Sonic Vortix

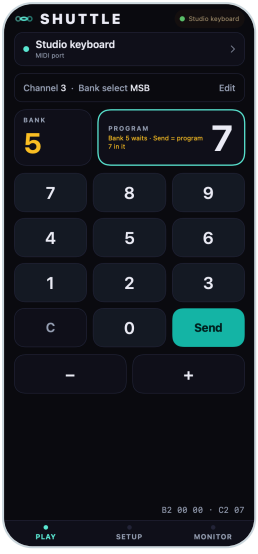
PROGRAM CHANGE · BANK SELECT

Shuttle

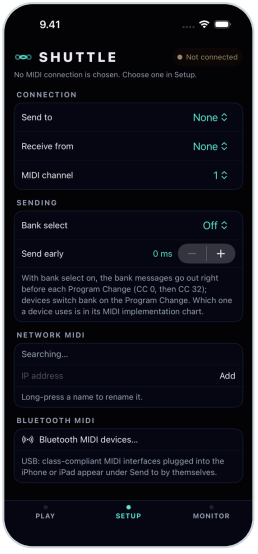
User Guide

iPhone & iPad / Shuttle Desktop / Logic Pro

Shuttle sends Program Change and Bank Select messages to your MIDI hardware. It doesn't need to know your device: you choose where the messages go, on which MIDI channel, and how your device expects its banks.



Choose a program



Connect your hardware

Shuttle on iPhone.

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This guide covers Shuttle for iPhone and iPad and Shuttle Desktop (the Mac app and its Logic plugin), version 1.0. Details may change.

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1. Connect your device

On iPhone and iPad, Shuttle reaches your MIDI device in three ways. Open the **Setup** tab. For the Mac app, see chapter 4.

USB

Plug a class-compliant USB MIDI interface into the iPhone or iPad (with Apple's USB adapter if needed). It appears under **Send to** by itself. Connect the interface's **MIDI OUT** to the device's **MIDI IN**.

USB CONNECTION AT A GLANCE

Shuttle
iPhone / iPad
→
USB MIDI interface
MIDI OUT
→
Your hardware
MIDI IN

Choose the interface under Send to, then match your hardware's MIDI channel.

Network MIDI (RTP-MIDI)

For a device on a computer or a bridge on your local network, for example a Mac with network MIDI turned on, or a Raspberry Pi with Shuttle Bridge (from the Downloads page).

1. In **Setup → Network MIDI**, wait for the host to appear. The list shows **Searching…** until one is found.
2. Tap **Connect** next to it. Shuttle chooses the network session under **Send to** for you.
3. If your host doesn't appear, type its address in **IP address** and tap **Add**.
4. After connecting, the status shows **Network · syncing…** for a few seconds. Network MIDI needs its clock sync before the first message can go out. Messages you send meanwhile wait and go out in order.

Long-press a host's name to rename it.

Set up network MIDI on a Mac

No companion app is needed. To send MIDI from Shuttle on iPhone or iPad to hardware connected to your Mac:

1. Connect the Mac and your iPhone or iPad to the same local network. Connect your MIDI interface to the Mac, with its MIDI OUT connected to your hardware's MIDI IN.
2. On the Mac, open **Audio MIDI Setup** (Applications → Utilities). Choose **Window → Show MIDI Studio**, then open **Configure Network Driver** in the toolbar.
3. Under **My Sessions**, click **+** to create a session. If asked for a type, choose **RTP**. Give it a recognisable name and enable it.
4. Set **Who may connect to me** to allow your device to connect. On older macOS versions, this may be labelled **Anyone**; use it on a trusted local network.
5. In **Live routings**, choose your MIDI interface's output as the destination for MIDI arriving from the network.
6. In Shuttle, open **Setup → Network MIDI** and tap **Connect** beside the Mac session. Wait for syncing to finish, then send a program change on the channel your hardware receives.

The network session also appears as a MIDI port in Mac apps such as Logic. For more detail, see Apple's network MIDI instructions.

