CME

Intelligent Keyboard Controller
User's manual

UX5678 超级火键

Read “Precautions” on page 5 before use

Please read this manual carefully before use.
Please keep this manual for reference.

Thank you for choosing CME VX —Intelligent MIDI Master Keyboard

Please keep all the important information here

Attach your invoice or receipt here

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for reference

Purchase date	Serial(on the back of the keyboard)
Dealer's name and addr.	
Dealer's tel.	

Warning:

- Improper connection may cause damage to the device.

Copyright

- Copyright of the manual belongs to Central Music Co. Anyone must get a written permission from Central Music Co. before copying any part of the manual to any kind of media.

Package list

Please check all the items in your VX keyboard package:

- USB MIDI Master keyboard 1 pcs
- USB cable 1 pcs
- User's manual 1 pcs
- AC adaptor 1 pcs
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Special Message Section

This product utilizes batteries or an external power supply (adapter). Do NOT connect this product to any power supply or adapter other than one described in the manual, on the product, or specifically recommended by CME.

WARNING: Do not place this product in a position where anyone could walk on, trip over, or roll anything over power or connecting cords of any kind. The use of an extension cord is not recommended! If you must use an extension cord, make sure that the cord has the ability to handle maximum current needed by this product. Please consult a local electrician when possible.

This product should be used only with the components supplied or recommended by CME. When used with any components, please observe all safety markings and instructions that accompany the accessory product.

SPECIFICATIONS SUBJECT TO CHANGE:

The information contained in this manual is believed to be correct at the time of printing. However, CME reserves the right to change or modify any of the specifications without notice or obligation to update existing units.

This product, either alone or in combination with an amplifier and headphones or speaker(s), may be capable of producing sound levels that could cause permanent hearing loss. Do NOT operate for long periods of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist.

IMPORTANT: The louder the sound, the shorter the time period before damage occurs.

Some CME products may have stands and/or accessory mounting fixtures that are either supplied with the product or as optional accessories. Some of these items are designed to be dealer assembled or installed. Please make sure that stands are stable and any optional fixtures (where applicable) are well secured BEFORE using.

Stands supplied by CME are designed for the respect products only. No other uses are recommended.

NOTICE:

Service charges incurred due to a lack of knowledge relating to how a function or effect works (when the unit is operating as designed) are not covered by the manufacturer's warranty, and are therefore the owners responsibility. Please study this manual carefully and consult your dealer before requesting service.

ENVIRONMENTAL ISSUES:

CME strives to produce products that are both user safe and environmentally friendly. We sincerely believe that our products and the production methods used to produce them, meet these goals. In keeping with both the letter and the spirit of the law, we want you to be aware of the following:

Battery Notice:

This product MAY contain a small non-rechargeable battery which (if applicable) is soldered in place. The average life span of this type of battery is approximately five years. When replacement becomes necessary, contact a qualified service representative to perform the replacement.

This product may also use "household" type batteries. Some of these may be rechargeable. Make sure that the battery being charged is a rechargeable type and that the charger is intended for the battery being charged.

When installing batteries, do not mix batteries with new, or with batteries of different type. Batteries MUST be installed correctly. Mismatches of incorrect installation may result in overheating and battery case rupture.

Warning:

Do not attempt to disassemble, or incinerate any battery. Keep all batteries away from children. Dispose of used batteries promptly and as regulated by the laws in your area. Note: Check with any retailer of household type batteries in your area for battery disposal information.

Disposal Notice:

Should this product become damaged beyond repair, or for some reason its useful life is considered to be at an end, please observe all local, state, and federal regulations that relate to the disposal of products that contain lead, batteries, plastics, etc. If your dealer is unable to assist you, please contact CME directly.

FCC INFORMATION (U.S.A)

1. **IMPORTANT NOTICE: DO NOT MODIFY THIS UNIT!**
   This product, when installed as indicated in the instructions contained in this manual, meets FCC requirements. Modifications not expressly approved by CME may void your authority, granted by the FCC, to use the product.
2. **IMPORTANT:** When connecting this product to accessories and/or another product use only high quality shielded cables. Cable(s) supplied with this product MUST be used. Follow all installation instructions. Failure to follow instructions could void your FCC authorization to use this product in the USA.
3. **NOTE:** This product has been tested and found to comply with the limits for a Class B Digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used according to the instructions found in the users manual, may cause interference harmful to the operation of other electronic devices. Compliance with FCC regulations does not guarantee that interference will not occur in all installations. If this product is found to be the source of interference, which can be determined by turning the unit “OFF” and “ON”, please try to eliminate the problems by using one of the following measures:

   Relocate either this product or the device that is being affected by the interference.

   Utilize power outlets that are on different branch (circuit breaker or fuse) circuits or install AC line filter(s).

   In the case of radio or TV interference, relocate/reorient the antenna. If the antenna lead-in is 300 ohm ribbon lead, change the lead-in to co-axial type cable.

   If these corrective measures do not produce satisfactory results, please contact the local retailer authorized to distribute this type of product. If you cannot locate the appropriate retailer, please contact CME.

The above statements apply ONLY to those products distributed in the USA.

PRECAUTIONS

IMPORTANT

Always follow the basic precautions listed below to avoid the possibility of serious injury or even death from electrical shock, damages, fire or other hazards. These precautions include, but are not limited to, the follows:

1. Read and understand all the instructions.
2. Always follow the instructions on the instrument.
3. Before cleaning the instrument, always remove the electric plug from the outlet as well as the USB cable. When cleaning, use a soft and dry cloth. Do not use gasoline, alcohol, acetone, turps or any other organic solutions; do not use liquid cleaner, spray cleaner or too wet cloth.
4. Do not use the instrument near water or moisture, such as bathtub, washbasin, kitchen sink, or similar places.
5. Do not place the instrument in an unstable position where it might accidentally fall over.
6. Do not jam sinks or holes of the instrument; those sinks of holes are used for air circulation to prevent the instrument from overheating. Do not place the instrument near heat sink or any places with poor air circulation.
7. Do not place anything on the power cord. Make sure the power cord is set on a safe place so nobody will step on it and/or trip over it.
8. Do not overload the outlet and the AC cable to avoid fire or electrical shock.
9. Do not insert anything in the instrument, which may cause fire or electrical shock. Do not splash any kind of liquid on the instrument.
10. Do not disassemble the instrument. Doing so risks possible accidental electrical shock.
11. If repair is necessary always take the instrument to a qualified service center. You will place yourself in danger if you open or remove the cover. Improper assembly may cause electrical shock in future use.
12. Unplug all the connectors and take the instrument to a qualified service center if anything in the below listed happens:
    A. The power cord or connector is damaged or worn out.
    B. Any liquid gets into the instrument.
    C. The instrument gets rain or water splashed on it.
    D. The instrument does not work properly after following all the instructions regarding troubleshooting.
    E. The instrument falls down or breaks.
    F. The instrument functions poorly.
13. Do not use the instrument during a thunderstorm. Lightening may cause long-distance electrical shock.
14. Do not use the instrument when there is a gas leak nearby.

Keep this manual in safe place

CAUTION:

Setting up

Do not connect the instrument during a thunderstorm.

Do not connect the power cord to an outlet located in a moist environment unless the outlet is properly designed for such situations.

When the power cord is connected to an AC outlet, do not touch the naked part of the cord or the connector.

Always follow the instructions carefully when setting up the instrument.

WARNING:

- Do not expose the instrument to rain or moisture, to avoid fire or electrical shock.

Other precautions:

- Keep the instrument away from electrical interface sources, such as fluorescent lights and electrical motors.
- Keep the instrument away from dust, heat and vibration.
- Do not expose the instrument to sunlight.
- Do not place heavy objects on the instrument; do not place containers with liquid on the instrument.
- Do not touch the connectors with wet hands
- Central Music Co. is not responsible for any damage or data loss caused by improper operation to the instrument.
- All the pictures and the LED display in the manual are used for demonstration; they may be different from the real instrument.

Features

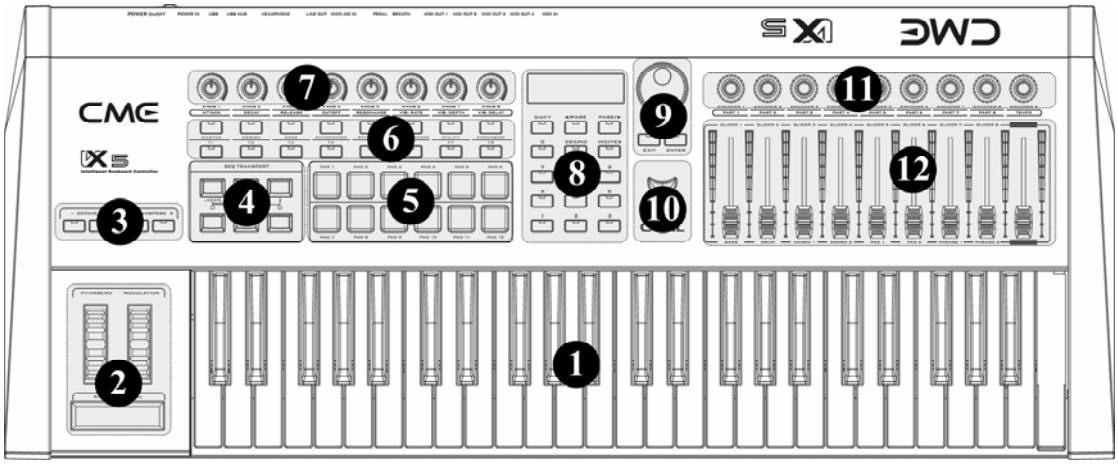
VX 5/6/7/8 Intelligent MIDI keyboard series

- World's first MIDI keyboard with motorized faders
- World's first MDI keyboard with multifunction expansion slot (for the firewire expansion board, the sound module expansion board, etc…)
- World's first MIDI keyboard with a lot of song data inside in padstyle format, and song data can be updated via USB
- VX5/6/7 are equipped with professional half weighted velocity sensitive keyboard with aftertouch
- VX8 is equipped with professional Graded Hammer Action velocity sensitive keyboard with aftertouch
- 9 motorized faders
- 12 pads
- 17 knobs
- Ribbon control
- 32-bit high-speed CPU
- MIDI and digital Audio function
- Scale and temperament function
- U-CTRL mode by CME, to use with your music software for total control
- USB plug&play

Content

1 General view

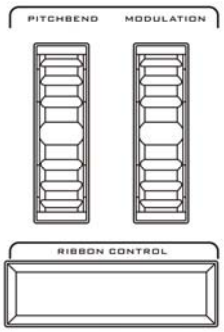
1.1 Front panel



1. The keyboard
   - ✧ There are 4 models in the VX series: VX5-49keys, VX6-61keys, VX7-76keys, VX8-88 keys.
   - ✧ All the keyboards in the VX series are equipped with velocity response and aftertouch.

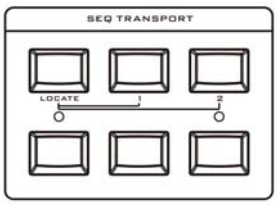
Velocity response means when you play the keyboard, it will respond to the initial force used to strike the keys.
Aftertouch means after you press and hold a key, it will continue to respond to additional pressure applied to the keys.

2. ✧ The pitchbend wheel: By default it can change the pitch up and down for a total two semi-notes, and you can change the default range.
   ✧ The modulation wheel: By default it will make the sound vibrant, and you can change its function.
   ✧ The ribbon control: You can press and move on it to send out control change messages. The default cc is brightness and can be changed.

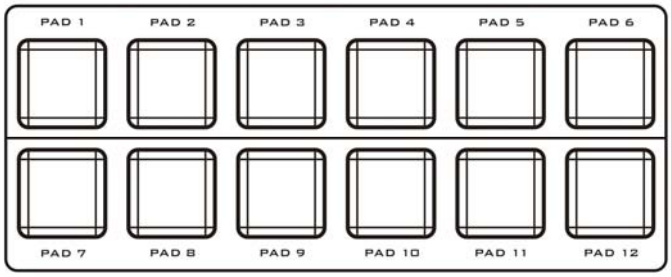


3. ✧ The OCTAVE button: It is used to change the pitch by octaves.
   ✧ The TRANSPOSE button: It is used to change the pitch by semi-notes.

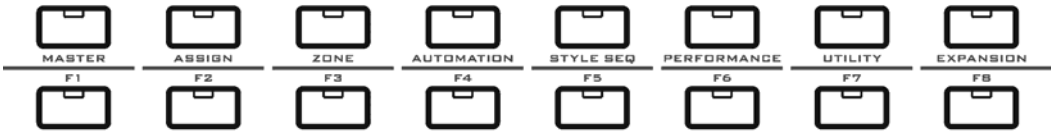
4. ✧ SEQ TRANSPORT: They are used for sequence control and the function can be changed.



5. ✧ The pads (PAD 1-12): They are velocity sensitive, you can define them to trigger drum notes, or use them as control buttons, or use them to play songs.

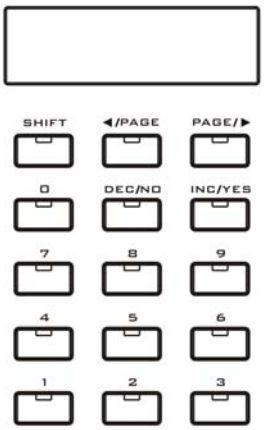


6. ✧ The FUNCTION buttons: They are used to control all the functions of the instrument and used for scene select.
   ✧ The function shortcut buttons (F1-F8): They are used for fast function select or to send user-defined parameters.



7. ✧ The potentiometer knobs (KNOB 1-8): Those knobs have left-mid-right locators, and can be used for real time control and sound changes, the functions can be re-defined.

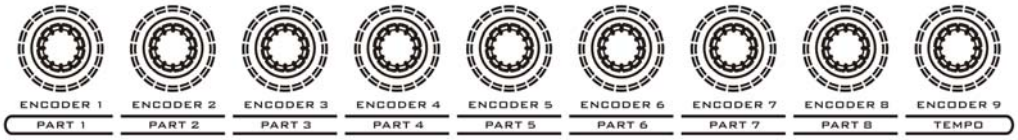
8. ✧ The DISPLAY: You will see all the VX information here.
   ✧ The digit buttons (NUMBER 0-9): They are used to input values.
   ✧ The SHIFT button: It is used with other control parts for more functions.
   ✧ The CURSOR/PAGE buttons: Use those buttons to locate a place you want.
   ✧ The DEC INC/ NO YES buttons: Use them to change value or confirm an operation.



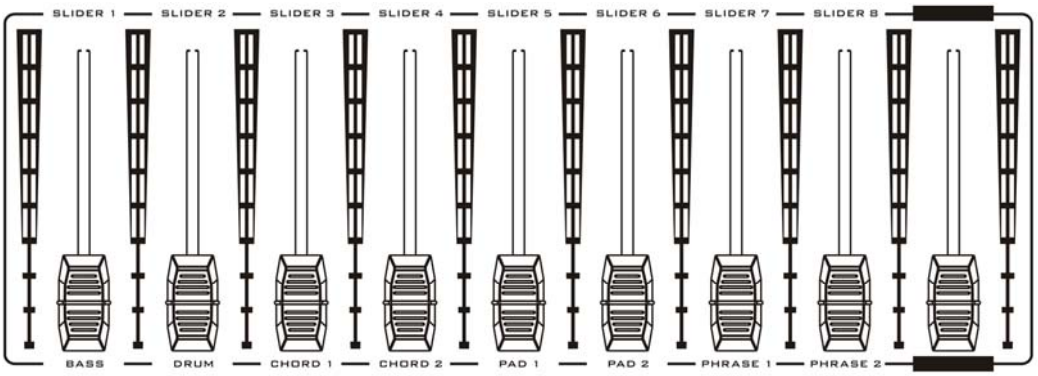
9. ✧ The DATA dial: Use it to change the value quickly.
   ✧ The EXIT/ENTER buttons: Use them to confirm or cancel an operation.

10. ✧ The U-CTRL button: Press it for the software remote control mode, compatible with the Mackie Control templates.

11. The encoder knobs (ENCODER 1-9): Those knobs have no start or end points, and the functions can be user-defined.

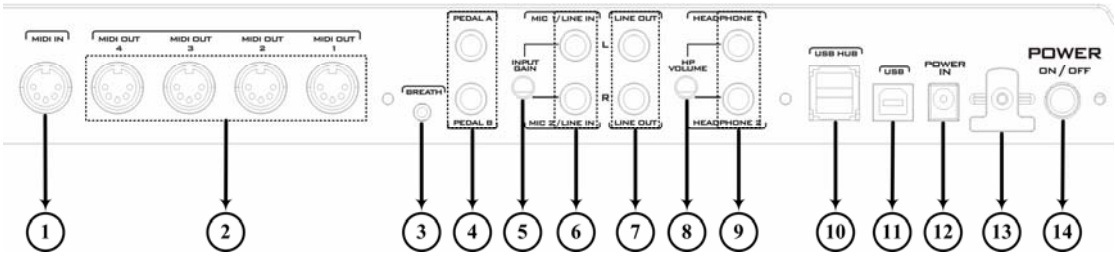


12. The motorized faders: They can move according to the incoming MIDI data, and the functions can be user-defined.



Do NOT hold or stop the motorized motors while they are moving, which may cause great damage to the instrument and may cause electrical shock and fire!

1.2 Rear panel



01. MIDI IN port x1

02. MIDI OUT ports x4

03. Breath control (BC) jack: 1/8" TRS x1, compatible with YAMAHA BC3.

04. Pedal jacks: 1/4" TRS x2, each one can be used for volume or sustain pedal.

05. Input gain for Mic/Line in.

06. MIC/LINE IN jacks: 1/4" TS x2

07. LINE OUT jacks: 1/4" TS x2

08. HP VOLUME: Headphone volume

09. HEADPHONE jacks: 1/4" TRS x2

10. USB HUB port: compliance with standard USB 1.1 for USB expansion

11. USB port: to make computer connection for MIDI/Audio data transfer

12. POWER IN port: connect the AC adaptor here

13. POWER ON/OFF switch: press down the switch to turn the instrument on; press again and release the switch to turn it off.

2 Installation guide

2.1 Power supply

1. Make sure the power switch is set to OFF.
2. Connect the AC adaptor to the POWER IN port in the rear panel.
3. Make sure the AC requirement of the AC adaptor is compliant with the local AC supply, then connect the AC adaptor to the power supply outlet.

Make sure the AC requirement of the AC adaptor is compliant with the local AC supply, otherwise it will cause severe damage to the AC adaptor or the instrument, and it may cause electrical shock!

Only the AC adaptor that goes with the VX should be used. If you cannot find the VX AC adaptor or the adaptor does not work, please contact local CME dealers.

The VX AC adaptor varies from country to country. If you take your VX from one country to another, please make sure your AC adaptor compliant with the local power supply.

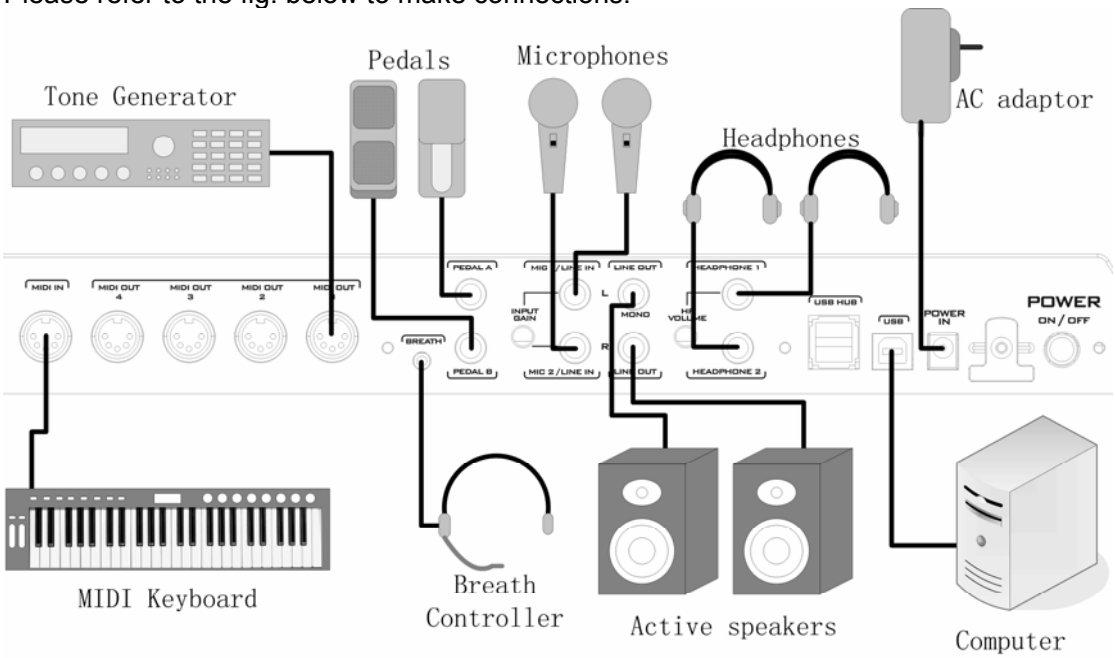
2.2 Power on in proper order

When you have your VX connected to a system, please set all the volume to minimum then follow the proper order to turn all the devices on: master MIDI device (which sends out MIDI data), slave MIDI device (which receives MIDI data), audio devices (mixer, amplifier, speakers). When you follow this order, all the signals (MIDI and audio) will go properly from the beginning to the end. If you will turn off the system, please follow the reverse order (turn off audio devices first, then MIDI deivces).

