User Guide

Prodipe 61 C / 49 C / 25 C

Precaution

Thank you for purchasing this digital appliance. To ensure perfect operation and security, please read the manual carefully and retain it for future reference.

Safety Precautions

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

The lightning flash with the arrowhead symbol in an equilateral triangle is intended to alert the user to the presence of non-insulated "dangerous voltage" inside the appliance that may be of sufficient magnitude to constitute a risk of electric shock.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

Important Safety Instructions

(Figure 1)

1) Read these instructions.
2) Retain these instructions.
3) Heed all warnings.
4) Follow all instructions.
5) Do not use this appliance near water.
6) Clean only with a dry cloth.
7) Do not block any of the ventilation openings that were installed in accordance with the manufacturer's instructions.
8) Do not install near any heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the plug provided does not fit into your outlet, consult an electrician to ensure replacement of the obsolete outlet.
10) Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where it exits from the appliance.
11) Only use attachments/accessories specified by the manufacturer.
12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the appliance. If using a cart, be careful when moving the cart/appliance combination to avoid injury from tip-over (Figure 1).
13) Unplug this appliance during lightning storms or when unused for long periods of time.
14) Refer all servicing to qualified service personnel. Servicing is required when the appliance has been damaged in any way, for example, the power-supply cord or plug is damaged, liquid has been spilled or objects have fallen inside the appliance, the appliance has been exposed to rain or moisture, does not operate normally, or has been dropped.

WARNING: To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.

CAUTION: The appliance should not be exposed to drips or splashes of water. Objects filled with liquids, such as vases, should not be placed on the appliance.

Contents :

Package's content :

- Prodipe 61 C / 49 C / 25 C keyboard
- USB cable
- Accompanying CD
- This user guide

Non-contractual picture

Thanks for having purchased this product.

For an optimal use of your product, please read the manual carefully and retain it for future reference.

Introduction

61 C / 49 C is a 49 key (25 C is a 25 key) (61 C is a 61 key) USB-MIDI Controller, which supplies with professional keyboard of initial touch and profuse assignable controllers. It satisfies the needs of portability, play, control, etc...

