CMC series
USB CONTROLLER

CH CHANNEL CONTROLLER

FD FADER CONTROLLER

TP TRANSPORT CONTROLLER

PD PAD CONTROLLER

QC QUICK CONTROLLER

AI AI CONTROLLER

EN

steinberg

Contents

Welcome

A message from the CMC series development team

Thank you for choosing a Steinberg CMC series controller. We are delighted to be able to offer a series of six small controllers that have been specifically designed to provide intuitive control of Cubase and Nuendo DAW systems.

DAW software can be controlled the computer's mouse and keyboard, so what are the benefits of using a hardware controller? One advantage is the ability to view parameters being edited on a separate screen while monitoring the overall flow of the project on the computer display. Another is simultaneous access to multiple parameters. Although only one parameter can be controlled at a time using a mouse, a well-designed hardware controller frees you from that limitation, providing direct access to multiple fader levels as well as EQ, effect, and other parameters at the same time. Hardware controllers can provide a more human, more musical way of working, and that is precisely what we wanted to offer our users. Compact production systems are usually based around a single computer, and most users prefer to have all controls right under their fingers at all times. In creating the CMC controllers it was our goal to provide the most useful control functions in the most intuitive arrangement possible.

Modern DAW software provides an extensive, complex set of functions in order to accommodate the widest possible range of production methods. Depending on the user's individual working style, some of the provided features will be used frequently while many others may not be used at all. Based on our experience with a large number of controllers, plus careful analysis of feedback from users, we set out to design the most versatile, useful controller for this type of situation. The result was a controller that allows the user to assign and easily access functions he or she needs. We also went to great lengths to achieve just the right configuration and visual appearance for efficient, enjoyable Cubase control … right down to the glow of the buttons and knobs. Select the controller or combination of controllers that best suits your needs from the six models in the lineup.

The development team has put every ounce of our combined know-how and experience into the CMC series controllers, in the hope that we can provide valuable support for the creative process and the birth of new music. We hope that you will push these products to their limits in order to fully realize your creative vision.

The Steinberg Hardware Development Team

About Manuals

Contents

Read me first (printed)

This is included with the package. Please read through this manual carefully to ensure safe use before initially using the product. Please also confirm the contact information and included all package contents.

Operation Manual (PDF; this document)

Please read through this manual for instructions on installing the software and how to use the features of the product.

Conventions

What is "CMC series"?

The phrase "CMC series" in this manual applies to all models (CMC-CH/ CMC-FD/ CMC-TP/ CMC-PD/ CMC-QC/ CMC-AI).

What is "Cubase"?

The phrase "Cubase" in this manual applies to all Cubase programs and versions (except Cubase LE).

Windows and Mac

When the procedures or explanations are specific to only one of the platforms, Windows or Mac, this is properly indicated in the manual. When there are no platform indications, procedures or explanations are for both Windows and Mac.

What does "Click" mean?

The phrase "click" in this manual applies to the mouse action by left clicking (Windows) or clicking (Mac).

Procedures

The indication "→" appears on some procedures in the manual. For example, the string [Start] → [Control Panel] → [Programs and Features] indicates that you should perform the procedures in the following order.

1. **Click the [Start] menu.**
2. **Select the [Control Panel].**
3. **Double click the [Programs and Features] folder.**

Keyboard Shortcuts

[Windows modifier key]/[Mac modifier key] + [key] shows the shortcut keys. For example, [Ctrl]/[command] + [Z] means "press [Ctrl] under Windows or [command] under Mac, then press [Z]."

Screens

This manual predominantly uses screenshots of Windows.

About the accessory disk

TOOLS for CMC CD-ROM contains the following software (with driver).

TOOLS for CMC

TOOLS for CMC is necessary when connecting the device to a computer. Please install the contents before using the device(s). The following two software components are installed.

- **Yamaha USB-MIDI Driver**

  This software allows communication between the device and a computer.

- **Steinberg CMC Applications**

  The software consists of the following three software components.

  - **Steinberg CMC Extension**

    This software allows you to link the device with Cubase.

  - **Steinberg CMC-PD Editor**
  - **Steinberg CMC-QC Editor**

    This software allows you to edit various settings of CMC-PD/ CMC-QC on a connected computer.

NOTE
- For installation instructions, refer to "Installing TOOLS for CMC" on page 5.
- For the latest information on the software contained in the accessory disk, please see the Steinberg web site below. Future upgrades of application and system software and any changes in specifications are announced separately on the web site. http://www.steinberg.net
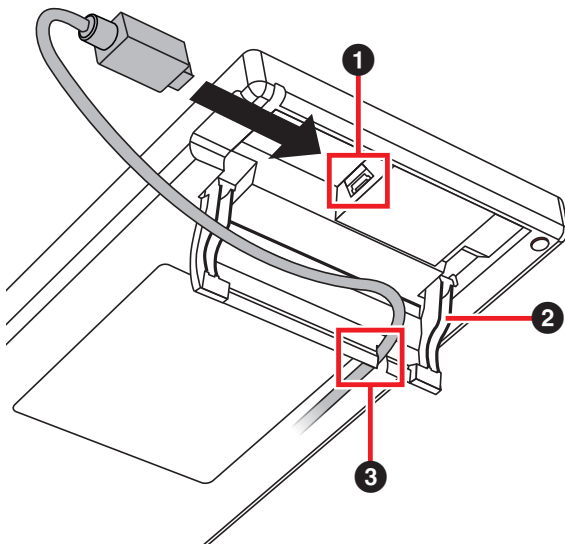
Operation Manual

(This document)

Before using the CMC series

Connection of multiple CMC series devices

This section explains how to connect the device(s) to a computer. See also "Setting up the device and Cubase" on page 6.

Controls and Functions (for all models)

❶ USB TO HOST terminal

This is a USB access point. Connect the device to a computer using a USB cable.

NOTICE

Be sure to observe the following points when connecting to the computer's USB interface. Failure to do so can cause the device and/or the computer to hang up (freeze), possibly causing corruption or loss of data. If the device or computer does hang up, restart the application or computer.

- Be sure to disable the sleep/suspended/standby mode of the computer before making a connection to the computer's USB connector.
- Quit all applications running on the computer before connecting or disconnecting the USB cable.
- Wait at least six seconds between connecting or disconnecting the USB cable.

NOTE
- Make sure to use an A-miniB type USB cable, preferably less than three meters in length and three millimeters in diameter.
- Power to the CMC series is supplied only from a computer via a USB cable.

❷ Stand

This allows you to set the device on a slant.

NOTICE

Make sure that the stand is locked in place before using. Avoid applying excessive force.

❸ Guide

This is a groove for passing the USB cable through.

Connecting multiple devices

Each model of the CMC series (except the CMC-FD) can be singly connected to one computer. The CMC-FD on the other hand, lets you connect up to four devices, allowing a total of up to nine devices.

NOTE
- Connect devices to a computer using one of the methods below:
  - Directly connect to the USB port of the computer.
  - Use a USB hub that derives its power from an external power supply unit. For details, see the following web site.
    http://www.steinberg.net
- When using CMC series devices, be sure to disable the sleep/suspended/standby mode of the computer. When the computer returns from the power-saving function, it may not be able to recognize the device.

Two devices can be connected by use of the joint plate included in the package, and can be placed horizontally. Instructions on installing the joint plate are described below.

1. **Insert the hooks of the joint plate properly into the device.**
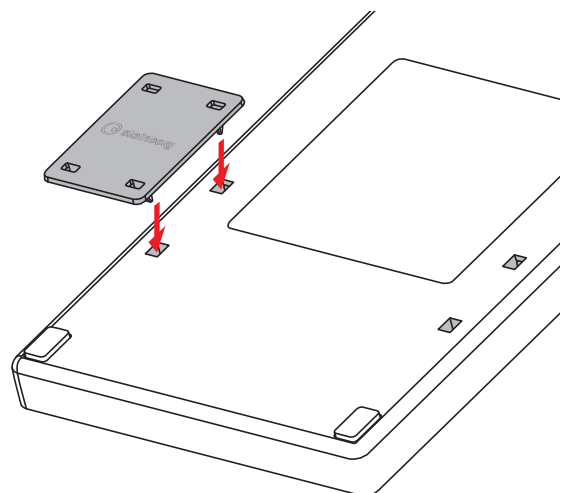
2. **Put the device as assembled above on a level place such as desk, and place the other device that you want to connect on the top of the installed joint plate.**

NOTE
- To detach the joint plate, perform the opposite procedure.
- Make sure to detach the joint plate when holding or moving the devices.

Installing TOOLS for CMC

NOTE
You are only permitted to use this software pursuant to the terms and conditions of the "License Agreement" shown during the installation.
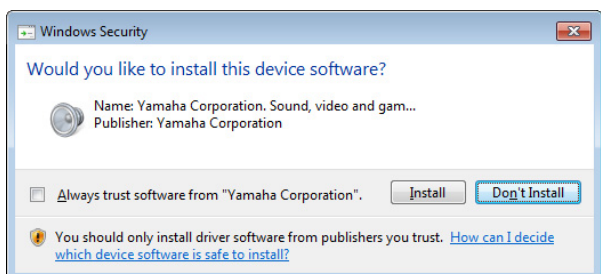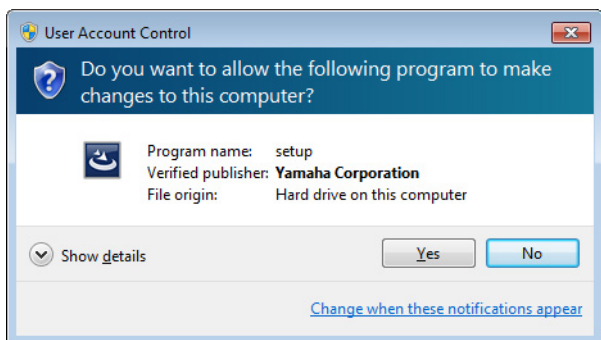
Windows

Before installing

If the following warning messages appear during the installation, click [Continue Anyway], [Yes], or [Install].

Example warning messages on Windows XP

Example warning messages on Windows Vista/Windows 7

Installation

1. **Start the computer and log on to the Administrator account.**

2. **Connect the device to the computer by using the included USB cable.**
   The device's built-in READY LED lights as soon as the device is connected to the computer.

   Windows XP:
   If the "Found New Hardware Wizard" appears, click [CANCEL].

   Windows Vista/ Windows 7:
   If a message such as "Device Driver Software was not successfully installed" appears, click [Close].

3. **Insert the TOOLS for CMC CD-ROM into the CD-ROM driver.**

4. **Open the CD-ROM then double-click the file "setup.exe."**

5. **Follow the on-screen instructions to install the software.**
   Install the following software in order.
   • Yamaha USB-MIDI Driver
   • Steinberg CMC Applications

6. **When installation has been completed, click [Finish].**
   If a window requiring you to restart your computer appears, follow the on-screen instructions and restart the computer.

Mac

Installation

1. **Start the computer and log on to the Administrator account.**

2. **Connect the device to the computer by using the included USB cable.**
   The device's built-in READY LED lights as soon as the device is connected to the computer.

3. **Insert the TOOLS for CMC CD-ROM into the CD-ROM driver.**

4. **Open the CD-ROM then double-click the file "TOOLS for CMC.mpkg."**

5. **Follow the on-screen instructions to install the software.**

6. **When installation has been completed, click [Close].**

Setting up the device and Cubase

The procedures are described below.

1. **Exit Cubase if it has been started.**

   Cubase cannot recognize the device if you connect the device to a computer after starting Cubase. Make sure to connect the device before starting Cubase.

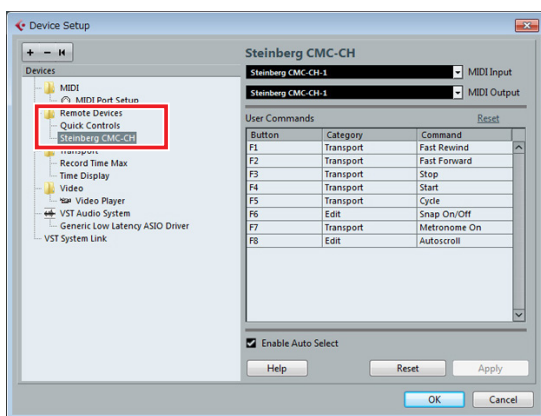2. **Connect the device to the computer with a USB cable.**

   The device's built-in READY LED lights.

3. **Start Cubase.**

4. **Open the Cubase Device Setup window (called up via [Device Setup…] under the [Devices] menu).**

   When the device's name connected to the computer appears under the [Remote Devices] folder in the [Device] column, Cubase has recognized the device. (Refer to Fig. 1)

   Fig. 1

How to operate the device and editor

The operation names and the methods which are used for the device(s) and editor(s) are explained below.
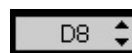
Device

Operation	Method
Slide	Slide your finger on the touch controller.
Tap	Tap your finger on the touch controller.
Pinch out	Put two fingers on the touch controller, and move them away from each other.
Pinch in	Put two fingers on the touch controller, and move them closer together.

Editor

Operation	Method
Mouse wheel	Locate the mouse pointer in the edit box, and rotate the mouse wheel.
Computer keyboard cursor key	Operate the ↑↓ keys on the computer keyboard after selecting the edit box.
Direct input	Input the value by using the numeric keypad after selecting the edit box, then enter it by pressing the [Enter] key.
▲/▼ click	Click ▲/▼ on the edit box.
Virtual keyboard	Click the keyboard displayed in the CMC-PD Editor window.

NOTE

The edit box applies to the components in the editor window (as shown below).

CMC-CH

The CMC-CH allows you to intuitively control parameters of the selected channel on Cubase.
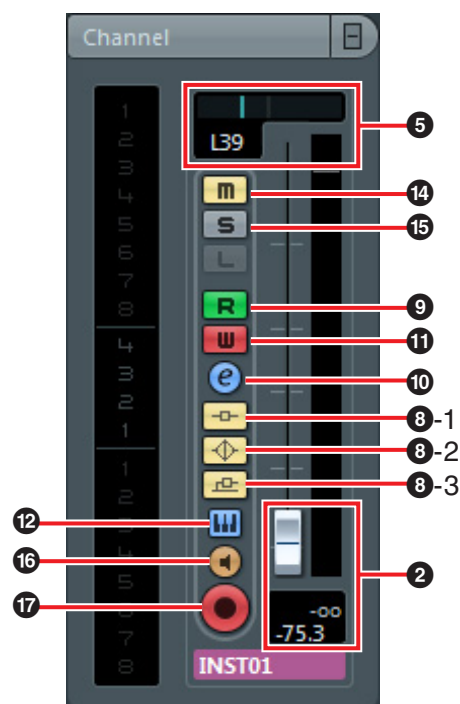
Controls and Functions

NOTE

As soon as the device is connected to the computer, the fader's built-in LEDs light, and the lights move up and down repeatedly a few times. The fader is then ready for use.