3 Connections

Before you make these connections, please turn off all devices to avoid possible damage.

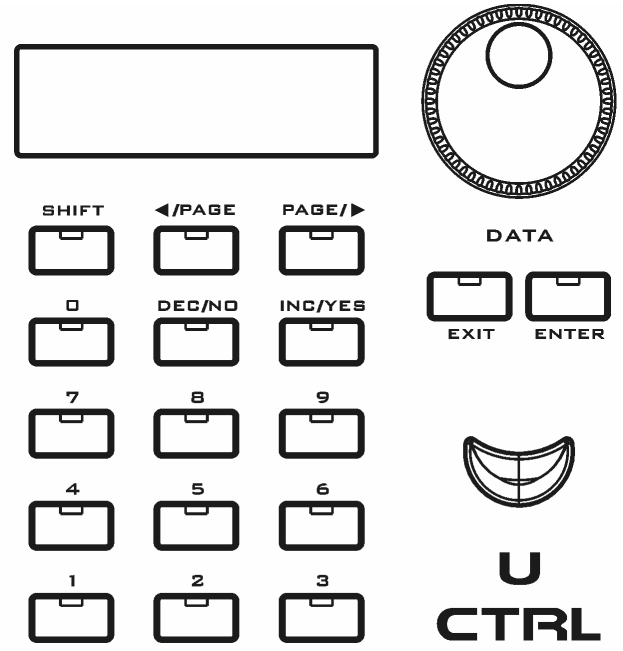
Please refer to the fig. below to make connections:



4 Playing a demo song

1. Connect the VX MIDI OUT1 to the sound module MIDI IN, or connect VX to your computer via USB and select a GM compatible software sound module.
2. Press the 【STYLE SEQ】button for style sequece mode.
3. Press the【PLAY】button to play the song.
4. You will hear the song.

5 Basic operation



【<PAGE PAGE>】buttons

For the editable contents on the LCD, you can use the 【<PAGE PAGE>】buttons to move the cursor to the place you want and edit the content.

When you see the arrow "← →" in the bottom right on the LCD, press and hold【SHIFT】then press【<PAGE PAGE>】buttons for another page.

【DEC/NO INC/YES】and【EXIT/ENTER】buttons

To edit the value, you can use the data dial, the 【DEC/NO INC/YES】buttons, or the number buttons.

To confirm or cancel an operation, you can use the 【DEC/NO INC/YES】and【EXIT/ENTER】buttons.

6 Turning on

6.1 Normally turning on

C M E V X
M a s t e r K e y b o a r d

- When you turn on the instrument, all the motorized faders will move to run a self-test and reset in turn. At the same time, all the pads will light on and off.

Do NOT hold or stop the motorized motors while they are moving. This may cause great damage to the instrument and may cause electrical shock and fire!

6.2 Driver installation

- After you connect the VX to your computer via USB and turn the VX on, the computer will find the VX device and install the driver automatically.
- You can plug and play the VX on WINDOWS XP or Mac OSX.
- When the driver installation is finished, your VX will be recognized as the ”USB Audio Device”.
- The VX MIDI driver offers 2 USB Ins and 3 USB OUTs.
- The VX audio driver offers 1 audio in and 1 audio out.

During the first installation, you may need to turn off the product then turn it on again for the OS to recognize the product.

6.3 Turning on with initilizing

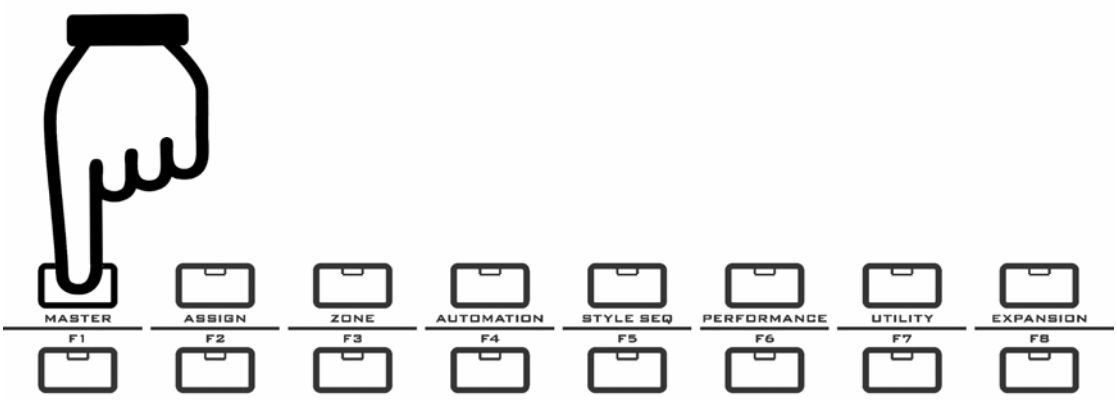
- If you want to initilize the instrument, please press and hold both 【OCTAVE-】 and【OCTAVE+】 buttons while turning on the instrument, then the instrument will enter the initialization mode and show the below message:

F a c t o r y S e t
A r e y o u s u r e ?

- Press the【YES】or【ENTER】button to clear all the user settings and user data, then return to the MASTER mode.
- Press the【NO】or【EXIT】button to cancel initialization and return to the MASTER mode.

The initializing operation will clear all the user settings, please be careful!

7 MASTER mode



Notes for the MASTER mode:

- The MASTER mode is the main mode for users connecting a sound module or computer for real time performance.
- All the parts status in this mode will be saved even if you turned off the instrument.
- Please refer to the below list to see the parts functions:

7.1 MASTER mode data list

Part name	Panel ID	Data type	Data sent
Keyboard	-	Note on & Note Off	Note on & Note Off
Aftertouch	-	After Touch	After Touch
Pitch wheel	PITCHBEND	Pitch Bend	Pitch Bend
Modulation wheel	MODULATION	Modulation	CC-001
Ribbon control	RIBBON CONTROL	Brightness	CC-074
Pedal A	PEDAL A	Expression	CC-011
Pedal B	PEDAL B	Sustain	CC-064
Breath control	B.C	Breath	CC-002
Function shortcut	F1	Program Change	001-Piano 1
Function shortcut	F2	Program Change	006-El.Piano 2
Function shortcut	F3	Program Change	019-Rock Organ
Function shortcut	F4	Program Change	023-Harmonica
Function shortcut	F5	Program Change	026-Steel Accoustic
Function shortcut	F6	Program Change	049-String Ensemble 1
Function shortcut	F7	Program Change	066-Alto Sax
Function shortcut	F8	Program Change	074-Flute
Seq transport	(RTZ)	Controller	CC-115
Seq transport	(REW)	Controller	CC-116
Seq transport	(FF)	Controller	CC-117
Seq transport	(REC)	Controller	CC-114

Seq transport	(STOP)	Controller	CC-118
Seq transport	(PLAY)	Controller	CC-119
Remote control	LOCATE 1	Controller	CC-112
Remote control	LOCATE 2	Controller	CC-113
Pad	PAD 1	Note	Tom-Low
Pad	PAD 2	Note	Tom-Mid
Pad	PAD 3	Note	Tom-Mid
Pad	PAD 4	Note	Tom-High
Pad	PAD 5	Note	Cymbal
Pad	PAD 6	Note	RideCymbal
Pad	PAD 7	Note	Kick
Pad	PAD 8	Note	Side Stick
Pad	PAD 9	Note	Snare
Pad	PAD 10	Note	Hi-Hat–Closed
Pad	PAD 11	Note	Hi-Hat Pedal
Pad	PAD 12	Note	Hi-Hat–Open
Knob(Encoder)	ENCODER 1	Controller	Channel-1,CC-10
Knob(Encoder)	ENCODER 2	Controller	Channel-2,CC-10
Knob(Encoder)	ENCODER 3	Controller	Channel-3,CC-10
Knob(Encoder)	ENCODER 4	Controller	Channel-4,CC-10
Knob(Encoder)	ENCODER 5	Controller	Channel-5,CC-10
Knob(Encoder)	ENCODER 6	Controller	Channel-6,CC-10
Knob(Encoder)	ENCODER 7	Controller	Channel-7,CC-10
Knob(Encoder)	ENCODER 8	Controller	Channel-8,CC-10
Knob(Encoder)	ENCODER 9	Timing Clock	F8
Knob(Potentiometer)	KNOB 1	Controller	B0 65 00,B0 64 00,B0 06 rr
Knob(Potentiometer)	KNOB 2	Controller	B0 65 00,B0 64 01,B0 06 rr
Knob(Potentiometer)	KNOB 3	Controller	B0 65 00,B0 64 02,B0 06 rr
Knob(Potentiometer)	KNOB 4	Controller	B0 63 01,B0 62 20,B0 06 rr
Knob(Potentiometer)	KNOB 5	Controller	B0 63 01,B0 62 21,B0 06 rr
Knob(Potentiometer)	KNOB 6	Controller	B0 63 01,B0 62 24,B0 06 rr
Knob(Potentiometer)	KNOB 7	Controller	B0 63 01,B0 62 30,B0 06 rr
Knob(Potentiometer)	KNOB 8	Controller	B0 63 01,B0 62 31,B0 06 rr
Fader	SLIDER 1	Controller	Channel-1,CC-07
Fader	SLIDER 2	Controller	Channel-2,CC-07
Fader	SLIDER 3	Controller	Channel-3,CC-07
Fader	SLIDER 4	Controller	Channel-4,CC-07
Fader	SLIDER 5	Controller	Channel-5,CC-07
Fader	SLIDER 6	Controller	Channel-6,CC-07
Fader	SLIDER 7	Controller	Channel-7,CC-07
Fader	SLIDER 8	Controller	Channel-8,CC-07
Fader	SLIDER 9	System Exclusive Messages	GM Master Volume

Except for the keyboard, all the other parts can be re-defined using the 【ASSIGN】button to send other data.

7.2 Registration BANK access

- You can save all the instrument settings to the registration BANK.

- Press the【MASTER】button to show the current registration bank# and name:

  ```
  0 0 - V X      M A S T E R
  ```

  - You can change the bank# then press [ENTER] to recall the settings from that registration bank. To change the bank#, press either the <PAGE or PAGE> button. When the bank# flashes, you can change it.
  - If the current settings are changed, when you recall settings from another registration bank, there will be a message as below:

    ```
    S a v e   C u r r e n t ?
                        Y e s / N o
    ```

  - Press【No】 to recall from another registration bank without saving current settings.
  - Press【Yes】to save current settings, and you can select the registration bank# and rename the bank:

    ```
    S a v e   T o :
    0 3 - U s e r   0 1
    ```

7.3 Selecting bank and voice

- Here the “bank” means tone bank. You can change the voice by selecting the bank# and voice#.

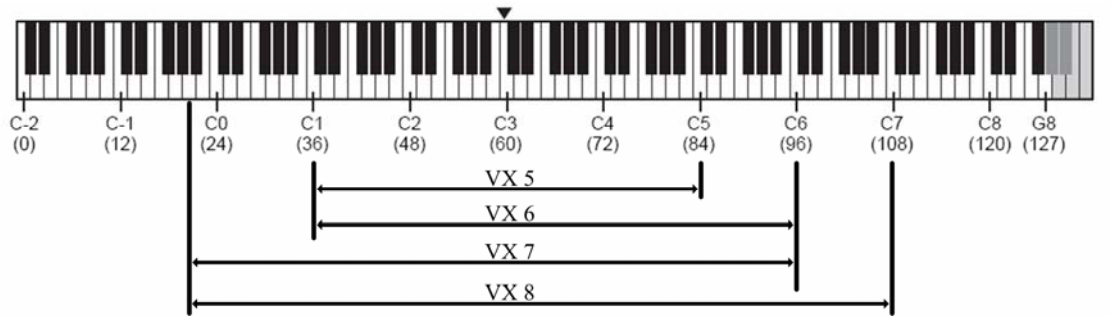
- When you are playing the instrument, it will show the information as below:

  ```
  P : 0 0 1 - G r a n d P
  M S B : 0 0 0   L S B : 0 0 0
  ```

  - P: the voice # and name. The voice # range is 001-128, refer to appendix <GM voice list>.
  - MSB & LSB: the BANK MSB & LSB#, range is 000-127.
  - To make changes, use the <PAGE and PAGE> button until the value flashes, then change the value and press ENTER.
  - Everytime you change one of the above data, all three MIDI messages will be sent.

7.4 Tanspose and octave

- You can shift the keyboard pitch in semi-notes by using the Transpose function.
- You can shift the keyboard pitch in octaves by using the Octave function.
- The default keyboard ranges of VX 5/6/7/8 are listed below:



- When you press [Transpose] or [Octave], you will see the information as below:

Octave	: 0 0
Transpose	: 0 0

  - When you change the Tranpose or Octave value, the corresponding button will light on.
  - The octave shift range is -04～00～+04 octaves. Pressing the two octave buttons at the same time will reset the octave shift to 0, and the button will light off.
  - The transpose shift range is -12～00～+12 semi-notes. Pressing the two transpose buttons at the same time will reset the transpose shift to 0, and the button will light off.

7.5 Knobs and faders

- When you adjust a knob or a fader, it will send MIDI data to a specific port and channel.

- When you adjust a knob or a fader, the instrument will show information as below:

EN1 : 064	CH : 00 P 1
CC : 073 - ATTACK	

  - For the encoder knobs (ENCODER)1～9, it shows EN1～9 and the value.
  - For the potentiometer knobs (KONB)1～8, it shows KN1～8 and the value.
  - For the faders (SLIDER)1～9, it shows SL1～9 and the value.
  - CH means channel. CH value KB means following the keyboard channel, value 01～16 means MIDI channel, value Z1-Z4 means using the Zone function.
  - P means MIDI Ports. Port value 1～4 means the 4 MIDI OUT ports.
  - CC means control change # and names. Refer to the appendix <Assignable controller list> and <Note list>. You can move the cursor to the CC#, change its value and confirm by pressing [ENTER].

7.6 Playing the pads

- When you play a pad, it will send MIDI data to a specific port and channel. The pads are velocity sensitive.

- When you play a pad, the instrument will show information as below:

Pad : 01	Vel : 058
Note : 001 (C# - 2)	

  - Pad # range is 01～12.
  - Vel means the velocity, and the range is 000～127.

- If you play more than one pad at the same time, only the information of the last pad will be shown.
- Note means the note name assigned to the pad, and the range is 000～127; refer to the appendix <Note list>.

7.7 SEQ control buttons

- When you press a SEQ button, it will send MIDI data to a specific port and channel.

- When you press a SEQ button, the instrument will show information as below:

```
S T O P
T e m p o : 1 2 0
```

  - You will see the SEQ button names: Return To Zero (RTZ), Fast rewind (REW), Fast forward (FF), Record (REC), Stop (STOP), Play (PLAY).
  - Tempo means song tempo, and the default value is 120, the range is Off, 20～250. You can use the tempo function to stop or change the MIDI timing data.

7.8 Function shortcut buttons

- When you press a function shortcut button F1～F8, it will send MIDI data to a specific port and channel.

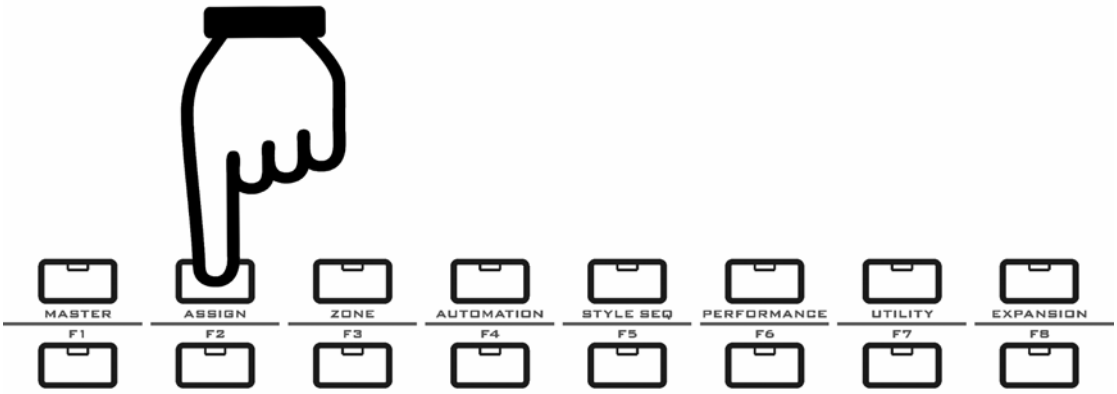
- The MIDI data sent includes Bank change (Bank Msb+Bank Lsb) and program change (Program Change).

```
F 1                    C H : 0 1     P 1
P C : 0 7 4 - F L U T E
```

7.9 Miscellaneous

- About miscellaneous parts like pitch wheel, modulation wheel, pedals, breath control, ribbon control and aftertouch:
  - The value of the above parts will not be shown on the LCD.
  - For the detail about the MIDI data of the above parts, refer to the <MASTER mode data list>.
  - You can use the【ASSIGN】function to re-define those parts.

8 Assigning



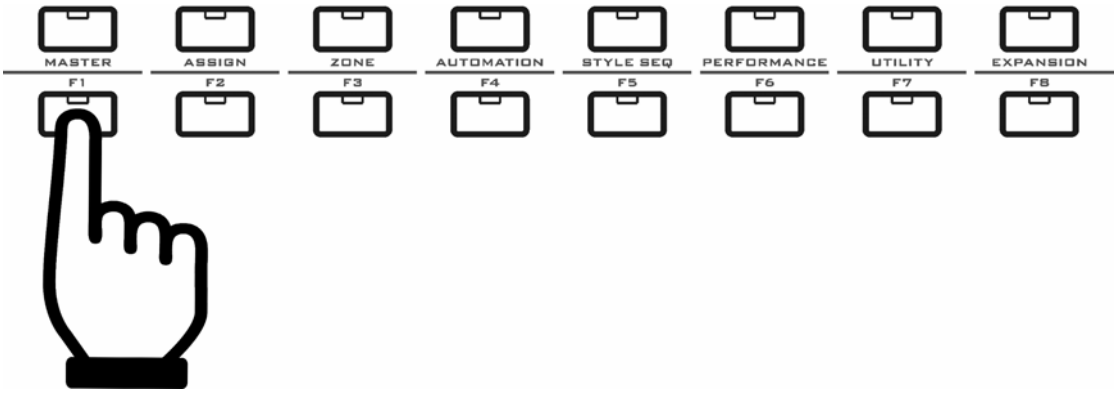
Notes for the ASSIGN function:

- You can use the ASSIGN function to re-define all the parts of the instrument.
- The ASSIGN button is available in the MASTER mode.
- You can use the function shortcut button F1～F8 for fast operation.

8.1 Assignable data list

Shortcut	Part name	Page range	Assignable data type		
			CC	Note	Voice
F1	Keyboard	1-1	-	-	-
	Pitch Bend Wheel	1-2～1-4	√	-	-
	(Modulation Wheel	1-5～1-7	√	-	-
F2	Sustain Pedal	2-1～2-3	√	-	-
	Expression Pedal	2-4～2-6	√	-	-
F3	Aftertouch	3-1～3-3	√	-	-
	Ribbon Control	3-4～3-6	√	-	-
	Breath Control	3-7～3-9	√	-	-
F4	Function shortcut Buttons	4-1～4-4	√	√	√
	SEQ buttons	4-5～4-10	√	√	-
F5	Potentiometer Knobs	5-1～5-3	√	-	-
F6	Pads	6-1～6-4	√	√	-
F7	Encoder knobs	7-1～7-3	√	-	-
F8	Faders	8-1～8-3	√	-	-

Refer to the appendix <Assignable controller list>, <Notes list> and <GM voice list>.



8.2 Assigning keyboard and wheels

- Keyboard:

K	e	y	b	o	a	r	d						1	-	1
P	o	r	t	:	1		C	H	:	0	0				→

  - You can set the MIDI port and channel to send data.

- Pitch Bend Wheel:

P	i	t	c	h		B	e	n	d				1	-	2
1	2	8	-	P	i	t	c	h	B	e	n	d		←	→

  - Set the CC #.

P	i	t	c	h		B	e	n	d				1	-	3
0	0	0	-	0	6	4	-	1	2	7				←	→

  - Set the value range.

P	i	t	c	h		B	e	n	d				1	-	4
P	o	r	t	:	1		C	H	:	0	0			←	→

  - Set the MIDI port and channel

- Modulation Wheel:

M	o	d	u	l	a	t	i	o	n				1	-	5
C	C	:	0	0	1	-	M	o	d	u	l	a	t	←	→

  - Set the CC #.