Bluetooth MIDI

Tap **Setup → Bluetooth MIDI → Bluetooth MIDI devices...**, pair your Bluetooth LE MIDI device, then choose it under **Send to**.

Then set

- **Send to**: the output that reaches your device.
- **Receive from**: optional. An input, so the **Monitor** tab can show what your device sends back.
- **MIDI channel**: the channel your device receives on (see its MIDI settings).

Shuttle remembers these and selects them again the next time it starts. If the saved output isn't connected, Shuttle tells you so and sends nothing.

2. Play: choose a program

The **Play** tab shows where messages go, your channel and bank setting, the **PROGRAM** number (and the **BANK** number when bank select is on), a keypad, and **–** / **+**.

- **Type a number.** It goes out by itself as soon as no longer number is possible, for example 13 (130 would be too high), or any third digit. Otherwise press **Send**: the status line says **Send, or keep typing**.
- **C** clears what you typed.
- **–** / **+** step to the previous or next program and send it at once. With **BANK** selected they step the bank instead; it goes out with the next program.
- The bytes Shuttle sent last are shown at the bottom, for example `C0 0C`. The **Monitor** tab shows recent sent and received MIDI messages (up to 200 lines).

Program numbers: 0–127 or 1–128

MIDI has 128 programs, numbered 0–127 inside the message. Many devices count them from 1 (Roland, for example: the first patch is 001), others from 0. Set **Setup → Sending → Program numbers** to match your device, so the number you type is the number your device shows. The message on the wire is the same either way.

Auto-send after pause

Setup → Sending → Auto-send after pause: **Off**, **1 s** or **2 s**. When it's on, a number still waiting for a possible next digit goes out by itself after the pause, and the status line counts down (**Sends in 2 s — or keep typing**). A new digit restarts the count; **C**, **Send**, **–** / **+** or switching between BANK and PROGRAM cancel it. It works the same when you type a **bank**: a pause after the first digit takes that digit as the bank, so type bank numbers without pausing, or leave auto-send off.

Send early

Setup → Sending → Send early (0–50 ms) sends timed messages slightly ahead of their time. It's for the Logic plugin, where the host times program changes (automation). In the app, messages go out when you press, and this setting has no effect.

3. Banks

What is standard and what is not

The **Bank Select messages are part of the MIDI standard**: Control Change 0 (Bank Select MSB) and Control Change 32 (Bank Select LSB). A device takes the new bank when the **next Program Change** arrives, so Shuttle always sends the bank messages right before the Program Change.

The **bank numbers are not standard**. Each manufacturer decides:

- which values select which bank,
- whether the device listens to CC 0, CC 32 or both,
- how many banks can be reached over MIDI at all,
- whether programs are numbered 0–127 or 1–128.

Find your device's bank table

Typically the owner's manual has a **Bank Select table**. Look for **MIDI Implementation** or a section like **"Selecting sounds from an external MIDI device"**. The table gives the CC 0 value, the CC 32 value and the program range for each bank.

Set it in Shuttle

Setup → Sending → Bank select: choose the line that matches your device's table.

Your device's table says	Choose
The bank is sent as CC 0 only	**CC 0 = bank (MSB)**
CC 0 has a fixed value, the bank is in CC 32	**CC 32 = bank (LSB), CC 0 fixed**, then set **CC 0 (MSB) value**
The bank is in CC 0, CC 32 is 0	**CC 0 = bank, CC 32 = 0**
No bank select, or you can't find the table	**Off**

Then on **Play**, tap **BANK**, type the bank number, and choose the program. The status line shows **Bank n waits · Send = program p in it** until the program goes out with the new bank. Bank numbers are always the value sent in the message (0–127).

A bank number that isn't in your device's table does nothing useful. The device may stay where it is or show an empty slot.

If you can't find the bank table

Set **Bank select** to **Off**, choose the bank on the device itself, and use Shuttle for program changes **inside that bank**. Without bank messages, a device stays in its current bank.