If you touch the fader during this start-up, the fader may not work properly. In this case, reconnect the device to the computer.
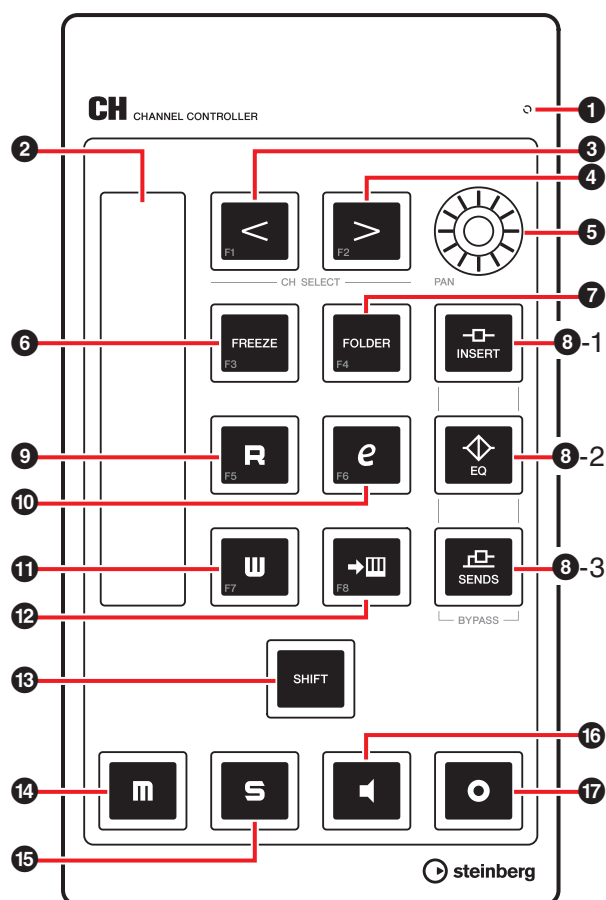
Correspondence between the CMC-CH and Cubase

❶ READY LED

Lights when connected to a computer.

❷ Fader (Touch controller)

Adjusts the level (by slide operation). The fader value lights.

Two fader operation modes are available: Catch and Jump.

• **Catch**

This allows you to control the parameter value only when your finger reaches the position of the fader value.

• **Jump**

This changes the parameter value as soon as the fader is operated, to the new value where your finger touches.

This device is always started in the Catch mode. For instructions on switching between the above operation modes, see "SHIFT functions of each control" on page 8.

The fader resolution is 128 steps. (Audio channel: ∞ to +6dB, MIDI channel: off to 127)
Holding down [SHIFT] while operating the fader improves the resolution to 1024 steps, and lets you adjust detailed parameters. At this time, the fader range is 64 steps in normal editing.

❸ [<] [CH SELECT <] ❹ [>] [CH SELECT >] (Channel Select button)

Shifts the selected channel forward/ back one level.

❺ ⬡ **[PAN] (Pan)**

Adjusts the stereo pan position of the sound.
LED brightness varies according to the setting value.
The farther from the center the stereo pan position is, the brighter the LED. The nearer to the center the stereo pan position is, the darker the LED. When set to the center, the LED is not lit.

❻ [FREEZE] **[FREEZE] (Freeze button)**

Press this to call up the "Freeze Channel Options" dialog.
Hold down this to execute the freeze function. This is the same operation when you call up the "Freeze Channel Options" dialog and click [OK].
This is available only for a Cubase version equipped with the freeze function.

❼ [FOLDER] **[FOLDER] (Folder button)**

When selecting a folder track, this opens or closes the folder. When selecting a track which has automation, this opens or closes the automation folder.

❽-1 [INSERT] **[INSERT] (Inserts Bypass button)**

Turns Inserts Bypass on or off.

❽-2 [EQ] **[EQ] (EQ Bypass button)**

Turns EQ Bypass on or off.

❽-3 [SENDS] **[SENDS] (Sends Bypass button)**

Turns Sends Bypass on or off.

❾ [R] **[R] (Read Automation button)**

Turns Read Automation on or off.

❿ [e] **[e] (Edit Channel Setting button)**

Opens or closes the Edit Channel Setting window of the selected channel.

⓫ [W] **[W] (Write Automation button)**

Turns Write Automation on or off.

⓬ **(Edit Instrument button)**

Opens or closes the Edit window of the VST instrument.

⓭ [SHIFT] **[SHIFT] (Shift button)**

When you operate an optional control while holding down this button, an extra function that the control provides (referred to as SHIFT function) is executed. For details on the SHIFT functions for each control, refer to the section "SHIFT functions of each control."

⓮ [m] **[M] (Mute button)**

Turns mute on or off.

⓯ [s] **[S] (Solo button)**

Turns solo on or off.

⓰ **(Monitor button)**

Turns the input monitoring of the selected Audio Channel on or off.

⓱ [o] **(Record Enable button)**

Specifies the behavior of the selected Audio Channel when recording is started. Alternately enables and disables recording of the selected track.

NOTE
- Each control lights while the function is performed. [<], [>], [FOLDER] and [SHIFT] light only while pressing the buttons.
- Refer to "How to operate the device and editor" on page 6 for instructions on using the fader.
- Be sure to operate the fader with bare hands. The fader will not work properly if operated with gloved hands.

SHIFT functions of each control

Controls	SHIFT functions
Fader	With slide operation, this allows finer adjustment of the level.
[CH SELECT <]	Executes the user command F1.
[CH SELECT >]	Executes the user command F2.
[PAN]	Allows finer adjustment of the stereo pan position of the sound.
[FREEZE]	Executes the user command F3.
[FOLDER]	Executes the user command F4.
[R]	Executes the user command F5.
[e]	Executes the user command F6.
[W]	Executes the user command F7.
▸▦	Executes the user command F8.
[M]	Cancels the mute of all channels.
[S]	Cancels the solo of all channels.
◀	Switches the fader operation mode between Catch and Jump.

User Commands

You can assign a desired command from among "Key Commands" of Cubase ([Key Commands…] under the [File] menu) to each button.
The initial settings of CMC-CH's user commands are the following.

Button	Category	Command
F1	Transport	Fast Rewind
F2	Transport	Fast Forward
F3	Transport	Stop
F4	Transport	Start
F5	Transport	Cycle
F6	Edit	Snap On/ Off
F7	Transport	Metronome On
F8	Edit	Autoscroll

NOTE

For instructions on editing the user commands, refer to "Editing User Commands" on page 35.
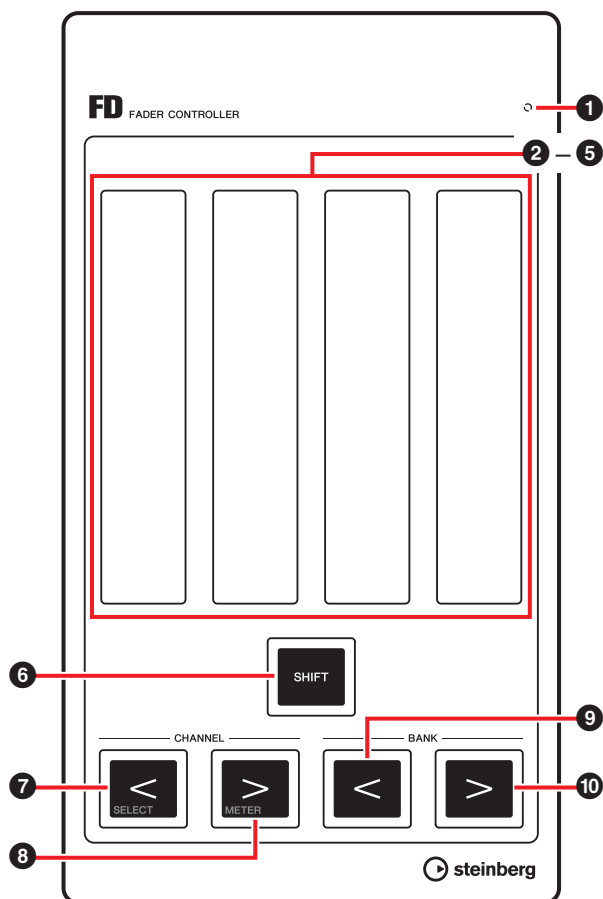
CMC-FD

The CMC-FD allows you to control the four channels' level faders in the Mixer window of Cubase with each device, and to control the level faders of up to sixteen channels when a maximum of four CMC-FDs are connected. You can also use it as level meter.

Controls and Functions

NOTE
As soon as the device is connected to the computer, each fader's built-in LEDs light, and the lights move up and down repeatedly a few times. The faders are then ready for use.
If you touch any fader during this start-up, the faders may not work properly. In this case, reconnect the device to the computer.

Correspondence between the CMC-FD and Cubase
Fig. 2

Channel bank
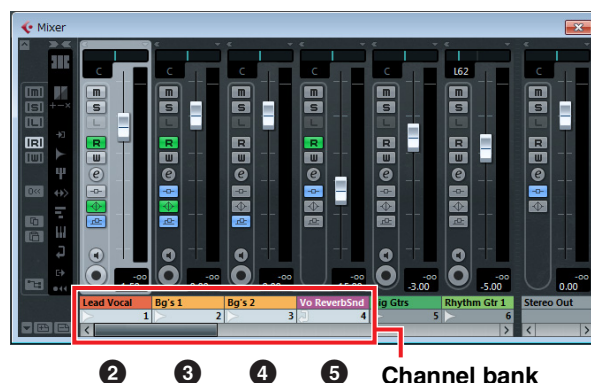
❶ READY LED
Lights when connected to a computer.

❷ – ❺ Fader (Touch controller)
The level faders in the mixer of Cubase are assigned to each fader.
A group of channels, up to four channels per device, can be specified in the Mixer of Cubase. This is called a "Channel Bank". (Refer to Fig. 2) Starting from the left, level faders of the channel bank are assigned to ❷ – ❺ automatically.

These let you adjust the levels of the selected channels (by slide operation). The current setting value lights.

Two fader operation modes are available: Catch and Jump.

- **Catch**
  This allows you to control the parameter value only when your finger reaches the position of the fader value.

- **Jump**
  This changes the parameter value as soon as the fader is operated, to the new value where your finger touches.

This device is always started in the Catch mode. For instructions on switching between the above operation modes, see "SHIFT functions of each control" on page 11.

The fader resolution is 128 steps. (Audio channel: ∞ to +6dB, MIDI channel: off to 127)
Holding down [SHIFT] while operating the fader improves the resolution to 1024 steps, and lets you adjust detailed parameters. At this time, the fader range is 64 steps in normal editing.

For details when connecting multiple CMC-FDs, see page 12.

❻ SHIFT **[SHIFT] (Shift button)**

When you operate an optional control while holding down this button, an extra function that the control provides (referred to as SHIFT function) is executed. For details on the SHIFT functions for each control, refer to the section "SHIFT functions of each control."

❼ < SELECT **[CHANNEL <] ❽** > METER **[CHANNEL >] (Channel button)**

Shifts the channel bank toward the right and left by one channel.

❾ < **[BANK <] ❿** > **[BANK >] (Bank button)**

Shifts the channel bank toward the right and left by the bank size (four channels per device).

NOTE
- Refer to "How to operate the device and editor" on page 6 for instructions on using the fader.
- Be sure to operate the faders with bare hands. The faders will not work properly if operated with gloved hands.

SHIFT functions of each control

Controls	SHIFT functions
Fader	With slide operation, this allows finer adjustment of the level of selected channel. With tap operation above the middle point, this turns Mute on or off. Both ends (the upper and lower sides) of the fader light during Mute. With tap operation below the middle point, this turns Solo on or off. The fader value flashes during Solo.
[CHANNEL <]	Moves the channel bank to the channel selected on Cubase. The selected channel is assigned to ❷, and the next channels of the selected channel are assigned to ❸ – ❺. (Refer to Fig. 3) When the selected channel stays in on the extreme right of Mixer, the selected channel is assigned to ❺, and the channels in front of the selected channel are assigned to ❷ – ❹. (Refer to Fig. 4)
[CHANNEL >]	Switches between the fader function and the level meter function. While in the level meter function, level information of an assigned channel appears on the fader in real time. Fader position of the corresponding channel appears for a certain period, if you operate the fader while it functions as a level meter.

Controls	SHIFT functions
[BANK <]	Switches the fader operation mode between Catch and Jump.