Features

- 61 - 49 - 25 or 61 keys with initial touch.
- **(61 C / 49 C)**: 2 x Assignable pedal interfaces (Pedal A, Pedal B), compatible with switch pedal and continuous pedal. It can be assigned as 152 controllers.
- **(25 C)**: 1 x Assignable pedal interface (Pedal B), compatible with switch pedal and continuous pedal. It can be assigned as 152 controllers.
- 1 x Assignable slider (SLIDER), which can be assigned as 148 controllers.
- Pitch Bend Wheel and Modulation Wheel (WHEEL P and WHEEL M), which can be assigned as 148 controllers.
- 2 x Assignable data buttons (DATA +/-), which can be assigned as 160 controllers.
- 1 x Edit button (EDIT), switch play and edit status.
- 1 x Dial function group switching button (SWITCH).
- 4 x Assignable dials, which can accomplish two groups of functions (R1~R4 and R5~R8) with each dial distributed to an independent channel. These dials can be assigned as 160 controllers.
- 5 x Keyboard velocity curve
- PC upload and download, useful for user setting save and transfer.
- Multi-functional keyboard, which can provide functions such as voice adjustment, dual, touch sensitivity adjustment, split, tempo, mute, snap shot, etc.
- 1 x MIDI OUT.
- USB interface, adaptable to USB 1.1. Power supply by USB and DC 9V (optional).
- Compatible with Win XP/Vista and Mac OSX, drive free and hot plug supporting.
- Compatible with major audio and sequencer software, such as Cubase and Cakewalk.
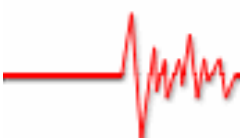
Operations
Front panel
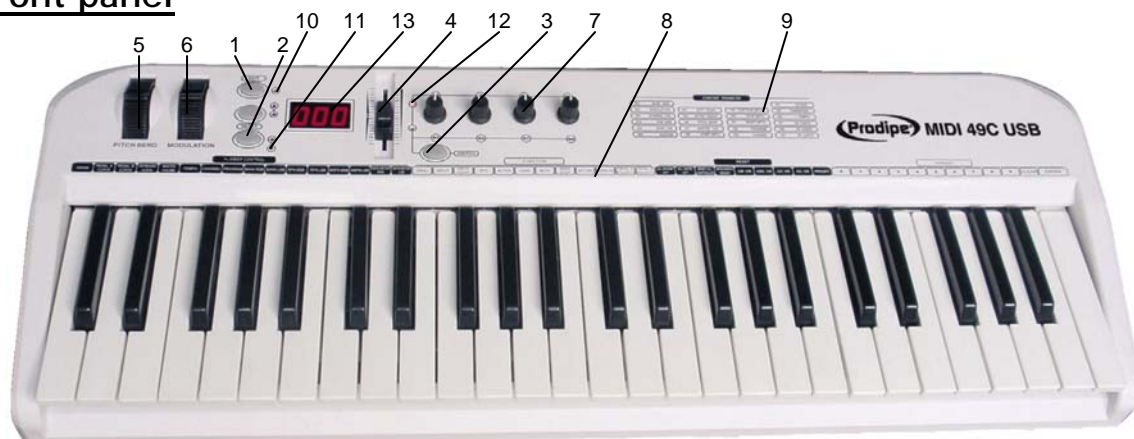
1. **Edit button:** It is to open/close keyboard multi-function.
2. **DATA +/- buttons:** They are assignable buttons, which could be assigned as 160 controllers. The initial setting is 154th controller: octave adjustment.
3. **Switch button:** It is to switch function groups of dials R1~R4 and R5~R8.
4. **Slider:** It is an assignable fader that can be assigned as 148 controllers. The initial setting is 147th controller: master volume.
5. **Pitch bend wheel:** It is an assignable wheel that can be assigned as 148 controllers. The initial setting is 146th controller: pitch bend wheel.
6. **Modulation wheel**: It is an assignable wheel that can be assigned as 148 controllers. The initial setting is 1st controller: modulation wheel.
7. **R1~R8 Dials**: These are assignable dials with an independent channel distributed to each dial, and each dial can be assigned as 160 controllers.
   * The initial channel of R1~R4 is 0, initial controller numbers are 152, 153, 156, 157, which controls program, channel, tempo and keyboard velocity curve respectively.
   * The initial channels of R5~R8 are 0~3, initial controller number is 7, which controls the volume of channels 0~3 respectively.
   * The function group of R1~R4 and R5~R8 is switched by SWITCH button.
8. **Multi-functional Keyboard**: This function is turned on/off by EDIT button. When it is on, the keyboard provides functions shown printed above the keyboard, including program adjustment, dual, touch sensitivity adjustment, numeric pads, and etc.
9. **Constant Controller Parameter**
10. **EDIT Indicator**: When EDIT indicator is on, keyboard multi-function is on, vice versa.
11. **OCTAVE/TRANSPOSE Indicator:**
    * When the indicator is on, it indicates that there's upper/lower octave adjustment.
    * When the indicator flickers slowly, it indicates that there's upper/lower transpose adjustment.
    * When the indicator flickers quickly, it indicates that there's upper/lower octave and transpose adjustment at the same time.
    * When the indicator is off, it indicates that there's no upper/lower octave nor transpose adjustment.
12. **Dial Function Group Indicator:**
    When the corresponding indicator of R1~R4 is on, the current dial function group is R1~R4; if the indicator of R5~R8 is on, the current dial function group is R5~R8.
13. **LED:** It is to display the current number/status information.

Rear panel

1. **MIDI Out:** MIDI output interface.
2. **Pedal A:** PEDAL A input interface, which can connect to pedals of both switching type and continuous type. It can be assigned as 152 controllers; the initial setting is soft pedal.
3. **Pedal B:** PEDAL B input interface, which can connect to pedals of both switching type and continuous type. It can be assigned as 152 controllers; the initial setting is sustain pedal.
4. **USB :** USB interface
5. **DC 9V :** 9V power input interface (optional)
6. **OFF/ON :** Power Off/On

Connection / Power / Control

✓ The keyboard gets connected to PC via the USB cable. This connection powers the keyboard and is used to transfer the MIDI data to PC. In addition, you can connect to other devices such as a sound module to send out MIDI data via MIDI output port. The USB interface of **61 C / 49 C** displays in PC as USB Audio Device.

