Other Mastermind Information

This section contains other information on the Mastermind series that didn't fit anywhere else

- Mastermind Version History Log
- Fractal VP4 CC Numbers

Mastermind Version History Log

This log contains a list of changes that have been made to the Mastermind GT, LT and PBC over time. This is not yet complete, but more information will be added later. For now, change information on older versions can be found on the RJM Forum.

You can download the latest firmware at rjmmusic.com/downloads

Version 5.5.1

Version 5.5.1 only applies to the PBC/LT editor. It fixes some UI issues. The Mastermind GT Editor and GT/LT/PBC firmware do not have these issues, so continue to use 5.5.0 for those cases.

Version 5.5.0

IMPORTANT NOTE FOR MAC USERS! We changed to a new development environment for 5.5.0. This allows us to build universal binaries for MacOS to insure future compatibility. However, this also means that we now require a minimum of MacOS 12 (Monterey) for version 5.5.0 and up.

FEATURES:

- New device support:
  - Ampete 442
  - Boss XS-100
  - EM Custom AMI-U Dual TRS
  - GigRig Wet/Dry Machine
  - Keeley Nocturne
  - Meris Ottobit X
  - Morningstar ML5R
  - Strymon: new CCs for the Stryfecta, accounting for later firmware updates
  - Strymon Timeline X
  - TC Electronic 2290P
  - Tone King Royalist
  - ToneX One+
  - Wampler Terraform (new version)

BUG FIXES:

- "Flash w/ Tempo" now works on external switches
- (Mastermind GT) Fixed a bug that prevented song-level BPM edits from being saved on the device
- Fixed a bug that prevented song number 1008 from being added to a setlist
- The Mastermind should not send MIDI clock when it's acting as a remote

- (Mastermind PBC) Independent loops and switches can now be controlled by audio actions during a preset change
- (Mastermind PBC/LT) Button repeat issues are fixed - it didn't read the saved setting on startup
- PBC6X no longer forces the buffer to turn on when the tuner display is on, but the internal tuner is disabled
- Improved the interaction between alternate presets and the "previous preset" function
- Set IA actions in the expression pedal position switch action list now work correctly
- Fixed some issues with scene buttons synchronizing between pages
- Editor: Moving presets within the preset list will update alternate presets on each preset accordingly

Version 5.4.0

FEATURES:

- New device support:
  - Boss SDE-3000D
  - Fractal Audio VP4 (see notes: https://docs.rjmmusic.com/books/other-mastermind-information/page/fractal-vp4-cc-numbers)
  - Kinotone Ribbons and Sparks
  - Universal Audio UAFX 2.0 pedals
  - Valeton GP5
- Fractal VP4 is supported as a normal (non-bidirectional) device for now. We need to work some more things out with Fractal before we can have full support
- New setting for groups: "Allow multiple on". As the name suggests, turning this on allows more than one button to be on in a group. This is for certain special cases, like when you have more than one MIDI controlled pedal in a switcher loop. You can set up a group action with this setting to turn off the loop when all pedals in the group are off, and turn the loop on when one or more pedals are turned on.

BUG FIXES:

- (Mastermind GT) Fixed song name display, so that vertical bars and any characters that follow are not displayed on screen
- Fixed some problems with expression pedal switch actions
- Improved message handling of Axe-Fx communication
- Fixed a lockup on startup that happened on rare occasions
- Fixed bank selection - preset on/off colors are now displayed properly

Version 5.3.4

FEATURES:

- New device support:
  - Chase Bliss Lost & Found

    - Electronic Audio Experiments Prismatic Wall and Sending
    - Hologram Chroma Console
    - Neural DSP Nano Cortex
    - Old Blood Noise Endeavors Dark Star, Bathing, Black Fountain and Signal Blender
- The number of available button groups has been increased to 16
- The maximum number of auto taps has been increased to 20
- Changing presets now cancels any auto tap in progress
- Added a "Resend" special value for the System / BPM action, which causes the current tempo to be sent again via auto tap
- (Mastermind PBC/6X) Made Remote Mode available on the PBC/6X. A Multibox or Smart Multibox is required to connect the remote PBC.

