EFNOTE 3

Reference Guide (for Ver 1.0)



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For the latest information, please refer to the EFNOTE 3/5 website.

ef-note.com/products/drums/EFNOTE3/efnote3.html ef-note.com/products/drums/EFNOTE5/efnote5.html





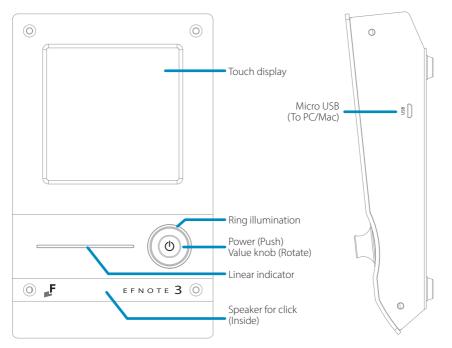
EFNOTE 3

EFNOTE 5

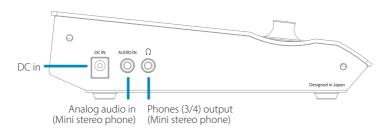
- * Before using this product, read "IMPORTANT SAFETY INSTRUCTIONS" in the Quickstart Guide.
- * Read this guide in combination with the Quickstart Guide.
- * The information in this document might differ from the sound module you're using due to differences of the firmware version. For the latest firmware update information, refer to the EFNOTE 3/5 website.
- * All illustrations and screens appearing in this document are for the purpose of explaining operation, and may differ from the actual product or specifications.
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Basic Operation

■ Panel Description



* About the USB connection, see p. 27.





* The line (1/2) output and MIDI output (5-pin) are available with the MULTI-B cable. See the "Quickstart Guide".

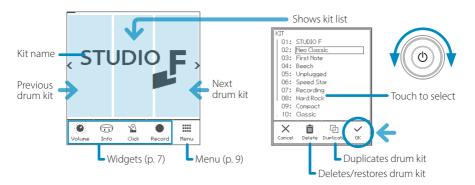
■ Power On/Off

Power On 1 2 E F N O T E Power Off 1 2 3 4 Power MENU Sudan. Power Off Power Off 1 2 3 4 Power Off Powe

- * Without this procedure may result in loss of changes.
- * The power save function will turn power off automatically after specified period. It can be disabled (p. 24).

■ Home Screen

Switching drum kits



- * Preset drum kits can be edited, but cannot be renamed or deleted.
- * The edited preset drum kit can be restored by "Restore".
- * User drum kits are listed after the preset drum kits and sorted by the drum kit name.

Opening the kit list

1 In the home screen, tap on the center of the kit name area.

Creating a new drum kit / Duplicate the drum kit

1 Open the kit list, and select a drum kit as a source of duplication.



3 Enter the new kit name and tap the OK.

Regarding the name entry window, see p. 13.

Restoring the preset drum kit

1 Open the kit list, and select a preset drum kit that you want to restore.

 $2 \, \text{Tap} \left| \stackrel{\boldsymbol{\varsigma}}{\underset{\text{Restore}}{\text{Restore}}} \right|$, and tap the OK in the confirmation window.

Deleting the user drum kit (duplicated drum kit)

 $1\,$ Open the kit list, and select a user drum kit that you want to delete.

 $2\,\, \text{Tap} \left[\begin{array}{c} \blacksquare \\ \text{Delete} \end{array}\right]$, and tap the OK in the confirmation window.

Widgets

These widgets control various settings easily at the home screen.

* Some other widgets can be open from the menu (p. 9).

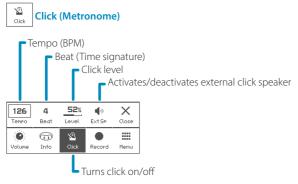


* The line out level can be linked with the phones level (p. 24).

CAUTION Be sure not to listen to audio at a high volume. It can cause permanent hearing loss.



* Clipping may occur when exceeding 85%.



- * For the detailed click setup, see (p. 17).
- * When the drum kit is switched, the click sound will be interrupted while loading the kit.



Records your drum performances by MIDI, for sound check on stage, transferring to your DAW, or later self review.



Rec Standby



Recording



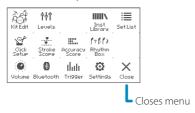
Playing



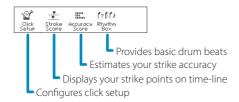
- * Any other audio/MIDI sources are not recorded.
- * Tempo and beat settings are not recorded.
- * If the recording widget is closed, the recording will be stopped.
- * The recorded data will be stored even if the power is turned off.
- * The playback will not send any MIDI data.

