WoodTroller



Woodman's Immaculate Maple Syrup Studio

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1.What

WoodTroller is NOT an app to annoy people. It's an MPE multi touch bar keyboard and midi controller.

MPE means "Midi Polyphonic Expression" (see <u>https://www.midi.org/midi-articles/midi-polyphonic-expression-mpe</u>).

The MPE touch bar supports multiple notes with individual pitch shift (horizontal movement), pressure and CC74 (vertical movement).

WoodTroller has 8 general purpose rotary controls :

- Each can send 6 different CC messages to different channels.
- Each of the 6 command values can be mapped differently to the full rotary range.
- So 1 rotary can control several parameters on the same or on different instruments.
- Rotary names, colour, unit, range can all be user set.

WoodTroller has 8 general purpose on-off or push buttons :

- Each button can send up to 8 different midi commands (CC, PC, NoteOn, ...) to different channels.
- This allows to quickly switch multiple midi instruments or devices to another program or to other settings.
- Each midi command's data value can be auto incremented/decremented.
- All button names, colour, type can be user set.

All settings can be stored in presets in iCloud which yield automatic preset syncing between several WoodTrollers on different devices.

The app can be used stand-alone (device midi output) or as a plugin in a DAW.

• IOS plugin type : AUv3 and stand-alone app.

• MacOS plugin type : AUv3 and stand-alone app.

1.1 New

v 1.1

- Added Snap control for note-on when touch down is not centred.
- Added Velocity note-on control in the lowest vertical note-on region.
- Added Velocity for note-off, controlled by button which toggles between zero or settable noteoff velocity
- Added 2 convenience buttons "Oct Up" and Oct Down" for the center touch bar note.
- Added User scale in Advanced panel.
- Fixed jump in pitch value when note-on touch down was not centred.
- Added Midi over BlueTooth in stand-alone app.

v 2.0

- Added Midi V2 support : All note-on/off messages now have 16 bits velocity (7 bits in midi v1) All controller (CC), pitch, aftertouch, pressure message values now have 32 bits. Added v2 button in main panel to enable v2 or revert to midi 1. Added v2 group dropdown (1..16) : each group has 16 v1 channels. Pitch shifting can use the new v2 "Per Note Pitch" message (MPE in v1). CC74 can use the new v2 RPN message (MPE in v1).
- Pressure and CC74 can now be set/changed after note-on (is held) with a second touch in the same note lane. A small circle will indicate the value set.
- Velocity zone can be made larger (Advanced Settings new slider).
- CC74 zone can now send any CC controller messages (Advanced setting).
- Pressure zone can now send "ChannelPressure" or "Aftertouch" midi messages.
- Midi send can now be done to published destination endpoints or from the WoodTroller midi source endpoint or from both.

v 2.5

Added Midi V2 CI (Capability Inquiry) Property Exchange :

- Added new CI panel
- Allows to Discover other midi CI devices/apps.
- Allows to select one of the found devices/apps.
- Allows to set the rotaries and buttons to parameters retrieved from the CI device/app.
- Presets (programs) retrieved from the CI device will be set in the WoodTroller preset dropdown.
- Allows to subscribe to changes in parameter values or current preset (program).
- Supports WoodSynth Property Exchange (on iPad, MacOS and iPad to MacOS).
- Supports Korg's Wavestate Native Property Exchange (on MacOS and iPad to MacOS).

v 2.6

- Added 16 more rotaries (move keyboard down with arrow button).
- Added 8 more buttons.
- Added new scaling mode : making window smaller keeps size of UI elements and allows to pan to area of interest.
- Added morphing : up to 4 snapshots (values of the 24 rotaries) can be taken. Moving between 2 snapshots make the individual rotaries go from their position in snapshot 1 to the position in snapshot 2.
- Added new UI morphing panel which allows to drag the morphing position and take the snapshots.
- Added midi CC inputs (default cc11 and cc1) for the morphing X (horizontal) and Y (vertical) position.
- Added midi CC inputs for the rotaries and buttons from the NI Kontrol-S keyboards default midi map.
- Added plugin automation of rotaries and buttons.
- New MacOS NKS VST3 version (for NI Komplete Kontrol) : acts as bridge between the new NI Kontrol-S MK3 keyboards and midi (v1 and v2). Control names, ranges and values set/changed in WoodTroller are automatically mapped to the keyboard display.



v 2.6.1

Added possibility to control several rotaries (and hence midi CC's) at the same time by moving on the keyboard.