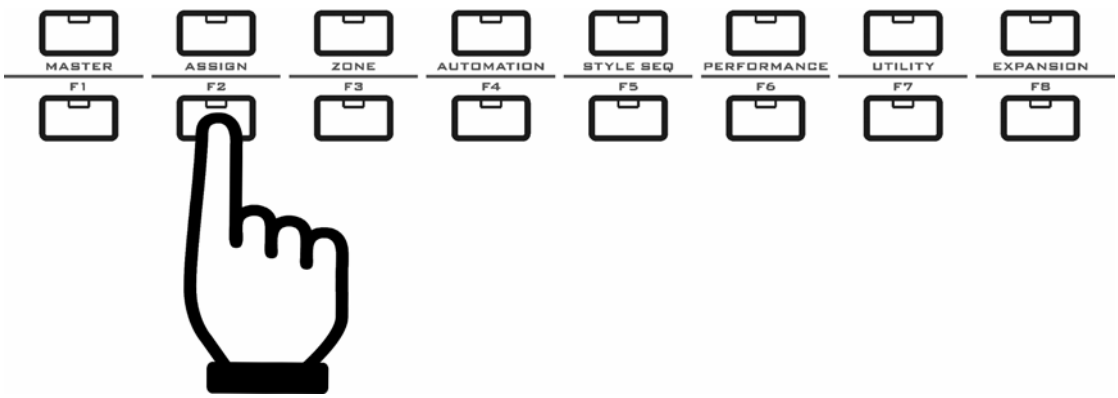
M	o	d	u	l	a	t	i	o	n				1	-	6
0	0	0	-	1	2	7								←	→

  - Set the value range.

M	o	d	u	l	a	t	i	o	n				1	-	7
P	o	r	t	:	1		C	H	:	0	0			←	

  - Set the MIDI port and channel.

8.3 Assigning pedals



- Sustain Pedal:

Pedal-A	2-1
064-Sustain	→

  - Set the CC #.

Pedal-A	2-2
000-127	← →

  - Set the value range.

Pedal-A	2-3
Port:1 CH:00	← →

  - Set the MIDI port and channel.

- Expression Pedal:

Pedal-B	2-4
011-Expression	← →

  - Set the CC #.

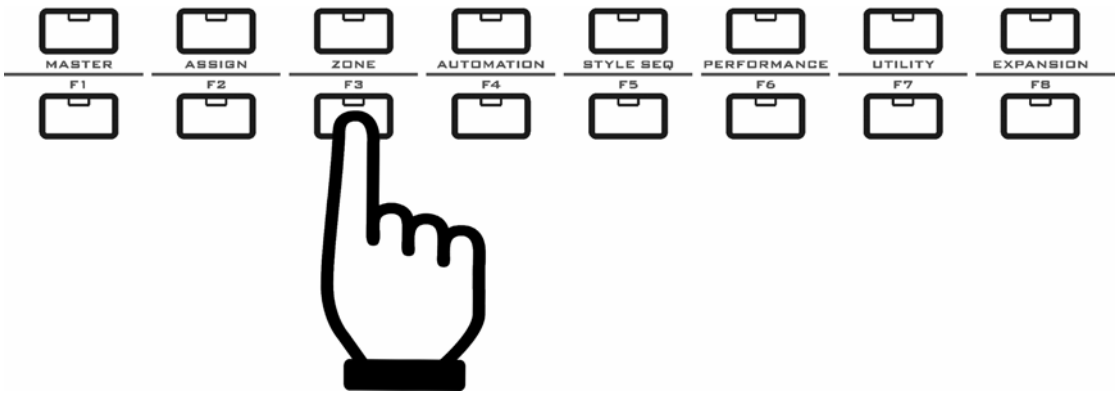
Pedal-B	2-5
000-127	← →

  - Set the value range.

Pedal-B	2-3
Port:1 CH:00	←

  - Set the MIDI port and channel.

8.4 Assigning aftertouch, ribbon, BC



- Aftertouch:

Aftertouch	3-1

1 4 7 - A f t e r t o u c h →

- Set the CC #.

A f t e r t o u c h 3 - 2 0 0 0 - 1 2 7 ← →

- Set the value range.

A f t e r t o u c h 3 - 3 P o r t : 1 C H : 0 0 ← →

- Set the MIDI port and channel.

- Ribbon Control:

R i b b o n C t r l 3 - 4 0 7 4 - B r i g h t n e s s ← →

- Set the CC #.

R i b b o n C t r l 3 - 5 0 0 0 - 1 2 7 ← →

- Set the value range.

R i b b o n C t r l 3 - 6 P o r t : 1 C H : 0 0 ← →

- Set the MIDI port and channel.

- BC(Breath Control):

B r e a t h C t r l 3 - 7 0 0 2 - B r e a t h ← →

- Set the CC #.

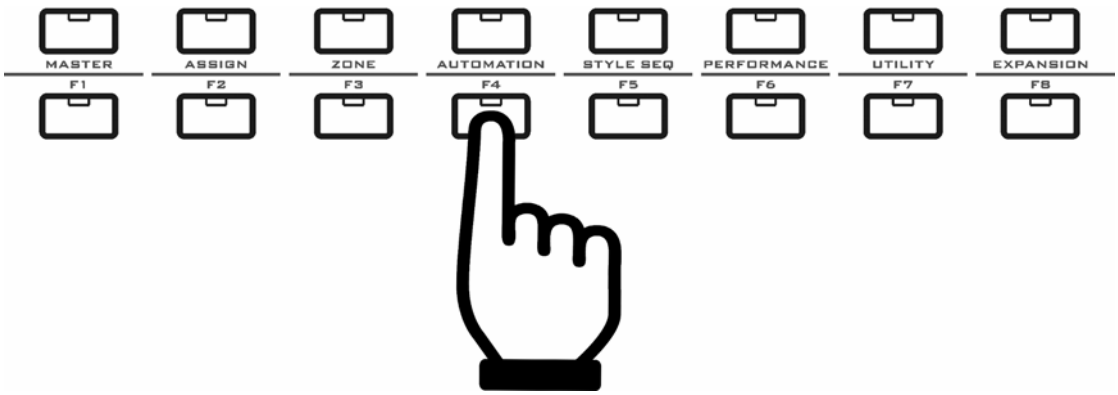
B r e a t h C t r l 3 - 8 0 0 0 - 1 2 7 ← →

- Set the value range.

B r e a t h C t r l 3 - 9 P o r t : 1 C H : 0 0 ←

- Set the MIDI port and channel.

8.5 **Assigning func. Shortcut and SEQ buttons**



- Function shortcut Buttons:

B u t t o n - F 1 4 - 1 T y p e : C o n t r o l →

- Function shortcut button: F1～F8
- Type: Can be control change, note, or program change.

- If type is “control”, the next page will be:

B u t t o n - F 1 4 - 2 0 1 6 - G e n e r a l ← →

- Set the CC #.

```
Button-F1                    4-3
127/Off                      ←→
```

- Set the value range: The first value is the data sent when button pressed; the second value is the data sent when button released. Off means sending no data.

```
Button-F1                    4-4
Port:1   CH:00               ←
```

- Set the MIDI port and channel.

- If the type on page 4-1 is set to “Note”:

```
Button-F1                    4-1
Type:Note                    →
```

- The next page will be:

```
Button-F1                    4-2
060-C4                       ←→
```

- Set the note #.

```
Button-F1                    4-3
127/000                      ←→
```

- Set the note velocity: The first value is the note on velocity; the second value is the note off velocity.

```
Button-F1                    4-4
PoRt:1   CH:00               ←
```

- Set the MIDI port and channel.

- If the type on page 4-1 is set to “Program”:

```
Button-F1                    4-1
Type:Program                 →
```

- The next page will be:

```
Button-F1                    4-2
001-Piano                    ←→
```

- Set the program # (voice #).

```
Button-F1                    4-3
M:000    L:000               ←→
```

- Set the bank MSB and LSB.

```
Button-F1                    4-4
Port:1   CH:00               ←→
```

- Set the MIDI port and channel.

- SEQ buttons:

```
Seq-RTZ                      4-5
Type:Control                 ←→
```

- Select one of the 6 buttons(RTZ,REW,FF,REC,STOP,PLAY)
- Set the type: control or note.
- If type is “Control”, the next page will be:

```
Seq-RTZ                      4-6
016-General                  ←→
```

- Set the CC #.

```
Seq-RTZ                      4-7
127/Off                      ←→
```

- Set the value range: The first value is the data sent when button pressed; the second value is the data sent when button released. Off means sending no data.

```
Seq-RTZ                      4-8
```

P	o	r	t	:	1		C	H	:	0	0						←		

- Set the MIDI port and channel.

- If the type on page 4-1 is set to “Note”:

S	e	q	-	R	T	Z									4	-	5		
T	y	p	e	:	N	o	t	e									←	→	

- The next page will be:

S	e	q	-	R	T	Z									4	-	6		
0	6	0	-	C	4												←	→	

- Set the note #.

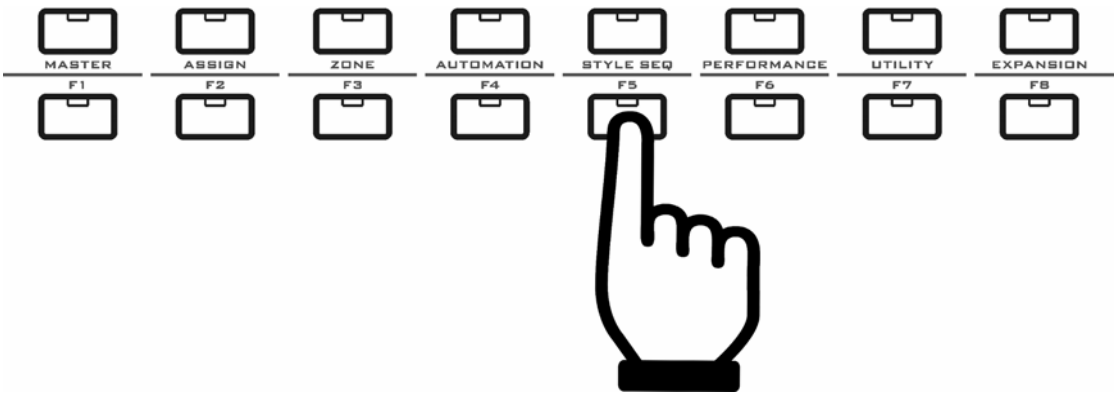
S	e	q	-	R	T	Z									4	-	7		
1	2	7	/	0	0	0											←	→	

- Set the trigger data: The first value is the trigger info. when button pressed; the second value is the trigger info. when button released, and the trigger value can be set to OFF.

S	e	q	-	R	T	Z									4	-	8		
P	o	r	t	:	1		C	H	:	0	0						←		

- Set the MIDI port and channel.

8.6 Assigning potentiometer knobs



- Potentiometer Knobs:

K	n	o	b	-	1										5	-	1		
0	5	2	-	U	n	d	e	f	i	n	e	d						→	

- Select one of the 8 potentiometer knobs.
- Set the CC #.

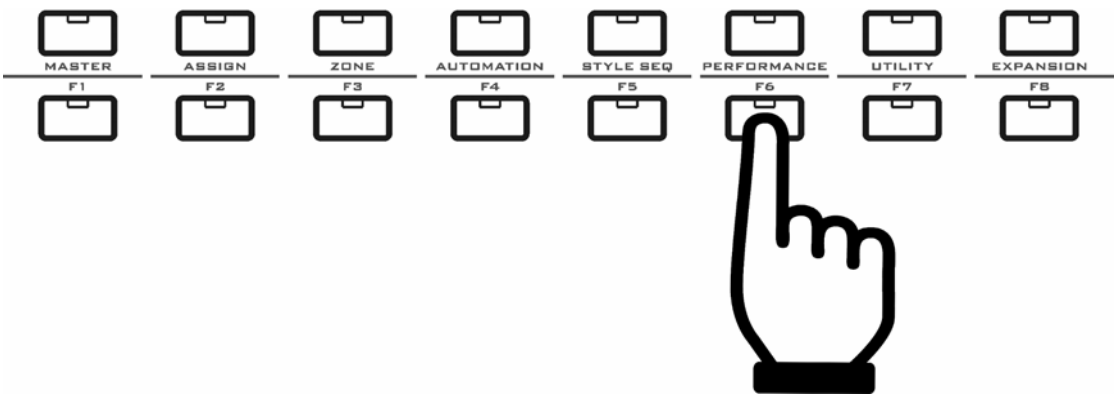
K	n	o	b	-	1										5	-	2		
0	0	0	-	1	2	7											←	→	

- Set the value range.

R	i	b	b	o	n	C	t	r	l						5	-	3		
P	o	r	t	:	1		C	H	:	0	0						←		

- Set the MIDI port and channel.

8.7 **Assigning pads**



- Pads:

Pad-01	6-1
Type: Note	→

  - Select one from the 12 pads.
  - Type can be note or control.

  - If type is “Note”, the next page will be:

Pad-01	6-2
043-G2	← →

  - Set the note #.

Pad-01	6-3
000-127	← →

  - Set the velocity range.

Pad-01	6-4
Port:1 CH:10	←

  - Set the MIDI port and channel.

  - If type is “Control”:

Pad-01	6-1
Type: Control	→

  - Select one from the 12 pads.
  - Type is set to “Control”.

Pad-01	6-2
052-No Define	← →

  - Set the CC #.

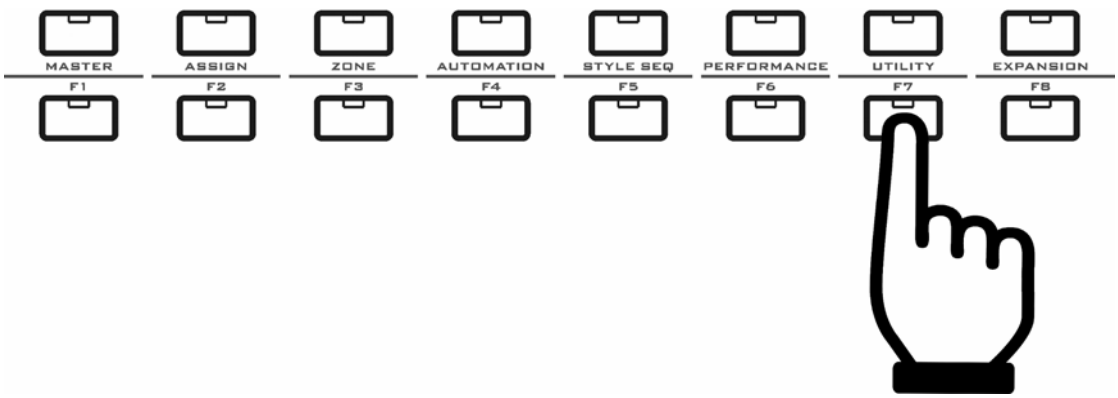
Pad-01	6-3
127/Off	← →

  - Set the velocity range: The first value is the Max/Min value when pad pressed; the second value is the Max/Min value when pad released.
  - Off means sending no data.

Pad-01	6-4
Port:1 CH:00	←

  - Set the MIDI port and channel.

8.8 **Assigning encoder buttons**



- Encoder knobs:

Encoder-1	7-1
010-Pan	→

  - Select one from the 9 encoder knobs.
  - Set the CC #.

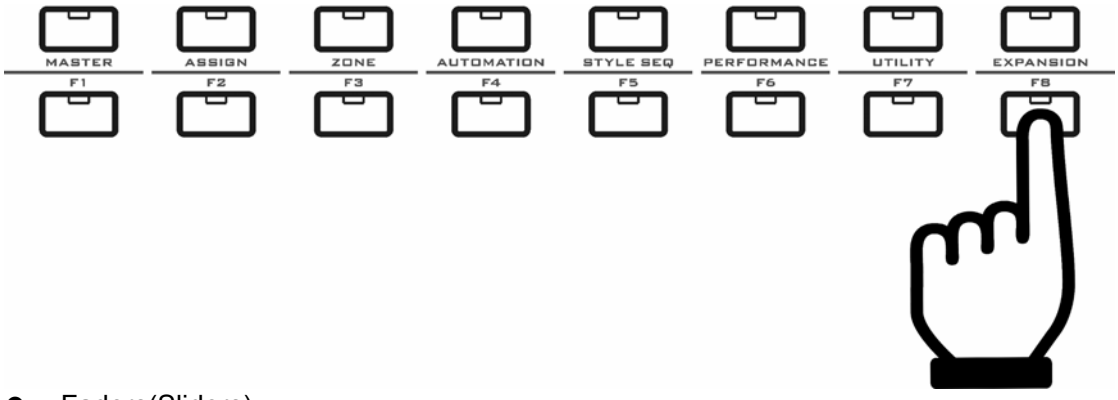
Encoder-1	7-2
000-127	← →

  - Set the value range.

Encoder-1	7-3
Port:1 CH:00	←

  - Set the MIDI port and channel.
  - If there is no channel data in the MIDI message, you cannot set the channel #.

8.9 **Assigning faders**



- Faders(Sliders):

Slider-1	8-1
007-Volume	→

  - Select one from the 9 faders (sliders).
  - Set the CC #.

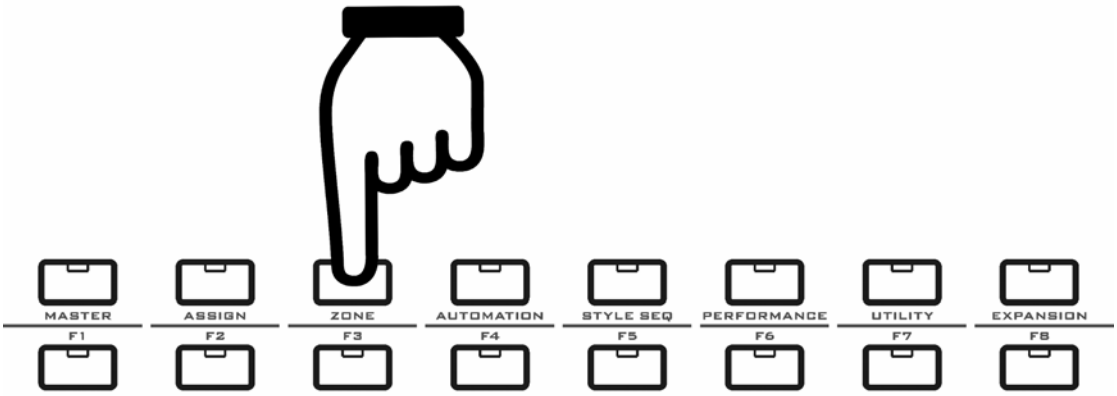
Encoder-1	8-2
000-127	← →

  - Set the value range.

Encoder-1	8-3
Port:1 CH:00	←

  - Set the MIDI port and channel.

9 ZONE



Notes for the ZONE function:

- When the zone function is on, the keyboard can be divided into as many as 4 zones, and each zone's data will be sent to a different MIDI OUT, so you can control and play 4 MIDI devices at the same time.
- You can turn on the ZONE function in the MASTER mode or the STYLE SEQ mode.
- The part with channel set to KB will be changed to ZONE settings.

- ZONE on/off settings:

Z 1	Z 2	Z 3	Z 4	
O N	O N	O N	O N	→

  - It is the on/off settings of ZONE 1～4.
- Setting the port, channel and keyboard range of ZONE 1～4:

Z 1 Port: 1	CH: 01			
Range: 000 - 127		←	→	

  - Port: MIDI OUT port.
  - CH: MIDI channel.
  - The default Zone settings are: Zone 1=Port1/CH1, Zone 2=Port2/CH1, Zone3=Port3/CH1, Zone 4=Port4/CH1.
  - Range: The keyboard range.

- Setting the velocity range of ZONE:

Z 1 Vel: 000 - 127			
Z 2 Vel: 000 - 127	←	→	

Z 3 Vel: 000 - 127			
Z 4 Vel: 000 - 127	←	→	

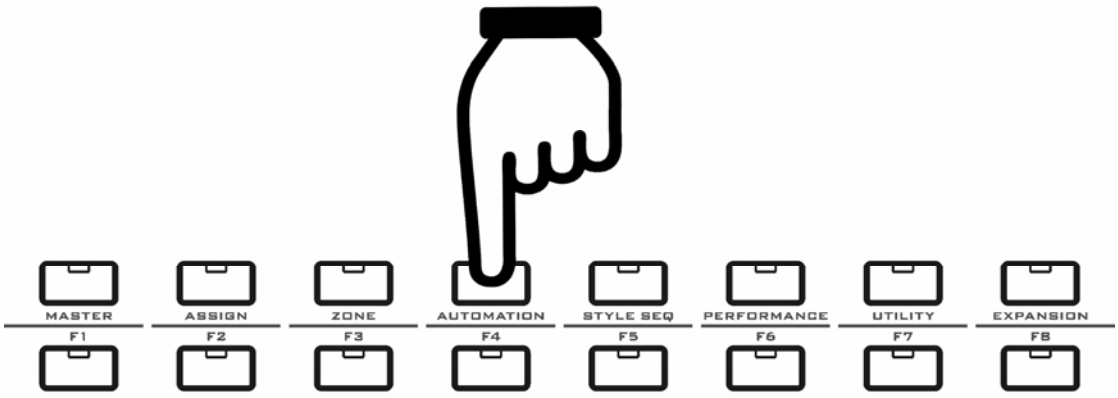
  - Set the velocity range of ZONE1～ZONE4.

- Octave and transpose of ZONE:

Z 1 Octave:	00
Transpose:	00 ←

  - You can set the octave and transpose value for each of the 4 zones respectively.
  - When the ZONE function is on, the octave and transpose buttons on the front panel work on all zones.
  - The zone octave range is -04～00～+04.
  - The zone transpose range is -12～00～+12 semi-notes.

10 AUTOMATION



Notes for the AUTOMATION function:

- You can use this function to record and play back the fader 1-9 movement, so you can make the faders move automatically.
- Faders 1-9 are map to tracks 1-9, each time you can record the movement of one fader, and you can play all the faders movement later.

- The information on LCD:

T	r	a	c	k	1	:	0	0	0		M	0	0	0	0
S	t	o	p			T	:	1	2	0			4	/	4

  - Track1 means the current track is 1 for fader 1, you can set it to 1-9.
  - Stop means the status of recording. The status can be also Rec or Play.