✓ The keyboard can also be used when connected to an optional 9V DC power supply. In this case the MIDI data will only be sent out via the MIDI output port.

Assign controllers

✓ Press EDIT button to enter keyboard multi-function mode, the indicator of EDIT is on.
Press ASSIGN button to enter controller assignment mode, LED shows CHO, reminding the user to choose the controller that needs to be assigned. Operate the very controller to select it (For example, if you want to assign SLIDER, slide the SLIDER to select), the LED shows the controller number of the selected controller, input the desired assignable parameter value with numeric pad, and press ENTER to confirm (for example, if Slider is selected, input 147 and the Slider is assigned as Master Volume Controller).

✓ Assignable controllers reference: Appendix 1- Assignable controller List

✓ Assignable controller parameters reference: Appendix 2-Assignable Controller Parameter List.

Pedal resistance curve *(61 C / 49 C only)*

- ✓ You can adjust the pedal resistance curve to better work with pedals of different specifications and resistance values.
- ✓ Estimate resistance curve value: Value of PA CURVE or PB CURVE= (128*pedal resistance value) / (10K+pedal resistance value). For instance, if the pedal resistance value is 10K, the value of PA CURVE or PB CURVE is: 128*10K/ (10K+10K) =64.
- ✓ For pedal resistance value, please refer to the technical specifications provided by pedal manufacturer.
- ✓ The resistance curve estimation does not need to be very accurate, or you could simply adjust it without calculation, as long as the travel and succession of the pedal satisfy your needs.
- ✓ The initial value of resistance curve is 64, adaptable to most pedals in the market.
- ✓ When you use switching type pedal, the recommended resistance curve value is 64.
- ✓ When DATA +/- is assigned as PA CURVE or PB CURVE, DATA +/- can be used to adjust resistance curve values. Press two buttons of DATA +/- at the same time to set the resistance curve value to initial 64.
- ✓ When the dials (R1~R4 or R5~R8)are assigned as PA CURVE or PB CURVE, they can be used to adjust pedal resistance value.
- ✓ Press EDIT button to enter keyboard multi-function mode, press PA CURVE or PB CURVE multi-functional keys to enter pedal resistance curve adjustment mode, input the pedal resistance value with numeric pad, then press ENTER to confirm.

Tempo *(61 C / 49 C only)*

- ✓ Which adjust the tempo of MIDI Time Code (MTC).
- ✓ When DATA +/- is assigned as TEMPO, it can be used to adjust tempo. Press DATA +/- at the same time to set the tempo to initial 100.
- ✓ When the dials (R1~R4 or R5~R8) are assigned as TEMPO, they (R1~R4 or R5~R8) can be used to adjust tempo.
- ✓ Press EDIT button to enter keyboard multi-function mode, press TEMPO to enter tempo adjustment mode, then input the tempo value with numeric pad, and press ENTER to confirm.

Program change

- ✓ Voice adjusting function, adjusting the voice of current channel.
- ✓ When DATA +/- is assigned as PROGRAM, DATA +/- can be used to adjust program. Press DATA +/- at the same time to set the program number to initial 0.
- ✓ When the dials (R1~R4 or R5~R8) are assigned as PROGRAM, they (R1~R4 or R5~R8) can be used to adjust program.
- ✓ Press EDIT button to enter keyboard multi-function mode, press PROGRAM button to enter program adjustment mode, then input the program number with numeric pad and press ENTER to confirm.

Midi channel

- ✓ When DATA +/- is assigned as CHANNEL, use DATA +/- to adjust general MIDI channel. Press DATA +/- buttons at the same time to set general MIDI channel to initial 0.
- ✓ When dial R1~R4 or R5~R8 are assigned as CHANNEL, use dial R1~R4 or R5~R8 to adjust general MIDI channel.
- ✓ <u>Global MIDI channel</u>: press EDIT button to enter keyboard multi-function mode, and then press CHANNEL to enter channel adjustment mode, and then use numeric pad to enter general MIDI channel number and press ENTER to confirm.
  61 C / 49 C: please read section "Split" to assign different MIDI channels to each section of the keyboard.
- ✓ <u>R1~R4 or R5~R8 individual MIDI channels</u> : press EDIT button to enter keyboard multi-function mode, and then press CHANNEL to enter channel adjustment mode. Operate the desired dial from R1~R4 or R5~R8 to select that dial, and then use numeric pad to enter the channel number of that dial in current group, and press ENTER to confirm.