- CC74 lane can now be directed to any rotary (which can send up to 6 midi CC's with different range).
- CC74 lane can be directed to Morph X or Y.
- Pitch Bend can be directed to Morph X.

v 2.7

- Added Hold button
- Held notes can still be moved in X (pitch) and Y (pressure, ...) direction.
- Added "Global" option to rotary and button midi channels (uses the channel at the top)
- Added Midi V2 Group to the rotary and button midi commands.
- Rotary and button midi Group and Channel are now automatically set when clicking "Set Controls" in the Midi V2 CI Property Exchange.
- Top Channel and Group are automatically set when selecting a discovered midi V2 device.
- Subscription to midi V2 Parameter changes now supports more than 1 device/subscription.

2. Main window



Individual controls are explained below in section 4.

A large part is dedicated to the touch bar to have finer control over pressure and/or CC74. When the rotaries are not needed, the touch bar can be further extended by clicking the up/down button on the right.

Most rotaries can be double clicked which will set a minimum value or toggle to the maximum value.

You have pressed the Question-mark button already as you are reading this manual.

The number of rotaries visible can be changed with the up/down arrow button on the right/top.

3. Presets

User presets can normally be set via the DAW specific controls. Those presets will be saved in a specific format and location dependant on the DAW.

User presets can also be selected via WoodTroller's own dropdown in the header bar. Factory presets can also be selected with this dropdown menu.

After installing a new version, the Preset menu will have a "Copy factory presets" item which should be selected to copy the factory presets from internal storage to the user folder.

The WoodTroller User and Factory presets are made available to the DAW which can/will present them as factory presets.

The WoodTroller preset.json files are saved in your iCloud Drive (when enabled) or else in the app's local documents folder.

When saved to iCloud Drive the presets are automatically available (and synced) to all devices and all DAW's running WoodTroller and are obviously backed-up as well.

Subfolders with preset files are supported and can be copied (Files app, Finder, ...) into the WoodTroller preset folder.

WoodTroller will create a subfolder when saving a new preset with a name starting with the subfolder's name and separated with a "/", e.g. saving a new preset with name "strings/violin" will create a subfolder "strings" (if it does not exist yet) and save a preset "violin" into this subfolder.

When a preset is selected and any parameter is changed afterwards, the name of the preset will be marked with a * at the end to indicate the settings are now different than those from the saved preset. When this preset is re-saved the * 's will disappear again.



4. Main Controls

4.1 Touch Bar

The touch bar has polyphonic pitch bending (horizontal movement) input on iOS, monophonic on MacOS (mouse).

The vertical direction has 3 (or 2) regions :

- at the bottom : note on
- above the first divider line : pressure starts and keeps increasing when moving further upward
- above the second divider line : CC74 starts and keeps increasing.

When either Pressure or CC74 is switched off, there will be only 1 divider (2 regions) line giving finer control over the pressure or CC74.

4.2 Touch bar controls

Velocity rotary : sets the maximum velocity value for notes-on.

Pressure : converts the vertical movement (above the first divider) to midi channel pressure.

Pitch Bend : converts the horizontal movement to midi pitch wheel values.

CC74 : converts the vertical movement (above the second divider) to midi CC74values.

Semitones rotary : sets the number of notes displayed in the touch bar.

Center note rotary : sets the center note of the touch bar. The "Oct -" and "Oct +" buttons shifts the center note per octave.

4.3 User rotary controls

The 24 rotaries can each send up to 6 different midi commands to different channels.

The midi command can be : CC (default), Pitch wheel or Channel pressure.

Each command value can be mapped to a smaller range of the full scale by setting a Map Start value > 0% and/or a Map End value < 100%.

So 1 rotary can be used to control different settings in 1 instrument (same channel) or the same setting in different instruments or any combination of those.

The name, colour, unit and range of the rotaries can be set in the Rotary settings panel.

Default only the first 8 rotaries are shown to give enough space to the keyboard. More rotaries can be made visible with the up/down arrow button.