- When you press the Rec button, there will be 4 count-in beats and the Rec button flashes 4 times:

T	r	a	c	k	1	:	0	0	0		M	0	0	0	0
4						T	:	1	2	0			4	/	4

  - Then it begins recording, the movement of one corresponded fader will be recorded until you press the STOP button.

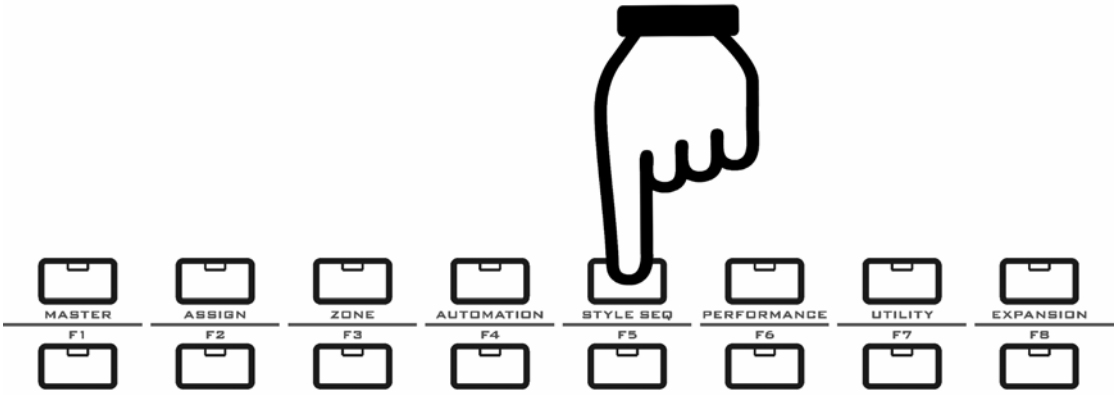
T	r	a	c	k	1	:	0	0	0		M	0	0	0	0
R	e	c				T	:	1	2	0			4	/	4

- When you press the PLAY button:

T	r	a	c	k	1	-	8				M	0	0	0	0
P	l	a	y			T	:	1	2	0			4	/	4

  - The faders will move according to the recording.

11 STYLE SEQ



Notes for the STYLE SEQ mode:

- In the STYLE SEQ mode you can use pads to play songs and play with the song.
- When the STYLE SEQ mode is on, the MASTER mode will be OFF.

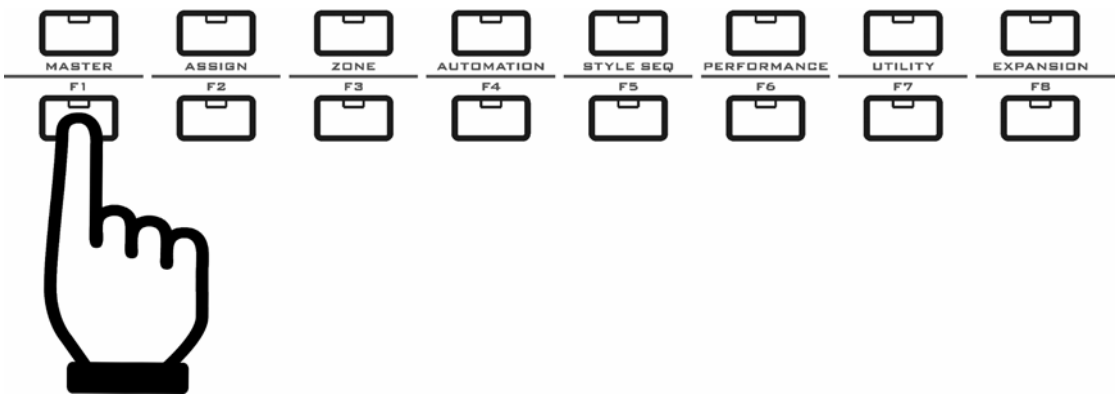
11.1 STYLE SEQ data list

Part name	Panel ID	Data type	Data sent
Keyboard	-	Note on & Note Off	Note on & Note Off
Aftertouch	-	After Touch	After Touch
Pitch wheel	PITCHBEND	Pitch Bend	Pitch Bend
Modulation wheel	MODULATION	Modulation	CC-001
Ribbon control	RIBBON CONTROL	Brightness	CC-074
Pedal A	PEDAL A	Expression	CC-011
Pedal B	PEDAL B	Sustain	CC-064
Breath control	B.C	Breath	CC-002
Function shortcut	F1	Song#,tempo, time signature	-
Function shortcut	F2	Keyboard part#, voice#, bank#	-
Function shortcut	F3	Melody on/off	-
Function shortcut	F4	Pad status setting	-
Function shortcut	F5	Motorized fader mode	-
Function shortcut	F6	Song play mode	-
Function shortcut	F7	Change fader channel	-
Function shortcut	F8	Panic	-
Seq transport	RTZ	Return to start point	-
Seq transport	REW	Fast rewind	-
Seq transport	FF	Fast forward	-
Seq transport	REC	-	-
Seq transport	STOP	Stop song playing	-
Seq transport	PLAY	Play the song	-
Remote control	LOCATE 1	-	-

Remote control	LOCATE 2	-	-
Pad	PAD 1	Song phrase1	-
Pad	PAD 2	Song phrase2	-
Pad	PAD 3	Song phrase3	-
Pad	PAD 4	Song phrase4	-
Pad	PAD 5	Song phrase5	-
Pad	PAD 6	Song phrase6	-
Pad	PAD 7	Song phrase7	-
Pad	PAD 8	Song phrase8	-
Pad	PAD 9	Song phrase9	-
Pad	PAD 10	Song phrase10	-
Pad	PAD 11	Song phrase11	-
Pad	PAD 12	Song phrase12	-
Knob(Encoder)	PART 1	Part1 volume	Channel-1,CC-7
Knob(Encoder)	PART 2	Part2 volume	Channel-2,CC-7
Knob(Encoder)	PART 3	Part3 volume	Channel-3,CC-7
Knob(Encoder)	PART 4	Part4 volume	Channel-4,CC-7
Knob(Encoder)	PART 5	Part5 volume	Channel-5,CC-7
Knob(Encoder)	PART 6	Part6 volume	Channel-6,CC-7
Knob(Encoder)	PART 7	Part7 volume	Channel-7,CC-7
Knob(Encoder)	PART 8	Part8 volume	Channel-8,CC-7
Knob(Encoder)	TEMPO	Song tempo	F8
Knob(Potentiometer)	ATTACK	Controller	B0 65 00,B0 64 00,B0 06 rr
Knob(Potentiometer)	DECAY	Controller	B0 65 00,B0 64 01,B0 06 rr
Knob(Potentiometer)	RELEASE	Controller	B0 65 00,B0 64 02,B0 06 rr
Knob(Potentiometer)	CUTOFF	Controller	B0 63 01,B0 62 20,B0 06 rr
Knob(Potentiometer)	RESONANCE	Controller	B0 63 01,B0 62 21,B0 06 rr
Knob(Potentiometer)	VIB.RATE	Controller	B0 63 01,B0 62 24,B0 06 rr
Knob(Potentiometer)	VIB.DEPTH	Controller	B0 63 01,B0 62 30,B0 06 rr
Knob(Potentiometer)	VIB.DELAY	Controller	B0 63 01,B0 62 31,B0 06 rr
Fader	BASS	Controller	Channel-9,CC-07
Fader	DRUM	Controller	Channel-10,CC-07
Fader	CHORD 1	Controller	Channel-11,CC-07
Fader	CHORD 2	Controller	Channel-12,CC-07
Fader	PAD 1	Controller	Channel-13,CC-07
Fader	PAD 2	Controller	Channel-14,CC-07
Fader	PHRASE 1	Controller	Channel-15,CC-07
Fader	PHRASE 2	Controller	Channel-16,CC-07
Fader	-	System Exclusive Messages	GM Master Volume

Except for the keyboard, all the other parts can be re-defined using the 【ASSIGN】button to send other data.

11.2 Song select

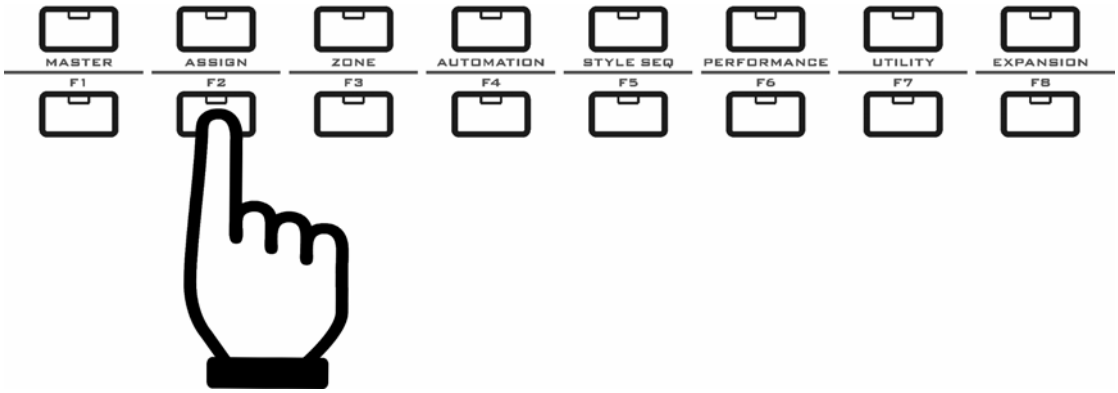


- Use the F1 button to select a song and set related parameters:

```
Song:00-Hello
Tempo:120        4/4
```

  - Song: Song name and number.
  - Tempo: Song tempo.
  - 4/4: Time signature.

11.3 Setting a performance part



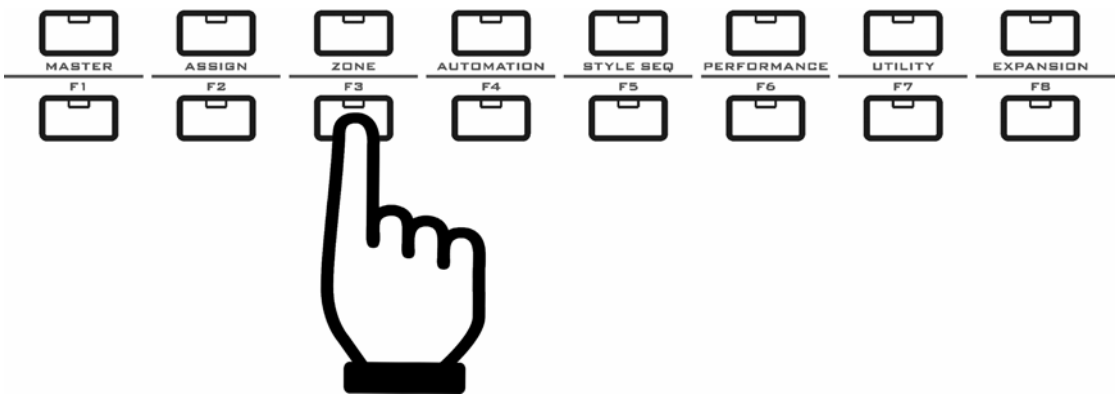
- Use the F2 button to set the part parameters including channel, voice(program), bank MSB, bank LSB:

```
P1    P001-Grand P
MSB:000 LSB:000    →
```

```
Song:00-Hello
Port:1             ←
```

  - PORT: It Is the MIDI OUT port of the part.

11.4 Melody on/off

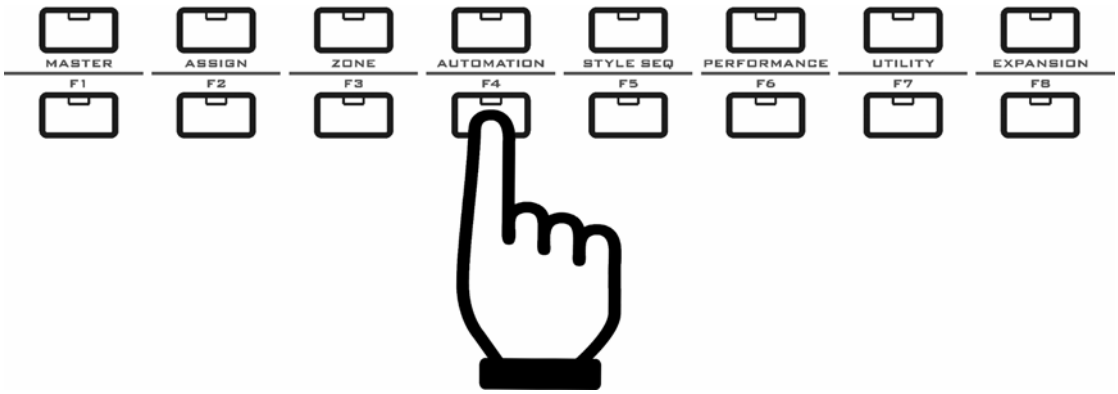


- Use the F3 button to turn ON/OF the melody part.

S o n g : 0 0 - H e l l o
M e l o d y : O n

  - Melody: ON/OFF works on channel 8.

11.5 Setting the pads hold

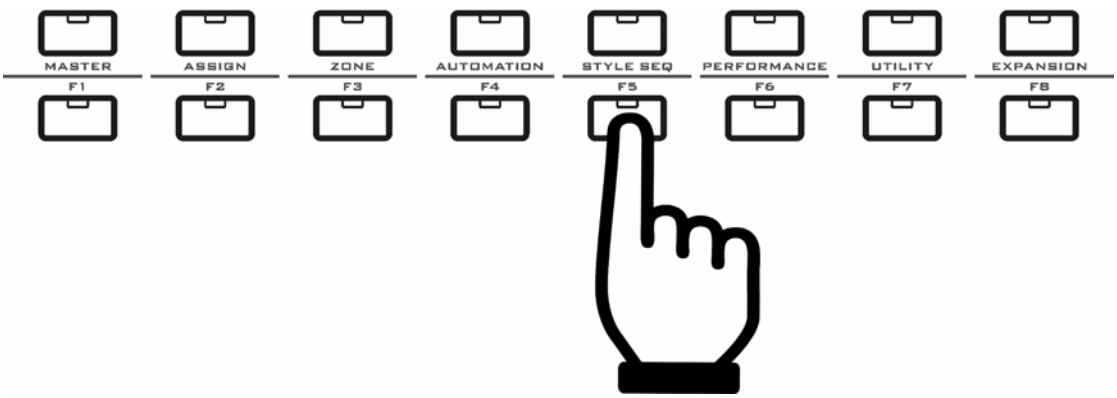


- Use the F4 button to set the pads hold ON/OFF

S o n g : 0 0 - H e l l o
P a d 0 1 : O f f

  - When the pads hold is ON, pressing and holding a pad results in continuous play; when you release a pad, it will stop playing.

11.6 Motorized fades mode

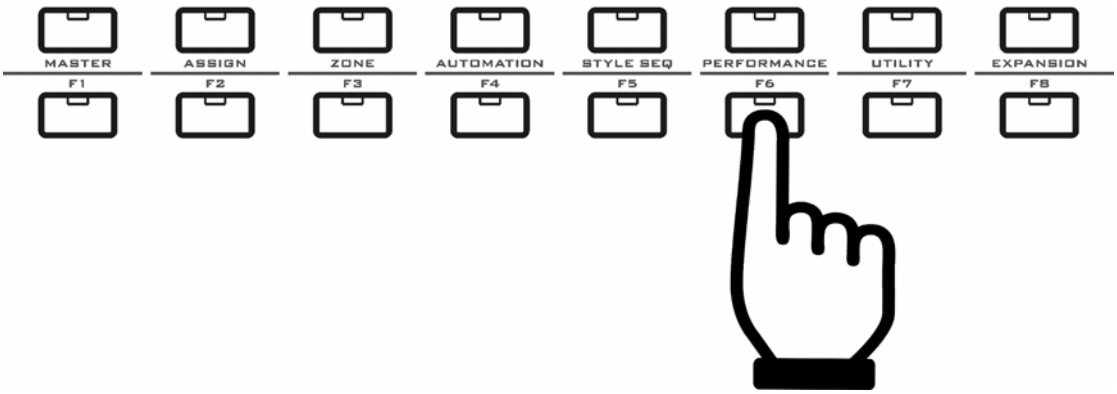


- Use the F5 button to set the motorized faders mode(Slidemode):

S o n g : 0 0 - H e l l o
S l i d e M o d e : W r i t e

  - SlideMode: You can set the SlideMode to either READ or WRITE.

11.7 Song play mode

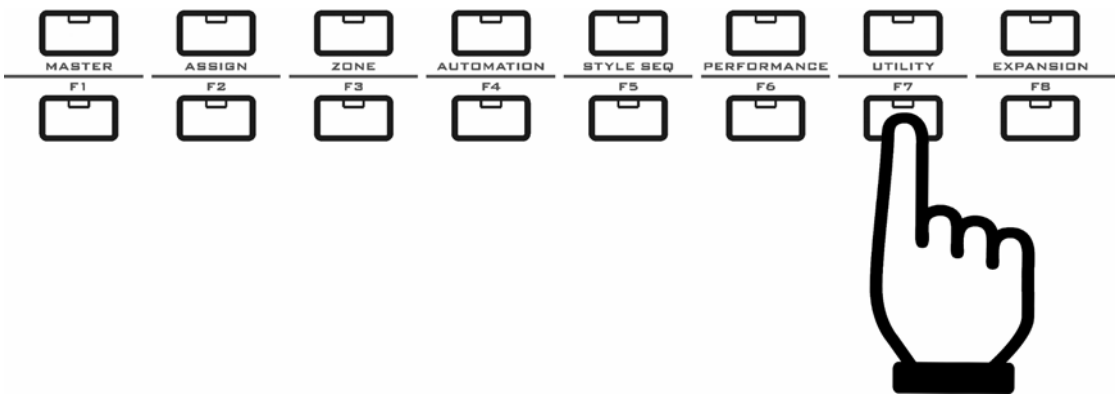


- Use the F6 button to set the song play mode:

S o n g : 0 0 - H e l l o
M o d e : O f f

  - Mode: The song play mode can be set to any one of the following:
    - ✓ 【Off】It is the normal song play mode.
    - ✓ 【Auto 1】The instrument will always play the right melody part no matter what key you play.
    - ✓ 【Auto 2】When you are playing, you can here what you play and the melody part volume will be reduced to 50%; when you are not playing, the melody part volume will return to normal. It is the mode for you to learn how to play with the melody.
    - ✓ 【Follow 1】You can play any key to trigger the right molody tone, and the tone will be played according to your velocity.
    - ✓ 【Follow 2】You should play the right key to trigger the right melody tone, and the tone will be played according to your velocity.

11.8 Changing faders channels

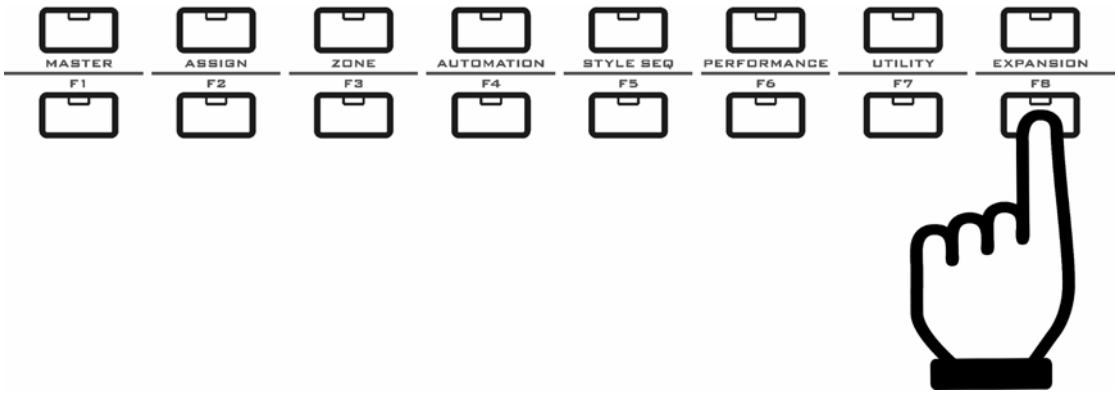


- Use the F7 button to change the motorized faders channels:

S o n g : 0 0 - H e l l o
S l i d e r C H : 1 - 8

  - The fader's channels can be changed to 1-8 or 9-16.

11.9 Panic



- Use the F8 buttons for the PANIC function:

P A N I C

  - When you press the button, the instrument will send reset data to all ports to stop continuous long tones and make all devices work properly.

- The 6 SEQ transport buttons:

S T O P	P a d 1 M : 0 0 0 1
T e m p o : 1 2 0	4 / 4

  - Use those buttons for SEQ transport like playing or stopping a song.

- You can use the following play modes:
  - Song play mode: play all the phrases of the song.
    - Press the PLAY button, it will play the song from start to end then stop.
    - While playing, the STOP, FF, REW, RTZ buttons are available.
    - While playing all the pads blink.
    - While playing you can hit any pad for the single-loop play mode.
    - While playing you can hit two pads at the same time for the multi-loop play mode.
  - Single-loop play mode:
    - Hit a pad to play the corresponding phrase.