BUG FIXES:

- (Mastermind GT) Fixed some major issues with Auto Tap on the Mastermind GT
- Fixed a bug that caused issues when sending settings to the Mastermind, when an alternate preset was selected
- Fixed a bug that allowed the Sysex ID to be set to invalid values

Version 5.3.3

FEATURES:

- New device support:
    - Chase Bliss Brothers AM
    - EHX Oceans Abyss
    - Hotone Ampero Stomp
    - Singular Sound Aeros
    - Source Audio C4
    - Tone King Imperial

BUG FIXES:

- (Mastermind PBC/10) Fixed a bug that prevented the tuner from working when Buffer 1 was off.
- Fixed a bug relating to global preset in remote mode
- Fixed an editor issue relating to condensed fonts

Version 5.3.2

FEATURES:

- New device support:
    - Boss DM-101
    - Boss SY-200
    - Kernom Elipse
    - Kernom Moho

    - Meris Enzo X
    - Soldano X88IR
    - Strymon EC-1
    - Voodoo Lab Control Switcher
    - Voodoo Lab Hex

BUG FIXES:

- Fixed a bug involving PC actions and their effect on the preset PCs in the editor
- Fixed a bug with song synchronization in Remote Mode
- Fixed some bugs in name editing in the Mastermind's setup menus
- Fixed an issue with scene display when using Fractal products

Version 5.3.1

- New device support:
    - BluGuitar Amp1
    - Chase Bliss Clean, Habit and Lossy
    - Diezel VH-X
    - EHX POG3
    - Friedman IR-C, IR-J, IR-X
    - GFI Enieqma, Solus Ventis
    - Kemper Player (still needs a USB host adapter to connect)
    - Radial Engineering JX-44 v2
    - Two Notes Opus
    - Walrus Meraki

BUG FIXES:

- BPM changes made using System / BPM actions can now be stored using IA Store buttons and actions
- (Mastermind GT) IA Cycle menus now highlight the active option no matter which row the buttons are in
- (Mastermind PBC/10) Fixed a bug where the tuner wouldn't work if a fuzz mode loop was on when turning on the tuner

Version 5.3.0

FEATURES:

- New device support:
    - Chase Bliss Mood mk II (fixed previous attempt) and Onward
    - GFI Duophony
    - Morningstar ML10X
    - Strymon Big Sky MX
    - Quad Cortex: Added individual scene CCs (Scene A, Scene B, etc.)

    - Kemper: Added looper buttons (for real this time, had some wires crossed last release...)
- All devices can now be set to respond to incoming PCs. For example, let's say you have a device on channel 5. If Ignore Incoming PCs is turned off, incoming PCs on channel 5 will cause preset changes on the GT. And, specifically, an incoming PC on channel 5 will never result in the Mastermind sending a PC on channel 5. This prevents MIDI PC feedback loops.
- The above feature is probably not needed or desired in most cases. As a result, Ignore Incoming PC and Ignore Incoming CC are now the default setting for most devices.
- The Set Preset PCs to 0 and Set Preset PCs Sequential buttons in the editor now ask for a preset and bank number. This will set all preset PCs for a device to a specific bank and preset (in the case of the Set Preset PCs to Value button) or it will assign sequential PCs starting at the given PC and bank (in the case of Set Preset PCs to Sequential)

BUG FIXES:

- It's once again possible to recall presets that are not in the active setlist.
- Fixed an issue that could cause buttons to incorrectly send their messages more than once when using Set IA.
- Fixed expression pedal issues when in Remote Mode.
- Fixed a bug that caused the previous screen to stick around after cancelling a Preset Number menu.
- Fixed an issue that caused tempo to continue to be displayed on buttons when MIDI clock is turned off.
- Added the missing Alt Preset Color setting in the editor
- Fixed numerical editing (like BPMs) on Mastermind GT/10
- It's now possible to show both preset numbers and scene names at the same time on the main screen
- Fixed an issue where drag and drop in the editor, followed by Send Changes To Device, didn't result in all data being updated correctly.
- Fixed an editor issue that caused Audio Feature Names to not be carried over correctly when sending to and reading back from the device.
- Fuzz mode is fixed (again) in PBC/10

And, one other change to the Mastermind GT - to make room for new features, I had to remove the non-bold fonts for the main display. The main display will always display in a bold font now.