4.4 User On/Off or Push buttons

The 16 buttons can each send up to 8 different midi commands to different channels.

Each button can be either an On-Off button (effect on-off) or a Push button (increase setting value).

The midi command can be : CC (default) , PC , Note On or Off, Pitch wheel or Channel pressure.

The name, colour, unit and range of the buttons can be set in the Button settings panel.

4.5 Touch bar MPE mode dropdown

This allows to set the MPE mode to either MPE-1 or MPE-16 or to set the midi channel in non-MPE mode.

4.14 Add preset button

Allows to save a new preset. The "Save as" window will be displayed which also allows to save comments (and made by) for the new preset.

4.14 Save preset button

When an existing preset is modified, this button will become enabled and allows to save the changes under the same preset.

4.15 Velocity (v1.1)

4.15.1 Note-on velocity

In v1.1 the velocity is determined by the vertical position in the lowest vertical region.

Above 75% of the region, the velocity is the maximum value set by the velocity rotary. Below 25% the velocity is set to a minimum value set by the "Velocity On Min" rotary in the Advanced settings.

Between 25% and 75% the value is calculated linearly between the minimum and maximum value.

4.15.2 Note-off velocity

The new button "V OFF H" toggles between zero and a velocity value set by the rotary in Advanced settings.

4.16 Midi V2

Midi V2 features :

- Note on/off velocity values are now 16 bits (were 7 bits in midi v1).
- Controller (CC), pitch wheel, pressure, aftertouch values are all 32 bits (were 7 bits in midi v1 and 14 bits for pitch wheel).
- Has equivalent MPE functionality : new Per Note Pitch message and new Per Note Controller messages.
- Has 16 groups (each group has 16 midi channels).

Midi V2 CI (Capability Inquiry) and Property Exchange is described in chapter 9.

Sending midi via the DAW does not support midi V2 (yet).

Note on midi v2-v1 conversion :

MacOS and iOS will convert incoming midiv2 messages to devices or endpoints using midi v1. Also midi v1 messages sent to midi v2 endpoints will be converted. Of course in both cases the new midi v2 features will be lost.

When sending midi v2 from iPad to MacOS via the Audio Midi setup network connection, unfortunately the v2 is converted to v1.

4.16.1 Midi V2 Button

When switched off, WoodTroller will use midi v1.

4.16.2 Midi V2 Group Dropdown

Allows to select the midi V2 group used to send notes and Program Changes. Midi commands send by rotaries or buttons have their own group or can use this one by choosing "Global" in the group dropdown.

4.16.3 Setup WoodTroller to send midi v2 to WoodSynth on iOS.

- run WoodTroller as stand-alone app
- set WoodTroller midi chan to 1 (not MPE)
- set WoodTroller Send midi mode in Advanced to "Dests + Source"
- run WoodSynth as stand-alone app, first try with "Reset to Default" in the preset menu.

Touching a note in WoodTroller should now produce sound in WoodSynth and pitch bending should work.

If pitch bend does not work check if :

- Pitch bend buttons in both WoodTroller and WoodSynth are on.
- Midi V2 buttons in both are on.
- MPE is off in both (or on in both but should not be needed with midi v2)

Running WoodSynth in AUM (either as Audio track source or as effect) :

- Switch off "Receive Midi DAW" in Advanced to let WoodSynth receive midi v2 directly from iOS.

Touch and pitch bend should now work as in the stand-alone case.

4.16.4 Check midi v2 has "native" MPE functionality :

With MPE switched off in both apps, press 2 notes in WoodTroller and bend them separately : you should hear 2 notes but only one shift in pitch when gliding with 1 finger. This works as midi v2 uses a new "Per Note Pitch" message.

When you now switch off Midi V2 in WoodTroller and do the same, the 2 notes will pitch shift together up or down even when moving only 1 finger. This is normal in midi v1 (MPE off) as pitch bending is using the pitch wheel message which is common for all notes.