- The pad light is on.
- Hit the same pad again to stop the playing.
- The FF and REW buttons work within the phrase.
- The RTZ buttons will return to the phrase start.
- If another pad is triggered while a previous pad is being played, the instrument will play the new pad after finishing one bar of the previous pad.
- While playing the PLAY button blinks.
- While playing you can hit two pads at the same time for the multi-loop play mode.

- Multi-loop play mode:
  - Hit two pads at the same time to play the two pads and all the pads between the two pads. (The region)
  - The region will be played repeatedly.
  - All pads in the region will light on and the current pad being played will blink.
  - While playing the PLAY button blinks.
  - While playing you can hit any pad for the single-loop play mode.
  - While playing the STOP button is available.
  - While playing the FF, REW and RTZ buttons work whithin the region.

Notes for the PAD STYLE file format:

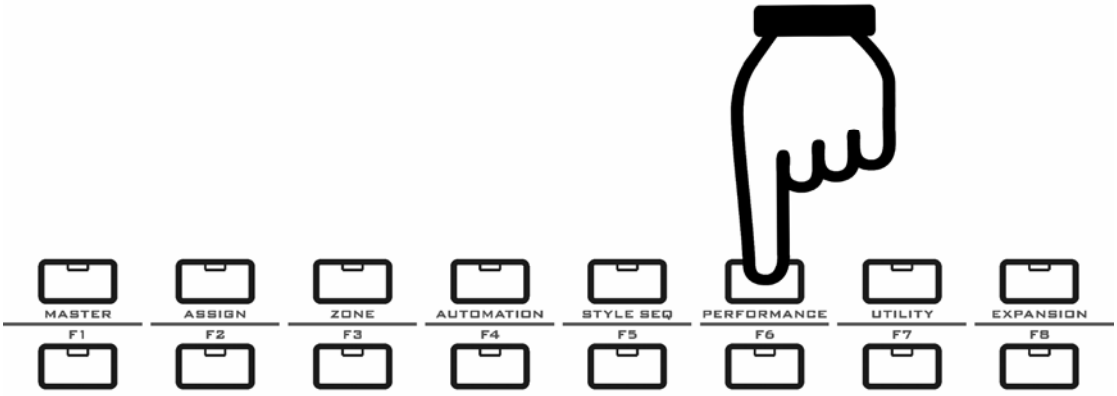
- For the MIDI files in the PAD STYLE file format, VX will recognize all the loops in the song, so you can use the PAD STYLE mode for song play.
- Refer to the General specification of the PAD STYLE file format below:
- File format: standard MIDI file format 0.
- File size: Within 64KB per song.
- PAD STYLE ID: In the beginning position 000 add Marker ”cme style”
- The settings section at the song start: this settings section begins at position 000 with the Marker ”SetStart”, then fill in all the parts heading data, after that it ends with the Marker ”SetEnd”. Please make this settings section as short as possible.
- Make all Markers for the loops:
  - LoopStart1 LoopEnd1
  - LoopStart2 LoopEnd2
  - LoopStart3 LoopEnd3
  - LoopStart4 LoopEnd4
  - LoopStart5 LoopEnd5
  - LoopStart6 LoopEnd6
  - LoopStart7 LoopEnd7
  - LoopStart8 LoopEnd8
  - LoopStart9 LoopEnd9
  - LoopStart10 LoopEnd10
  - LoopStart11 LoopEnd11
  - LoopStart12 LoopEnd12
  - The previous LoopEnd can be at the same position of the next LoopStart.
  - Each loop will be at least one measure.
  - VX can recognize a maximum of 12 pairs of the loop Marker.
- Use MIDI channels 8 to 16 as below:
  - ch 8---Melody & Chord Marker
  - ch 9---Bass
  - ch 10---Drums & Percussion
  - ch 11---Rhythm chord 1 (ex. Guitar)
  - ch 12---Rhythm chord 2 (ex. Keyboard)
  - ch 13---Pad chord 1 (ex. Organ, Strings)
  - ch 14---Pad chord 2 (ex. Synth)
  - ch 15---Others 1
  - ch 16---Others 2

- If there is any cc message like expression, volume or pitch bend in the song, it is recommend to add the corresponding default value at the start of each loop.

You can play a MIDI file that is not in PAD STYLE format in VX, but you cannot use the pads for loop select.

With the VX Brain program, you can transfer song data from computer to the instrument via USB. To get the newest VX Brain program, please visit http://www.cme-pro.com

12 PERFORMANCE



Notes for the PERFORMANCE mode:

- In the Performance mode, you can call for some unique functions to make your performance more expressive.
- You can select a function in the performance mode, and then apply it in the MASTER or STYLE SEQ mode.
- You can use scale and temperament at the same time.
- When the scale or temperament function is on, the keyboard will be in monophonic mode.

12.1 Scale

```
Scale:Off
                                                    →
```

- The default scale type is 12 tones. However, you can chage the scale type to meet your music style.
- When the scale function is on, it will show the below information:

```
Scale:On
01-Major                                            →
```

- When the scale function is on, the default scale type is 01-Major, refer to the appendix <scale list>.

12.2 Temperament

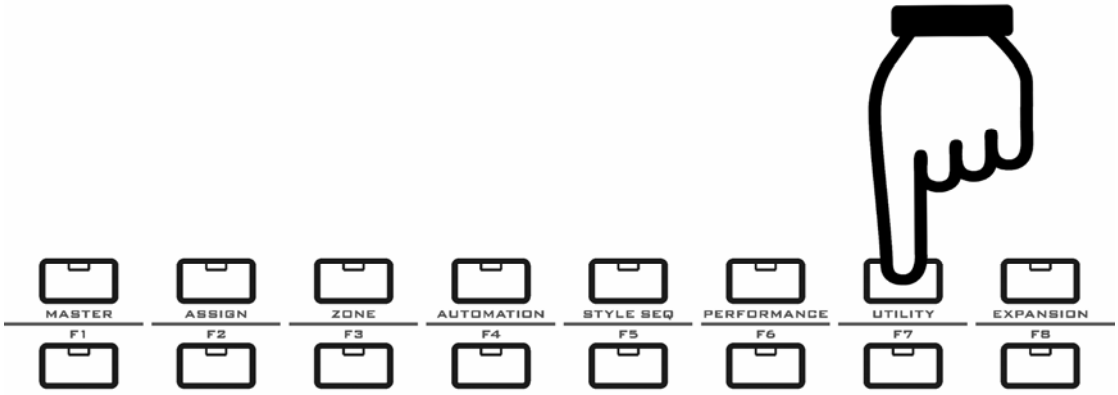
```
Temperament:Off
                                                  ← →
```

- You can change the temperament other than the defult equal one.
- When the temperament function is on, it will show the below information:

```
Temperament:On
00-Equal                                          ←
```

- The default temperament is 00-Equal, refer to the appendix <Temperament list>.

13 UTILITY



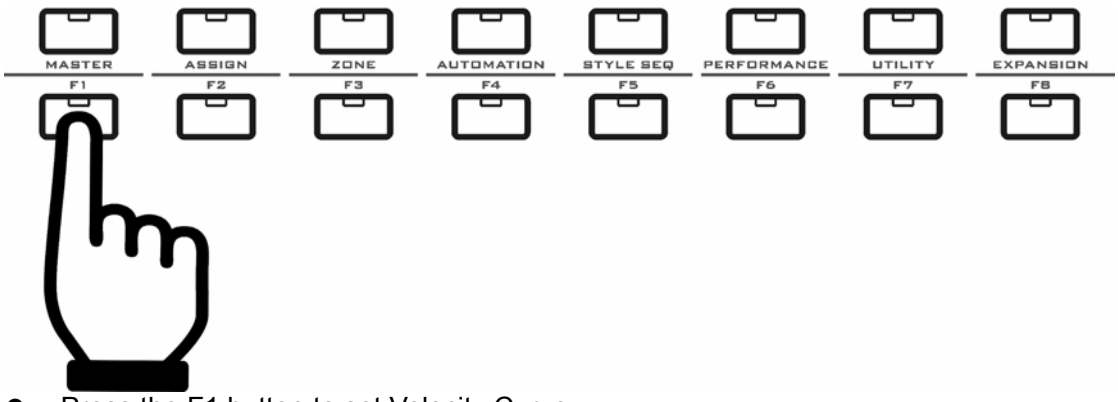
Notes for the UTILITY mode:

- Press the 【UTILITY】button for this mode.
- You can set or adjust the parts in this mode.
- All the changes made in this mode are global, affecting the instrument overall.

UTILITY mode function list

Function shortcut	Function type
F1	Velocity Curve
F2	Aftertouch
F3	Data Dump
F4	Breath Control Adjust
F5	Local control
F6	Pedal Type
F7	MIDI Filter
F8	Reset

13.1 Velocity curve



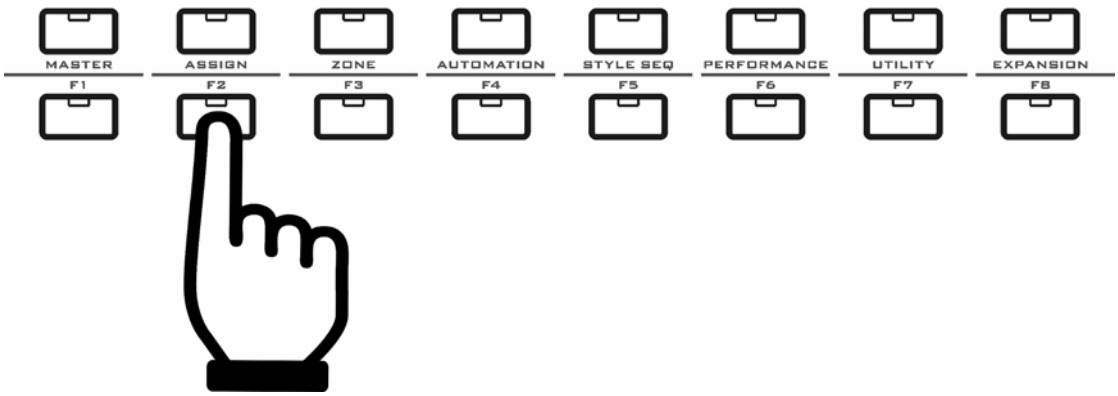
- Press the F1 button to set Velocity Curve:

C u r v e : K B N o r m a L

  - The Velocity Curve works for both the keyboard and pads.
  - You can try different velocity curves to find your favorite one.

- Refer to the appendix <Velocity curve list>.

13.2 After touch

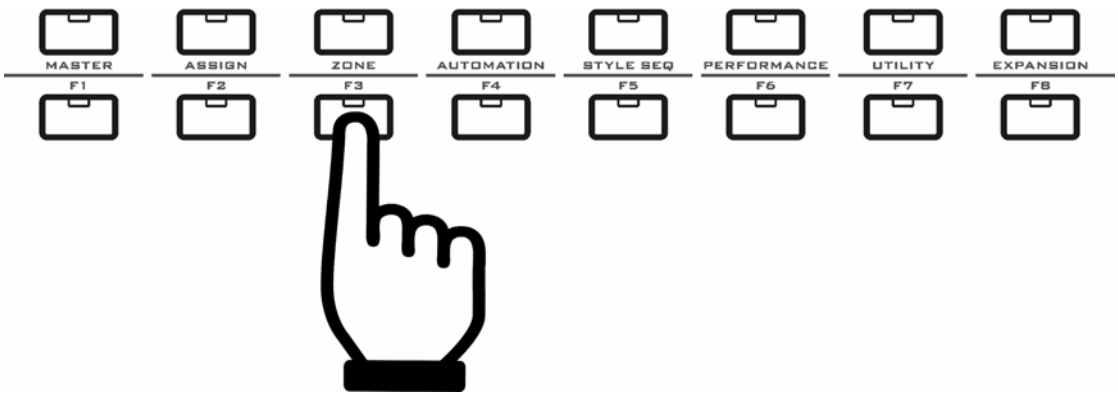


- Press the F2 button to set Aftertouch:

A f t e r t o u c h N o r m a l

  - Press and hold a key then change the pressure to send aftertouch data.
  - You can try different aftertouch types to find your favorite one.
  - Refer to the appendix <Aftertouch list>.

13.3 Data dump

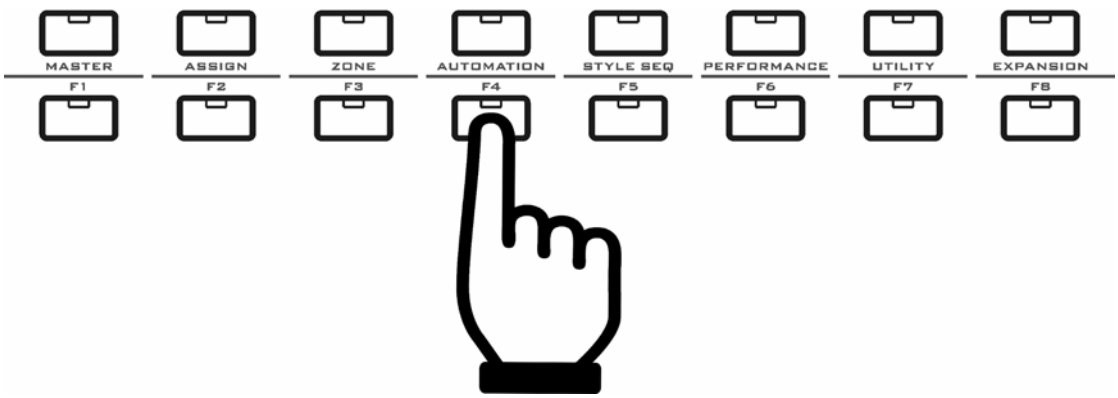


- Press the F3 button for the Data Dump function:

D u m p : Y e s / N o

  - Use this function to dump the instrument settings by system exclusive messages.

13.4 Adjusting breath control

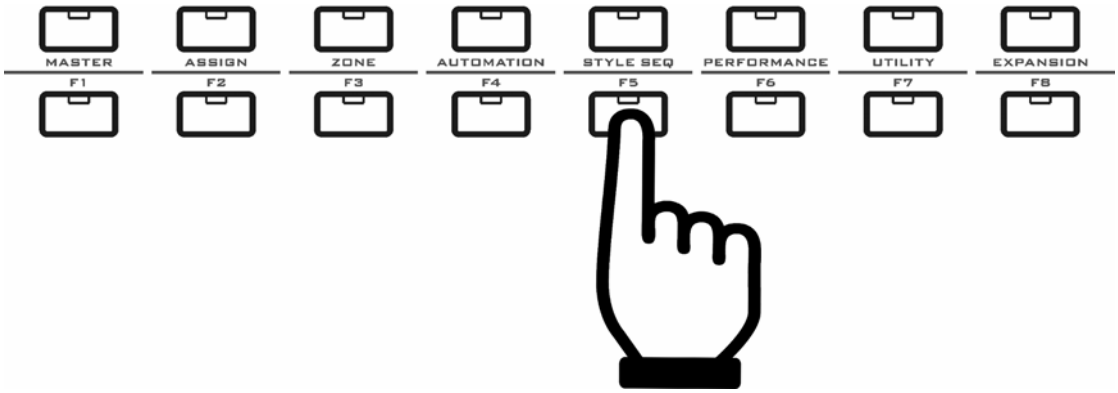


- Press the F4 button to adjust Breath Control:

B r e a t h A d j u s t :
0 0 0 :

  - When the breath controller is connected, use this function to adjust (calibrate) it.
  - By turning the gain and fine tune knobs in the breath controller, set the BC basic value to 000, and set the data range to 000-127.

13.5 Local control

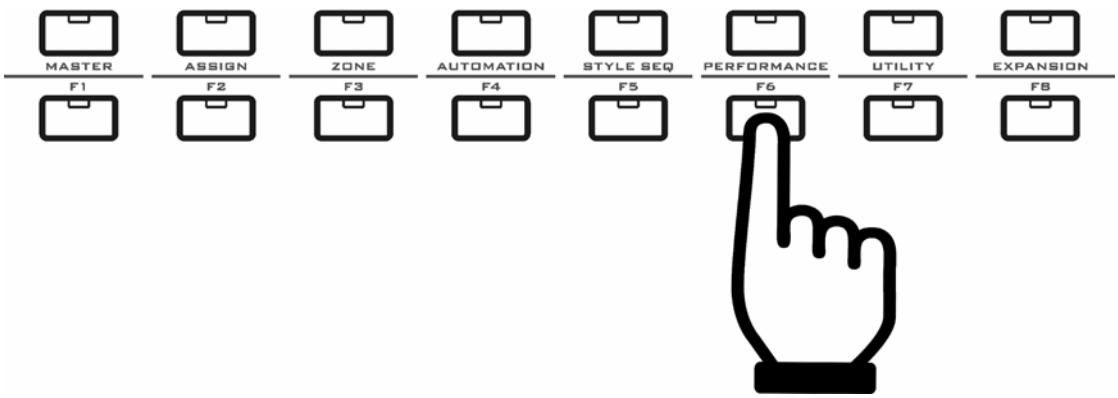


- Press the F5 button for Local control:

L o c a l :
O n

  - The local control decides if the MIDI data will be sent to the expansion board. Refer to the appendix <MIDI route>.

13.6 Pedal type



- Press the F6 button to set the Pedal Type.

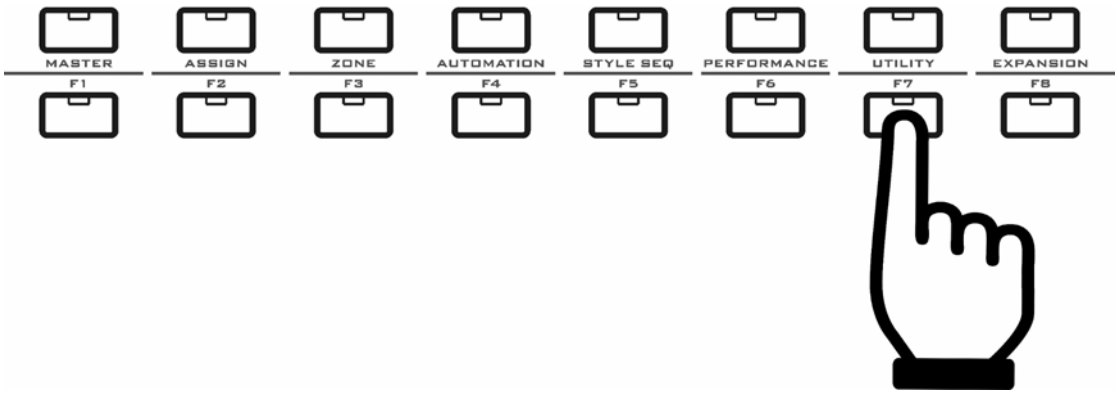
P e d a l 1 : S w i t c h
P e d a l 2 : C o n t i n u

  - The pedal type of pedal1/2 can be Switch or continuous.
- Pedal Polarity

P e d a l 1 : +	
P e d a l 2 : +	←

  - Here you can switch the podal polarity.

13.7 MIDI filter



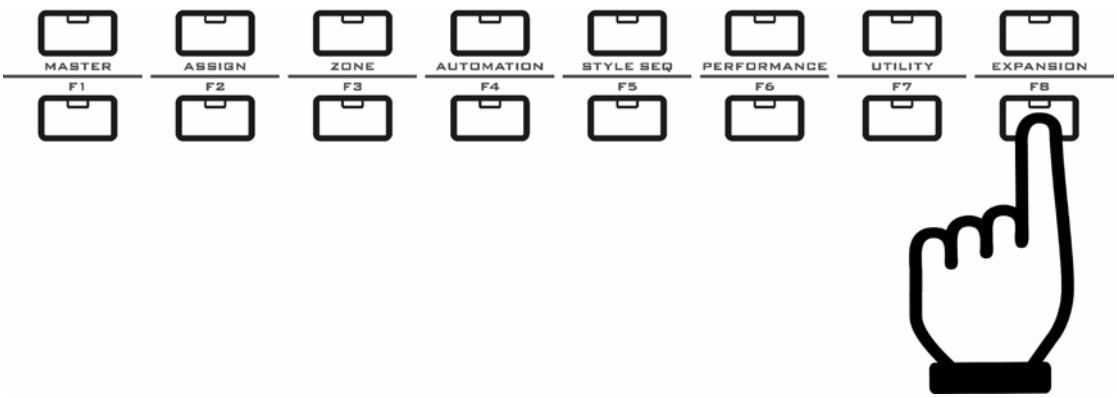
- Press the F7 button to set the MIDI Filter:

C l o c k	A c t i v e	
O f f	O f f	→

A f t e r t o u c h	
O n	←

  - You can enable or disable the below MIDI messages for the instrument to send:
  - Clock:F8, MIDI clock, by default it is disabled. When enabled, it will send “F8” to the 4 ports according to the Tempo.
  - Active:FE, MIDI active, by default it is disabled. When enabled, it will send “FE” to the 4 ports every 267ms.
  - Aftertouch:Dn kk, by default it is enabled.