Moving the channel bank to the selected channel

Fig. 3

Selected channel

❷ ❸ ❹ ❺ Channel bank
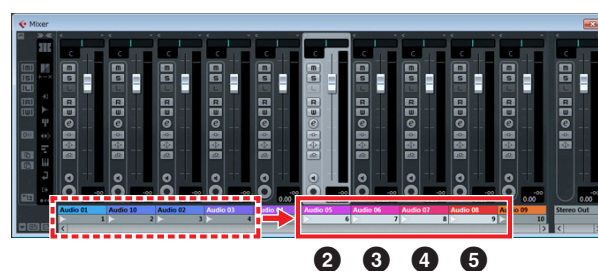
❷ ❸ ❹ ❺
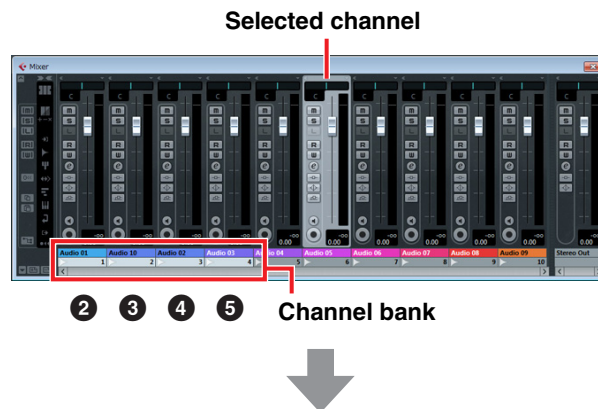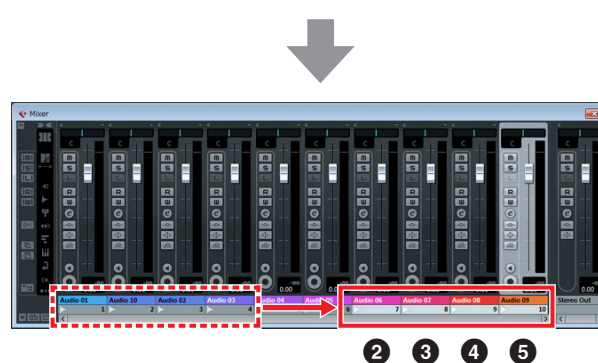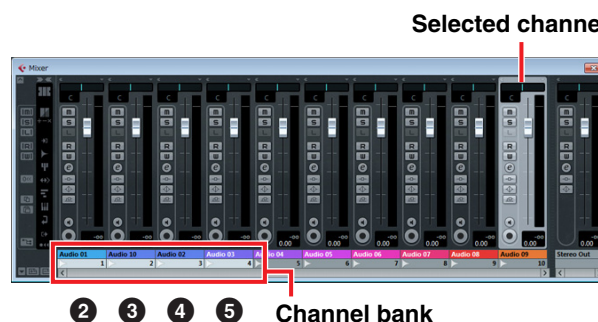
Fig. 4

Selected channel

❷ ❸ ❹ ❺ Channel bank

❷ ❸ ❹ ❺

Connection of multiple CMC-FDs

You can connect up to four CMC-FDs to control sixteen faders simultaneously. Assignment of the channel bank to the device is performed automatically.

Each device is recognized individually in Cubase. You can confirm the channel bank corresponding to each device in the Mixer window of Cubase.

Control the device's faders to confirm which ones correspond to the faders in the Mixer window. The sequences of the channel bank are retained in Cubase. You can control the channel bank with the channel button/bank button of each device. (Refer to Fig. 5 and Fig. 6)

Turning the level meter on and off works with all of the connected devices. The setting of SHIFT function is independent of each device.

NOTE
- When using multiple devices all together for the first time, match the order of channel bank and corresponding devices before using.
- Refer also to "Connection of multiple CMC series devices" on page 4.

Moving channel banks when multiple devices are connected

(If two devices are being connected.)
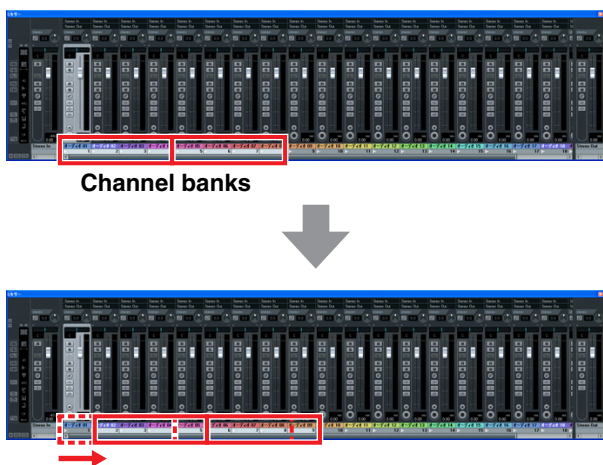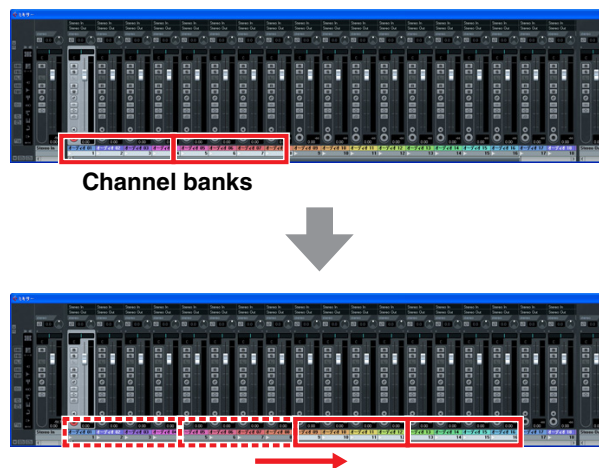
Fig. 5 Using [CHANNEL <]/[CHANNEL >]

Channel banks

Fig. 6 Using [BANK <]/[BANK >]

Channel banks

CMC-TP

The CMC-TP allows you to control the transport functions of Cubase.

## Controls and Functions

NOTE

As soon as the device is connected to the computer, the slider's built-in LEDs light, and the lights move from side to side repeatedly a few times. The slider is then ready for use.
If you touch the slider during this start-up, the slider may not work properly. In this case, reconnect the device to the computer.
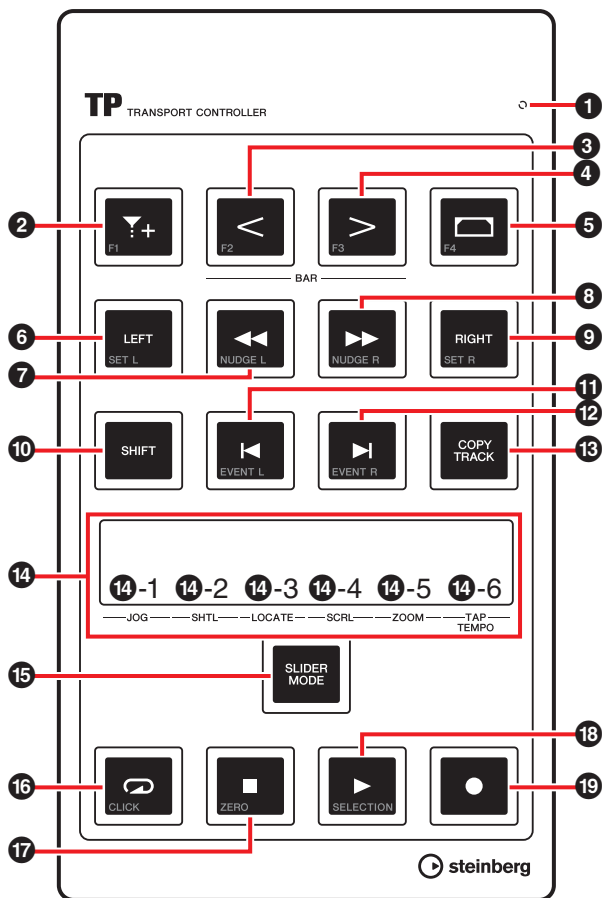
Correspondence between the CMC-TP and Cubase
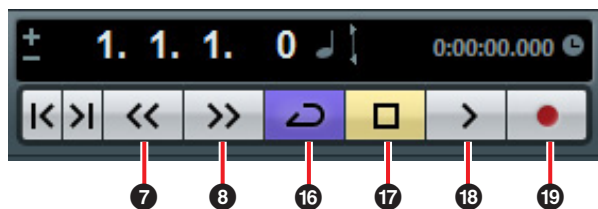
❶ READY LED

Lights when connected to a computer.

❷ ▼+ (Insert Marker button)

Inserts a marker at the project cursor position.

❸ < [BAR <] ❹ > [BAR >] (Step Bar button)

Moves the project cursor backward and forward by one bar. Holding down this button continuously repeats the same operation.

❺ ▭ (Set Locators Range button)

When selecting an event in the event display, this sets the right and left locators to the width of the event. When selecting any width in the event display, this sets the right and left locators to the selected width.

❻ LEFT SET L [LEFT] (Locator Left button)

Moves the project cursor to the left locator position.

❼ ◀◀ NUDGE L [◀◀] (Rewind button)

Rewinds the project.

❽ ▶▶ NUDGE R [▶▶] (Forward button)

Forwards the project.

❾ RIGHT SET R [RIGHT] (Locator Right button)

Moves the project cursor to the right locator position.

❿ SHIFT [SHIFT] (Shift button)

When you operate an optional control while holding down this button, an extra function that the control provides (referred to as SHIFT function) is executed. For details on the SHIFT functions for each control, refer to the section "SHIFT functions of each control."

⓫ ◀| EVENT L [◀|] ⓬ |▶ EVENT R [|▶] (Step Marker button)

Moves the project cursor to the previous/next marker. Holding down this button continuously repeats the same operation.

⓭ COPY TRACK [COPY TRACK] (Copy Track button)

When a track is selected, this copies the same track immediately beneath the original.
When no track exists (none has been created) in the project, this creates a new mono Audio Track.

⓮ Slider (touch controller)

Executes one of the six functions (Jog, Shuttle, Locate, Scroll, Zoom and Tap Tempo). You can select the function by using [SLIDER MODE] (below).
Pinch in/out operations allow you to horizontally zoom in/out the display range within the event display (except for tap tempo). Other operations of each function are as follows.

NOTE

- The slider resolution is 128 steps. Holding down [SHIFT] while operating the slider doubles the resolution as fine as in normal editing, and lets you adjust detailed parameters. (Except for the Tap Tempo)
- The device maintains the selective state of the function used last.
- Refer to "How to operate the device and editor" on page 6 for instructions on how to use the fader.
- Be sure to operate the slider with bare hands. The slider will not work properly if operated with gloved hands.

⓮-1 [JOG] (Jog)

Controls the jog wheel (by slide operation). The faster you move along the slider with your finger, the faster the rotating speed of jog wheel on the transport panel of Cubase. The jog wheel state will appear in the slider. The initial setting of the CMC-TP is this mode.

⓮-2 [SHTL] (Shuttle)

Controls the shuttle speed (by slide operation). The state of the shuttle wheel on the transport panel of Cubase appears in the slider.

⓮-3 [LOCATE] (Locate)

Moves the project cursor (by slide operation). The state of the project time position slider on the transport panel of Cubase appears in the slider.

⓮-4 [SCRL] (Scroll)

Scrolls the display position in the event display (by slide operation). The current display position in the entire length of event display appears in the slider.

⓮-5 [ZOOM] (Zoom)

This horizontally zooms in/out the display range within the event (by slide operation). The current display width in the entire length of event display appears in the slider.

⓮-6 [TAP TEMPO] (Tap Tempo)

Allows you to set the tempo by tapping.

Correspondence between the slider and Cubase
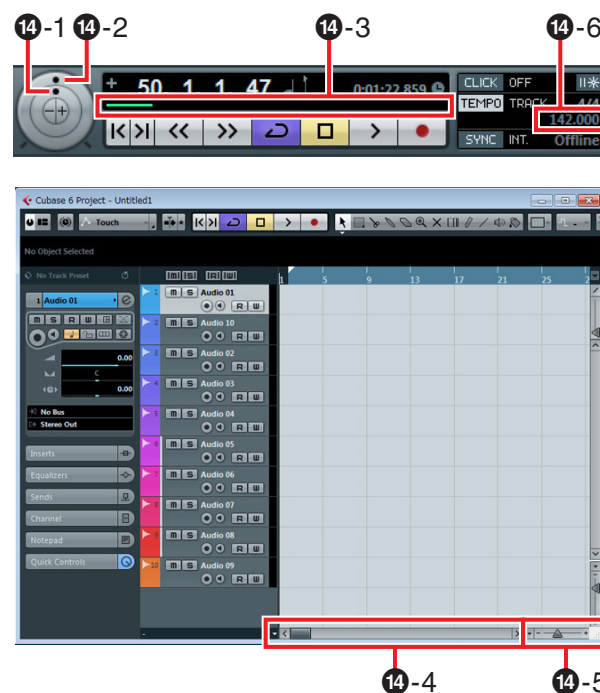
⓯ [SLIDER MODE] (Slider Mode button)

Selects the functions of the slider. When this is pressed, the position of the function currently assigned will blink in the slider. For example, when JOG is selected, the [JOG] position of the slider will flash. Instructions on assigning the function are described below.

1. **While holding down [SLIDER MODE], tap on the slider position corresponding to the desired function.**
The position tapped will flash.

2. **Release [SLIDER MODE].**
The function selected in step 1 will operate.

⓰ (Cycle button)

Turns the Cycle Mode on or off, and lights when on.

⓱ [■] (Stop button)

Stops the project playback, and lights when stopped.

⓲ [▶] (Start button)

Plays back the project, and lights during playback.

⓳ [●] (Record button)

Records to the channel(s) for which the Record Enable button on the Cubase track is turned on. Lights while recording.

SHIFT functions of each control

Controls	SHIFT functions
[F1+]	Executes the user command F1.
[BAR <]	Executes the user command F2.
[BAR >]	Executes the user command F3.
[F4]	Executes the user command F4.
[LEFT]	Sets the left locator position to the current project cursor position.
[◄◄][►►]	Shifts the project cursor backward and forward in single frame. Holding down this button continuously repeats the same operation.
[RIGHT]	Sets the right locator position to the current project cursor position.
[◄◄][►►]	Moves the project cursor to the previous/ next event.
Slider	See "SHIFT functions of the slider" below.
[CLICK]	Turns the metronome (click) of the transport on or off.
[■]	Executes the command "Return to Zero."
[►]	Plays back an event selected in the event display.

SHIFT functions of the slider

The SHIFT functions provided for the slider are as follows. All functions are performed by slide operation.

Functions	SHIFT functions
Jog	Finely adjusts the jog wheel.
Shuttle	Finely adjusts the shuttle speed.
Locate	Finely adjusts the project cursor's position.
Scroll	Finely adjusts the display position in the event display.
Zoom	Finely adjusts zoom percentage of the display range within the event display.
Tap Tempo	Adjusts the level of metronome (click).

User Commands

You can assign a desired command from among "Key Commands" of Cubase ([Key Commands…] under the [File] menu) to each button.
The initial settings of the CMC-TP's user commands are as follows.

Button	Category	Command
F1	Edit	Snap On/ Off
F2	Edit	Autoscroll
F3	Transport	Precount On
F4	Transport	Loop Selection

NOTE
For instructions on editing the user commands, refer to "Editing User Commands" on page 35.

CMC-PD

The CMC-PD is best suited for creating MIDI data of drum and/or percussion instruments. You can use the pads as shortcut keys by assigning various Cubase functions for control by each pad.

CMC-PD has the following two modes for use in drum and/or percussion instrument playing.

Normal Mode

This lets you use all pads individually and use the device as a general MIDI input pad.