4.16.5 Check midi v2 has extended resolution (32 bits) :

- connect WoodSynth oscillator 1 detune with ML (midi learn) to 1 of the rotaries on WoodTroller. (e.g. CC 64, rotary 8).
- set the range of the rotary in the WoodTroller "Rot" panel to a small range, e.g. 50 .. 60 (so sweeping the rotary form 0 to 100 will only result in using 10% of the total value range)
- when switching off midi v2 (in WoodTroller) you will hear discrete steps when sweeping the rotary form 0 to 100 (and of course holding a note). This is because 10% of the midi v1 range of 7 bits (= 128 values) is +- 13 different values .
- when using midi v2, no discrete steps will be heard as 10% of 32 bits is still +- 429 million values, which is much more than any hardware control can ever produce.

4.16.6 Midi V2 CI button

Opens the CI panel (see chapter 9)

4.16.7 Midi Program button

Toggles between the WoodTroller own presets and the presets retrieved from the connected midi v2 CI device.

4.17 Morphing

Pressing the Morph button will show the morphing panel.



Up to 4 snapshots can be taken by pressing 1 of the corner buttons.

Each snapshot saves the postion of all the rotaries.

Moving between 2 snapshots will move each rotary from its position in the first snapshot to its position in the second snapshot.

Snapshots are stored and retrieved in the WoodTroller presets.

The morphing X,Y position can be set/dragged in the UI panel but also moved by midi CC input.

The CC numbers for X and Y can be set in the Advanced panel.

Default values are cc11 (expression) for X (horizontal) and cc1 (mod wheel) for Y (vertical).

4.18 Hold button

When on, any note played will remain on when finger or mouse is released.

The note can still be pitch shifted (horizontal movement) or vertically moved to change pressure or CC74.

Double clicking/tapping on an individual held note will switch is off.

Switching off the Hold button will release all notes held.

5. Rotary Settings

The rotary settings panel can be made visible by pressing the "Rot" button.

The rotary number can be set by the dropdown or pressing Prev or Next.

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The top part has the controls to set the rotary name, colour, unit displayed, range (minimum and maximum values) and a skew factor.

The skew factor allows to have finer control (more of the rotary range used) over either the smaller values or the larger values in stead of having a linear range.

The midi commands sent by the rotary can set :

- the midi command (message) : CC, Pressure, Pitch
- the midi V2 group : 1..16 or Global (uses the group set at the top)
- the midi channel : 1..16 or Global (uses the channel set at the top)
- the CC number (or Pitch value) : 0 .. 127
- mapping start and end : will map the full scale of the rotary to a limited part of the CC/pitch values.

6. Button Settings

The button settings panel can be made visible by pressing the "But" button.

The button number can be set by the dropdown or pressing Prev or Next.

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The top part has the controls to set the button name, colour and type.

6.1 Button type

Type can be On-Off or Push.

6.2 When (midi command sent) dropdown

The "When" dropdown allows to send the midi command either when the button is on or when it is off. "Never" disables sending the command.

When the button type is set to Push, the When setting can be on or off to enable the command.

6.3 Midi commands

Up to 8 midi commands can be sent when the button is pushed.

The midi commands sent by the button can set :

- the midi command (message) : CC, Pressure, Pitch, PC, Note on-off
- the midi V2 group : 1..16 or Global (uses the group set at the top)
- the midi channel : 1..16 or Global (uses the channel set at the top)
- the CC/note number (or Pitch value) : 0 .. 127
- auto increment

6.4 Auto increment or decrement

The "Auto +-" dropdown allows to increment or decrement the midi command value after each push. This can be used for example to increment the Program number in a PC command each time the button is pushed.

7. Advanced Panel

The Advanced panel can be made visible by pressing the "Advanced" button.

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7.1 Touch bar Key and Limit Scale popup

Allows to limit notes played to the selected scale in the specified key.

7.2 Sensitivity rotaries

-100% .. 100%

Applies a non-linear curve on the values of Pressure and CC74.

7.3 Pitch bend popups.

Pitch bend values can be set for normal keyboards (non-MPE mode) and for MPE controllers.

7.4 Snap Rotary.



The snap value is used when the note-on touch down is not perfectly centred.

In v1.0 the snap value was always 100% meaning the note-on was always the exact semitone.

When the snap value is lower than 100% and the touch down position is off-center, the note-on will only be partially rounded to the exact semitone.

For example, when snap is zero and the touch is just at the border of the next/prev semitone, the note value will be +- 0.5 semitones off the exact semitone.