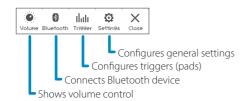
■ IIII Menu

This menu takes you to the various screens.



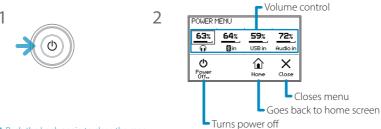






Power Menu

You can access to the power menu from anywhere.



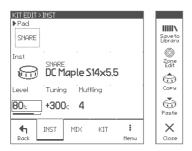
* Push the knob again to close the menu.

Menu

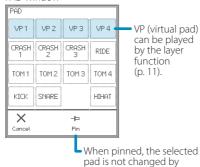
■ Control Drum Kit Edit ■ Control Drum Kit Edit

In this section, you can edit the drum kit.

INST



PAD window



hitting a pad.

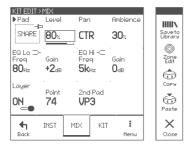
Parameters for each pad

	o. cac pan		
Pad	Selects an edit target pad. Can be selected by hitting a pad.		
Inst (icon)	Selects Inst group		
Inst (name)	Selects Inst (sound for the pad)		
Level	Adjusts pad level * Clipping may occur when exceeding 85%. * Adjusts all zones together		
	You can also adjust pad levels with faders in the Pad Levels screen (p. 14).		
Tuning	Adjusts pitch in cent * Adjusts all zones together		
Muffling	Adjusts mute amount (sustain) * Adjusts all zones together		

Page Menu

Save To	Saves current Inst settings to the Inst library	
Library	(p. 15).	
Zone Edit	Edits each zone (p. 12)	
Copy/Paste	Copies/Pastes current pad (Inst) settings When paste, the PASTE ITEMS window appear to select paste items.	

MIX



Parameters for each pad

· aram	arameters for each pau		
Pad		Selects an edit target pad. • Can be selected by hitting a pad.	
Level Adjusts pad level * Clipping may occur when exceeding 8		Adjusts pad level * Clipping may occur when exceeding 85%.	
Pan	Pan Adjusts pan		
Ambie	ence	Adjusts ambience send amount	
EQ Lo/Hi		Modifies sound character with shelving EQs	
Layer On/ Off Point 2nd Pad		ON: Overlays the VP (virtual pad) sound on the pad. The VP is determined by the "2nd	
		Pad", and overlaid only when struck harder than the "Point".	

About the Inst, tone and zone

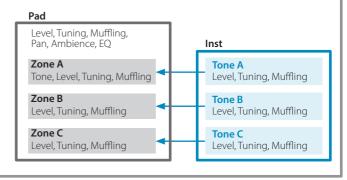
Each pad has some zones.

An Inst has three tones and some parameters in it.

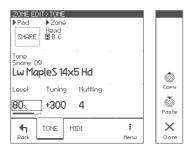
When you assign an Inst to a pad, the three tones are assigned to each zone of the pad, and you can edit all zones at once.

You can also edit the each zone in the ZONE EDIT screen.

	Pad				
Zone	Kick	Snare	Toms	Crashes/ Ride	Hi-Hat
Α	Head Bow			W	
В	– Rim		Ed	ge	
C	-	Side-Rim	-	Cup	Pedal



ZONE EDIT > TONE



Parameters for each zone

Pad	Selects edit target pad	
Zone	Selects edit target zone	
Tone	Selects tone (sound for a zone)	
Level	Adjusts zone level	
Tuning	Adjusts pitch in cent	
Muffling	Adjusts mute amount (sustain)	

Page Menu

Copy/Paste	Copies/Pastes current zone (tone) settings

ZONE EDIT > MIDI



Parameters for each zone

r drameters for each zone		
MIDI Note	Note number for current zone	
Open	Note number for hi-hat open state on current	
Open	zone	
Closed	Note number for hi-hat closed state on	
Ciosea	current zone	
Pedal CC	Control change number for hi-hat pedal	

* If the note numbers or the control change numbers are changed, MIDI data previously recorded cannot be played back correctly.