Example: Roland XV-5050

The bank table is in Roland's manuals ("Selecting Patches … from an External MIDI Device").

- **Bank select:** CC 32 = bank (LSB), CC 0 fixed. **CC 0 (MSB) value: 87** (87 selects Patches).
- **Program numbers:** 1–128.

BANK	Patch group
0	USER
64 – 71	Preset groups A – H
32 – 39	Memory card banks (only with a card inserted)

- Example: BANK **64**, program **1** → the XV shows **PR-A 001** (bytes `B0 00 57 · B0 20 40 · C0 00`).
- Other bank numbers show "<<No media>>" on the XV.
- The XV must be in Patch mode and receive on the channel you set.

Example: Access Virus C

Bank values are documented in the Virus C (OS5) manual.

- The manual lists **Bank Select 0–3 = banks A–D** for both CC 0 and CC 32, and Program Change 0–127.
- Only **banks A–D** can be selected over MIDI, although the Virus holds more banks.
- **Program Change Enable** must be on in the Virus's global MIDI settings, or it ignores program changes.

4. Shuttle Desktop on the Mac

Open the standalone Shuttle Desktop app to control hardware without Logic. In **Setup**, choose **Send to**, optionally **Receive from** for Monitor, and **MIDI channel**. Use **Play** as in chapter 2; bank settings work as in chapter 3. The app remembers your settings.

Set up network MIDI in macOS: **Audio MIDI Setup → Window → Show MIDI Studio → Configure Network Driver**. Enable a session and connect the other network participant there. Connected sessions appear under **Send to** in Shuttle. Choose the session and the channel your hardware receives on. The Mac app does not have the phone's network host list. USB MIDI ports appear under **Send to** when connected.

5. The Logic plug-in

On any track with a MIDI FX slot, choose **MIDI FX → Sonic Vortix → Shuttle**. In Shuttle's **Setup**, choose **Send to**, **MIDI channel** and, optionally, **Receive from**. On an External Instrument track, choose the same MIDI port and channel in Shuttle and External Instrument. Shuttle's hint says:

> On a track with External Instrument, choose the same MIDI port and channel here as in External Instrument.

Automate Program and Bank

Show track automation in Logic, choose Shuttle's **Program** or **Bank** parameter in the automation lane, and place points where the hardware should change. Read the automation during playback. These are stepped values: a point selects a whole number, rather than a ramp through the numbers between points. Program numbering follows **Program numbers**; Bank uses 0–127.

A Program point sends the selected bank messages, if enabled, followed by Program Change. A Bank point sends the new bank messages followed by the **current program**: CC 0 then Program Change for MSB; fixed CC 0, bank CC 32 then Program Change for LSB; or bank CC 0, CC 32 = 0 then Program Change for the combined scheme. A repeated program/bank selection is not sent again by automation. With **Bank select → Off**, a Bank point sends nothing. Keypad sends can repeat the same selection; keypad bank entry waits for a program, as in chapter 3.

Send early (chapter 2) applies to timed automation here. Start at 0 ms; increase it if your hardware needs the change ahead of the notes. It does not move Logic's notes.

MIDI paths and saved settings

Program and Bank go through Shuttle's own MIDI connection to the chosen port. Notes and everything else arriving from Logic pass through unchanged, with their time and order preserved. A software instrument on the same track does not receive Shuttle's Program or Bank changes. Keep Logic's note routing and audio setup as usual.

Each plug-in instance keeps its own output, input and channel in the project, together with its sending settings. Opening a project sends nothing from Shuttle. External Instrument has its own program-send setting; that is separate from Shuttle.

The input hint

When a selected input is connected, Shuttle shows a hint once for that input name, until you press **OK**. It helps prevent Logic from receiving the same hardware input as well. With your input's name in place of “port”, the hint says:

> In Logic, untick “port” under Logic Pro → Settings → MIDI → Inputs (if Inputs is missing: Settings → Advanced → Complete Features on), so Logic does not also receive this port's MIDI.