The difference with the exact semitone is implemented via the pitch midi value, so both WoodTroller and the receiving instrument must have pitch bend switched on.

7.5 Send midi Ext and DAW buttons

External : sends the touch bar notes and midi commands directly to the OS midi handler which allows to reach other devices or apps independent of the DAW settings or routing. Obviously the stand-alone app can only use this.

DAW : the midi is sent to the DAW which can decide how to route these further.

currently this does not support midi V2 yet.

7.6 User scale buttons.

Allow to define your own scale when the Limit Scale dropdown is set to "User".

7.7 Velocity Note Off rotary.

Sets the value sent when a note is released and when the main panel button "V OFF H" is on.

When "V OFF H" is off, the velocity is set to zero.

7.8 Velocity Note On Low rotary.

Sets the minimum velocity sent for a note-on. This value is sent when touching the lower part of the velocity region (first vertical zone).

7.9 Velocity Vertical size rotary.

When a higher velocity precision is wanted, the velocity vertical zone can be made larger with this control. Obviously the pressure and CC74 zones will then become smaller.

7.10 CC74 control number dropdown.

Sets the CC number used when the CC74 vertical zone is touched.

By default this is obviously 74.

7.11 Midi V2 Pitch message.

When Pitch Bend is enabled, this allows to choose between

- the Pitch Wheel message (default for midi v1)
- the new midi v2 "Per Note Pitch" message (MPE equivalent).

7.12 Pressure message.

When Pressure is enabled, this allows to choose between

- the "Channel Pressure" message
- Poly Aftertouch message (which is per note).

7.13 Midi V2 CC74 message.

When CC74 is enabled, this allows to choose between

- the "CC" message (default in midi v1)
- the new v2 RPN (Registered Per Note) message (MPE equivalent)

7.14 Send Ext (external) Midi Destination.

For the WoodTroller stand-alone app or when the "Send Midi Ext" button is on, WoodTroller will connect directly to the OS midi system.

The Destination can be set to :

- sending to all published midi destinations.
- sending from the WoodTroller source endpoint (an app or plugin can not publish itself as a destination but still listen to published sources)
- both
- a specific published midi destination

7.15 Input CC Channel.

Besides receiving midi for the midi v2 CI functionality, also some CC's are or can be used.

To receive/enable the CC input, the channel has to be set in the dropdown.

CC input can be used for the X,Y position of the morphing point. These 2 CC numbers can be changed with their dropdown.

The 16 first rotaries and the first 8 buttons can also be set with CC's :

rotaries : CC14 .. CC29 buttons : CC 112 .. CC 119

These CC numbers are the defaults used by the NI Kontrol-S keyboards.

This allows to hook up the keyboard to an iPad and still control any CC via WoodTroller.

8. Midi Out

8.1 AUv3 midi out

Normally you will want the midi out to go via the DAW system as this one can do further routing.

So make sure the "Send midi to DAW" button is switched on in Advanced Settings.

When you also want to send the midi to external (outside the DAW) instruments (hard or soft), switch on the "Send midi to Ext" button.

Below is an example routing in AUM which sends midi from WoodTroller to WoodSynth.

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8.2 iPad midi out to Mac synth

Apple made it easy to send midi between different Apple devices (Mac, iPad, ...) :

Make sure both iPad and Mac are on the same network.

Start WoodTroller on the iPad.

On the Mac open the "Audio Midi Setup" application (in Applications / Utilities).

In the menu "MIDI Studio" choose "Open MIDI Network Setup".

In the Network Setup window, create a session if there isn't one, select your iPad and press "Connect". Midi should now travel from iPad to receiving instruments or DAW's on the Mac.

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Remark : when connecting over wifi, there can be a rather big latency.

This can be avoided by connecting the iPad with USB cable to the Mac (and switching off wifi on the iPad).

8.3 iPad midi out to Bluetooth

The new "BT" button will advertise the device (iPad, Mac) as a midi over bluetooth peripheral.

This means it can be seen by apps implementing a midi over BT central. When the central connects to the peripheral, midi will be sent over BT.

This is normally with a much lower latency than when using a wifi connection (8.2).

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8.3.1 Receiving BT midi on the Mac

Choose "Bluetooth Configuration" from the Midi Studio menu. When seeing WoodTroller BT, click on connect.