4Velocity Mode

This lets you assign four levels of velocities to any desired four MIDI notes. For example, when creating MIDI data for kick, snare, hi-hat and ride cymbal, you can input MIDI notes with different velocities efficiently by assigning different velocity values (for example: 120, 90, 70 and 50) to a vertical column of four pads for each MIDI note. This is convenient when using Drum Kits of a tone generator that allows the voice to vary according to the velocity.

There is another function, called Browse Operation, which is unrelated to above-mentioned modes.

NOTICE

The stand may break when striking the pads strongly. Close the stand in such situations.

Controls and Functions
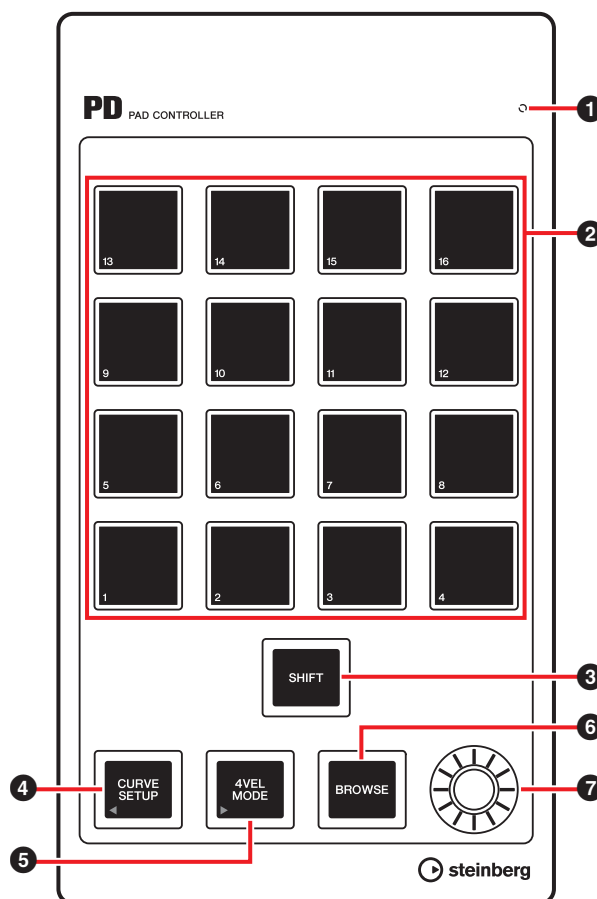
❶ READY LED

Lights when connected to a computer.

❷ Pad

Transmits the MIDI note data or the user command. You can change the velocity curve setting of the Drum Pads, and also edit the note number assigned to the pads via the pads.

❸ SHIFT [SHIFT] (Shift button)

By simultaneously pressing this button and a pad, you can change the note numbers of the pads in sixteen unit groups. The group is referred to as "Bank".
For details, see "Selecting the bank" on page 18.

❹ CURVE SETUP [CURVE SETUP] (Curve Setup button)

Selects the velocity curve via the pad. For details, see "Changing the velocity curve" on page 18.

❺ 4VEL MODE [4VEL MODE] (4Velocity Mode button)

Sets to the 4Velocity mode, and lights when in the 4Velocity mode. When this is not lit, the device is in the Normal mode.
For details about 4Velocity mode operation, see "Using in 4Velocity Mode" on page 19.

❻ BROWSE **[BROWSE] (Browse button)**

Calls up Presets browser (Fig.7 on page 20) only when the dialog compatible with the Browse Operation (VST/VSTi plug-in window) is displayed.
For details, see "Browse Operation" on page 20.

❼ Knob

Edits the bank data.

NOTE
To edit the bank data, use the CMC-PD Editor. For details, see "CMC-PD Editor" on page 21.

Basic Operations

Using in Normal mode

In normal mode, you can use the sixteen pads as touch sensitive drum pads. Velocity value varies depending on the strength with which you play a pad. The pads light in different colors according to the velocity value, as follows.

Velocity Value	Color
1 – 42	green
43 – 84	orange
85 – 127	red

You can also change the velocity curve, allowing you to customize the velocity range to your playing strength. For details, see "Changing the velocity curve" on page 18.

The initial settings of Normal Mode

By default, MIDI note numbers are assigned to sixteen pads in the Normal mode. Each group of sixteen pads is referred to as a "bank." You can select the set of most appropriate MIDI note numbers by switching the bank based on your MIDI tone generator.
The available banks are from 1 to 16. The CMC-PD is initially set to bank 4 in this mode. Bank 1 is used for drum tone generators corresponding to GM. Since that is editable, you can replace MIDI notes as desired.
The assignment of banks 2 – 8 and 9 – 15 are the same by default; however, the assignment of banks 2 – 8 is editable. Bank 16 is specially used for assigning the function keys of Cubase.
The initial settings of each bank and pad are shown in the following table.

Bank	Initial value
1	GM (page 17)

Bank	Initial value
2	E-2 – G-1
3	G♯-1 – B0
4	C1 – D♯2
5	E2 – G3
6	G♯3 – B4
7	C5 – D♯6
8	E6 – G7

Bank	Fixed value
9	E-2 – G-1
10	G♯1 – B0
11	C1 – D♯2
12	E2 – G3
13	G♯3 – B4
14	C5 – D♯6
15	E6 – G7

Bank	Function Key
16	F1 – F16

GM assignments for bank 1 are shown in the following table.

Pad number	MIDI note number
1	B0
2	C1
3	D1
4	E1
5	D♯1
6	G♯1
7	F♯1
8	A♯1
9	F1
10	A1
11	B1
12	C2
13	D♯2
14	G2

Pad number	MIDI note number
15	C♯2
16	G♯2

Selecting the bank

To select the bank, use one of the following methods:

- Press [SHIFT] so that the current bank lights. Simultaneously press [SHIFT] and the number pad corresponding to the desired bank.

- Simultaneously press [SHIFT] and [CURVE SETUP]/ [4VEL MODE] to move the bank selection up and down.

- Click on a bank in the CMC-PD Editor window.

NOTE
- The bank information currently set is saved in each mode so that the next time the device starts with the saved condition.
- To edit banks, use the CMC-PD Editor.
- For details about the CMC-PD Editor operation, see "CMC-PD Editor" on page 21.

Changing the velocity curve

In the normal mode, response of output velocity when pressing the pad can be adjusted by changing the velocity curve set for the pad. Fixed velocity can also be selected.
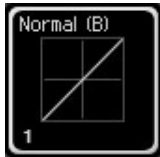
NOTE
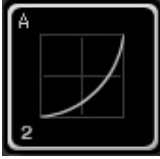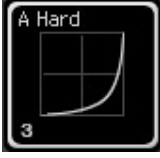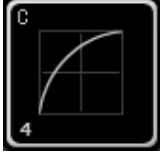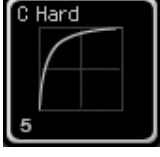The setting of velocity curve applies to all pads of the entire bank.
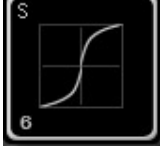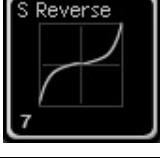
To select the velocity curve, use one of the following methods:

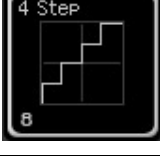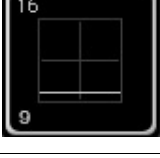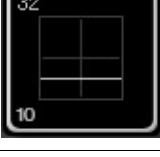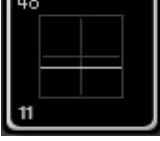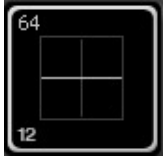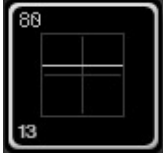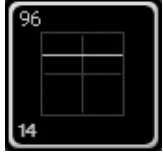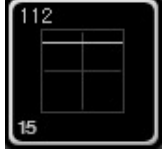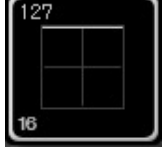- Press [CURVE SETUP] so that the pad of the velocity curve number currently selected lights. Then, while holding down [CURVE SETUP], press the number pad corresponding to the desired velocity curve.

- Click on a velocity curve in the CMC-PD Editor window. In this condition, you can check the response of the selected velocity curve by ear when operating the device's built-in pad.

Velocity curve types

The following 16 types are available.

No	Name	Functions
1	Normal (B)	

No	Name	Functions
2	A	
3	A Hard	
4	C	
5	C Hard	
6	S	
7	S Reverse	
8	4 Step	
9	16	
10	32	
11	48	

No	Name	Functions
12	64	
13	80	
14	96	
15	112	
16	127	

Using in 4Velocity Mode

In this mode, you can assign four different levels of velocities for four different MIDI notes. Press [4VEL MODE] to enter the 4Velocity mode (the button lights). Press the button once again to return to the normal mode.
To use this mode, assign a different MIDI note to each vertical column of four pads and assign different velocities to each pad.
To assign a MIDI note number and a velocity value to the pad, use the CMC-PD Editor (page 21).

The initial settings of 4Velocity Mode

On the pads of the 4Velocity mode, four levels of velocities are assigned for four kinds of MIDI notes. The 4 x 4 unit is regarded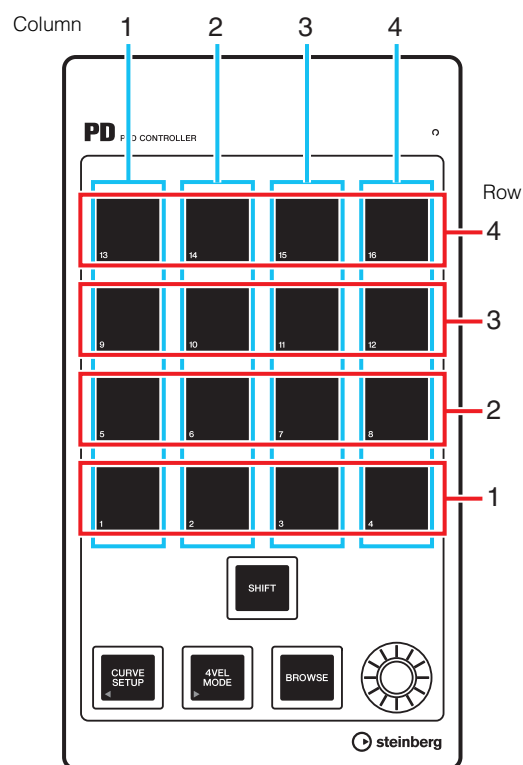 as one "bank." You can use it by switching the bank depending on the MIDI note to input. The available banks are from 1 to 8. The CMC-PD is initially set to bank 1 in this mode. Assembling combinations of commonly used MIDI notes would be convenient, since all banks are editable by the CMC-PD Editor.

The initial settings of each bank are shown in the following table. The far left column of the device's built-in

pad is the first column. The lowermost row is the first row. (See the figure below.)

NOTE
To confirm the bank, press [SHIFT]. For details, refer to "Selecting the bank" on page 18.

Bank	Column	Initial value of MIDI note number (Column)	Row	Initial value of velocity (Row)
1	1	B0	1	31
	2	C1	2	63
	3	C♯1	3	95
	4	D1	4	127
2	1	D♯1	1	31
	2	E1	2	63
	3	F1	3	95
	4	F♯1	4	127
3	1	G1	1	31
	2	G♯1	2	63
	3	A1	3	95
	4	A♯1	4	127

Bank	Column	Initial value of MIDI note number (Column)	Row	Initial value of velocity (Row)
4	1	B1	1	31
	2	C2	2	63
	3	C♯2	3	95
	4	D2	4	127
5	1	D♯2	1	31
	2	E2	2	63
	3	F2	3	95
	4	F♯2	4	127
6	1	G2	1	31
	2	G♯2	2	63
	3	A2	3	95
	4	A♯2	4	127
7	1	B3	1	31
	2	C3	2	63
	3	C♯3	3	95
	4	D3	4	127
8	1	D♯3	1	31
	2	E3	2	63
	3	F3	3	95
	4	F♯3	4	127

Using the Function keys

The Bank 16 of the normal mode allows you to use the sixteen pads as function keys. You can assign a desired command from among "Key Commands" of Cubase ([Key Commands…] under the [File] menu) to each button. To assign commands, you need to perform this in the Device Setup window of Cubase (called up via [Device Setup...] under the [Devices] menu).
Refer to "Editing User Commands" on page 35.

Browse Operation

This function allows you to select a desired item displayed in VST/VSTi plug-in window by using the device. This function is convenient when searching for a voice from among those in the library of your drum tone generator.

❸ [SHIFT] **[SHIFT] (Shift button)**

Press this to close the Presets browser (Fig. 7).
Hold down this to reset all items already fixed within the Presets browser.

❹ [CURVE SETUP] **[CURVE SETUP] (Curve Setup button)**

Moves the cursor to select items in the left column.

❺ [4VEL MODE] **[4VEL MODE] (4Velocity Mode button)**

Moves the cursor to select items in the right column.

❻ [BROWSE] **[BROWSE] (Browse button)**

When the VST/VSTi plug-in window is displayed on Cubase, press this to call up the Presets browser (Fig. 7).
When the Presets browser is opened, press this to select the next item after determining the operation. When the last item is selected, this closes the dialog after determining the operation.
While Browse Operation function is on, this lights.

❼ **Knob**

Moves the cursor to select an item up or down.

Fig. 7
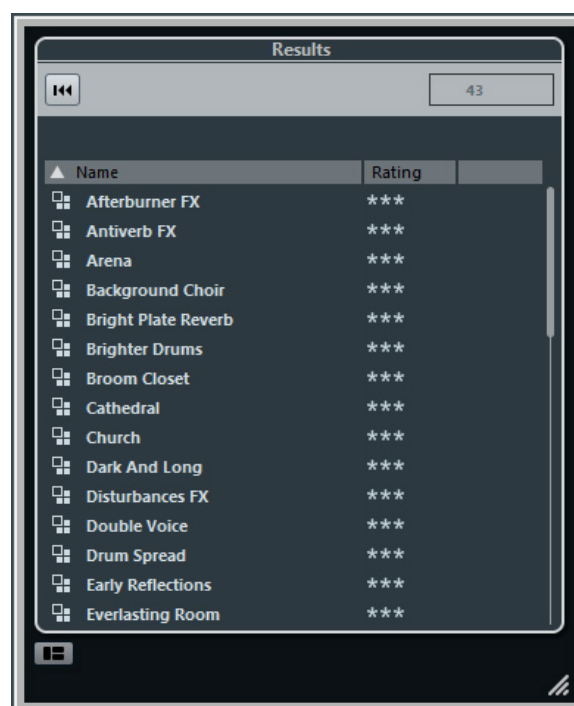
NOTE
• The Browse Operation is disabled while the CMC-PD Editor is running.
• You can check the sound by operating the device's built-in pad while selecting the item.
• If an additional dialog is called up while a dialog compatible with the Browse Operation opens, use the mouse to operate.