If a host does not take MIDI from the plug-in and incoming MIDI is lost, the open window says:

> This host does not take MIDI from the plug-in: notes on this track stop here

Check that the plug-in is in a MIDI FX slot and that the host accepts its MIDI output. The message is based on new losses while the window is open; it clears after five seconds without another loss.

6. Computer keyboard

In the Mac app or plug-in window, select **Play** and click the keypad area if it needs keyboard focus. Keys act like the on-screen controls. The host may keep some keys for its own shortcuts.

Key (including numeric keypad where available)	Action
0–9	Enter a digit in the selected Program or Bank.
Return or keypad Enter	Send / accept the typed number, just like **Send**.
Delete (Backspace), Forward Delete, Escape or keypad Clear	Clear the whole entry, like **C**.
– or -	Step down: program sends at once; bank waits for a program.
+ or =	Step up, with the same sending rules.
B or b	Select Bank, when bank select is on.
P or p	Select Program.
Tab	Switch between Program and Bank, when bank select is on.

Command, Control or Option with a key is left to the app or host. Shift alone does not block these keys.

7. Technical log

On first use Shuttle asks **Keep a technical MIDI log for support?** Choose **Yes** or **No**. Nothing is logged before an answer. A small record-circle indicator appears while this process is logging; its accessibility label is **Technical log on**.

In **Setup → Technical log**, **Keep technical log** changes your answer and **Clear log** deletes Shuttle's technical log files, including rotations and files from its other processes. Turn logging off before clearing if you want the files to stay empty: new activity can otherwise create them again. The Monitor's clear control clears its displayed list, separately from these files.

With permission, the app logs while it is running. A plug-in process logs only while at least one Shuttle window in that process is open. Automation continues with the window closed, but that process does not log it. The app and plug-in share the answer; it is read again on window opening. If an already open window does not reflect a change made in another process, close and reopen it.

The log contains timestamps, MIDI messages sent and received, device and port names, connection status, errors and messages shown to you. Files rotate by size, replacing older rotations; this is not a fixed retention time. They stay on the device unless you choose to email or share them.

In the apps, **Setup → About → Email log to support** appears when log files exist. The row shows the attachment names and total size. It opens an email composer, or sharing if email is unavailable; you choose whether to send it. The plug-in window has no email action: use the standalone app for this.

8. Troubleshooting

You see	What to do
Choose a destination / **Nothing selected**	Choose an output under **Setup → Send to**.
Nothing changes on the device	Check the MIDI channel on both sides, the cable (Shuttle's OUT to the device's IN), and that the device accepts program changes (some have a setting to turn them on).
The device shows a number one higher or lower	Switch **Program numbers** between 0–127 and 1–128.
The bank doesn't change	Check the bank table and the **Bank select** line (section 3), or use Bank select **Off**.
Network: **Network · syncing…** stays on	Check that the host is running and on the same network; disconnect and connect again.
Logic sends notes but the hardware program does not change	Choose Shuttle's output and channel. On an External Instrument track match that instrument's port and channel. Read the Program automation lane.
Bank automation does nothing	With **Bank select → Off**, Bank points send nothing. Choose the bank scheme your device uses; a Bank point then sends bank messages and the current program. Repeating the same selection is suppressed.
A software instrument does not change program	Shuttle sends Program and Bank to its selected MIDI port. Use the software instrument's own controls for its sounds.
An input hint appears	Follow the instruction in chapter 5, then press **OK**. It prevents Logic also receiving that hardware input.
This host does not take MIDI from the plug-in: notes on this track stop here	Check the host's MIDI output support and MIDI FX placement; see chapter 5.
Project reopening changes a hardware program	Shuttle's restore sends nothing. Check External Instrument's separate program-send setting and other MIDI senders.
There is no technical log or email row	Answer the log question or enable **Keep technical log**, then use the app or open a plug-in window. Email appears in the apps only, when files exist.

Still stuck? Write to support@sonicvortix.com.