Version 5.2.1

BUG FIXES:

- Fixed a bug that prevented the "Preset" special value of the System / Page action from working in most cases

Version 5.2.0

FEATURES:

- New device support:
  - Chase Bliss Bliss Factory and Reverse Mode C
  - Electro-Harmonix 8 Step
  - Hologram Microcosm
  - Kemper Profiler update: add looper controls
  - Line 6 HX One
  - Meris Mercury X
  - RJM Music Full English
- Added "Use Song Index" MIDI setting, which controls whether an incoming MIDI bank number selects a song by its number, or whether it selects by index (1st song in the setlist, 2nd song in the setlist, etc.)
- Added "Clock Pulse Limit" MIDI setting, which causes the Mastermind to send only a specific number of MIDI clock pulses each time the tempo changes. This makes it work effectively like tap tempo, just much faster. Setting this to 0 keeps the default behavior (continuously send clock pulses).
- Added special value "Preset" to the System / Page action. This shows the button page indicated by the currently loaded preset.
- Added special value "Preset" to the PC action. This sends the PC stored in the current preset for the selected device.

BUG FIXES:

- Fixed a bug that kept Fuzz Mode from working correctly on the PBC/10
- Fixed a bug that caused external switches on pages 2 and higher from properly switching audio features
- Fixed a bug that caused the LEDs not to update when dismissing the tuner screen
- Fixed issues in the setup menus relating to the "clear" button
- Fixed a bug in the PC Edit menu that caused it to not calculate presets and banks correctly

Version 5.1.0

FEATURES:

- New device support:
  - Amplitube Tonex
  - Chase Bliss Mood 2 & Gen Loss 2
  - Flower Sunflower
  - Strymon Brig, Cloudburst and Ultraviolet
- Added new Bank Size parameter, which allows you to set a fixed bank size. This is the amount of presets the Bank Up and Bank Down advance through the preset list. (This has no effect in Song & Setlist mode.) The default value "Auto" is the old behavior, where bank size is determined by the number of preset buttons on the current page.
- *Mastermind GT Only* IA Cycle Menu and Scene Menus now have a "Remain in Menu" option that allows you to switch between any or all of the options in the menu without

exiting the menu. A Done button is provided to exit the menu when this option is activated.

BUG FIXES:

- Corrected the default settings for the Axe-Fx III looper button
- Improved the way log taper compensation works in expression pedals, expression pedal bar graph also works better when using log compensation
- Fixed issues in the setup menus relating to the "clear" button

Version 5.0.1

- Fixed a bug that could cause audio problems when both inputs are disabled on a PBC/6X
- Fixed the CC list for Eventide H90
- Fixed default tap tempo CCs for some Strymon pedals
- Enabled scrolling with up/down arrows in the Mastermind editor song and setlist lists
- Extra data (device PC info, KPA effect names) is now stripped from button names before transferring to the editor
- IA Store now stores tempo correctly in the current song or preset based on the current settings
- Show Tempo no longer interferes with bank selection
- Fixed some weird interactions between bank selection, alternate presets and page changes

Version 5.0.0

- New device support:
  - Eventide H90
  - Jet Lamb, Lion and Revelation
  - Kernom Ridge
  - Meris LVX
- Added Wrap Banks setting which, when enabled, allows Bank Up / Bank Down to wrap around from the first bank or song to the last bank or song. (Or vice-versa). Keeping this setting turned off works as it did in the past, where you can't Bank Up past the last bank/song or Bank Down past the first bank/song.
- Changed how special text is appended to buttons (PC number in Device PC -/+ buttons, effect block types in Kemper, etc.) Now, special text is given priority so that it can't get cut off if your button name is too long.
- Fixed a bug that caused IA Cycle buttons with CC Momentary actions to malfunction
- Added some sanity checking and protection code to MIDI bank handling, in the hope that it helps those seeing MIDI bank issues.

Version 4.9.1

- A proposed fix to a problem that caused the editor to hang during settings transfers on Macs. Let's hope this works!
- Fixed the inability to select a few Axe-Fx III CCs at the end of the CC list

- Fixed Preset Number button menu on GT/10
- Fixed Set IA and IA Link problems on IA Cycle Menu buttons
- Fix bug that prevented Song action from updating preset button names

Version 4.9.0

- New device support:
  - Red Panda Bitmap 2 and Raster 2
  - Strymon V2 pedals: Bluesky, Deco, Dig, El Capistan, Flint, Lex
  - Wampler Metaverse
- *Mastermind GT Only* Added Condensed Fonts setting, which makes all button displays use the condensed (narrower) font all the time
- Fixed the Off Preset LED color option, which didn't quite work in 4.8.1
- Added Dynamic Distortion block support in Axe-Fx III
- Fixed editor bug that caused clicks on IA buttons in the Presets tab to register in the wrong page
- Fixed an editor bug in the PC messages section that can cause PCs to be sent when they aren't supposed to