CMC-PD Editor

The CMC-PD Editor is a convenient tool which lets you assign the MIDI note number and velocity value to the CMC-PD's built-in pad, or lets you edit the bank. Thanks to its easy-to-understand graphical interface, you can assign/edit the CMC-PD's setting right from your computer.

NOTICE

Do not unplug the USB cable while operating the CMC-PD Editor. Doing so could result in damage to the data.

Starting the CMC-PD Editor

Install the Steinberg CMC-PD Editor and the other necessary software and/or driver by following the instructions in "Installing TOOLS for CMC" on p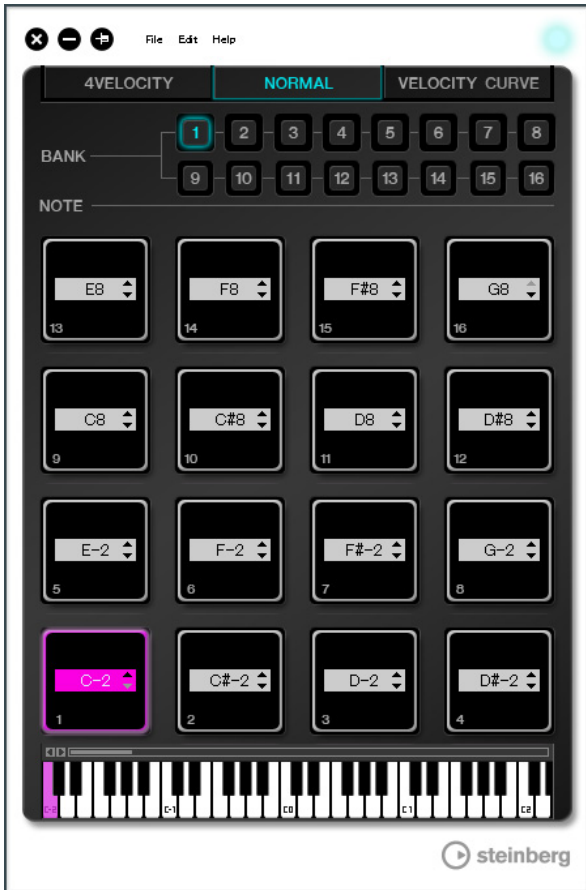age 5. Connect the CMC-PD and the computer via a USB cable, then start the CMC-PD Editor. Instructions on starting are described below.

Windows

[Start] → [All Programs] → [Steinberg CMC] → [CMC-PD Editor]

Mac

[Macintosh HD] → [Applications] → [CMC-PD Editor]

NOTE

- For details about the connection between the CMC-PD and a computer, see "Setting up the device and Cubase" on page 6.
- The editor and the device work in tandem after they are connected (except when selecting the [VELOCITY CURVE] tab).

Controls and Functions
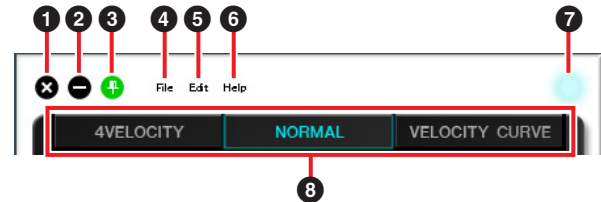
❶ ❌ (Close button)

Closes the Editor.
The following dialog will appear if you close the editor without saving its settings.

Click [Yes] to open the "Save as" window. Click [No] to close the editor without saving its changes. Click [Cancel] to cancel closing the editor.

❷ ➖ (Minimize button)

Minimizes the editor window.

❸ ➕ (Fixing button)

Switches whether or not to always display the editor window on top of any other windows.

Always displayed on top   Not always displayed on top

❹ [File] (File menu)

Clicking this calls up the following menus.

Menu	Function
Open	Opens the file previously saved.
Save	When opening an existing file, this overwrites it with the current changes. When creating a new file, this functions as the same as "Save as."

Menu	Function
Save as	Saves the current changes as a new file.

If you execute [Open] after changing the settings, a dialog appears to confirm saving of the changes. Click [Yes] to open the "Save as" window. Click [No] to open a new file without saving the changes. Click [Cancel] to cancel opening a file.

The following dialog appears, if the current settings are saved to an existing file.

Click [Yes] to overwrite the current settings onto the existing file.
Click [No] to cancel this operation.

❺ [Edit] (Edit menu)

Clicking this calls up the following menus.
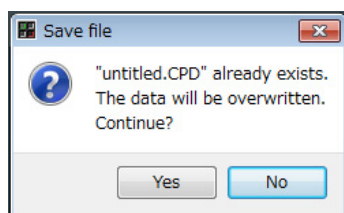
Menu	Function
Copy	Copies the currently selected item's parameter value to the clipboard. The item and data which can be copied are shown in the following table.
Paste	Pastes the parameter value copied in the selected item. You can paste data only to the same type.
Revert To Initial State	Restores the current settings to the state that existed when the editor was started.
Load Factory Preset	Restores the current settings to the factory settings.

Items and data which can be copied

Item	Data
Pad for normal mode [*1]	MIDI note number
[NOTE] for 4Velocity mode [*1]	MIDI note number
Pad for 4Velocity mode	Velocity
[BANK] for normal mode [*2]	Bank for normal mode
[BANK] for 4Velocity mode [*2]	Bank for 4Velocity mode

*1 Copying and pasting of data can be done between the two items marked by *1.
*2 All data can be copied between banks.

The following dialog appears as soon as [Revert To Initial State] is executed.
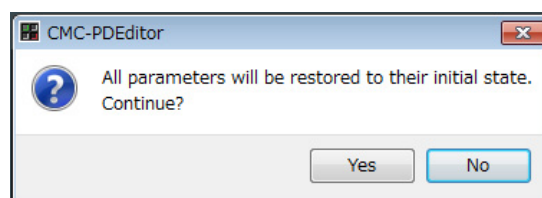
Click [Yes] to restore the current settings to the state that existed when the editor was started. Click [No] to cancel this operation.

The following dialog appears as soon as [Load Factory Preset] is executed.
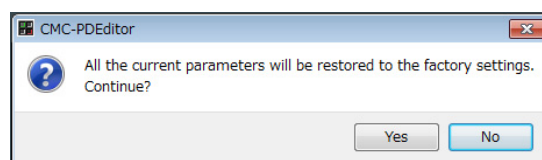
Click [Yes] to restore the current settings to the factory settings.
Click [No] to cancel this operation.

❻ [Help] (Help menu)

Clicking this calls up the following menus.

Menu	Function
Manual	Displays the operation manual of the CMC-PD Editor.
About	Displays information about the CMC-PD Editor.

❼ Online icon

Displays the connection status between the editor and the device. This lights as soon as communication with the device is enabled.

❽ Mode Select tab

Selects the state for editing. [CURVE SETUP] appears only when [NORMAL] is selected.
Details of each tab are explained below.

[4VELOCITY]

This allows you to confirm/edit MIDI note numbers and velocity values which are assigned to the pads of the 4Velocity mode.
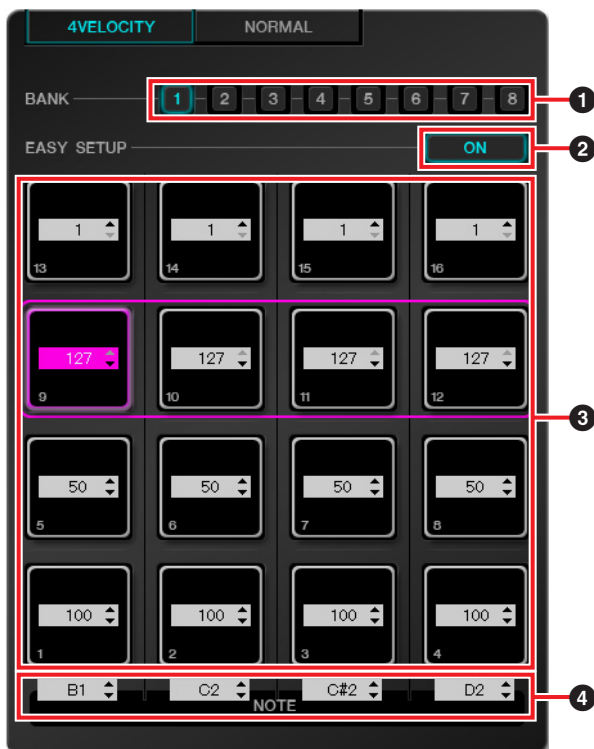
❶ [BANK] (Bank Select button)

Click the bank number to select a desired bank for editing ([1] – [8]). The bank number currently selected is highlighted.

❷ [EASY SETUP] (Easy Setup)

Switches the assignment method of velocity value.

Button status	Function
ON	Assigns a velocity to each group. Four pads in a horizontal row are regarded as one group.
OFF	Assigns a velocity to each pad individually.

When switching from [OFF] to [ON], each horizontal row value is set to the same velocity value as the leftmost pad.

NOTE
• Easy Setup can be specified to each bank.

• Switching Easy Setup is only available with the CMC-PD Editor.

❸ Pad

Displays/edits the currently assigned velocity values. The editing procedures are described below.

1. **Use either one of the following two methods to select the pad.**

   • Click a pad in the editor window.

   • Operate a device's built-in pad.

2. **Use any of the following to edit the velocity value.**

   • Mouse wheel

   • Computer keyboard cursor key

   • Direct input

   • ▲/▼ click

   • The device's knob

The velocity value range is 1 to 127. If you hold down a device's built-in pad and edit the value of the corresponding pad in the editor window, you can immediately check the sound of the velocity value set.

❹ [NOTE] (Note Selecting)

Displays/edits the MIDI note numbers assigned to the vertical row pads. The editing procedures are described below.
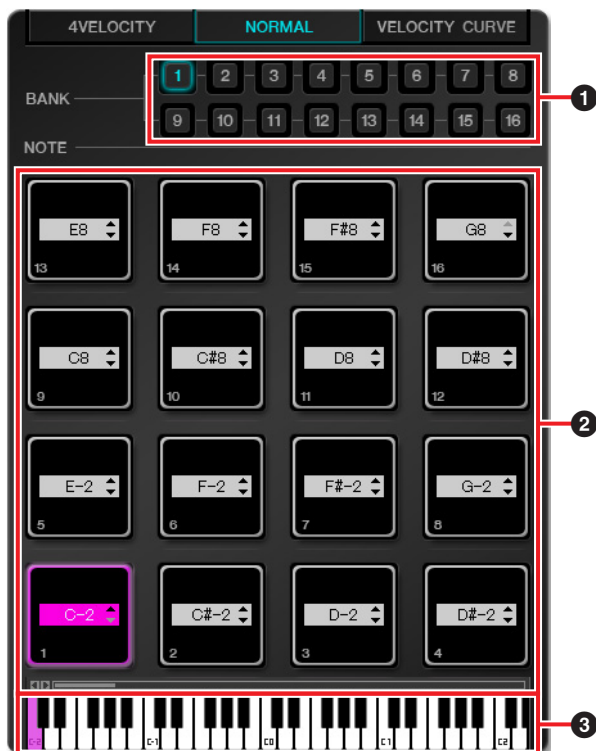
1. **Click the edit box in the editor window.**

2. **Use any of the following to edit the velocity value.**

   • Mouse wheel

   • Computer keyboard cursor key

   • Direct input

   • ▲/▼ click

The MIDI note number range is C-2 to G8.

[NORMAL]

This allows you to confirm the MIDI note number assigned to each pad of the Normal mode. Editing is also available for banks 1 – 8.

❶ **[BANK] (Bank Select button)**

Click the bank number to select a desired bank for editing ([1] – [8]) / display purpose ([9] – [16]). The currently selected bank number is highlighted.

❷ **Pad**

The pads of banks 1 – 8, for which editing MIDI note numbers is allowed, and that of banks 9 – 16 (display only), are explained separately.

The pads of banks 1 – 8

Displays/edits the currently assigned MIDI note numbers. The editing procedures are described below.

1. **Use either one of the following two methods to select the pad.**

- Click a pad in the editor window.
- Operate a device's built-in pad.

2. **Use any of the following to edit the MIDI note number.**

- Mouse wheel
- Computer Keyboard cursor key
- Direct input
- ▲/▼ click
- Virtual keyboard
- The device's knob

The MIDI note number range is C-2 to G8. If you hold down a device's built-in pad and edit the value of the corresponding pad in the editor window, you can immediately check the sound of the MIDI note number set.

The pads of banks 9 – 16

The pads of banks 9-15 display the assigned MIDI note numbers. The pads of bank 16 display the function numbers.

Example pad of banks 9 – 15

Example pad of bank 16

❸ **Virtual Keyboard**

Indicates the virtual keyboard corresponding to the MIDI note number assigned to the pad selected. You can also change the MIDI note number by clicking the keyboard.

[VELOCITY CURVE]

This allows you to confirm/change the velocity curve set to the pad of the Normal mode.
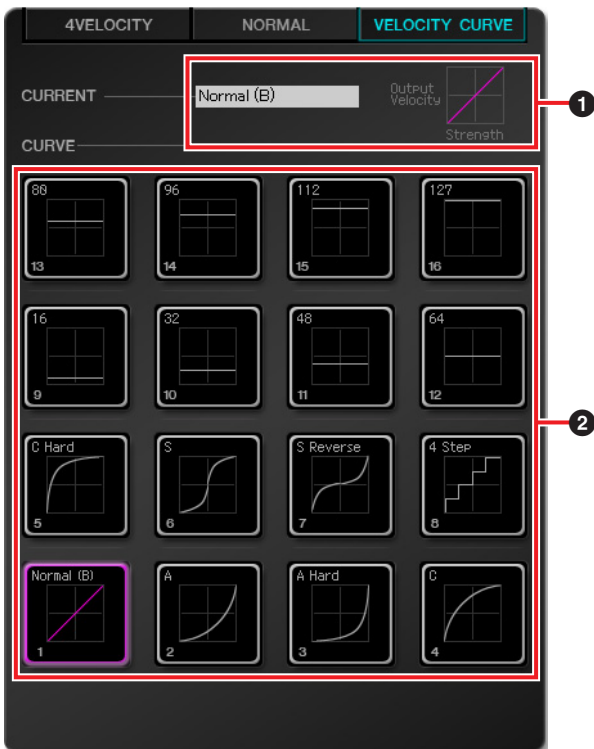
❶ [CURRENT] (Current display)

Displays the currently set velocity curve.