Transpose

- ✓ This function allows the keyboard to change the pitch up/down by semi-tone.
- ✓ When DATA +/- is assigned as TRANSPOSE, use DATA +/- to adjust transpose. Adjustment range is +/- 12 semitones. Press DATA +/- buttons at the same time to set transpose to initial 0.
- ✓ Hold EDIT and use DATA +/- to adjust transpose. Adjustment range is +/- 12 semitones. Hold EDIT and DATA +/- at the same time to set transpose to initial 0.
- ✓ When dial R1~R4 or R5~R8 are assigned as TRANSPOSE, use dial R1~R4 or R5~R8 to adjust transpose. Adjustment range is +/- 12 semitones.

Octave

- ✓ This function allows the keyboard to change the pitch up/down by octave.
- ✓ When DATA +/- is assigned as OCTAVE, use DATA +/- to adjust octave. Adjustment range is +/- 3 octaves. Press DATA +/- buttons at the same time to set octave to initial 0.
- ✓ When dial R1~R4 or R5~R8 are assigned as OCTAVE, use dial R1~R4 or R5~R8 to adjust octave. Adjustment range is +/- 3 octaves.

Dual

- ✓ When Dual is ON, Keyboard/Wheel/Pedal/Slider sends MIDI info of two channels, with the voice/channel of both channels adjustable.
- ✓ Press EDIT button to enter keyboard multi-function mode, and then press DUAL to open/close dual function.
- ✓ Dual and keyboard split functions cannot be used simultaneously. Open dual will turn off keyboard split function.

Split *(61 C / 49 C only)*

- ✓ When Split is ON, Wheel/Pedal/ Slider sends MIDI info of two channels, the keyboard is split to right section and left section by the split point, with each section use a own channel. The voice/channel of both channels is adjustable.
- ✓ Press EDIT button to enter keyboard multi-function mode, and then press SPLIT to open /close keyboard split function.
- ✓ To choose the MIDI channels for each section, follow these steps :
  1) Turn the Split mode OFF and choose the MIDI channel as previously explained. This channel will be the one used for the LEFT section of the "splitted" keyboard.
  2) Turn the Split mode ON, and choose the MIDI channel as previously explained. This channel will be the one used for the RIGHTsection of the "splitted" keyboard.
- ✓ Dual and keyboard split functions cannot be used simultaneously. Open keyboard split will turn off dual function.

Split point *(61 C / 49 C only)*

- ✓ Default Split Point is the central C (MIDI No. 60). User can choose the Split Point.
- ✓ Press EDIT button to enter keyboard multi-function mode, and then press SPLIT POINT to select split point. LED displays CHO to remind users to select the split point, and then press the desired split point note and then that note will be the new split point.

MTC (Midi Time Code)

- ✓ Press EDIT button to enter keyboard multi-function mode, and then press MTC to open/close sending MTC message (0xF8).

Active sensing *(61 C / 49 C only)*

- ✓ Press EDIT button to enter keyboard multi-function mode, and then press ACTIVE SENSING to open/close active sensing message (0xFE).

Lock *(61 C / 49 C only)*

- ✓ Press EDIT button to enter keyboard multi-function mode, and then press LOCK to open/close lock function. No other controllers except keyboard can be operated under Lock mode.).

Mute

- ✓ Press EDIT button to enter keyboard multi-function mode, and then press MUTE to open/close mute function. No message will be transmitted under Mute mode.

Snap shot

✓ Press EDIT button to enter keyboard multi-function mode, and then press SNAP SHOT, DATA +/-, SLIDER, WHEEL, PEDAL, R1~R4 and R5~R8 and etc all together to transmit those data at one time.