About the MIDI messages

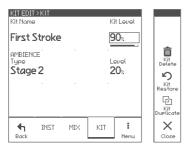
Pad		Note#
K	ick	36
	Head	38
Snare	Rim	40
	Side-rim	37
Tom 1	Head	48
101111	Rim	50
Tom 2	Head	45
	Rim	47
Tom 3	Head	43
101113	Rim	58
Tom 4	Head	41
	Rim	39

Pad		Note#
	Bow	46*
HH	Edge	26*
Open	Pedal	44
	Splash	(CC#4=0)
	Bow	42*
HH Closed	Edge	22*
	Pedal	44
	Close	(CC#4=127)

Pad		Note#
	Bow	49
Crash 1	Edge	55
	Cup	54
	Bow	57
Crash 2	Edge	52
	Cup	56
Crash 3	Bow	27
Clasii 3	Edge	28
	Bow	51
Ride	Edge	59
	Cup	53

- * The hi-hat pedal sends MIDI control change #4 with value in range from 0 (open) to 127 (tight closed), before the corresponding note message.
- * The cymbal choke technique sends the polyphonic after touch (key after touch) message.
- * The EFNOTE 3/5 does not send/receive the Program Change messages.

KIT

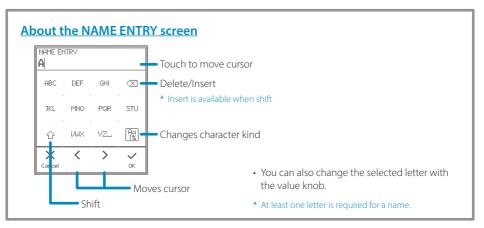


Parameters for each drum kit

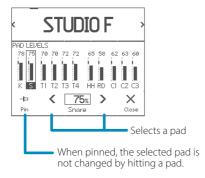
Kit Name	Changes kit name	
Ricivanie	* Preset kits cannot be renamed.	
Level	Adjusts kit level	
Ambience Type	Selects room type	
Ambience Level	Adjusts ambience return level	

Page Menu

Kit Duplicate	Duplicates drum kit. About the name entry window, see p. 13. * Unique kit name is required.
Kit Restore	Restores this drum kit to initialized preset kit. (Preset kit only)
Kit Delete	Deletes this drum kit. (User kit only)



■ ÎTÎ Pad Levels

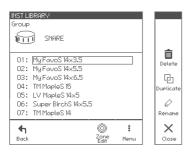


This is dedicated page for level control for all pads.

Pad Level	Adjusts pad level
r au Levei	* Clipping may occur when exceeding 85%.

- Target pad can be selected by hitting a pad.
- Pad level can also be adjusted in drum kit edit, or Inst info widget in the home screen.

Inst Library



You can store your customized Inst on a pad to the Inst library, and assign it to any pads.

In this screen, you can manage the stored instruments.

Parameters

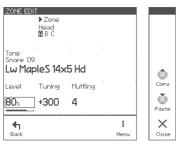
Group	Selects Inst group
Zone Edit	Edits parameters in each zone

Page Menu

Renam	e	Changes selected Inst name. • About the name entry window, see p. 13.
Duplic	ate	Duplicates selected Inst. • About the name entry window, see p. 13.
Delete		Deletes selected Inst

- The Inst library shows only customized Insts you stored.
- You can store your customized Inst in the drum kit edit screen (p. 10).
- In the drum kit edit, your customized Inst are listed behind the preset Insts and sorted by the Inst name.
- In this screen, you can play the selected inst with all pads.

ZONE EDIT



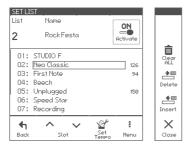


Parameters for each zone

Zone	Selects edit target zone
Tone	Selects tone (sound for a zone)
Level	Adjusts zone level
Tuning	Adjusts pitch
Muffling	Adjusts mute amount (sustain)

Page Menu

Copy/Paste	Copies/Pastes current zone (tone) settings
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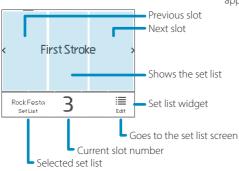
The set list function allows you to determine drum kit order along with your performance on stage. In this screen, you can manage set lists.

Parameters

List	Selects the set list number
Name	Changes set list name. • About the name entry window, see p. 13.
Activate	ON: Drum kit order is sorted along with the selected set list.
Slot up/ down	Select a slot on the list. Choose a drum kit with the value knob.
Set Tempo	Configures click for each slot In case the Enable is checked, configured tempo and beat are applied to the click when the slot is proceeded.
Clear ALL	Clears all slots.
Delete	Deletes selected slot.
Insert	Inserts a slot before selected slot.