13.8 Reset

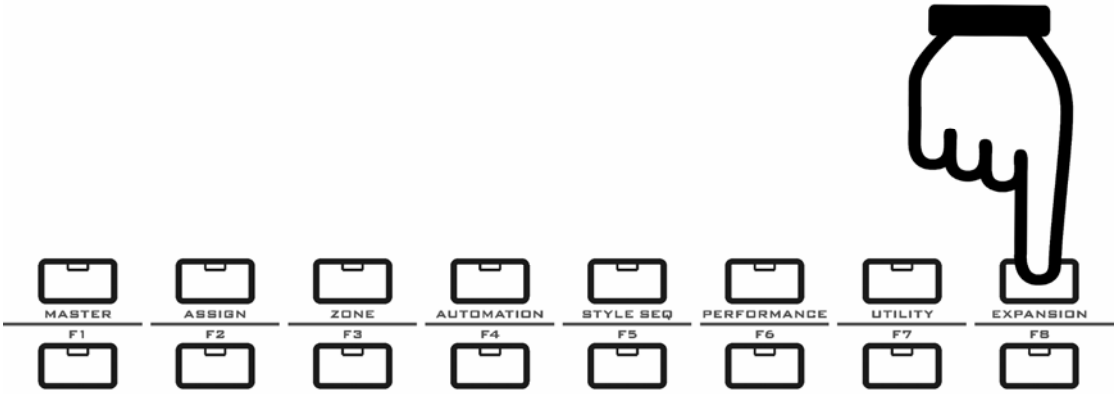


- Press the F8 button to send the Reset message:

All Notes Off Send: Yes/No

  - Select a reset message then press YES or ENTER to send it to all ports.
  - The available reset messages are listed below:
    - All Notes Off
    - Reset All Controllers
    - All Sound Off
    - GM On
    - CME On
    - GM2 On
    - XG On
    - GS On
    - MMC Reset
    - System Reset

14 EXPANSION



About the EXPANSION mode:

- Press the EXPANSION】button for this mode.

- Expansion

E x p a n s i o n : N o t L i n k

  - You will see related information when an expansion board is connected to the instrument.

For more VX expansion board information, please visit www.cme-pro.com

15 U-CTRL

U

CTRL

Notes for the U-CTRL mode:

- You can control popular computer software in the U-CTRL mode. In this mode, Pads and knobs will send out preset control data along with the SHIFT button.
- To use the U-CTRL mode:
- Press the U-CTRL button on the front panel, and the buttron will light on.
- Launch your computer software, and follow the software's manual to load the MackieControl template.
- Set the remote control port in the template as "USB AUDIO DEVICE（2）" (Device name for the instrument)
- Please refer to the list below regarding the MackieControl function map:

MCU part	VX part	
Fader1	Fader1	SLIDER 1
Fader2	Fader2	SLIDER 2
Fader3	Fader3	SLIDER 3
Fader4	Fader4	SLIDER 4
Fader5	Fader5	SLIDER 5
Fader6	Fader6	SLIDER 6
Fader7	Fader7	SLIDER 7
Fader8	Fader8	SLIDER 8
Fader9	Fader9	SLIDER 9
Knob1	Encoder1	ENCODER 1
Knob2	Encoder2	ENCODER 2
Knob3	Encoder3	ENCODER 3
Knob4	Encoder4	ENCODER 4
Knob5	Encoder5	ENCODER 5
Knob6	Encoder6	ENCODER 6
Knob7	Encoder7	ENCODER 7
Knob8	Encoder8	ENCODER 8
Data dial	Data dial	Data dial
SELECT 1	MASTER	MASTER
SELECT 2	ASSIGN	ASSIGN
SELECT 3	ZONE	ZONE
SELECT 4	AUTOMATION	AUTOMATION
SELECT 5	STYLE SEQ	STYLE SEQ
SELECT 6	PERFORMANCE	PERFORMANCE
SELECT 7	UTILITY	UTILITY
SELECT 8	EXPANSION	EXPANSION
SOLO 1	Button F1	BUTTON F1
SOLO 2	Button F2	BUTTON F2

SOLO 3	Button F3	BUTTON F3
SOLO 4	Button F4	BUTTON F4
SOLO 5	Button F5	BUTTON F5
SOLO 6	Button F6	BUTTON F6
SOLO 7	Button F7	BUTTON F7
SOLO 8	Button F8	BUTTON F8
UNDO	Pad 1	PAD 1
MIXER	Pad 2	PAD 2
LEFT	Pad 3	PAD 3
RIGHT	Pad 4	PAD 4
PREVIOUS	Pad 5	PAD 5
NEXT	Pad 6	PAD 6
BANK LIFT	Pad 7	PAD 7
BANK RIGHT	Pad 8	PAD 8
CHANNEL LIFT	Pad 9	PAD 9
CHANNEL RIGHT	Pad 10	PAD 10
GLOBAL VIEW	Pad 11	PAD 11
SMPTE/BEATS	Pad 12	PAD 12
F1	Number 1	NUMBER 1
F2	Number 2	NUMBER 2
F3	Number 3	NUMBER 3
F4	Number 4	NUMBER 4
F5	Number 5	NUMBER 5
F6	Number 6	NUMBER 6
F7	Number 7	NUMBER 7
F8	Number 8	NUMBER 8
SAVE	Number 9	NUMBER 9
ZOOM	Number 0	NUMBER 0
ZOOM H IN	<Page	<PAGE
ZOOM H OUT	Page>	PAGE>
ZOOM V IN	Dec	DEC
ZOOM V OUT	Inc	INC
READ	EXIT	EXIT
WRITE	ENTER	ENTER
SHIFT	SHIFT	SHIFT
PREVIOUS	RTZ	RTZ
REW	REW	REW
FF	FF	FF
REC	REC	REC
STOP	STOP	STOP
PLAY	PLAY	PLAY

16 Update

About the UPDATE function:

- With the VX Brain program, you can update the program and data of the instrument via USB connection. To get the newest VX Brain program, please visit www.cme-pro.com

17 Appendix

17.1 Assignable controller list

#	Contrller name	Abbr	Remark
000	Bank Select	Bank MSB	
001	Modulation wheel	Modulate	
002	Breath control	Breath	
003	Undefined	Undefine	
004	Foot controller	Foot	
005	Portamento time	PtmtTime	
006	Data Entry	Data MSB	
007	Channel Volume	Volume	
008	Balance	Balance	
009	Undefined	Undefine	
010	Pan	Pan	
011	Expression Controller	Express	
012	Undefined	Undefine	
013	Undefined	Undefine	
014	Undefined	Undefine	
015	Undefined	Undefine	
016	General Purpose Controller #1	GenCtrl1	
017	General Purpose Controller #2	GenCtrl2	
018	General Purpose Controller #3	GenCtrl3	
019	General Purpose Controller #4	GenCtrl4	
020	Undefined	Undefine	
021	Undefined	Undefine	
022	Undefined	Undefine	
023	Undefined	Undefine	
024	Undefined	Undefine	
025	Undefined	Undefine	
026	Undefined	Undefine	
027	Undefined	Undefine	
028	Undefined	Undefine	
029	Undefined	Undefine	
030	Undefined	Undefine	
031	Undefined	Undefine	
032	Bank Select	Bank LSB	
033	Undefined	Undefine	
034	Undefined	Undefine	
035	Undefined	Undefine	
036	Undefined	Undefine	
037	Undefined	Undefine	
038	Data entry	Data LSB	
039	Undefined	Undefine	
040	Undefined	Undefine	
041	Undefined	Undefine	
042	Undefined	Undefine	
043	Undefined	Undefine	
044	Undefined	Undefine	
045	Undefined	Undefine	

046	Undefined	Undefine	
047	Undefined	Undefine	
048	Undefined	Undefine	
049	Undefined	Undefine	
050	Undefined	Undefine	
051	Undefined	Undefine	
052	Undefined	Undefine	
053	Undefined	Undefine	
054	Undefined	Undefine	
055	Undefined	Undefine	
056	Undefined	Undefine	
057	Undefined	Undefine	
058	Undefined	Undefine	
059	Undefined	Undefine	
060	Undefined	Undefine	
061	Undefined	Undefine	
062	Undefined	Undefine	
063	Undefined	Undefine	
064	Sustain pedal	Pdl-sust	
065	Portamento on/off	Portamnt	
066	Sustenuto on/off	Pdl-stnt	
067	Soft pedal	Pdl-soft	
068	Undefined	Undefine	
069	Hold 2	Hold 2	
070	Undefined	Undefine	
071	Timbre/Harmonic Intens.	Harmonic	
072	Release Time	Release	
073	Attack Time	Attack	
074	Brightness	Bright	
075	Decay Time	Decay	
076	Vibrato Rate	VibRate	
077	Vibrato Depth	VibDepth	
078	Vibrato Delay	VibDelay	
079	Undefined	Undefine	
080	General Purpose Controller #5	GenCtrl5	
081	General Purpose Controller #6	GenCtrl6	
082	General Purpose Controller #7	GenCtrl7	
083	General Purpose Controller #8	GenCtrl8	
084	Portamento Control	PtmtCtrl	
085	Undefined	Undefine	
086	Undefined	Undefine	
087	Undefined	Undefine	
088	Undefined	Undefine	
089	Undefined	Undefine	
090	Undefined	Undefine	
091	Reverb Send Level	Reverb	
092	Tremolo Depth	Undefine	
093	Chorus Send Level	Chorus	
094	Celeste/Detune Depth	Celeste	
095	Phaser Depth	PhaDepth	
096	Data entry +1	RPN Inc	
097	Data entry -1	RPN Dec	
098	NRPN LSB	NRPN LSB	
099	NRPN MSB	NRPN MSB	
100	RPN LSB	RPN LSB	

101	RPN MSB	RPN MSB	
102	Undefined	Undefine	
103	Undefined	Undefine	
104	Undefined	Undefine	
105	Undefined	Undefine	
106	Undefined	Undefine	
107	Undefined	Undefine	
108	Undefined	Undefine	
109	Undefined	Undefine	
110	Undefined	Undefine	
111	Undefined	Undefine	
112	Undefined	Undefine	
113	Undefined	Undefine	
114	Undefined	Undefine	
115	Undefined	Undefine	
116	Undefined	Undefine	
117	Undefined	Undefine	
118	Undefined	Undefine	
119	Undefined	Undefine	
120	All Sound Off	SoundOff	
121	Reset All Controllers	Rst ctrl	
122	Undefined	Undefine	
123	All notes off	NotesOff	
124	Omni mode off	OMNI Off	
125	Omni mode on	OMNI On	
126	Poly mode off	Mono	
127	Poly mode on	Poly	
128	Pitch Bend	Pit Bend	Not for pads or buttons
129	Pitch Bend Sensitivity-RPN	PitB Sen	Not for pads or buttons
130	Fine Tuning-RPN	Fine Tun	Not for pads or buttons
131	Coarse Tuning-RPN	Coar Tun	Not for pads or buttons
132	Vibrato Rate-NRPN	Vib Rate	
133	Vibrato Depth-NRPN	VibDepth	
134	Vibrato Delay-NRPN	VibDelay	
135	Low Pass Filter Cutoff Frequency-NRPN	LPFCFreq	
136	Low Pass Filter Resonance -NRPN	LPFReson	
137	High Pass Filter Cutoff Frequency-NRPN	HPFCFreq	
138	EQ Low Gain-NRPN	EQ LGain	
139	EQ High Gain-NRPN	EQ HGain	
140	EQ Low Frequency-NRPN	EQ LFreq	
141	EQ High Frequency-NRPN	EQ HFreq	
142	EG Attack Time-NRPN	EG AttTi	
143	EG Decay Time-NRPN	EG DTime	
144	EG Release Time-NRPN	EG RTime	
145	RPN	RPN	
146	NRPN	NRPN	
147	Channel Pressure	Chan Pre	Not for pads or buttons
148	Polyphonic Key Pressure	PKey Pre	Not for pads or buttons
149	Master Volume	Mast Vol	Not for pads or buttons
150	Master Balance	Mast Bal	Not for pads or buttons
151	Master Tuning	Mast Tun	Not for pads or buttons
152	CME ON	CME ON	Only for pads, knobs and pedals
153	GM ON	GM ON	Only for pads, knobs and pedals
154	XG ON	XG ON	Only for pads, knobs and pedals
155	GS ON	GS ON	Only for pads, knobs and pedals

156	GM2 ON	GM2 ON	Only for pads, knobs and pedals
157	Tempo	Tempo	Only for encoders
158	ProgramChange	ProgChan	Not for wheels
159	Song Position Pointer	S PPoint	
160	Song Select(Song #)	S Selectr	
161	Tune request	Tune req	Not for pads, buttons or wheels
162	Timing clock	TimClock	Not for pads, buttons or wheels
163	Start	Start	Not for pads, buttons or pedals
164	Continue	Continue	Not for pads, buttons or pedals
165	Stop	Stop	Not for pads, buttons or pedals
166	System Reset	S Reset	Not for pads, buttons or pedals
167	Stop	Stop	Not for pads, buttons or pedals
168	PLAY	PLAY	Not for pads, buttons or pedals
169	DEFERRED PLAY	DF PLAY	Not for pads, buttons or pedals
170	FORWARD	FORWARD	Not for pads, buttons or pedals
171	REWIND	REWIND	Not for pads, buttons or pedals
172	RECORD STROBE	R STROBE	Not for pads, buttons or pedals
173	RECORD EXIT	R EXIT	Not for pads, buttons or pedals
174	RECORD PAUSE	R PAUSE	Not for pads, buttons or pedals
175	PAUSE	PAUSE	Not for pads, buttons or pedals
176	EJECT	EJECT	Not for pads, buttons or pedals
177	CHASE	CHASE	Not for pads, buttons or pedals
178	COMMAND ERROR RESET	CE RESET	Not for pads, buttons or pedals
179	MMC RESET	MMCRESET	Not for pads, buttons or pedals
180	LOOP 1	LOOP 1	Not for pads, buttons or pedals
181	LOOP 2	LOOP 2	Not for pads, buttons or pedals
182	LOOP 3	LOOP 3	Not for pads, buttons or pedals
183	LOOP 4	LOOP 4	Not for pads, buttons or pedals
184	LOOP 5	LOOP 5	Not for pads, buttons or pedals
185	LOOP 6	LOOP 6	Not for pads, buttons or pedals
186	LOOP 7	LOOP 7	Not for pads, buttons or pedals
187	LOOP 8	LOOP 8	Not for pads, buttons or pedals
188	LOOP 9	LOOP 9	Not for pads, buttons or pedals
189	LOOP 10	LOOP 10	Not for pads, buttons or pedals
190	LOOP 11	LOOP 11	Not for pads, buttons or pedals
191	LOOP 12	LOOP 12	Not for pads, buttons or pedals
192	USER 1	USER 1	
193	USER 2	USER 2	
194	USER 3	USER 3	
195	USER 4	USER 4	
196	USER 5	USER 5	
197	USER 6	USER 6	
198	USER 7	USER 7	
199	USER 8	USER 8	
200	USER 9	USER 9	
201	USER 10	USER 10	

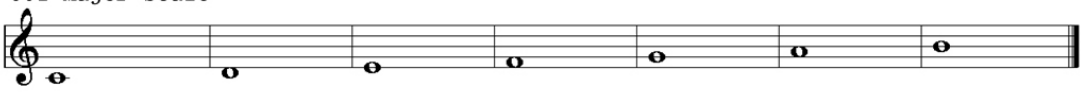
17.2 GM voice list

Voice#	Name	Voice#	Name	Voice#	Name	Voice#	Name
001	GrandPno	033	Aco.Bass	065	SprnoSax	097	Rain
002	BritePno	034	FngrBass	066	Alto Sax	098	SoundTrk
003	El.Grand	035	PickBass	067	TenorSax	099	Crystal
004	HnkyTonk	036	Fretless	068	Bari.Sax	100	Atmosphr
005	E.Piano1	037	SlapBas1	069	Oboe	101	Bright
006	E.Piano2	038	SlapBas2	070	Eng.Horn	102	Goblins
007	Harpsi.	039	SynBass1	071	Bassoon	103	Echoes
008	Clavi	040	SynBass2	072	Clarinet	104	Sci-Fi
009	Celesta	041	Violin	073	Piccolo	105	Sitar
010	Glocken	042	Viola	074	Flute	106	Banjo
011	MusicBox	043	Cello	075	Recorder	107	Shamisen
012	Vibes	044	Contrabs	076	PanFlute	108	Koto
013	Marimba	045	Trem.Str	077	Bottle	109	Kalimba
014	Xylophon	046	Pizz.Str	078	Shakhchi	110	Bagpipe
015	TubulBel	047	Harp	079	Whistle	111	Fiddle
016	Dulcimer	048	Timpani	080	Ocarina	112	Shanai
017	DrawOrgn	049	Strings1	081	SquareLd	113	TnklBell
018	PercOrgn	050	Strings2	082	Saw Lead	114	Agogo
019	RockOrgn	051	Syn Str1	083	CaliopLd	115	SteelDrm
020	ChrchOrg	052	Syn Str2	084	Chiff Ld	116	WoodBlok
021	ReedOrgn	053	ChiorAah	085	CharanLd	117	TaikoDrm
022	Acordion	054	VoiceOoh	086	Voice Ld	118	MelodTom
023	Harmnica	055	SynVoice	087	Fifth Ld	119	Syn Drum
024	TangoAcd	056	Orch.Hit	088	Bass&Ld	120	RevCymbl
025	NylonGtr	057	Trumpet	089	NewAgePad	121	FretNoiz
026	SteelGtr	058	Trombone	090	Warm Pad	122	BrthNoiz
027	Jazz Gtr	059	Tuba	091	PolySyPd	123	Seashore
028	CleanGtr	060	Mute Trp	092	ChoirPad	124	Tweet
029	Mute.Gtr	061	Fr. Horn	093	BowedPad	125	Telphone
030	Ovrdrive	062	BrasSect	094	MetalPad	126	Helicptr
031	Dist.Gtr	063	SynBrss1	095	Halo Pad	127	Applause
032	GtrHarmo	064	SynBrss2	096	SweepPad	128	Gunshot

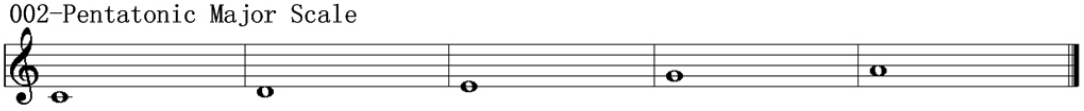
17.3 Scale list

Scale No.	Pitch name	C	C#	D	D#	E	F	F#	G	G#	A	A#	B
	Note number:	1	2	3	4	5	6	7	8	9	10	11	12
001	Major Scale	**C**	C	**D**	D	**E**	**F**	F	**G**	G	**A**	A	**B**
002	Pentatonic Major Scale	**C**	C	**D**	D	**E**	E	E	**G**	G	**A**	A	A
003	Blues Major Scale	**C**	C	D**#**	**D#**	F	**F**	**F#**	**G**	G	**A**	A	A
004	Minor Scale	**C**	C	**D**	**D#**	D**#**	**F**	F	**G**	**G#**	G**#**	**A#**	A**#**
005	Melodic Minor Scale	**C**	C	**D**	**D#**	D**#**	**F**	F	**G**	G	**A**	A	**B**
006	Harmonic Minor Scale	**C**	C	**D**	**D#**	D**#**	**F**	F	**G**	**G#**	A	A	**B**
007	Pentatonic Minor Scale	**C**	C	D**#**	**D#**	D**#**	**F**	F	**G**	G	A**#**	**A#**	A**#**
008	Blues Minor Scale	**C**	C	D**#**	**D#**	D**#**	**F**	**F#**	**G**	G	A**#**	**A#**	A**#**
009	Augmented Scale	**C**	C	D**#**	**D#**	**E**	E	G	**G**	**G#**	G**#**	B	**B**
010	Be-Bop Scale	**C**	C	**D**	D	**E**	**F**	F	**G**	G	**A**	**A#**	**B**
011	Whole-Half Scale	**C**	C	**D**	**D#**	D**#**	**F**	**F#**	F**#**	**G#**	**A**	A	**B**
012	Half-Whole Scale	**C**	**C#**	C**#**	**D#**	**E**	E	**F#**	**G**	G	**A**	**A#**	A**#**
013	Whole Tone Scale	**C**	C	**D**	D	**E**	E	**F#**	F**#**	**G#**	G**#**	**A#**	A**#**
014	Augmented fifth Scale	**C**	C	**D**	D	**E**	**F**	F	**G**	**G#**	**A**	A	**B**
015	Algerian Scale	**C**	C	**D**	**D#**	D**#**	F**#**	**F#**	**G**	**G#**	G**#**	B	**B**
016	Arabian Scale	**C**	C	**D**	D	**E**	**F**	**F#**	F**#**	**G#**	G**#**	**A#**	A**#**
017	Balinese Scale	**C**	**C#**	C**#**	**D#**	D**#**	D**#**	G	**G**	**G#**	G**#**	G**#**	G**#**
018	Bartok Scale	**C**	C	**D**	D	**E**	E	**F#**	**G**	G	**A**	**A#**	A**#**
019	Byzantine Scale	**C**	**C#**	C**#**	E	**E**	**F**	F	**G**	**G#**	G**#**	B	**B**
020	Egyptian Scale	**C**	C	**D**	D	F	**F**	F	**G**	G	G	**A#**	A**#**
021	Enigmatic Scale	**C**	**C#**	C**#**	E	**E**	E	**F#**	F**#**	**G#**	G**#**	**A#**	**B**
022	Spanish Scale	**C**	**C#**	C**#**	E	**E**	**F**	F	**G**	**G#**	G**#**	**A#**	A**#**
023	Spanish 8 Tone Scale	**C**	**C#**	C**#**	**D#**	**E**	**F**	**F#**	F**#**	**G#**	G**#**	**A#**	A**#**
024	Gypsy Scale	**C**	**C#**	C**#**	E	**E**	**F**	F	**G**	G	**A**	**A#**	A**#**
025	Hungarian Gypsy Scale	**C**	C	**D**	**D#**	D**#**	F**#**	**F#**	**G**	**G#**	G**#**	**A#**	A**#**
026	Hindu Scale	**C**	C	**D**	D	**E**	**F**	F	**G**	**G#**	G**#**	**A#**	A**#**
027	Iwato Scale	**C**	**C#**	C**#**	C**#**	F	**F**	**F#**	F**#**	F**#**	A**#**	**A#**	A**#**
028	Japanese Scale	**C**	**C#**	C**#**	C**#**	F	**F**	F	**G**	**G#**	G**#**	G**#**	G**#**
029	Javanese Scale	**C**	**C#**	C**#**	**D#**	D**#**	**F**	F	**G**	G	**A**	**A#**	A**#**
030	Hawaiian Scale	**C**	C	**D**	**D#**	D**#**	**F**	F	**G**	G	**A**	A	**B**
031	Hirajoshi Scale	**C**	C	**D**	**D#**	D**#**	D**#**	G	**G**	**G#**	G**#**	G**#**	G**#**
032	Hungarian Minor Scale	**C**	C	**D**	**D#**	D**#**	F**#**	**F#**	**G**	**G#**	G**#**	B	**B**
033	Hungarian Major Scale	**C**	C	D**#**	**D#**	**E**	E	**F#**	**G**	G	**A**	**A#**	A**#**
034	Leading Whole Tone Scale	**C**	C	**D**	D	**E**	E	**F#**	F**#**	**G#**	G**#**	**A#**	**B**
035	Mohammedan Scale	**C**	C	**D**	**D#**	D**#**	**F**	F	**G**	**G#**	G**#**	B	**B**
036	Mongolian Scale	**C**	C	**D**	D	**E**	E	G	**G**	G	A**#**	**A#**	A**#**
037	Neapolitan Minor Scale	**C**	**C#**	C**#**	**D#**	D**#**	**F**	F	**G**	**G#**	G**#**	B	**B**
038	Neapolitan Major Scale	**C**	**C#**	C**#**	**D#**	D**#**	**F**	F	**G**	G	**A**	A	**B**
039	Oriental Scale	**C**	**C#**	C**#**	E	**E**	**F**	**F#**	F**#**	A	**A**	**A#**	A**#**
040	Pelog Scale	**C**	**C#**	C**#**	**D#**	D**#**	D**#**	G	**G**	G	A**#**	**A#**	A**#**
041	Persian Scale	**C**	**C#**	C**#**	E	**E**	**F**	**F#**	F**#**	**G#**	G**#**	B	**B**