❷ [CURVE] (Velocity curves)

Displays the velocity curve. The currently set velocity curve (pad) is highlighted. The velocity curves of the whole device's built-in pads are changed if you select a velocity curve.

NOTE

You can check the response of each velocity curve by ear if you play the pads while [VELOCITY CURVE] is selected.

CMC-QC

The CMC-QC allows you to control the Quick Control and EQ of the selected channel on Cubase. In addition, you can also use the CMC-QC as a versatile MIDI controller.

The CMC-QC has the following three modes.

QC Mode

This mode lets you control the Quick Control of the selected channel on Cubase versions equipped with the Quick Control function. You can control the Quick Control via the knobs by assigning up to eight parameters.

EQ mode

This mode lets you control the four-band EQ of the selected channel in Cubase.

MIDI mode

This mode lets you use this device as a versatile MIDI controller. You can control by assigning control change numbers to the eight knobs of the device.
This mode works automatically upon starting the CMC-QC Editor.

NOTE
The device always starts in the MIDI mode when connected to a computer, and then goes into the mode set last upon starting Cubase.

Controls and Functions
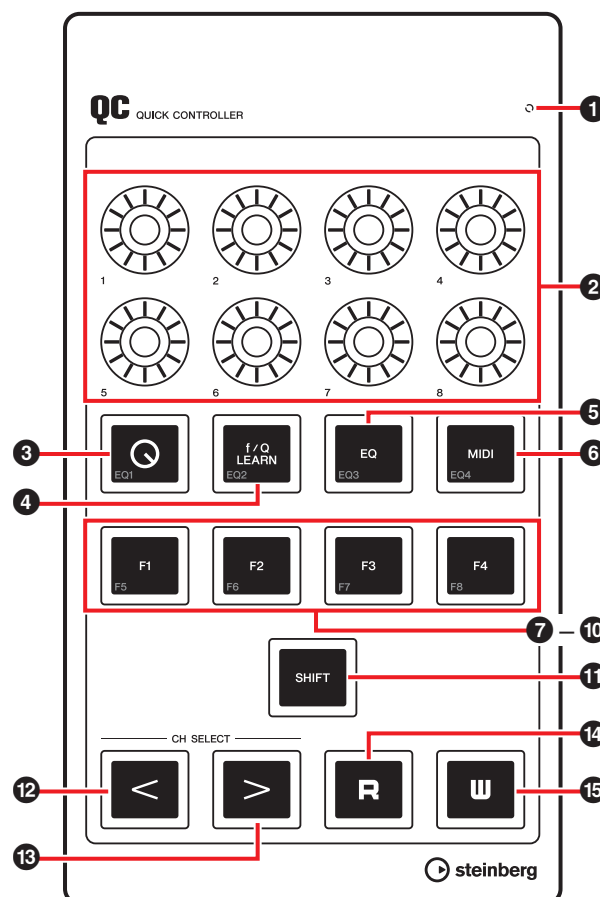
❶ READY LED

Lights when connected to a computer.

❷ [1] – [8] (Knob)

In the QC mode, these control Quick Controls 1 – 8 in Cubase.
In the EQ mode, these control the parameters of four bands of EQ in Cubase.
In the MIDI mode, these control the parameters of the assigned control change numbers.

The knob's functions in each mode are shown in the following table.

Mode		Knobs [1] – [4]	Knobs [5] – [8]
QC		Quick controls 1 – 8	
EQ	f/Q LEARN: On (lit)	Gain	Q (bandwidth)
	f/Q LEARN: Off (not lit)	Gain	Frequency
MIDI		Control change	

You can change the lighting pattern of the knobs. For details, see "❷ [KNOB LED]" in the CMC-QC Editor on page 31.

❸ [Q] (QC mode button)

Sets to the QC mode, and lights when in the QC mode.

❹ [f/Q LEARN]
(In the QC mode: QC Learn)
(In the EQ mode: f/Q button)

In the QC mode, this turns on or off "QC Learning," which assigns to Quick Control the parameter currently located with the mouse pointer. See "Assigning a Quick Control with QC Learning" on page 28 for the QC Learning operation.

In the EQ mode, this switches the parameters operated via knobs [5] – [8]. You can operate Q (bandwidth) when it's on, and Frequency when it's off.

NOTE
The QC Learning is compatible with Cubase version 6.0 or later and Cubase Artist version 6.0 or later only.

❺ [EQ] (EQ mode button)

Sets to the EQ mode, and lights when in the EQ mode.

❻ [MIDI] (MIDI mode button)

Sets to the MIDI mode, and lights when in the MIDI mode.

❼ [F1] ❽ [F2] ❾ [F3] ❿ [F4] (Function 1/ 2/ 3/ 4 button)

Controls the DAW by assigning a user command.
You can assign a desired command from among "Key Commands" of Cubase ([Key Commands…] under the [File] menu) to each button. To control functions 5 – 8 (F5 – F8), press this button while holding down [SHIFT]. By default, the functions of the Transport are assigned as shown in the following table.

Button	Command
[F1]	Fast Rewind
[F2]	Fast Forward
[F3]	Stop
[F4]	Start
[SHIFT] + [F1] (F5)	Step Back Bar
[SHIFT] + [F2] (F6)	Step Bar
[SHIFT] + [F3] (F7)	Cycle
[SHIFT] + [F4] (F8)	Record

NOTE
For instructions on editing the user commands, refer to "Editing User Commands" on page 35.

⓫ [SHIFT] (Shift button)

When you operate an optional control while holding down this button, an extra function that the control provides (referred to as SHIFT function) is executed. For details on the SHIFT functions for each control, refer to the section "SHIFT functions of each control."

SHIFT functions of each control

Controls	SHIFT functions	Corresponding mode
Knob	Finely adjusts parameter.	QC/EQ/MIDI
[Q]	Turns EQ band 1 on or off.	EQ
[f/Q LEARN]	Turns EQ band 2 on or off.	EQ
[EQ]	Turns EQ band 3 on or off.	EQ
[MIDI]	Turns EQ band 4 on or off.	EQ
[F1]	Executes the user command F5.	QC/EQ/MIDI
[F2]	Executes the user command F6.	QC/EQ/MIDI
[F3]	Executes the user command F7.	QC/EQ/MIDI
[F4]	Executes the user command F8.	QC/EQ/MIDI

⓬ < ⓭ > [CH SELECT] (Channel Select button)

Shifts the selected channel forward/ back by one level.

⓮ [R] (Read Automation button)

Turns Read Automation on or off, and lights when on.

⓯ [W] (Write Automation button)

Turns Write Automation on or off, and lights when on.

Assigning a Quick Control with QC Learning

The QC Learning function allows you to assign any parameter to a quick control by using a knob in the QC mode.

Instructions on assigning are described below.

1. **Press [Q] to enter the QC mode.**

2. **Press [f/Q LEARN] to turn QC Learning on.**

3. **Locate the mouse pointer on the desired parameter of Cubase to which you want to assign to the knob.**

    NOTE
    • Assignable parameters are limited to those which can be automated.
    • The plug-in parameter must be compatible with VST3 or above.

4. **Turn the desired knob.**

    A parameter will be assigned to the Quick Control, corresponding to the knob turned, for the selected track. The knob will flash, then lights if the assignment was successful.

5. **Press [f/Q LEARN] once again to turn QC Learning off.**

To cancel the parameter assignment, click the desired slot of the Quick Control on Cubase, then select "No Parameter".

NOTE
• When overwriting a different parameter onto a knob to which a parameter is already assigned, repeat the above steps.
• You can control the parameter already assigned even when performing QC Learning.
• To prevent other parameters from being overwritten accidentally, turn off QC Learning while not performing parameter assignments.

The initial parameter settings of MIDI mode

The CMC-QC allows Control Change parameters to be assigned to each knob in the MIDI mode. The initial settings are shown in the following table.

Knob	KNOB LED	CC NUMBER	MIDI CH	MAX	MIN
1	1	74 (Brightness)	1	127	0
2	1	71 (FilterResonance)	1	127	0
3	3	10 (Pan)	1	127	0
4	1	07 (Level)	1	127	0
5	1	73 (AttackTime)	1	127	0
6	1	72 (ReleaseTime)	1	127	0
7	1	91 (ReverbSendLevel)	1	127	0
8	1	93 (ChorusSendLevel)	1	127	0

To edit parameters, use the CMC-QC Editor. See "CMC-QC Editor" on page 29 for details.

CMC-QC Editor

The CMC-QC Editor is a convenient tool which lets you edit the MIDI control change parameter assigned to each knob. Thanks to its easy-to-understand graphical interface, you can edit/assign the CMC-QC's settings right from your computer.
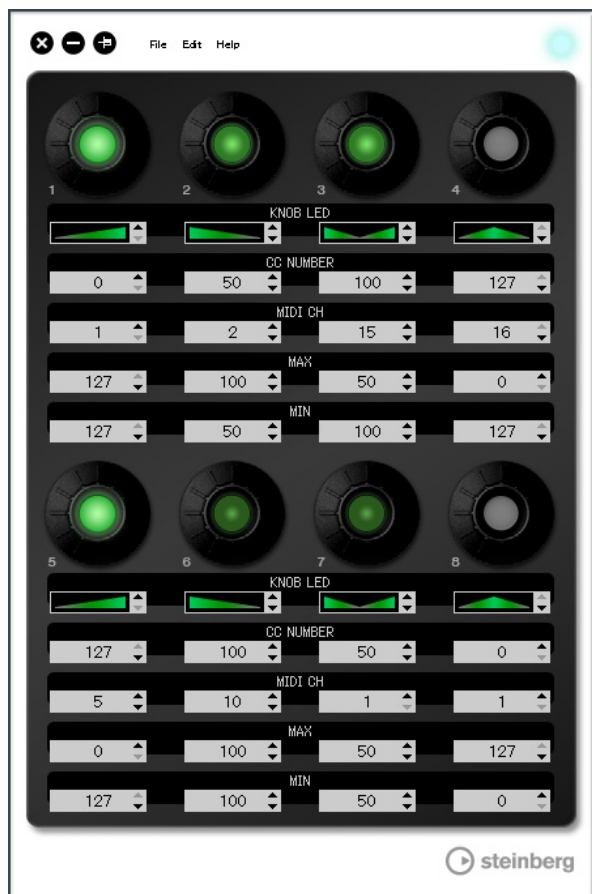
NOTICE

Do not unplug the USB cable while operating the CMC-QC Editor. Doing so could result in damage to the data.

Starting the CMC-QC Editor

Install the Steinberg CMC-QC Editor and the other necessary software and/or driver by following the "Installing TOOLS for CMC" on page 5. Connect the CMC-QC and the computer via a USB cable, then start the CMC-QC Editor.
Instructions on starting are described below.

Windows
[Start] → [All Programs] → [Steinberg CMC] → [CMC-QC Editor]

Mac
[Macintosh HD] → [Applications] → [CMC-QC Editor]

NOTE
- For details about the connection between CMC-QC and a computer, see "Setting up the device and Cubase" on page 6.
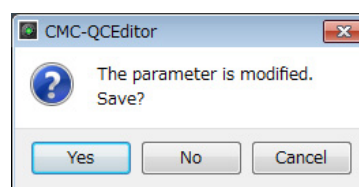- After being connected, the editor is always linked with the CMC-QC.

Controls and Functions

❶ ✖ (Close button)

Closes the editor.
The following dialog will appear if you close the editor without saving the settings.

Click [Yes] to open the "Save as" window. Click [No] to close the editor without saving its changes. Click [Cancel] to cancel closing the editor.

❷ ➖ (Minimize button)

Minimizes the editor window.

❸ ➕ (Fixing button)

Switches whether or not to always display the editor window on top of any other windows.

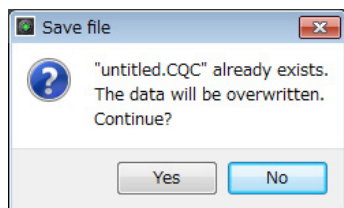Always displayed on top   Not always displayed on top

❹ [File] (File menu)

Clicking this calls up the following menus.

Menu	Function
Open	Opens the file previously saved.
Save	When opening an existing file, this overwrites it with the current changes. When creating a new file, this functions as the same as "Save as."
Save as	Saves the current changes as a new file.

If you execute [Open] after changing the settings, a dialog appears to confirm saving of the changes. Click [Yes] to open the "Save as" window. Click [No] to open a new file without saving the changes. Click [Cancel] to cancel opening a file.

The following dialog appears, if the current settings are saved to an existing file.

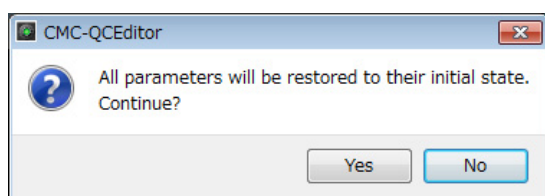Click [Yes] to overwrite the current settings onto the existing file.
Click [No] to cancel this operation.

❺ [Edit] (Edit menu)

Clicking this calls up the following menus.

Menu	Function
Copy	Copies the currently selected item's parameter value to the clipboard. The items which can be copied are ❶ – ❻ of Fig. 8 (page 31). Copying ❶ lets you copy data ❷ – ❻ all together.
Paste	Pastes the parameter value copied in the selected item. You can paste data only to the same type.
Revert To Initial State	Restores the current settings to the state that existed when the editor was started.
Load Factory Preset	Restores the current settings to the factory settings.

The following dialog appears as soon as [Revert To Initial State] is executed.

Click [Yes] to restore the current settings to the state that existed when the editor was started.
Click [No] to cancel this operation.

