > Loop.10 : Enabled

Mono Connection for 4CM

* Setup > Global > Audio > Out.R : Disabled
* Setup > Global > Audio > Loop.6 : Enabled
* Setup > Global > Audio > Loop.8 : Enabled
* Setup > Global > Audio > Loop.10 : Enabled
* Move loop4 to the next stage of loop6
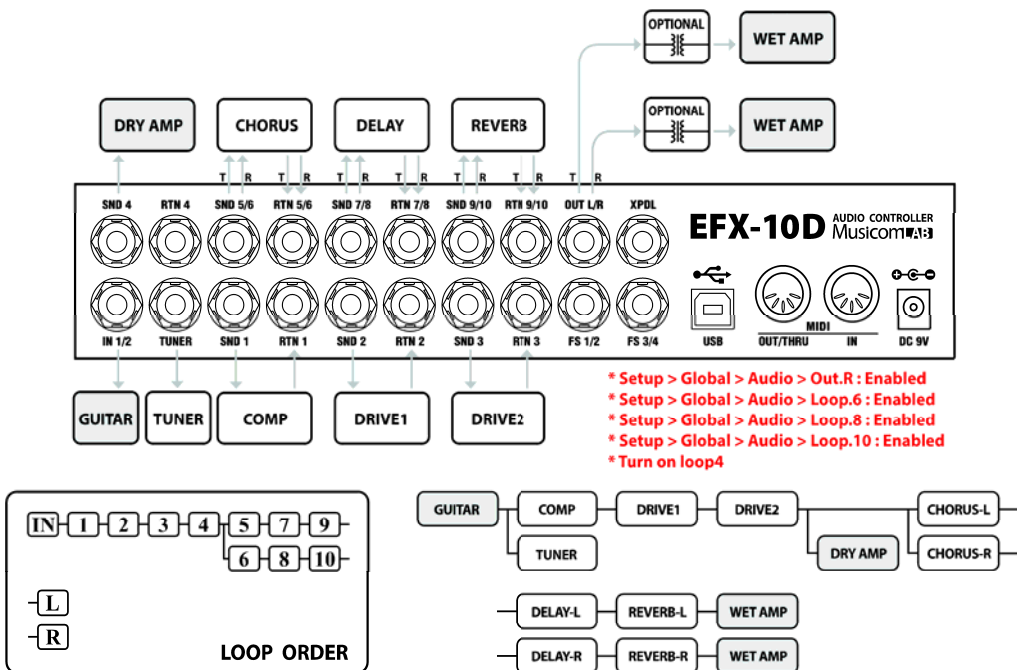* Turn on loop4
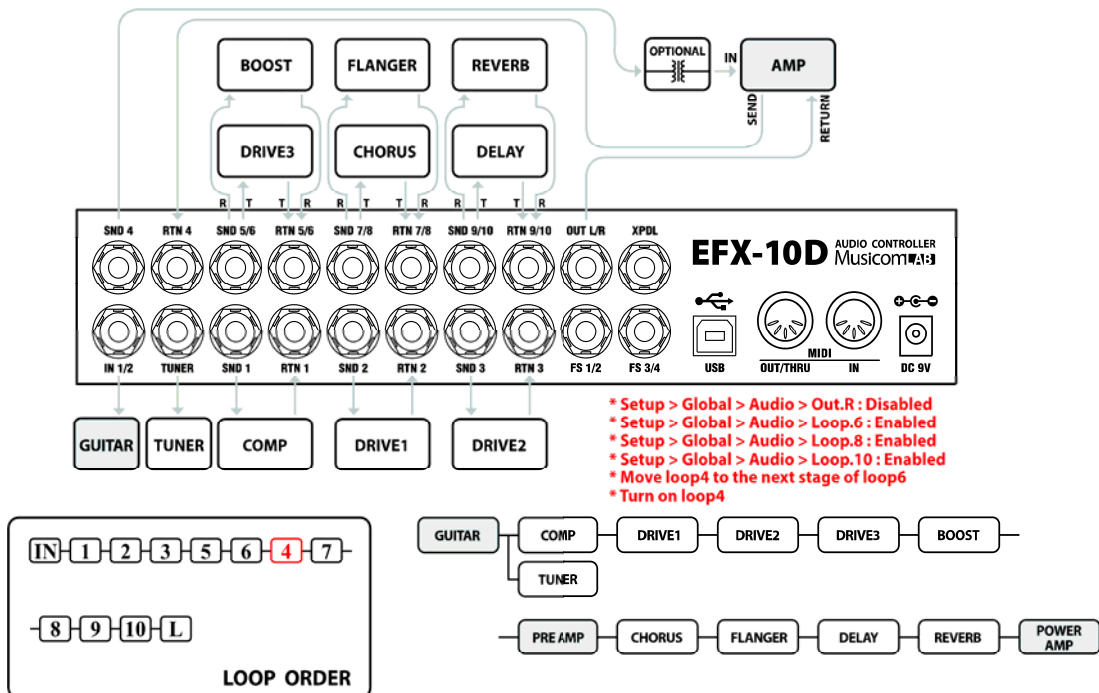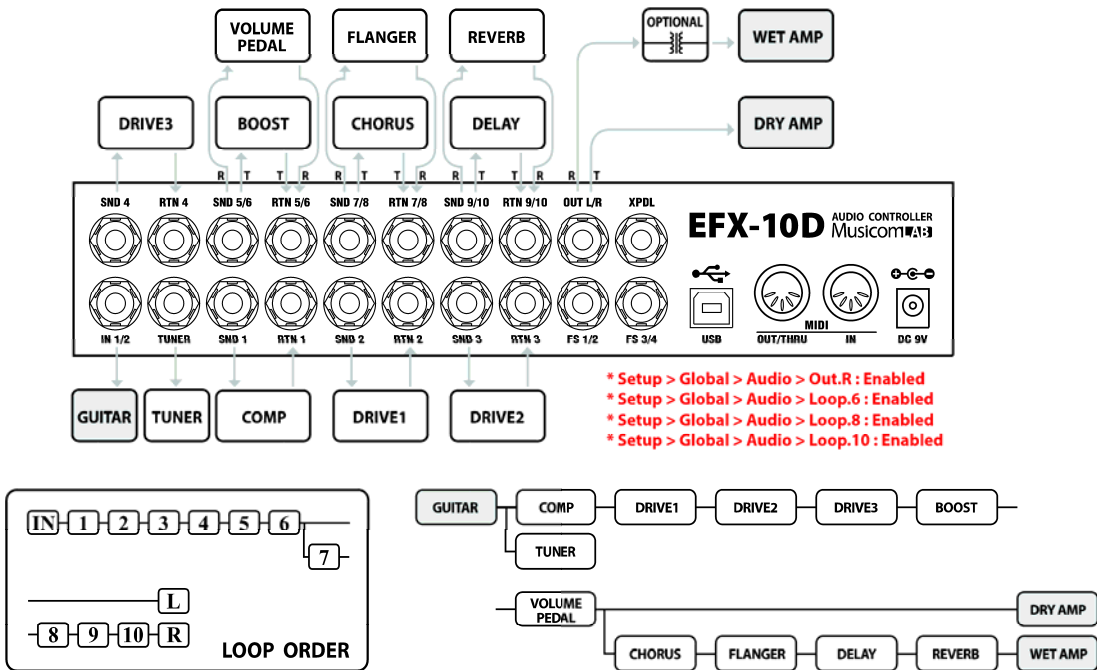
Wet / Dry