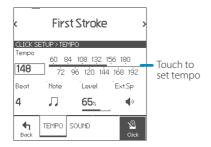
- You can create up to 9 set lists, and 20 slots for each.
- When the set list is activated, the set list widget appears in the home screen.

Home screen



Click Setup

TEMPO



You can configure the detailed click settings.

Parameters

Tempo	Sets tempo (BPM) • Also can be set by touching the scale.
Beat	Sets beat (time signature)
Note	Sets beat interval
Level	Sets click level
Ext Sp	ON: Activates on-board click speaker. You can use EFNOTE 3/5 as a training kit without headphones for daily exercise.

SOUND



Parameters

Sound	Selects click sound
Output	Configures output routing

Turns click on/off

Stroke Scope



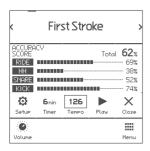


The stroke scope displays your strike timings on the time line to visualize your stroke accuracy against the metronome.

Parameters

Start/Stop	Starts/stops the stroke scope
Tempo	Sets tempo
Division	Changes the division of the scope window.
Setup	Shows the setup window to select which pads are displayed.
Volume	Shows the volume widget

Accuracy Score



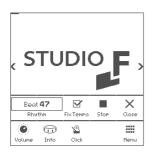


The accuracy score estimates your stroke accuracies against the metronome and displays them with scores.

Start/Stop	Starts/stops the accuracy score
Tempo	Sets tempo
Timer	Configures period of time until finish
Setup	Shows the setup window to select which pads are displayed.
Volume	Shows the volume widget

- * The scores are just for your reference and does not reflect your exact stroke/performance skills.
- * Flams or rolls may lower the scores.

Rhythm Box



The rhythm box provides approx. 100 short drum beat loops.

This shows the rhythm box widget in the home screen.

. arameters	
Rhythm	Selects drum beats
	When checked, it keeps current tempo even if the drum beat is changed.
Start/Stop	Starts/stops the drum beat

Bluetooth



The EFNOTE 3/5 comes with the Bluetooth connectivity to be connected with your smart device.

Status OFF: Bluetooth is turned off. ON: Ready to pair: No device is connected: Connected: Device is connected.	
Connected Device Displays currently connected device nam Audio: Device name which is being connected as audio in device. MIDI: Device name which is being connected as MIDI device.	
Discoverable Device name of the sound module whi	
As	shown on your smart device.

Connecting

1 Make sure the status is "Ready to pair". If the status is "OFF", tap it to turn on.



On your smart device

- 2 Turn Bluetooth on.
- 3 Find new device discoverable as "EFNOTE AUDIO xxx" or "EFNOTE MIDI xxx" (xxx is any value), and select it.
- 4 If pin code is required, enter "0000" (four zeros), and tap [Pair].
- 5 Make sure the status changes to "Connected", and your device name is displayed.



Disconnecting

1 Tap [Disconnect] on your smart device.

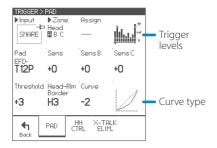
Re-connecting

- 1 Tap [Connect] on your smart device.
- * About the operation of your smart device, refer to the user guide of your smart device.



In this section, you can optimize the pad sensing settings as needed. The EFNOTE 3/5's trigger settings are already configured appropriately at the factory state.

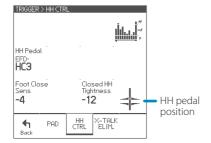
PAD



Parameters for each pad

Input	Selects optimizing target trigger input
Zone	Selects target zone
Assign	You can switch trigger input assignment for Tom 4 and Crash 3 inputs. Tom 4 cable: Tom 4 or Crash 1 Cup Crash 3 cable: Crash 3 or Crash 2 Cup Only for Tom 4 / Crash 3 input.
Pad	Selects the pad model which is connected to the input. * When the pad model is changed, internal trigger settings are automatically set to the appropriate values.
Sens	Adjusts sensitivity of the pad for all zones. The default value is 0.
Sens B	Adjusts zone B sensitivity of the pad. The default value is 0. * Only for the inputs zone B is available.
Sens C	Adjusts zone C sensitivity of the pad. The default value is 0. * Only for the inputs zone C is available.
Threshold	Adjusts threshold of the pad. Only when the trigger signal coming from the pad exceeds this level, the trigger is acquired. The default value is 0.
Head-Rim Border	Determines border between the head-shot and the rim-shot. When the rim-shot sound can be heard even though the head is struck, set it toward H. The default value is CTR. * Only for snare and tom inputs.
Curve	Adjusts the sensitivity of the pad in mf (middle) strike strength. The default value is 0.