The following dialog appears as soon as [Load Factory Preset] is executed.
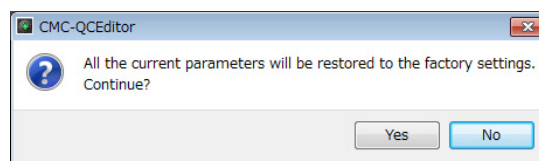
Click [Yes] to restore the current settings to the factory settings.
Click [No] to cancel this operation.

❻ [Help] (Help menu)

Clicking this calls up the following menus.

Menu	Function
Manual	Displays the operation manual of the CMC-QC Editor.
About	Displays information about the CMC-QC Editor.

❼ Online icon

Displays the connection status between the editor and the device. Lights as soon as communication with the device is enabled. The device goes into MIDI mode automatically.

Fig. 8

❶ Knob

This is for display purposes only. LED brightness varies according to the current setting value of the control change.

❷ – ❻ Edit Box

This allows you to confirm/edit the settings of the control change parameter assigned to the knob.
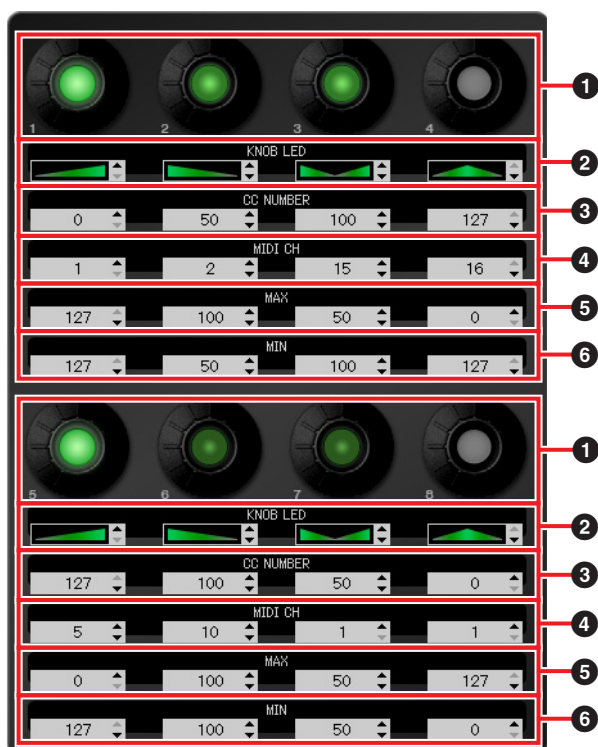A parameter is always assigned to all knobs. Use any of the following to edit each parameter after clicking the edit box.

• Mouse wheel

• Computer keyboard cursor key

• Direct Input (except the editing of "Knob LED lighting type")

• ▲/▼ click

For details about the parameters assigned to the edit box, see below.

❷ [KNOB LED] (Knob LED)

Selects the LED lighting type for the knob. Four types are available.
The setting-based brightness varies depending on the type.

Type 1

The smaller/ larger the setting value is, the darker/ brighter the LED brightness is.

Type 2

The smaller/ larger the setting value is, the brighter/ darker the LED brightness is.

Type 3

The closer to or further from the center the setting value is, the darker/brighter the LED brightness is.

Type 4
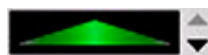
The closer to or further from the center the setting value is, the brighter/darker the LED brightness is.

❸ [CC NUMBER] (Control Change Number)

Displays/ edits the currently assigned MIDI Control Change number. Range is from 0 to 127.

❹ [MIDI CH] (MIDI channel number)

Displays/ edits the currently specified MIDI channel. Range is from 1 to 16.

❺❻ [MAX]/[MIN] (Maximum/ Minimum)

Displays/edits the maximum/minimum values of Control Change assigned to ❸. Range is from 0 to 127. Specifying the maximum/minimum values to both sides ❺ and ❻ can be done. The knob behaviors are given below.

• When the value is ❺ > ❻: The output value decreases/ increases by turning the knob to the left/right.

• When the value is ❺ < ❻: The output value increases/ decreases by turning the knob to the left/right.

• If inputting the same value to ❺ and ❻, the output value stays constant.

CMC-AI

The CMC-AI allows you to control a specific parameter with the mouse pointer, the main mix level and the jog wheel by using a knob, and to control Cubase by assigning parameters to function buttons.
CMC-AI has the following three modes.

AI Knob mode

This mode lets you control a user-specified parameter with the mouse pointer on Cubase by using the AI Knob. The CMC-AI is initially set to this mode.

Volume Mode

This mode lets you control the main mix level by using the AI Knob.
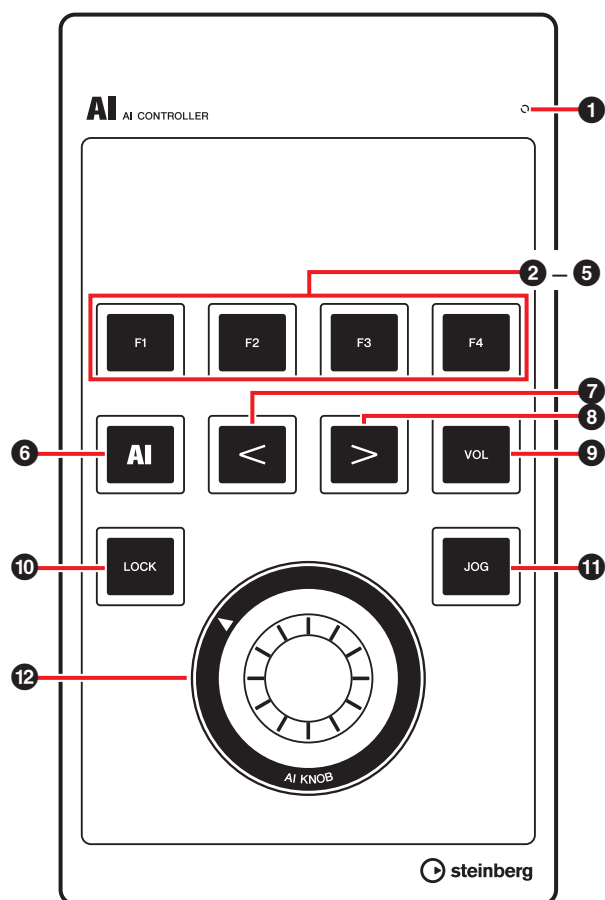
Jog mode

This mode lets you control the project time position slider on the transport panel of Cubase by using the AI Knob.

There is another function, called Browse Operation, which is unrelated to the above-mentioned modes.

Controls and Functions

NOTE
The device maintains the mode used last.

❶ READY LED

Lights when connected to a computer.

❷ [F1] ❸ [F2] ❹ [F3] ❺ [F4] (Function 1/ 2/ 3/ 4 button)

Executes the user command F1/ F2/ F3/ F4.
You can assign a desired command from among "Key Commands" of Cubase ([Key Commands…] under the [File] menu) to each button. The initial settings of CMC-AI's user commands are as follows.

Button	Category	Command
F1	File	Save
F2	Edit	Undo
F3	Devices	Mixer
F4	Edit	Redo

NOTE
For instructions on editing the user commands, refer to "Editing User Commands" on page 35.

❻ [AI] (AI Knob mode button)

Sets to the AI Knob mode, and lights when in the AI Knob mode.

❼ [<] ❽ [>] (Browser button)

Select an item. These buttons are available only while the Browse Operation is running. For details, see "Browse Operation" on page 33.

❾ [VOL] (Volume mode button)

Sets to the Volume mode, and lights when in the Volume mode.

❿ [LOCK] (Lock button)

In the AI Knob mode, this locks the parameter to be edited with the AI Knob. You can control the parameter locked regardless of the mouse pointer location.

Instructions on locking the parameter are described below.

1. **Locate the mouse pointer to the desired parameter on Cubase.**

2. **Press [LOCK].**
   [LOCK] will light as soon as the parameter is locked.

NOTE
- To release the lock, press [LOCK] again. When the lock is released, the button light will go out.
- The CMC-AI maintains the lock status set last during operation.

In the Volume mode, this slightly adjusts the main mix level if you control [AI KNOB] while pressing this button. In the Jog mode, this slightly adjusts the position of the project time position slider if you control [AI KNOB] while pressing this button.

⓫ JOG **[JOG] (Jog mode button)**

Sets to the Jog mode, and lights when in the Jog mode.

⓬ ◎ **[AI KNOB] (AI Knob)**

In AI Knob mode, this controls a desired parameter within the principal window and plug-in software on Cubase. When [LOCK] is off, this controls a specified parameter with the mouse pointer in a Cubase window.

In the Volume mode, this adjusts the main mix level of Cubase.

In the Jog mode, this controls the project time position slider (moves the playback position manually forward or backward).

Pressing [AI KNOB] calls up a dialog corresponding to the Cubase window. The correspondence table is shown below.

Cubase window status	Dialog which is called up
When the project window is not opened.	Project Assistant
When the project window is opened.	Choose Track Preset
When VST/ VSTi plug-in window is opened and active.	Presets Browser

NOTE
The assignable parameters to the AI Knob are parameters that can be automated within the principal window and plug-in software on Cubase. Plug-in software compatible with the AI Knob are the VST 3 plug-ins included with Cubase (as of June 2011).

Browse Operation

This function allows you to select a desired item displayed in a window called up when the AI Knob is pressed by using the device.

NOTE
• The mode button currently selected ([AI], [VOL] or [JOG]) flashes during the Browse Operation.
• If an additional dialog is called up while a Browse Operation dialog is open, use the mouse to operate.
• If you selected the "Prompt for project location" → [Continue]/ [Open Other] in the Project Assistant window, the "Set Project Folder"/ "Open Project" dialog will appear. Select a project folder by using the mouse, then click [OK]/ [Open].

❼ < **[<]** **❽** > **[>] (Browser button)**

Moves the cursor to select items from side to side.

❿ LOCK **[LOCK] (Lock button)**

Press this to close the dialog without fixing the operation. Hold down this to reset all items already fixing within the dialog.

⓬ ◎ **[AI KNOB] (AI Knob)**

Turn this to move the cursor to select an item up or down.
Press to select the next item after fixing the operation. When the last item is selected, this closes the dialog after fixing the operation.

NOTE
Control functions other than those above are the same as the AI Knob mode.

Troubleshooting

The power of the device does not turn on.

• **Make sure that the device is properly connected to the computer via a USB cable.**

Connecting between the computer and the device via a USB cable supplies power source to the device.

• **Confirm whether or not a proper USB cable is used.**

If the USB cable is broken or damaged, replace the USB cable with a new one. Use a USB cable no longer than three meters.

Cubase does not recognize the device.

• **Make sure that the device is connected to the computer before Cubase is started.**

• **Make sure that the device is properly connected to the computer via a USB cable.**

• **Confirm whether or not a proper USB cable is used.**

• **Make sure that the TOOLS for CMC (Yamaha USB-MIDI Driver and CMC Extension) has been installed.**

• **Make sure that a version of Cubase which is compatible with operation with the device is used.**

For latest information of the corresponding Cubase, see the following web site.
http://www.steinberg.net

• **Are you connecting a device equipped with an AI knob and the CMC-AI simultaneously to one computer?**

If you are using Cubase 5.5.1 or any previous version under the above-mentioned condition, the AI knob and Lock button equipped with CMC-AI cannot be used.

• **Make sure that the sleep/suspended/standby mode of the computer is disabled.**

When the computer returns from the power-saving function with the function enabled, it may not be able to recognize the device. Disable the power-saving function.

The touch controller (fader or slider) does not work properly.

• **Do not touch the touch controller while the indicator is moving immediately after connecting the device to a computer.**

If you touch it in the above-mentioned situation, the touch controller may not work properly. In this case, reconnect the device to the computer.

CMC-PD Editor/CMC-QC Editor cannot change to online.

• **Make sure that the device is connected to the computer before the Editor is started.**

• **Make sure that CMC-PD/ CMC-QC is properly connected to the computer via a USB cable.**

• **Is any other MIDI application running simultaneously?**

Quit any application software which may be using the CMC-PD/ CMC-QC Port. If the application software closes unexpectedly, restart the computer.

Appendix

Uninstalling the TOOLS for CMC

You must remove the following two software components installed from the TOOLS for CMC.

- Yamaha USB-MIDI Driver

- Steinberg CMC Applications

Windows

1. Start the computer and log on to the Administrator account.

2. Open the window for the uninstall operation as follows.

Windows XP:

[Start] → [Control Panel] → [Add or Remove Programs]

Windows Vista/ Windows 7:

[Start] → [Control Panel] → [Uninstall a Program]

3. Select one of the software components from the list.

4. Uninstall them as follows.

Windows XP:

Click [Change/Remove]/ [Remove]. Follow the on-screen instructions to remove the software.

Windows Vista/ Windows 7:

Click [Uninstall]/ [Uninstall/Change]. Follow the on-screen instructions to remove the software.

Uninstallation of the TOOLS for CMC is now complete.

Mac

Remove the folders and files of the following software components.

Yamaha USB-MIDI Driver

- [User] → Your user folder → [Library] → [Preferences] → jp.co.yamaha.USBMIDIDriver.plist
  (This file is created after the driver is loaded.)

- [Library] → [Audio] → [MIDI Drivers] → YAMAHAUSBMIDIDriver.plugin

- [Library] → [PreferencePanes] → YAMAHAUSBMIDIPatch.prefPane

- [Library] → [Receipts] → YAMAHA-USBMIDIDriver.pkg

- [Library] → [Receipts] → YAMAHA-USBMIDIPatch.pkg

Steinberg CMC Applications

- [Library] → [Application Support] → [Steinberg] → [Components] → cmc_extension_u.boundle

- [Applications] → CMC-PDEditor.app

- [Applications] → CMC-QCEditor.app

Uninstallation of the TOOLS for CMC is now complete.