Wet / Dry / Wet

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		
CC# : 000 VALUE : 001		**CC# : 000 VALUE : 001**	
PRESET 129	PC # 001	SONG 002 - P1	PC # 001
•••	•••	•••	•••
PRESET 256	PC # 128	SONG 002 - P4	PC # 004
•••		•••	
CC# : 000 VALUE : 005		**CC# : 000 VALUE : 118**	
PRESET 641	PC # 001	SONG 119 - P1	PC # 001
•••	•••	•••	•••
PRESET 768	PC # 128	SONG 119 - P4	PC # 00
CC# : 000 VALUE : 007		**CC# : 000 VALUE : 119**	
PRESET 769	PC # 001	SONG 120 - P1	PC # 001
•••	•••	SONG 120 - P2	PC # 002
PRESET 800	PC # 032	SONG 120 - P3	PC # 003
GLOBAL PRESET	PC # 033	SONG 120 - P4	PC # 004

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

Individual Loop Controls
The individual loops, outputs and function switches can be controlled with MIDI Control Change messages.
Via MIDI, the presets are numbered sequentially.

	CC#	VALUE RANGE			CC#	VALUE RANGE	
LOOP 1	80	OFF(0-63)	ON(64-127)	IN 2	90	OFF(0-63)	ON(64-127)
LOOP 2	81	OFF(0-63)	ON(64-127)	IN BUFFER	91	OFF(0-63)	ON(64-127)
LOOP 3	82	OFF(0-63)	ON(64-127)	OUT L	92	OFF(0-63)	ON(64-127)
LOOP 4	83	OFF(0-63)	ON(64-127)	OUT R	93	OFF(0-63)	ON(64-127)
LOOP 5	84	OFF(0-63)	ON(64-127)	FUNC.SWITCH 1	94	OFF(0-63)	ON(64-127)
LOOP 6	85	OFF(0-63)	ON(64-127)	FUNC.SWITCH 2	95	OFF(0-63)	ON(64-127)
LOOP 7	86	OFF(0-63)	ON(64-127)	FUNC.SWITCH 3	96	OFF(0-63)	ON(64-127)
LOOP 8	87	OFF(0-63)	ON(64-127)	FUNC.SWITCH 4	97	OFF(0-63)	ON(64-127)
LOOP 9	88	OFF(0-63)	ON(64-127)	MUTE	98	OFF(0-63)	ON(64-127)
LOOP 10	89	OFF(0-63)	ON(64-127)				

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