Upload / Download

✓ Use USB port to connect with computer can upload or download user parameters: to upload 61 C / 49 C / 25 C panel parameters to computer, or, to download the parameters from computer to the 61 C / 49 C / 25 C.
✓ The transmit messages are system exclusive messages in form of F0......F7. According to different sequencer software, there are different ways to receive/send system message: mainly record/playback style and system message window style.
  Details are as follows :

Record Style E.g. Cubase :
From 61 C / 49 C / 25 C to computer (<u>UPLOAD</u>):

1) Use USB cable to connect computer and 61 C / 49 C / 25 C.
2) Set 61 C / 49 C / 25 C parameters;
3) Open a new MIDI project in Cubase.
4) Select 61 C / 49 C / 25 C as MIDI input and neglect output.
5) Uncheck the box – SYSEX in RECORD to validate system message. (FILE-> PREFERENCES-> MIDI-> MIDI FILTER).
6) Cubase starts to record.
7) Press EDIT button to enter keyboard multi-function mode, and then press UPLOAD, 61 C / 49 C / 25 C enters into system message upload mode. LED displays SEu. After upload completes, LED displays don.
8) Cubase stops recording.
9) In Cubase, select MIDI->OPEN LIST EDITOR to find received system message; press COMMENT to open system message window and use EXPORT to save the message in *.SYS format.

Record Style E.g. Cubase :
From computer to 61 C / 49 C / 25 C to computer (<u>DOWNLOAD</u>) :

1) Use USB cable to connect computer and 61 C / 49 C/ 25 C.
2) Open a new MIDI project in Cubase.
3) Select 61 C / 49 C / 25 C as MIDI output.
4) Export saved system message file (*.SYS) into Cubase.
5) Press EDIT button to enter keyboard multi-function mode, and then press DOWNLOAD, 61 C / 49 C / 25 C enters into system message download mode. LED displays SEd.
6) Cubase starts to playback and transmit system message to 61 C / 49 C / 25 C.
7) LED displays don after 61 C / 49 C / 25 C finishes receiving correct system message.
8) System starts SNAP SHOT function to transmit download setting message to sequent device.

<u>System Message Window style E.g. Cakewalk :</u>
From 61 C / 49 C / 25 C to computer (<u>UPLOAD</u>) :

(Operate 61 C / 49 C / 25 C in the same way as under Record Style, only different operation in sequencer software.)

1) Use USB cable to connect computer and 61 C / 49 C / 25 C.
2) Set 61 C / 49 C / 25 C parameters.
3) Open a new MIDI project in Cakewalk.
4) Select 61 C / 49 C / 25 C as MIDI input and neglect output.
5) Open system message window: VIEW->SYSX; select a BANK and press the down arrow; select YOU START DUMP ON INSTRUMENT and then Cakewalk enters into system message receive mode.
6) Press EDIT button to enter keyboard multi-function mode, and then press UPLOAD, 61 C / 49 C / 25 C enters into system message upload mode. LED displays SEu. After upload completes, LED displays don.
7) Use SAVE in Cakewalk to save received message in *.SYS format.

<u>System Message Window style E.g. Cakewalk:</u>
From computer to 61 C / 49 C / 25 C (<u>DOWNLOAD</u>):

1) Use USB cable to connect computer and 61 C / 49 C/ 25 C.
2) Open a new MIDI project in Cakewalk.
3) Select 61 C / 49 C / 25 C as MIDI output
4) Open system message window: VIEW->SYSX; select a BANK and import saved system message file.
5) Press EDIT button to enter keyboard multi-function mode, and then press DOWNLOAD, 61 C / 49 C / 25 C enters into system message download mode. LED displays SEd.
6) Use Cakewalk system message send function to send system message to 61 C / 49 C/ 25 C.
7) LED displays don after 61 C / 49 C / 25 C finishes receiving correct system message.
8) System starts SNAP SHOT function to transmit download setting message to sequent device.

Pedal polarity *(61 C / 49 C only)*

✓ System can recognize or change pedal polarity. If you want pedal to transmit PEDAL ON message while pressing the pedal and PEDAL OFF message while releasing the pedal, you do not need to do any adjustment. Otherwise, you can press down the pedal while switching on this unit and release the pedal after the unit is turned on.
✓ Press EDIT button to enter keyboard multi-function mode, and press PEDAL A POLARITY or PEDAL B POLARITY to adjust pedal polarity.

Switch dial function groups

✓ Press SWITCH to shift dial function group between R1~R4 or R5~R8.