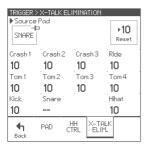
HH CTRL



Parameters for HH pedal

HH Pedal	Selects the HH pedal model
Foot Close Sens	Adjusts sensitivity of the foot-close and foot- splash of the hi-hat pedal. The default value is 0.
Closed HH Tightness	Adjusts the closed hi-hat sound tightness at the closed pedal position. When set toward +, tight closed hi-hat is sounded even if the pedal is pressed lightly. The default value is 0.

X-TALK ELIM.



With this settings, you can cancel cross-talk which means that when you hit a pad, you also hear sounds coming from other pads, due to the vibration travel. This phenomenon can often happen when the two pads are mounted on the same stand.

Parameters for each pad

Source Pad	Selects the source pad of the vibration			
Other pads	Example: In case that you hear a Tom 3 sound when you strike the snare pad, select the snare as source pad, and increase the value of the Tom 3 until the Tom 3 no longer sounds. * Note not to set too high value.			
Reset	Resets values for all pads.			

■ Settings Settings

OPTION



These parameters configure the system general settings.

Parameters

LCD	Contrast Backlight	Adjusts the display contrast The LCD contrast is adjusted automatically depending on the surrounding temperature. Adjusts display back light brightness
	Trigger	On: The indicator displays strike force.
Linear Indicator	Tempo	Blink / Scan: When the click is on, the indicator displays the beat.
Audio Level	Line Out	The line out level can be configured as fixed level or variable level. OdB: Maximum level -6dB: Applies a 6dB attenuator -12dB: Applies a 12dB attenuator Link: Line out level is linked to the phones level setting
	USB Out	Adjusts USB audio output level for all channels OdB: Normal level +6dB: Boosts 6dB
MIDI	Ch	Configures the MIDI channel for send/receive • Multi: Configures separate MIDI channels for each pad. See the "Multi MIDI channel" table.
	Local	This should be ON normally. When Off, internal connection between the pad and the sound generator is inactivated.
Power Save		Power save function will turn power off automatically after specified period has passed since it was last played or operated. You can specify this period of time, or disable it. 30 min / 4 Hrs: Enables the power save Off: Disable the power save
Info		Displays the firmware version information

* About the USB connection, see p. 27.

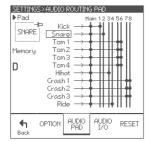
Multi MIDI channel

* Each channel setting is not changeable.

Ch
1
2
3
4
5
6

Pad	Ch
HH	7
Crash 1	8
Crash 2	9
Crash 3	10
Ride	11

AUDIO PAD



In this screen, you can configure the audio output routings for each pad.

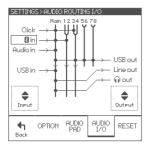
The sound module has a stereo main bus, and 8 channel buses.

The sounds from all pads always send to the main bus. Bus 1 to 4 are used for both analog and USB output. Bus 5 to 8 are used for USB output only.

Parameters

Pad Selects edit target pad			
Mamari	The sound module keeps 4 different settings in the memory A/B/C/D. Changes are stored automatically to the memory currently selected.		

AUDIO I/O



In this screen, you can specify the audio in/out routings.

All inputs always send to the main bus.

	Click	Selects the click sound destination					
Input	Bluetooth	Selects the Bluetooth audio destination					
	Audio in	Selects the Audio in signal destination					
	USB in	Selects the USB audio in signal destination					
	USB out	Selects source bus for channel 1/2 of the USB audio out					
	Line out	Selects the line out signal source: Main or bus 1/2					
Output		Selects the phones out signal source: Main or bus 3/4					
	Phones out	* When using the phones out as line level output, set the phones volume to 60%. Clipping may occur when exceeding 67%.					

^{*} About the USB connection, see p. 27.

RESET



In this section, you can delete, initialize, or reset data and settings in specified area.