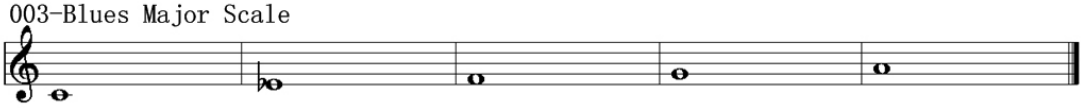
001-Major Scale



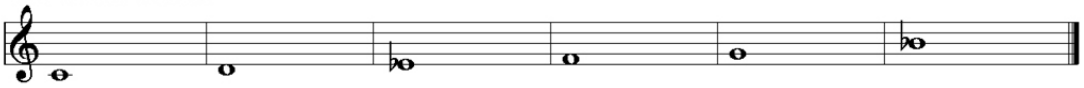
002-Pentatonic Major Scale



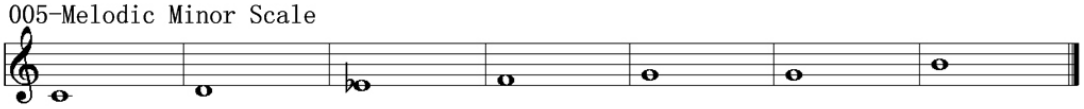
003-Blues Major Scale



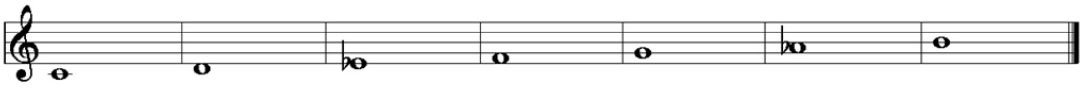
004-Minor Scale



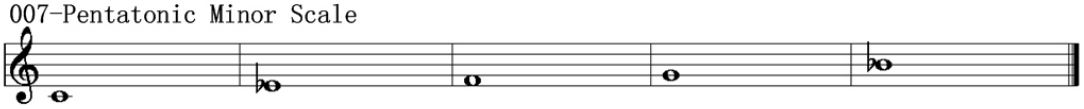
005-Melodic Minor Scale



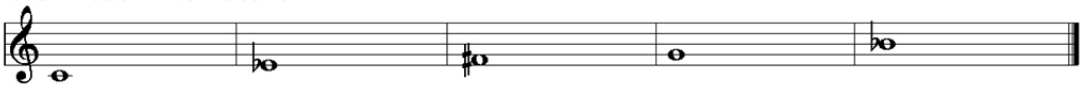
006-Harmonic Minor Scale



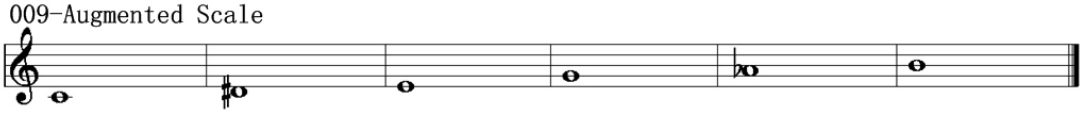
007-Pentatonic Minor Scale



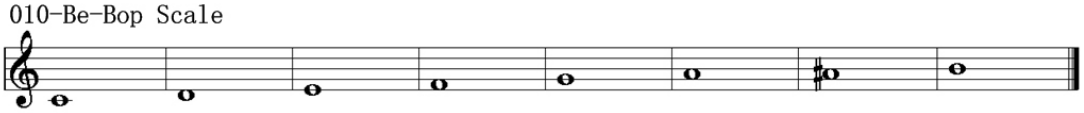
008-Blues Minor Scale



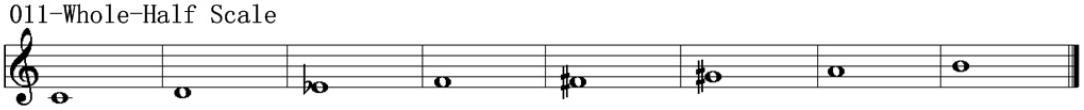
009-Augmented Scale



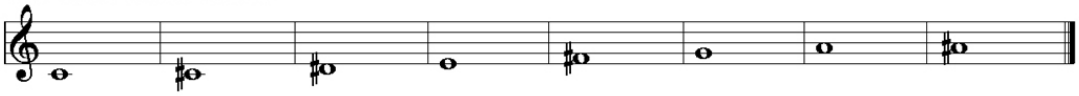
010-Be-Bop Scale



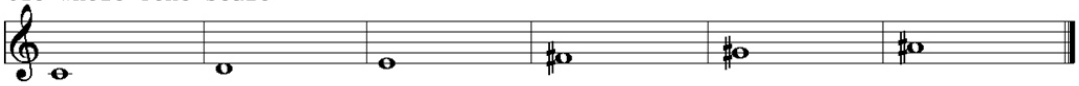
011-Whole-Half Scale



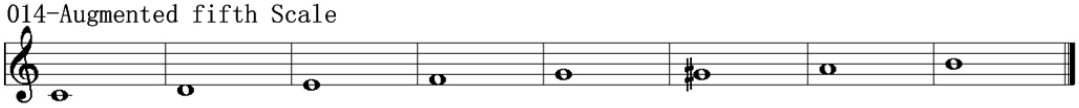
012-Half-Whole Scale



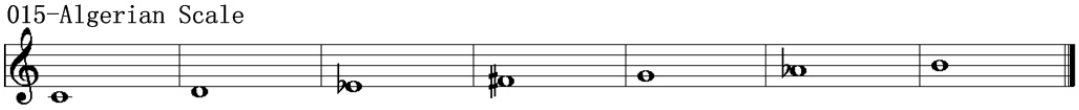
013-Whole Tone Scale



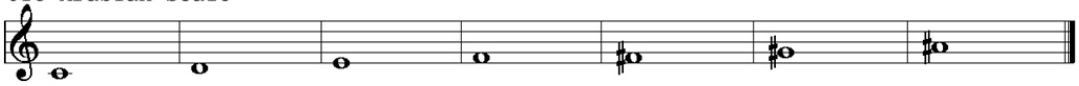
014-Augmented fifth Scale



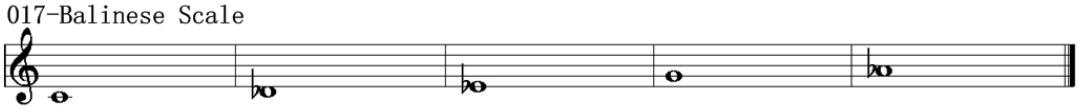
015-Algerian Scale



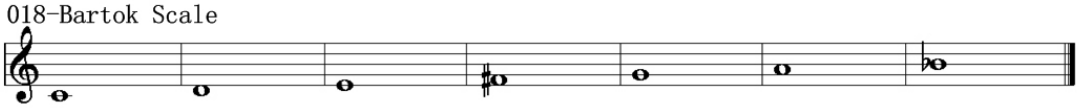
016-Arabian Scale



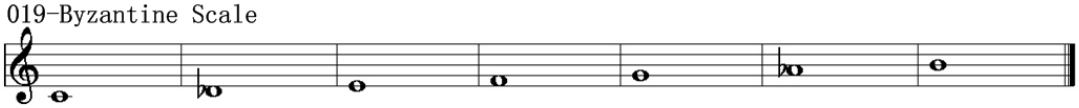
017-Balinese Scale



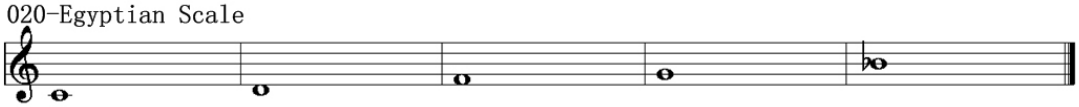
018-Bartok Scale



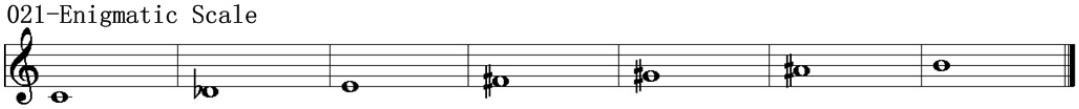
019-Byzantine Scale



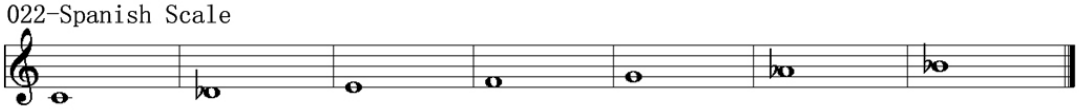
020-Egyptian Scale



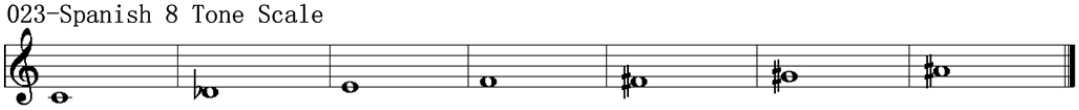
021-Enigmatic Scale



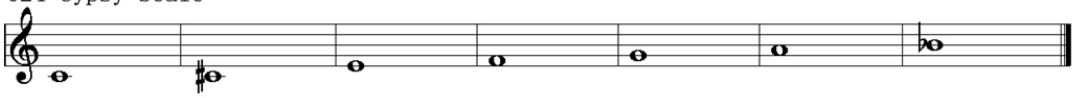
022-Spanish Scale



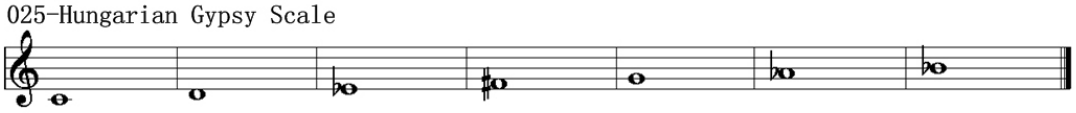
023-Spanish 8 Tone Scale



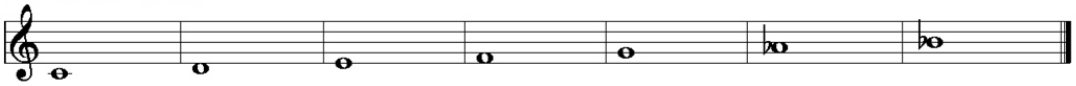
024-Gypsy Scale



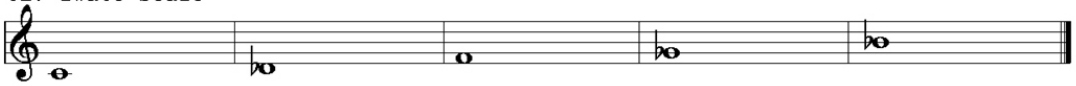
025-Hungarian Gypsy Scale



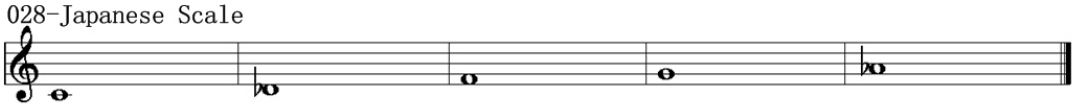
026-Hindu Scale



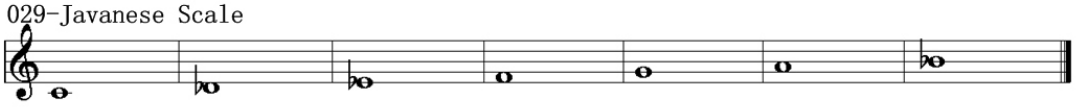
027-Iwato Scale



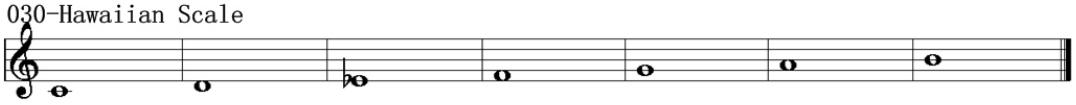
028-Japanese Scale



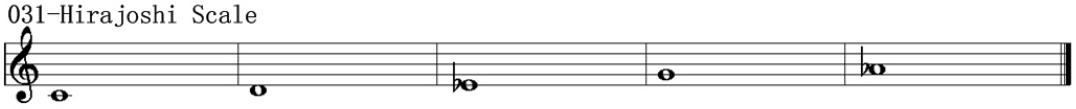
029-Javanese Scale



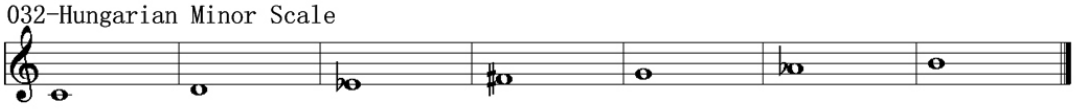
030-Hawaiian Scale



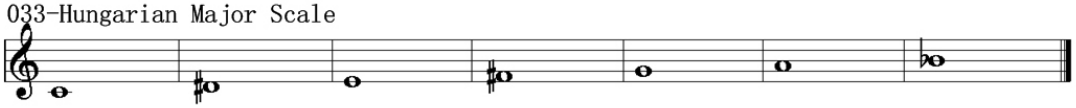
031-Hirajoshi Scale



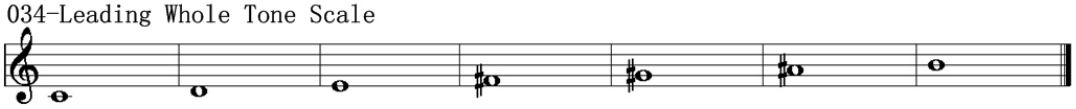
032-Hungarian Minor Scale



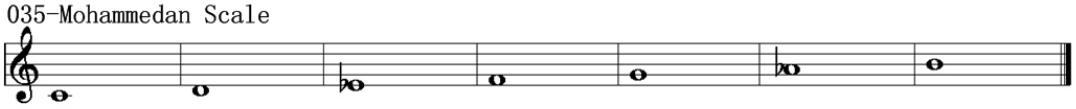
033-Hungarian Major Scale



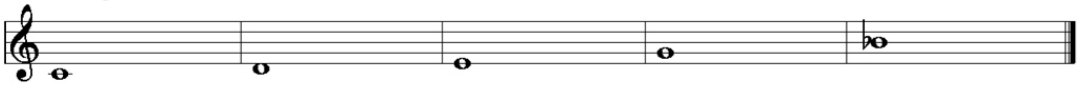
034-Leading Whole Tone Scale



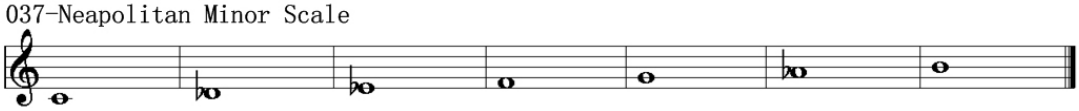
035-Mohammedan Scale



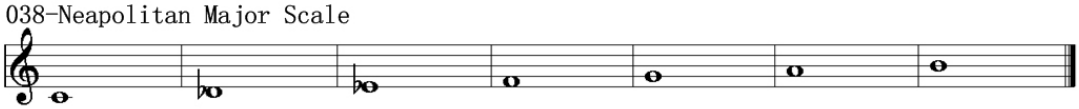
036-Mongolian Scale



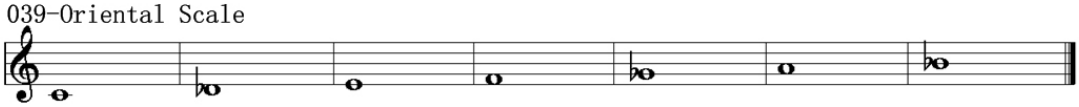
037-Neapolitan Minor Scale



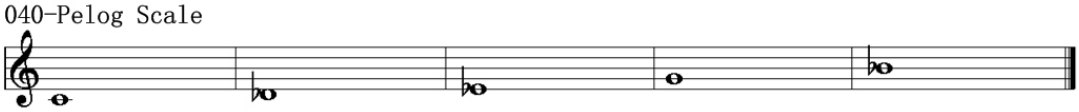
038-Neapolitan Major Scale



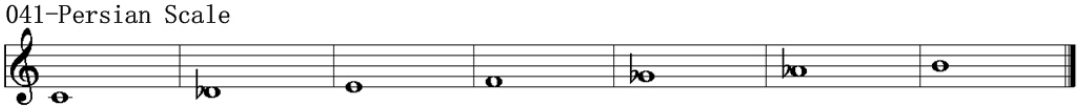
039-Oriental Scale



040-Pelog Scale



041-Persian Scale



17.4 Note list

Note #	Name
000	C-2
001	C#-2
002	D-2
003	D#-2
004	E-2
005	F-2
006	F#-2
007	G-2
008	G#-2
009	A-2
010	A#-2
011	B-2
012	C-1
013	C#-1
014	D-1
015	D#-1
016	E-1
017	F-1
018	F#-1
019	G-1
020	G#-1
021	A-1
022	A#-1
023	B-1
024	C0
025	C#0
026	D0
027	D#0
028	E0
029	F0
030	F#0
031	G0

Note #	Name
032	G#0
033	A0
034	A#0
035	B0
036	C1
037	C#1
038	D1
039	D#1
040	E1
041	F1
042	F#1
043	G1
044	G#1
045	A1
046	A#1
047	B1
048	C2
049	C#2
050	D2
051	D#2
052	E2
053	F2
054	F#2
055	G2
056	G#2
057	A2
058	A#2
059	B2
060	C3
061	C#3
062	D3
063	D#3

Note #	Name
064	E3
065	F3
066	F#3
067	G3
068	G#3
069	A3
070	A#3
071	B3
072	C4
073	C#4
074	D4
075	D#4
076	E4
077	F4
078	F#4
079	G4
080	G#4
081	A4
082	A#4
083	B4
084	C5
085	C#5
086	D5
087	D#5
088	E5
089	F5
090	F#5
091	G5
092	G#5
093	A5
094	A#5
095	B5

Note #	Name
096	C6
097	C#6
098	D6
099	D#6
100	E6
101	F6
102	F#6
103	G6
104	G#6
105	A6
106	A#6
107	B6
108	C7
109	C#7
110	D7
111	D#7
112	E7
113	F7
114	F#7
115	G7
116	G#7
117	A7
118	A#7
119	B7
120	C8
121	C#8
122	D8
123	D#8
124	E8
125	F8
126	F#8
127	G8