All notes off

✓ Press EDIT button to enter keyboard multi-function mode, and then press ALL NOTE OFF to transmit all notes off message (Controller #123), in case of abnormal constant sound from system or external sound module.

All sound off *(61 C / 49 C only)*

✓ Press EDIT button to enter keyboard multi-function mode, and then press ALL SOUND OFF to transmit all sound off MIDI message (Controller #120), in case of abnormal constant sound from system or external sound module.

Reset all controllers

✓ Press EDIT button to enter keyboard multi-function mode, and then press RESET ALL CONTROLLER to transmit all reset all controllers message (Controller #121).

GM / GS / XG On *(25 C only)*

✓ Press EDIT button to enter keyboard multi-function mode, and then press GM/GS/XG ON to transmit GM initialization message (F0 7E 7F 09 01 F7), GS initialization message (F0 41 10 42 12 40 00 7F 00 41 F7), and XG initialization message (F0 43 10 4C 00 00 7E 00 F7).

GM On *(61 C / 49 C only)*

✓ Press EDIT button to enter keyboard multi-function mode, and then press GM ON to transmit GM initialization message (F0 7E 7F 09 01 F7).

GM2 On *(61 C / 49 C only)*

✓ Press EDIT button to enter keyboard multi-function mode, and then press GM2 ON to transmit GM2 initialization message (F0 7E 7F 09 03 F7).

GS On *(61 C / 49 C only)*

✓ Press EDIT button to enter keyboard multi-function mode, and then press GS ON to transmit GS initialization message (F0 41 10 42 12 40 00 7F 00 41 F7).

XG On *(61 C / 49 C only)*

✓ Press EDIT button to enter keyboard multi-function mode, and then press XG ON to transmit XG initialization message (F0 43 10 4C 00 00 7E 00 F7).

Preset *(61 C / 49 C only)*

- ✓ Press EDIT button to enter keyboard multi-function mode, and then press PRESET to return to factory preset.
- ✓ System starts SNAP SHOT function to transmit preset to sequent device.

Clean *(61 C / 49 C only)*

- ✓ While using numeric pad to enter numbers, press CLEAN button to set the number to 0.

Reset

- ✓ If not especially mentioned, press DATA +/- buttons at the same time to set controlled parameter to 0.

Appendix : Assignable controller list

No.	Item	Channel range	Initial channel	Parameter range	Initial parameter	Initial parameter value
1	Data +/-	0~15 current channel	0	0~159	154	0
2	Slider			0~147	147	0
3	Wheel P			0~147	146	64
4	Wheel M			0~147	1	0
5	Pedal A			0~151	64	0
6	Pedal B			0~151	67	0
7	R1	0~15 Independent channel	0	0~159	152	0
8	R2		0	0~159	153	0
9	R3		0	0~159	156	100
10	R4		0	0~159	157	0
11	R5		0	0~159	7	100
12	R6		1	0~159	7	100
13	R7		2	0~159	7	100
14	R8		3	0~159	7	100

Appendix : Assignable controller parameter list

Controller No	Definition	Initial Value	Value range
0	Bank select MSB	0	0-127
1	Modulation MSB	0	0-127
2	Breath MSB	127	0-127
3	Controller	0	0-127
4	Foot controller MSB	127	0-127
5	Portamento time MSB	0	0-127
6	Data entry MSB	2	0-127
7	Channel volume MSB	100	0-127
8	Balance MSB	64	0-127
9	Controller	0	0-127
10	Pan MSB	64	0-127
11	Expression MSB	127	0-127
12	Effect control 1 MSB	0	0-127
13	Effect control 2 MSB	0	0-127
14-31	Controller	0	0-127
32	Bank select LSB	0	0-127
33	Modulation LSB	0	0-127
34	Breath LSB	127	0-127
35	Controller	0	0-127
36	Foot controller LSB	127	0-127
37	Portamento time LSB	0	0-127
38	Data entry LSB	0	0-127
39	Channel volume LSB	127	0-127
40	Balance LSB	64	0-127
41	Controller	0	0-127
42	Pan LSB	64	0-127