Editing User Commands

You can edit User commands in the Device Setup window of Cubase (called up via [Device Setup…] under the [Devices] menu).
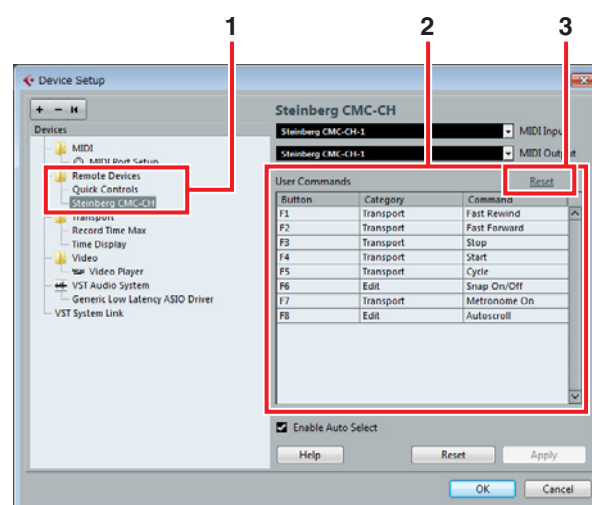
Instructions on editing are described below.

1. Remote Devices

Select a desired model from the [Remote Devices].

2. User Commands

The user commands of the model selected in step 1 above are displayed. Select a function to assign to the button ([F1] to [F4] or [F1] to [F8]) from [Category] and [Command].
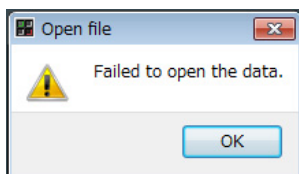
3. Reset

Click to reset the user commands assignments (step 2) to the factory settings.

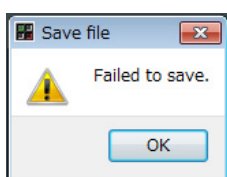# Error Messages (CMC-PD Editor/CMC-QC Editor)

These messages appear when certain problems have occurred.

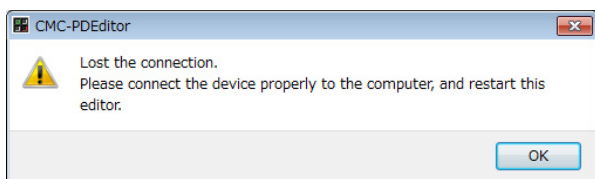**When unauthorized data is included in the file.**

The file cannot be opened. Select another file or confirm the file.
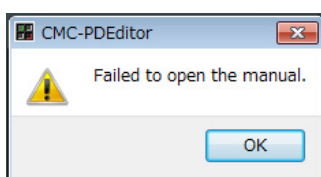
When creating a new file could not be done.

The file cannot be saved. Try [Save as] once again.

When connection between the device and the editor was lost.

Data communication between the device and the editor cannot be established. Connect the device to the computer correctly, and restart the editor.

When the manual data is missing.

The manual can not be displayed. Install the TOOLS for CMC once again. Refer to "Installing TOOLS for CMC" on page 5 for installation instructions.

Glossary

Autoscroll

During playback, this keeps on displaying the project cursor in the event display of Cubase. In other words, the waveform display will scroll.

Automation

You can edit parameters such as volume and pan to desired values in the project window of Cubase. The value edited will be immediately reflected and recorded.

Control Change

These are MIDI messages, numbered from 0 to 127, that allow you to control a variety of parameters.

Cycle

Repeatedly plays back a particular range within the event display of Cubase.

Channel Bank

A unit of consecutive channels which can be operated by the CMC-FD. Up to four channels are regarded as one unit.

Nudge

Shifts the position of project cursor in units of frame.

Bypass

Temporarily suspends effects such as EQ, Inserts and Sends so that you can hear the unprocessed sound.

Bank

A group of the CMC-PD's built-in sixteen pads.

Project Cursor

Vertical line (the playback position) in the event display of Cubase.

Frame

One of the measures of time in the event display.

Freeze

Locks the track's process. Effect plug-ins can sometimes require a lot of processor power. You may reach a point where the computer cannot play back the track properly (the CPU overload indicator in the VST Performance window lights, cracking sounds occur, etc.). Using Freeze can help prevent this.

Velocity

This is MIDI information which represents how strong (fast) the CMC-PD's built-in pad is operated.
The phrase "Velocity" represents speed. For the CMC-PD's built-in pad, "Velocity" is effectively the same as both the strength and the speed at which a pad is pressed.

Velocity Curve

This determines how the velocity value is generated (output) responding to your general playing strength of the CMC-PD's built-in pads.
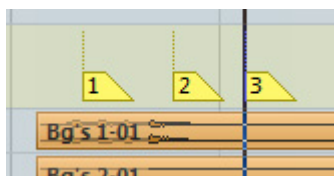
Locator

The blue box with white triangles in the ruler on the event display of Cubase is the locator. (See the figure below) You can drag it, locating the mouse pointer on the triangle.
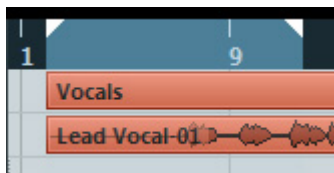
Marker

The numbered marks in the event display of Cubase (see figure below).

GM

This is the abbreviation of General MIDI, which is the format related to Voice allocation of MIDI tone generators and MIDI functions. This standard ensures that recorded MIDI songs will sound virtually the same regardless of the manufacturer and the model of the tone generator on which they are played.

VST

This is the abbreviation of Virtual Studio Technology, which is one of general standards of software plug-ins developed by Steinberg. The phrase "VST3" applies to version 3 of VST.

Specifications

General Specifications

USB terminal	USB1.1/ 2.0
Dimensions (W x D x H)	CMC-CH: 102 x 183 x 29.5 mm CMC-FD: 102 x 183 x 18.0 mm CMC-TP: 102 x 183 x 18.0 mm CMC-PD: 102 x 183 x 30.0 mm CMC-QC: 102 x 183 x 29.5 mm CMC-AI: 102 x 183 x 32.7 mm When the stand is in use: additional 24.3 mm (H)
Weight	CMC-CH: 240g CMC-FD: 245g CMC-TP: 240g CMC-PD: 260g CMC-QC: 250g CMC-AI: 220g
Accessories	• Read me first (printed) • Cubase AI Download Instructions (printed) • TOOLS for CMC CD-ROM • USB Cable • Joint plate

Specifications and descriptions in this manual are for information purposes only. Steinberg/Yamaha Corp. reserves the right to change or modify products or specifications at any time without prior notice.

MIDI command map

CMC-CH

Buttons and Encoders

Function	MIDI Message CMC → PC	MIDI Message PC → CMC
Channel Select Left	90 30 kk	–
Channel Select Right	90 31 kk	–
Pan	B0 10 rr	B0 30 xy
Freeze	90 4C kk	90 4C kk
Folder	90 47 kk	–
Inserts Bypass	90 2B kk	90 2B kk
Read	90 4A kk	90 4A kk
Edit Channel Setting	90 33 kk	90 33 kk
EQ Bypass	90 28 kk	90 28 kk
Write	90 4B kk	90 4B kk
Edit Instrument	90 2D kk	90 2D kk
Sends Bypass	90 29 kk	90 29 kk
Shift	90 46 kk	–
Mute	90 10 kk	90 10 kk
Solo	90 08 kk	90 08 kk
Monitor	90 78 kk	90 78 kk
Record Enable	90 00 kk	90 00 kk

Detail of Parameters	
kk:	00 = OFF, 7F = ON
rr:	0x = CW, 4x = CCW
x:	Lighting Type (0 – 4)*
y:	Lighting Pattern (1 – B)

* 0: Increase
  1: Center Minimum
  2: Increase
  3: Decrease
  4: Center Maximum

Touch Controller

Function	MIDI Message Device → PC	MIDI Message PC → Device
Fader Position	E0 nn mm	E0 nn mm
Jump On/Off	90 68 kk	–
Solo	–	90 08 kk
Mute	–	90 10 kk

Detail of Parameters	
nn:	Position Low (0x00 – 0x7F)
mm:	Position High (0x00 – 0x7F)

CMC-FD

Buttons and Encoders

Function	MIDI Message CMC → PC	MIDI Message PC → CMC
Shift	90 46 kk	–
Channel Left	90 30 kk	–
Channel Right	90 31 kk	–
Bank Left	90 2E kk	–
Bank Right	90 2F kk	–

Detail of Parameters
kk: 00 = OFF, 7F = ON

Touch Controller

	Function	MIDI Message CMC → PC	MIDI Message PC → CMC
Fader 1	Fader Position	E0 nn mm	E0 nn mm
	Jump On/Off	90 68 kk	–
	Solo	90 08 kk	90 08 kk
	Mute	90 10 kk	90 10 kk
	Level Meter	–	F9 03 xx
Fader 2	Fader Position	E1 nn mm	E1 nn mm
	Jump On/Off	90 69 kk	–
	Solo	90 09 kk	90 09 kk
	Mute	90 11 kk	90 11 kk
	Level Meter	–	F9 13 xx
Fader 3	Fader Position	E2 nn mm	E2 nn mm
	Jump On/Off	90 6A kk	–
	Solo	90 0A kk	90 0A kk
	Mute	90 12 kk	91 12 kk
	Level Meter	–	F9 23 xx
Fader 4	Fader Position	E3 nn mm	E3 nn mm
	Jump On/Off	90 6B kk	–
	Solo	90 0B kk	91 0B kk
	Mute	90 13 kk	91 13 kk
	Level Meter	–	F9 33 xx

Detail of Parameters
nn: Position Low (0x00 – 0x7F)
mm: Position High (0x00 – 0x7F)
x: Lighting Pattern (0 – D)

CMC-TP

Buttons and Encoders

Function	MIDI Message CMC → PC	MIDI Message PC → CMC
Insert Marker	90 57 kk	–
Step Bar Left	90 60 kk	–
Step Bar Right	90 61 kk	–
Set Locators Range	90 58 kk	–
Locator Left	90 62 kk	–
Rewind	90 5B kk	91 5B kk
Forward	90 5C kk	91 5C kk
Locator Right	90 63 kk	–
Shift	90 46 kk	–
Step Marker Left	90 54 kk	–
Step Marker Right	90 55 kk	–
Copy Track	90 59 kk	–
Slider Mode	90 5A kk	–
Cycle	90 56 kk	90 56 kk
Stop	90 5D kk	90 5D kk
Start	90 5E kk	90 5E kk
Record	90 5F kk	90 5F kk

Detail of Parameters
kk: 00 = OFF, 7F = ON

Touch Controller

Function	MIDI Message CMC → PC	MIDI Message PC → CMC
Slider Position	E9 nn mm	–
Pinch out/Pinch in	EA nn mm	–
Touch On/Off	90 71 kk	–
Slider LED	–	E9 0x yy

Detail of Parameters
nn: Position Low (0x00 – 0x7F)
mm: Position High (0x00 – 0x7F)
xx: Lighting Type (0 – 5)*
yy: Lighting Pattern (0x00 – 0x0D)

* 0: Position
  1: Zoom
  2: Shuttle
  3: Level Meter
  4: Tap
  5: Level Meter Mask

CMC-PD

Buttons and Encoders

Function	MIDI Message CMC (Device Port 1) → PC	MIDI Message PC → CMC (Device Port 1)	MIDI Message CMC (Device Port 2) → PC	MIDI Message PC → CMC (Device Port 2)
Pad 1	90 nn vv	90 nn vv	–	–
Pad 2	↑	↑	–	–
Pad 3	↑	↑	–	–
Pad 4	↑	↑	–	–
Pad 5	↑	↑	–	–
Pad 6	↑	↑	–	–
Pad 7	↑	↑	–	–
Pad 8	↑	↑	–	–
Pad 9	↑	↑	–	–
Pad 10	↑	↑	–	–
Pad 11	↑	↑	–	–
Pad 12	↑	↑	–	–
Pad 13	↑	↑	–	–
Pad 14	↑	↑	–	–
Pad 15	↑	↑	–	–
Pad 16	↑	↑	–	–
Shift	–	–	90 46 kk	–
Curve Setup	–	–	90 72 kk	–
4Velocity mode	–	–	90 73 kk	–
Browse	–	–	90 3A kk	90 3A kk
Knob	–	–	B0 3C rr	–

Detail of Parameters
nn: Note Number
vv: Velocity
kk: 00 = OFF, 7F = ON
rr: 0x = CW, 4x = CCW

Velocity LED
1 – 42: Green
43 – 85: Orange
86 – 127: Red

CMC-QC

Buttons and Encoders

Function	MIDI Message CMC (Device Port 1) → PC	MIDI Message CMC (Device Port 2) → PC	MIDI Message PC → CMC
Knob 1	Control Change	B0 10 rr	B0 30 xy
Knob 2	Control Change	B0 11 rr	B0 31 xy
Knob 3	Control Change	B0 12 rr	B0 32 xy
Knob 4	Control Change	B0 13 rr	B0 33 xy
Knob 5	Control Change	B0 14 rr	B0 34 xy
Knob 6	Control Change	B0 15 rr	B0 35 xy
Knob 7	Control Change	B0 16 rr	B0 36 xy
Knob 8	Control Change	B0 17 rr	B0 37 xy
QC mode	–	90 2A kk	90 2A kk
f/Q LEARN	–	90 32 kk	90 32 kk
EQ mode	–	90 2C kk	90 2C kk
MIDI mode	–	90 74 kk	90 74 kk
Function 1	–	90 36 kk	–
Function 2	–	90 37 kk	–
Function 3	–	90 38 kk	–
Function 4	–	90 39 kk	–
Shift	–	90 46 kk	–
Channel Select Left	–	90 30 kk	–
Channel Select Right	–	90 31 kk	–
Read	–	90 51 kk	90 51 kk
Write	–	90 4E kk	90 4E kk

Detail of Parameters
kk: 00 = OFF, 7F = ON
rr: 0x = CW, 4x = CCW
x: Lighting Type (0 – 4)*
y: Lighting Pattern (1 – B)

* 0: Increase
  1: Center Minimum
  2: Increase
  3: Decrease
  4: Center Maximum

CMC-AI

Buttons and Encoders

Function	MIDI Message CMC → PC	MIDI Message PC → CMC
Function 1	90 36 kk	–
Function 2	90 37 kk	–
Function 3	90 38 kk	–
Function 4	90 39 kk	–
AI Knob mode	90 78 kk	90 78 kk
Browse Left	90 30 kk	–
Browse Right	90 31 kk	–
Volume mode	90 75 kk	90 75 kk
Lock	90 77 kk	90 77 kk
Jog mode	90 76 kk	90 76 kk
AI Knob (turn)	B0 3C rr	–
AI Knob (press)	90 3A kk	–

Detail of Parameters
kk: 00 = OFF, 7F = ON
rr: 0x = CW, 4x = CCW