CAUTION With the reset operation, you will permanently lose the edited data or settings in the specified area

Parameters

Reset All Kits	Deletes all kit data and all set lists, and then restores preset kits.			
Reset Inst Lib	Deletes all instruments in the Inst library.			
Reset Trigger	Initializes all trigger settings to the factory settings.			
Reset Audio	Resets all audio routings and memories.			
Reset System	Resets all system parameters.			
Reset ALL	Deletes all data and resets all settings in the sound module, and then restores to the factory state.			
Touch Calib	Shows the touch screen calibration			
Demo	This should be OFF, normally. CAUTION If ON, all data and settings are deleted/initialized automatically every time you turn this sound module on.			

TOUCH SCREEN CALIBRATION

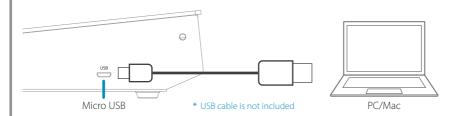




In case that you can't tap any button on the screen correctly, this calibration can adjust the touch screen.

- 1 Touch each point indicated on the screen step by step.
- * Using a headphones' mini plug to touch is one idea on how to do this.
- * Do not touch with your finger for the calibration.
- * Be sure not to press too hard.
- 2 Touch the screen and confirm if the calibration is correct.
- 3 Tap the OK to finish.

Connecting to a PC/Mac



Supported function:

- USB Audio (8-channel Output / 2-channel Input)
- USB MIDI In/Out

Supported OS:

- · Windows 10
- Mac OS 10.13 (High Sierra), 10.14 (Mojave), 10.15 (Catalina)

Note for the Windows PC:

The ASIO driver installation is needed for the high quality USB audio streaming with 8 channel audio output. Without the driver installation, the EFNOTE 3/5 supports 2-in/2-out USB audio by the WDM

The ASIO driver is available on the website (p. 3).

- * The ASIO driver can be used for the EFNOTE 3/5 series.
- * About the USB connection to a computer, the operation is not guaranteed for all environments. Some computers may not be fully compatible.
- * About the operation of computers or application softwares, please refer to their manuals.

Specifications

Trigger Interface

Innu	Input Kicl		Snare	Tom				Hi-Hat	Ride	Crash		
Шри				1	2	3	4	пі-пас	niue	1	2	3
	Head/Bow	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Rim	-	✓	✓	✓	✓	✓	-	-	-	-	-
Supported Zone	Side-Rim	-	√ *1	-	-	-	-	-	-	-	-	-
20.110	Edge	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Cup	-	-	-	-	-	-	-	√ *2	√ *3	√ *4	-

- * 1: Uses the Side-Rim cable.
- * 2: Uses the Ride Cup cable.
- * 3: Uses the Tom 4 cable. The Tom 4 input can be assigned as Tom 4 or Crash 1 Cup.
- * 4: Uses the Crash 3 cable. The Crash 3 input can be assigned as Crash 3 or Crash 2 Cup.

Audio / MIDI Interface

Addio / Millimeriace							
 Line (1/2) Output: 2x TS Phone (+4dBu, Unbalanced) Phones (3/4) Output: Stereo Mini-Phone (320 mW + 320 mW @32Ω) Audio Input: Stereo Mini-Phone (+2dBu Max) USB Audio: 8-ch Output / 2-ch Input (Mac/Windows ASIO, USB 2.0 Hi-Speed) Bluetooth Audio Input (A2DP) 		 Phones (3/4) Output: Stereo Mini-Phone (320 mW + 320 mW @32Ω) Audio Input: Stereo Mini-Phone (+2dBu Max) USB Audio: 8-ch Output / 2-ch Input (Mac/Windows ASIO, USB 2.0 Hi-Speed) 					
MIDI		USB MIDI In/Out Bluetooth MIDI In/Out (Bluetooth Low Energy/GATT) MIDI Out: 5-pin DIN					

Others

Recorder	Resolution: 480 TPQN Tracks: 5 (EFNOTE 3) / 15 (EFNOTE 5) Capacity: Approx. 8,000 Events/Track
Drum Kit	50 (EFNOTE 3) 100 (EFNOTE 5) * Including the preset drum kit
User Inst Library	• 50 (EFNOTE 3) • 128 (EFNOTE 5)
Set List	9 lists 20 slots/list

^{*} Specification and design are subject to change without prior notice.

E F N O T E

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