Version 4.8.2

Windows editor release only, fixes a transfer issue between editor and Mastermind GT

Version 4.8.1

- Fixed the missing Illumine pedal data
- Fixed Assign Default Buttons for Syn2
- Fixed firmware update bug in 4.8.0 editor
- Fixed version number displayed in editor when converting older settings
- Fixed Set IA action "prev" and "next" special values
- Fixed remote mode synchronization of grouped IA buttons

Version 4.8.0

- New device support:
  - Ampete switchers
  - Boss RE-202
  - Eventide Blackhole, Micropitch, Tricerachorus, Ultratap
  - Jackson Optimist
  - Line 6 DM4 II
  - Morningstar ML5
  - Neunaber Illumine
  - Synergy Syn2
  - Walrus M1
- Fixed Mini Effect Gizmo X CC list
- Fixed IA Cycle synchronization in remote mode
- Fixed Copy Preset on GT/10

- Fixed a bug that cause Auto Tap to trigger when switching to BPM=off
- Added Off Color for presets, so that you can now specify an on color and a off color to be displayed on the preset's button
- Added System / Setlist special value Reload, which brings you to the first song, first preset in the current setlist
- Axe-Fx III/FM3/FM9 now disable looper buttons when there's no looper available in the current preset
- Added "Show Preset Number" parameter, which allows you to switch of display of preset number in the main display
- Editor: fixed weird behavior at the end of the song and setlist lists

Version 4.7.0

- New device support:
  - Fractal FM9
  - Free The Tone pedals (5 of them)
  - Suhr microMIDI and Discovery
  - Strymon Zelzah
  - Sound Sculpture ABCadabra, Abyss, Volcano
  - Wampler Terraform
- Fixed a bug in the Windows editor that messed up Scene names
- *GT Only:* Fixed a nasty, nasty memory bug that caused problems in the onboard menu Save Settings and Format Drive option, among other things
- Fixed a bug in Axe-Fx III Poll State where it sometimes failed to scan for effect block states
- *PBC/LT Only:* Fixed independent loops and function switches so that they power up in the user-specified default state instead of always being off on powerup
- *GT Only:* Added range numbers to the Page/Preset/Song/Setlist menus. The main screen will tell you things like "Presets 1-20" to tell you which page of items you're currently looking at.

Version 4.6.3

- More fixes for Get Preset Names

Version 4.6.2

- Fixed Get Preset Names on Kemper as much as I could. It won't hang anymore, and it generally works, but sometimes it will put an incorrect name in a blank performance slot. This is something that Kemper has to fix, and they're aware of the issue.
- Fixed the "w Tails" effect buttons so that they are in sync with the respective delay and reverb blocks
- Fixed local button pages so that scene buttons are correct when the page is loaded
- Fixed MIDI Clock = Auto for incoming clock over USB
- Fixed an incorrect interaction between Previous Preset buttons and Preset 2nd Press = Reload
- Fixed a bug involving Previous Preset buttons and actions and MIDI banks

- Did a lot of work in general improving MIDI bank handling. The Mastermind now always sends MIDI banks before PCs during a preset change, for any device that supports banks. Prior, it would try to be "smart" and not send bank numbers it thought were redundant.

Version 4.6.1

4.6.1 started as a bug fix release, but I decided to squeeze in a few extras that didn't quite make the cut for 4.6.0.

- *PBC Only:* Fuzz mode! This was something that came to me when working on the new Mini Effect Gizmo. The idea is that you tell the PBC that a loop has a fuzz pedal (or other pedal that doesn't like buffers) in it. Then, when that loop is active (and there are no other active pedals in front of it), the PBC automatically turns off the input buffer so it doesn't interfere. The buffer will automatically come back on when all "fuzz" loops are turned off (if the buffer is enabled). Don't know why I didn't think of this before, it makes a lot of sense. You can find the Fuzz mode settings ni the global Audio tab.
- Added support for Walrus pedals and Quad Cortex
- Fixed support for Jackson pedals
- Fixed CC lists for some RJM products
- Fixed firmware update problems in editor
- Fixed system report in editor to show more parameters (IA ID, Min, Max, etc.) Also external switches are now shown properly
- The GT can now use a PBC (or new Mini Effect Gizmo) as a remote tuner and display the results on the Mastermind's screen. Just send the Tuner CC to the PBC or MEGX and run a System / Tuner action. As long as you have a bidirectional connection between the two, you should get the tuner appearing on the GT.
- PBCs will now send tuner data when the tuner is activated via a MIDI CC. Data is sent back on the same port where the tuner CC was received. This allows any Mastermind to use a PBC (or new Mini Effect Gizmo) as a remote tuner and display the results on the Mastermind's screen.
- Fixed grouping of external switches on pages higher than page 1.
- Fixed external switches' handling of IA Cycle colors
- Turning Send Redundant PCs off now works correctly when Direct Send is turned on
- Fixed the quick flash IA buttons did when changing presets on an Axe-Fx III