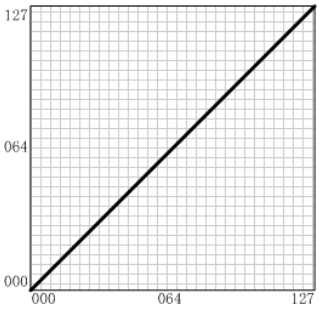
17.5 Temperament list

No.	Type	C	C#	D	D#	E	F	F#	G	G#	A	A#	B
0	EQUAL	△	△	△	△	△	△	△	△	△	△	△	△
1	ARABIC	△	△	△	△	▲	△	△	△	△	△	△	▲
2	ARABIC	△	▲	△	△	△	△	△	△	△	△	△	△
3	ARABIC	△	△	△	△	△	△	▲	△	△	△	△	▲
4	ARABIC	△	▲	△	△	△	△	▲	△	△	△	△	△
5	ARABIC	△	△	▲	△	△	△	△	▲	△	△	△	△
6	ARABIC	△	△	▲	△	△	△	△	△	△	▲	△	△
7	ARABIC	△	△	△	▲	△	△	△	△	▲	△	△	△
8	ARABIC	△	▲	△	△	△	△	△	△	▲	△	△	△
9	ARABIC	△	▲	△	△	△	△	△	△	△	△	▲	△
10	ARABIC	△	△	△	△	▲	△	△	△	△	△	△	△
11	ARABIC	△	△	△	△	△	△	△	△	△	▲	△	△
12	ARABIC	△	△	△	△	△	△	△	△	△	△	△	▲

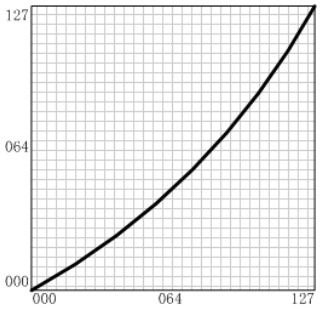
Note: △=Normal pitch, ▲=Changed pitch

17.6 Velocity curve list

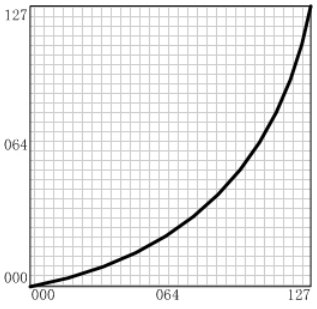
Normal



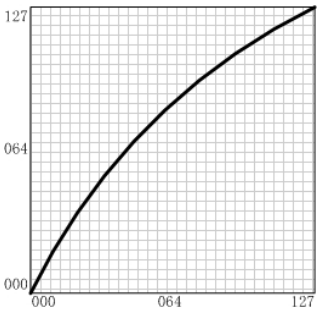
Soft 1



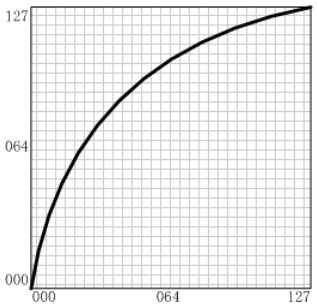
Soft 2



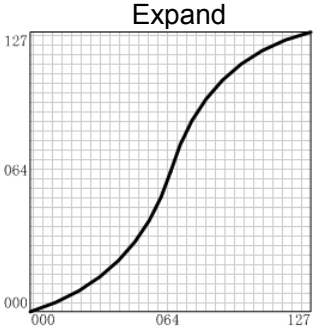
Hard 1



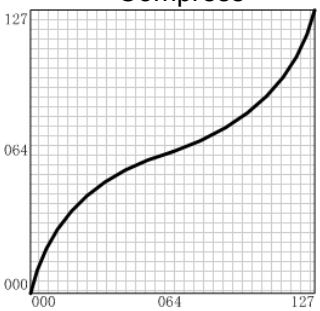
Hard 2



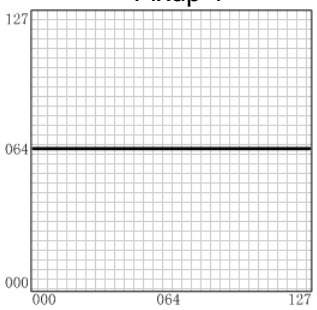
Expand



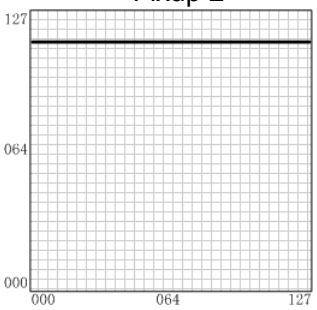
Compress



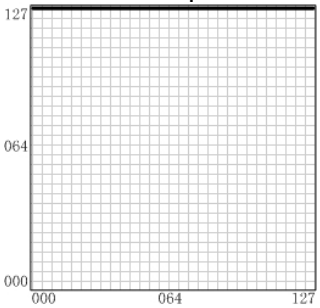
Fixup 1



Fixup 2

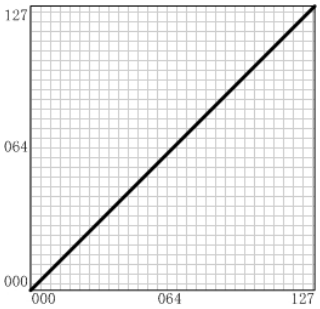


Fixup 3

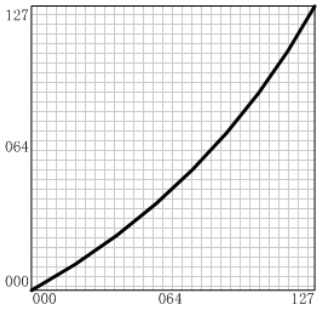


17.7 Aftertouch curve list

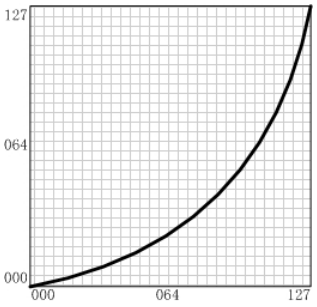
Normal



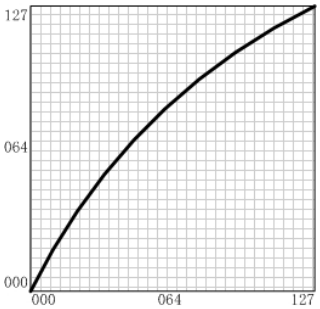
Soft 1



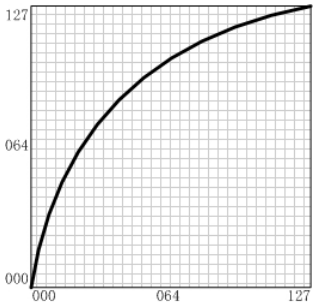
Soft 2



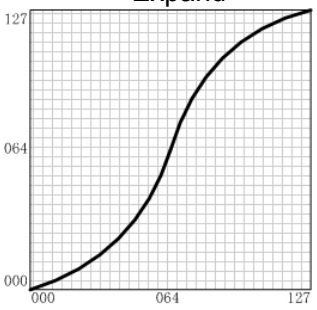
Hard 1



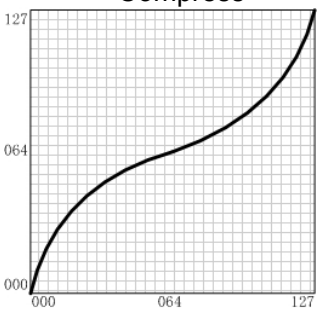
Hard 2



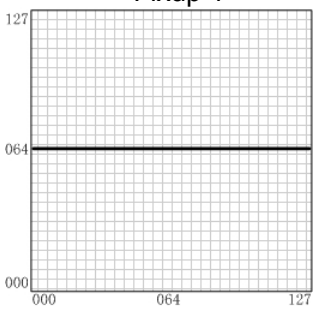
Expand



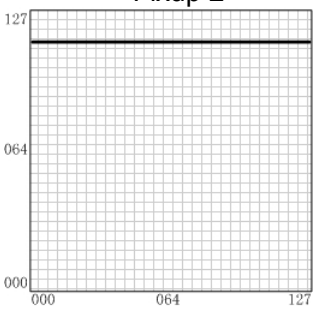
Compress



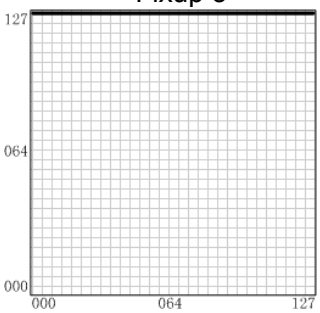
Fixup 1



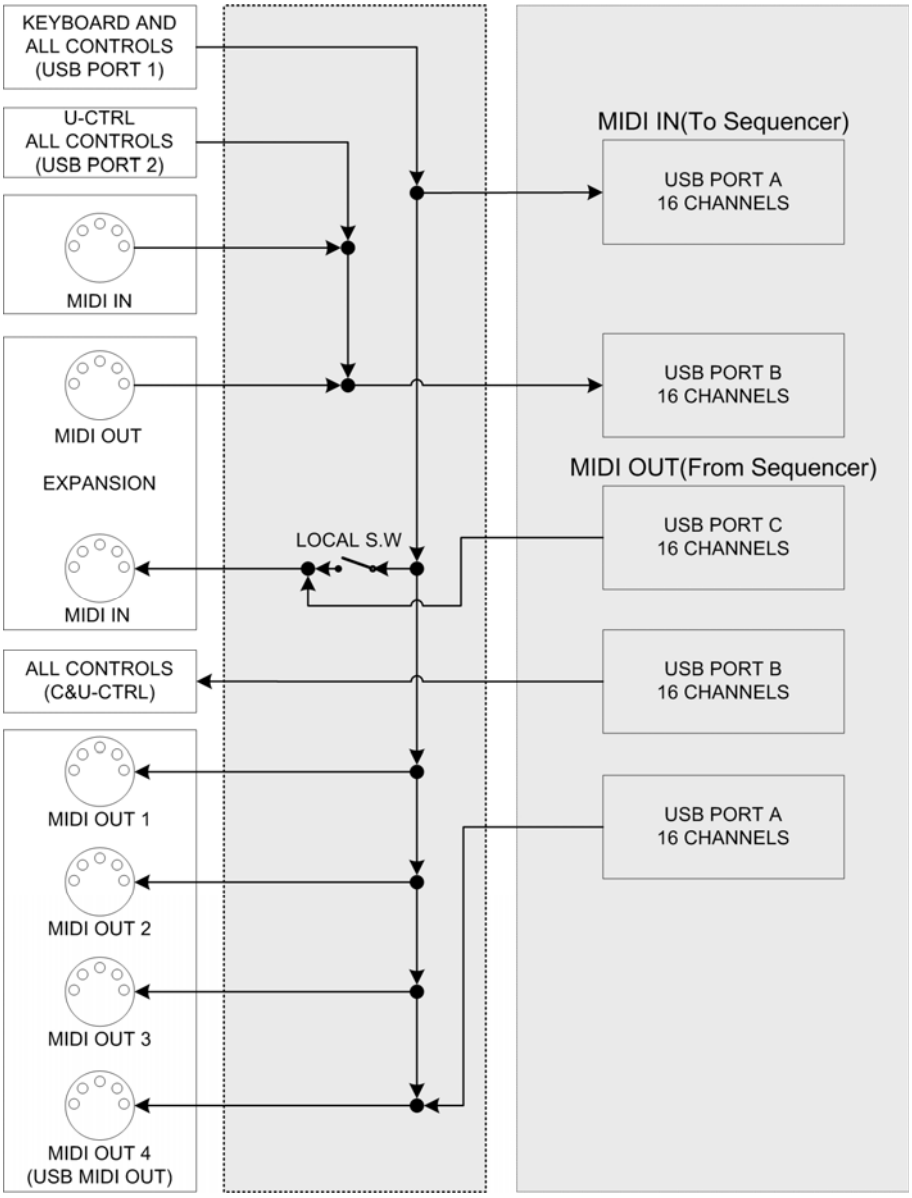
Fixup 2



Fixup 3



17.8 MIDI route



- The keyboard data and all the contral part data will be sent to USB PORT 1, MIDI OUT PORT 1～4, and all the data to MIDI PORT 1 will also be copied to the expansion board MIDI IN(by the local control setting).
- In the U-CTRL mode, knob and fader data will be sent to USB PORT 2 exclusively. No knob or fader data will be sent to USB PORT 1.
- Data from the external MIDI IN or from the expansion MIDI IN will be merged to USB PORT 2, so please do not use both those MIDI Ins at the same time to prevent data jams or data loss.
- Data from computer via USB PORT 1 will be sent to MIDI OUT 4.
- Data from computer via USB PORT 2 is used to control the VX motorized faders. The faders can be controlled by CC#7 messages and MCU messages in the U-CTRL mode.
- Data from computer via USB PORT 3 will be sent to the expansion board MIDI IN..

18 Troubleshooting

Trouble with possible reasons and solution

- After turning on the power switch, the instrument is not powered on:
    1. Make sure you have connected the instrument to its AC adaptor with the proper AC supply.
    2. Make sure the power connector is firmly connected to the power outlet.
- No sound when playing the instrument
    1. Check the volume settings of the tone generator and speaker system
    2. Check the MIDI connection and the audio cable
    3. Check Master Volume fader
    4. Check Channel Volume knobs
    5. Check Channel Expression Knobs
    6. Check the attack time of the filter
    7. Make sure you have the right settings in you music software
    8. Check the MIDI route settings
    9. Check the Controller Pedal position
- Continuous long sound:
    1. Check Sustain pedal (Damper pedal)
    2. Check the release time of the filter
    3. Use All notes off or Reset
- Improper voice

  Tone generator not set properly，please Initialize or Reset.
- Wrong pitch
    1. Check the transpose or octave settings.
    2. Pitch bend message not returned to default, please reset.
    3. Check the scale or termperament settings.
- Tempo knob does not work
    1. Check the MIDI filter and enable the MIDI clock message.
    2. Make sure your sequencer software supports this function with the right settings (Refer to the Sync section of your software manual)
- Some functions do not work

  It is possible that your tone generator or music software does not support those functions
- You hear two sounds when playing one key

  Please disable the ZONE mode.
- Cannot select voice

  Read the data list of your tone generator for voice select detail, and properly set the tone BANK MSB and LSB
- The motorized faders do not move automatically

  Check the fader’s settings and song data.

19 Specifications

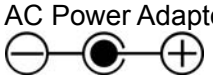
- Keyboard
  - ✧ VX5: 49 keys(C1 - C5), velocity sensitive and aftertouch
  - ✧ VX6: 61 keys(C1 - C6), velocity sensitive and aftertouch
  - ✧ VX7: 76 keys(A-1 - C6), velocity sensitive and aftertouch
  - ✧ VX8: 88 keys(C-1 - C7), Graded Hammer Action Keyboard, velocity sensitive and aftertouch

- Functions
  - ✧ Basic functions: USB MIDI, USB AUDIO, Octave shift, Transpose, Pitch bend wheel, Modulation wheel, Ribbon control, Pedals, Breath control, Audio In, Audio Out, Headphone out, MIDI IN, MIDI OUT
  - ✧ MIDI Data: Sequence control, MIDI clock, bank select, Program change, GM System On, GS System on, XG System On, Control change, All Notes Off, etc.
  - ✧ Parameters: Transose, Octave, MIDI out ports and channels, Velocity curve, Pitch bend, Breath control, Moulation, Brightness, Aftertouch, Aftertouch curve, etc.

- Panel Controls and Indicators
  - ✧ Function buttons with light x 8, Function shortcut buttons with light x 8
  - ✧ Potentiometer knobs x 8, Encoder knobs x 9, Motorized faders x 9
  - ✧ Data dial x 1, Switch button with light x 1, Number buttons x 10, Cursor/Inc/Dec/Confirm buttons x 6
  - ✧ Seq transport buttons x 6, U-CTRL button with light x 1
  - ✧ Transpose buttons with light x 2, Octave buttons with light x 2
  - ✧ Pads with light x 12

- Display
  - ✧ 16 digs, two lines LCD display

- Input/Output Terminals
  - ✧ POWER ON/OFF switch x 1, POWER IN connector x 1
  - ✧ USB port x1, USB HUB port x 2
  - ✧ HEADPHONE jack 2, HP VOLUME knob x 1
  - ✧ LINE OUT jack x 2
  - ✧ LINE IN jack x 2, INPUT GAIN knob x 1
  - ✧ PEDAL jack x 2, BREATH Control jack x 1
  - ✧ MIDI OUT port x 4, MIDI IN port x 1

- Power Supply
  - ✧ AC Power Adaptor included
  - ✧ AC Power Adaptor requirement: 16V 2.6A DC
  - ✧ 

- Dimensions (W x D x H) and Weight
  - ✧ VX 5: 859 x 348 x 113mm, 9.62kg
  - ✧ VX 6: 1022 x 348 x 113mm, 11.30kg
  - ✧ VX 7: 1232 x 348 x 113mm, 13.38kg
  - ✧ VX 8: 1408 x 372 x 150mm, 26.94kg

* Specifications and appearance are subject to change without notice.

20 MIDI Implementation Chart

CME VX(MIDI KEYBOARD)

Model: VX **MIDI Implementation chart** Ver: 1.0

Function		Transmitted	Recognized
Basic	Default	1	1~16
Channel	Changed	1~16	1~16
Mode	Default		X
	Messages	X	
	Altered	**********	
Note		0~127	X
Number:	True voice	**********	
Velocity	Note ON	○ v=0~127	X
	Note OFF	○ v=0~127	X
Aftertouch	Key's	X	X
	Ch's	○	X
Pitch Bend		○	X
Control Change		0~127	○
Prog		○	X
Change:	True #	**********	
System Exclusive		○	○
System	Clock	○	X
Real Time	Commands	○	X
System command	Song position	○	X
Aux Messages	Active Sense	○	X

○: Yes X: No

- CME is continually improving its products, and every attempt is made to ensure the information in the user's manual is current and accurate. CME cannot be responsible for possible discrepancies between the manual and the real product.

2007-03

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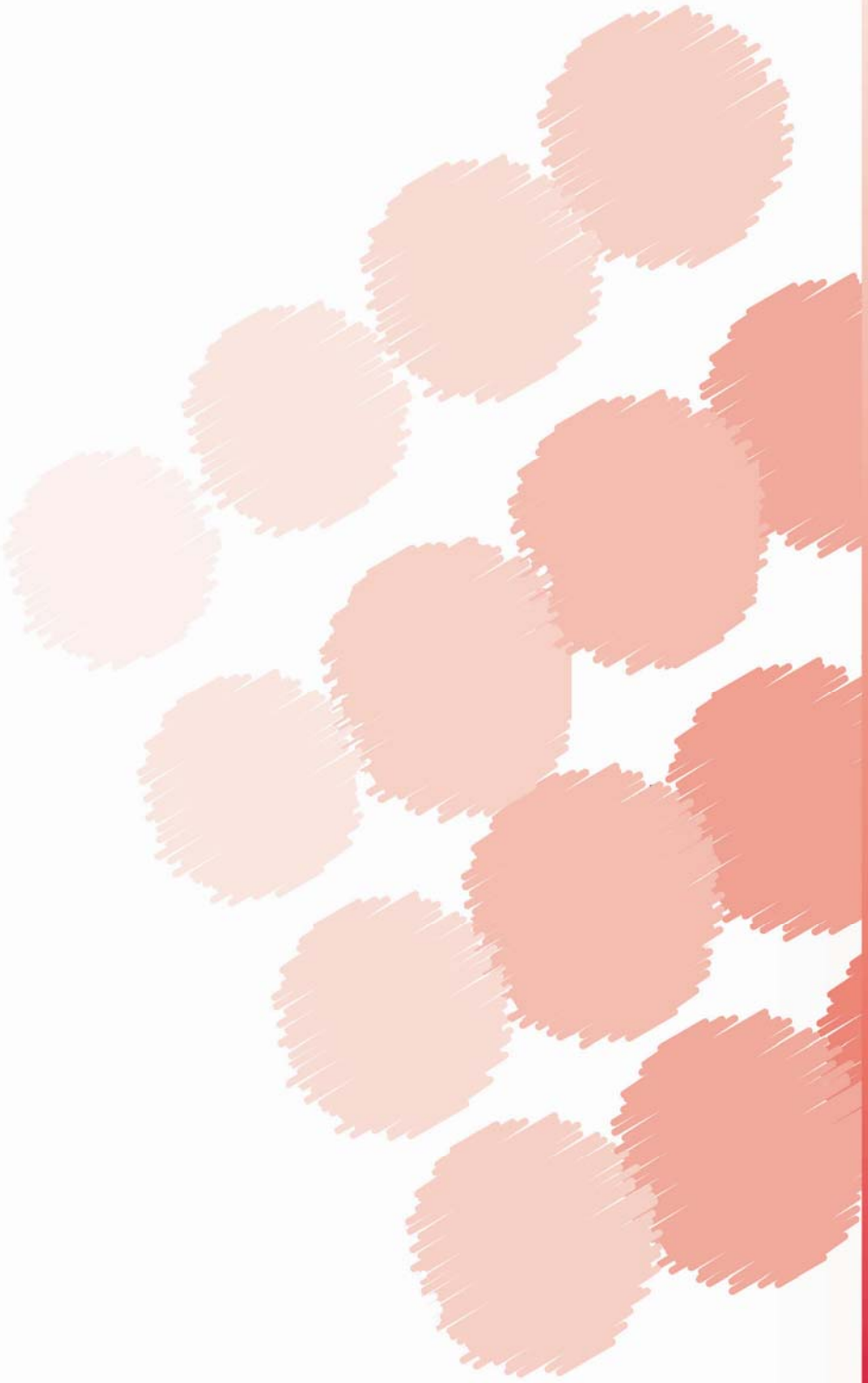

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