43	Expression LSB	127	0-127
44-63	Controller	0	0-127
64	Sustain	0	0-127
65	Portamento	0	0-127
66	Sostenuto	0	0-127
67	Soft pedal	0	0-127
68	Legato footswitch	0	0-127
69	Hold 2	0	0-127
70	Sound controller	64	0-127
71	Resonance	64	0-127
72	Release time	64	0-127
73	Attack time	64	0-127
74	Cutoff	64	0-127
75	Decay time	64	0-127
76	Vibrato depth	64	0-127
77	Vibrato depth	64	0-127
78	Vibrato depth	64	0-127
79	Sound controller	64	0-127
80-83	Controller	0	0-127
84	Portamento control	0	0-127
85-90	Controller	0	0-127
91	Reverb	64	0-127
92	Effects	0	0-127
93	Chorus	0	0-127
94	Effects	0	0-127
95	Effects	0	0-127
96	RPN Increment	0	0-127
97	RPN Decrement	0	0-127
98	NRPN LSB	0	0-127
99	NRPN MSB	0	0-127
100	RPN LSB	0	0-127
101	RPN MSB	0	0-127
102-119	Controller	0	0-127
120	All sound off	0	0-127
121	Reset all controllers	0	0-127
122	Local control	0	0-127
123	All notes off	0	0-127
124	Omni off	0	0-127
125	Omni on	0	0-127
126	Mono	0	0-127
127	Poly	0	0-127
128	Pitch bend sensitivity (RPN)	2	0-127
129	Channel fine tuning (RPN)	64	0-127
130	Channel coarse tuning (RPN)	64	0-127
131	Modulation depth range (RPN)	64	0-127
132	Vibrato rate (RPN)	64	0-127
133	Vibrato depth (NRPN)	64	0-127
134	Vibrato delay (NRPN)	64	0-127
135	Filter cutoff frequency (NRPN)	64	0-127
136	Filter resonance (NRPN)	64	0-127
137	EQ low gain (NRPN)	64	0-127
138	EQ high gain (NRPN)	64	0-127

139	EQ low frequency (NRPN)	64	0-127
140	EQ high frequency (NRPN)	64	0-127
141	EG attack time (NRPN)	64	0-127
142	EG decay time (NRPN)	64	0-127
143	EG release time (NRPN)	64	0-127
144	Polyphonic key pressure	100	0-127
145	After touch	100	0-127
146	Pitch bend	64	0-127
147	Master volume	100	0-127
148	Start (MTC)	-	-
149	Continue (MTC)	-	-
150	Stop (MTC)	-	-
151	Reset (MTC)	-	-
152	Program	0	0-127
153	Global channel	0	0-15
154	Octave	0	-3 ~ +3
155	Transpose	0	-12 ~ +12
156	Tempo	100	20-250
157	Keyboard curve	0	0-4
158	Pedal A curve	64	1-127
159	Pedal B curve	64	1-127

Appendix: LED status list

No	Status	Definition
1	Xxx	3 digit display
2	Xx	Upper transpose value
3	-xx	Lower transpose value
4	X	Upper octave value
5	-x	Lower octave value
6	CHO	(1) Under assign mode : indicate the controller to be assign. (2) Under split point : indicate keyboard split point.
7	ON/OFF	Certain function On/Off, or pedal polarity positive/negative
8	Don	Certain function done
9	Err	Operation error
10	SEu	Parameters upload
11	SEd	Parameters download

Appendix : Technical specifications

No	Item	Specifications
1	Keyboard	25 C : 25 keys, C2-C4, Initial touch 61 C : 61 keys - 49 C: 49 keys, C1-C5, Initial touch
2	Function	• Midi data : Program select, Bank select, Sequencer control, MTC, Controller change, GM, GS, XG system reset, etc … • Controllable parameters : Transpose, Octave, MIDI transmit channel, Velocity curve adjust, Keyboard split point, etc …
3	Panel & indicator	• 4 x assignable dials • 1 x dial group function shift button (incl. 2 indicators) • 2 x assignable data +/- buttons (incl. 2 indicators) • 1 x Edit button (incl. 1 indicator)
4	Display	8 segments, 3 digits LED.
5	Input & Output	• 1 x MIDI out • 1 x USB port • 1 x Pedal input (25 C) • 2 x Pedal inputs (61 C / 49 C) • 1 x DC input • 1 x Power switch
6	Power supply	• 9V DC • USB power