Version 4.6.0

FEATURES:

- A ton of new device support:
  - Chase Bliss Preamp and CXM1978
  - Several CooperFX devices
  - Seymoud Duncan Dark Sun
  - Empress Zoia
  - Eventide Rose
  - GFI Synesthesia (added new CCs to Specular Tempus too)
  - Hologram Microcosm, Dream Sequence

    - HX Stomp XL (added more CCs to HX Stomp and HX Effects)
    - Jackson Asabi and Golden Boy
    - Meris Hedra
    - Mesa MIDI Matrix
    - Neunaber Neuron
    - Vintage Revolution Pedal Pro (basic unidirectional support)
    - Red Panda Particle, Tensor, Context
    - Source Audio EQ2
    - Strymon Night Sky, more CCs for Volante
    - And of course, Mini Effect Gizmo X and Overture
- Cycle buttons can now be grouped. If you link one or more of them, step #1 is considered the "off" step which it will return to when another button in the group is activated
- Cycle buttons can now be IA Linked together
- Audio loops, buffers, function switches, etc. can be named by the user. There's an "Audio Feature Names" menu option that allows you to set the names.
- Added CCs for remote bank up and bank down functions
- System / Wait action will wait a specified number of milliseconds. Please note that this is pretty "dumb" - it will stop everything while it waits, except MIDI clock, so don't make it wait too long. If you're trying to put delays in between messages going to the same device, make sure that that device has Direct Send PC/CC turned on, otherwise you won't get the desired effect.
- *GT Only:* Page and Bank up/down CC numbers can be edited on the GT (not in the editor at the moment, but the editor will preserve those settings).
- Added the option to send "True" note off messages instead of Note Ons with 0 velocity
- System Report in the editor now has search functionality
- The MIDI tab now only shows the CCs that are actually supported by the currently selected model of Mastermind.

BUG FIXES:

- Removed artificial limit of 99 for IA IDs on hold functions
- Fixed Previous Preset button type's behavior
- External switches set to Preset type now number themselves correctly
- External switches will now repeat correctly (if set to a button type that is supposed to repeat)
- Page buttons now repeat
- Note messages are now sent correctly over USB
- The page selector at the bottom of the Presets tab now works correctly
- Local pages with IA Cycle buttons now behave correctly
- The editor didn't handle grouped hold functions correctly in the Presets tab, now fixed
- *GT Only:* Currently selected preset will highlight when selecting banks
- *GT Only:* Preset buttons update now update correctly after using a Preset Menu button and a page change
- *PBC Only:* Audio / Insert and Invert actions now display correctly in the editor
- PBC/10 no longer draws excessive current during startup

Fractal VP4 CC Numbers

> **NOTE**: In firmware 5.4.0, some changes to the default settings should be made in order to get the VP4 working correctly. In Devices, turn on **Send CCs On Preset Change** for the VP4 device. On each IA button that controls a VP4 effect block or channel, turn on **Send on Preset Change** and **Update on Preset Change**.

The Fractal VP4 has partial support as of firmware 5.4.0. Unfortunately, this device doesn't ship with predefined CC numbers, so an initial setup step is required. In the MIDI/Remote setup menu, set up the CC numbers as follows:

Parameter Name	CC Number
Scene Select	CC #34
Scene +1	CC #52
Scene -1	CC #53
Input Volume	CC #4
Output Volume	CC #7
Tap Tempo	CC #33
Tuner	CC #35
Tuner on Heel Down	CC #36
VP4 Bypass	CC #20
FX1 Bypass	CC #21
FX2 Bypass	CC #22
FX3 Bypass	CC #23
FX4 Bypass	CC #24
FX1 Channel	CC #31
FX2 Channel	CC #32

Parameter Name	CC Number
FX3 Channel	CC #33
FX4 Channel	CC #34
External 1	CC #11
External 2	CC #12
External 3	CC #13
External 4	CC #14
Preset +1	CC #50
Preset -1	CC #51