The Mac may ask to pair the bluetooth.

When connect does not works, it may help to remove an earlier BT pairing.

9. Midi v2 CI (Capability Inquiry)

https://www.midi.org/specifications/midi-2-0-specifications

Midi v2 Property Exchange allows to send program info (presets) and midi CC controlled parameter info and values to a midi v2 initiator (keyboard, controller, WoodTroller) which can then map parameter names and values automatically to its controllers (rotaries, ...).

WoodTroller is a midi v2 CI initiator : press the CI button to open the CI panel.

Options)	WoodTroller – X
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	Version	
	Program Items	294
	Controllers	60 SET CONTROLS REFRESH

9.1 Discover Button

Will send a Midi v2 CI discovery message. When an error appears, press again.

CI responders found will be listed in the Select dropdown.

9.2 Select Responder dropdown

After retrieving the available midi CI resources, WoodTroller will request following resources :

- "DeviceInfo" : human readable manufacturer, family, model, version.
- "ProgramList" : list of all presets with their PC (Program Change) and bank numbers. The preset names will be shown in the WoodTroller Preset dropdown when the button "Midi Prg" is on (otherwise WoodTroller's own presets will be shown).
- "ChannelList" : current channel and program.
- "AllCtrlList": CC controllable parameters (names, cc number, ...) sent by WoodSynth (midi CI version 1.2) and also adds some WoodSynth specific fields (current value, min, max, etc).
- "X-ParameterList" : sent by Korg "Wavestate native" (midi CI version 1.1), names, cc numbers.
- "X-ProgramEdit" : sent by WoodSynth, Korg "Wavestate native" : current parameter values. (it is a slightly misleading name as it handles the parameters and not the programs).

The number of programs and parameters sent, will be displayed.

Program names are directly set in the Preset dropdown.

Programs (presets) can be changed on the responder by selecting one from the dropdown or by pressing the Next or Prev buttons.

The corresponding PC and bank number is now also shown left of the rotaries.

The top midi V2 group and the midi channel will be automatically set to the values used by the client device.

9.3 Set Controls button

Will set the first 24 parameters sent, in the rotary settings (and or the button settings) :

- parameter name
- CC number
- unit
- current value
- minimum, maximum and skew value (when sent).
- midi V2 group
- midi channel

The rotary settings now have an extra dropdown, listing all the parameters retrieved. This allows to set different parameters (than the first 24 set when pressing the Set Controls).

The AllCtrlList resource contains the parameter type : continuous or toggle. WoodTroller will use this to either set the parameter in the rotaries or in the buttons.

9.4 Subscribe button

Midi v2 CI subscription is a powerful feature which allows an initiator to subscribe to some resources of the responder. If then something changes in this resource on the responder, a subscription message will be sent to the initiator, which can then update its UI.

WoodSynth and Korg's Wavestate allow subscription on the ChannelList, ProgramList and "X-ProgramEdit" resources.

When this button is on, WoodTroller will subscribe to :

- the ChannelList : will update the current preset (when changed in the responder).
- the ProgramList : will update all preset names, e.g. sent by WoodSynth when changing the preset category.
- X-ProgramEdit : will update the parameter UI (rotaries, buttons).

9.5 Refresh button

When subscription if pff or not supported by the responder, pressing this button will send a request for the all resources to the responder and update the WoodTroller UI after receiving them.

9.6 Midi Endpoints (Source and Destination)

Midi devices and apps can receive midi from their destination endpoint and send midi from their source endpoint.

Other devices/apps can connect to either the source or destination to make a connection but the device can also make connections to other devices endpoints either automatically or via a UI.

A classic keyboard will have a source endpoint but usually not a UI to let the keyboard connect to destination endpoints of sound generating devices/apps. Therefore the sound apps usually either connect automatically to the keyboards source (e.g. WoodSynth) or have a UI to choose the keyboard source endpoint.

WoodTroller has both a source (sending midi) and destination endpoint (receive midi for midi v2 Cl).

When the (in Advanced) checkbox "From All Sources" is on, WoodTroller will connect itself to all source endpoints.

The (Advanced) dropdown "Send midi TO" also allows WoodTroller to connect to all destination endpoints or to only 1 specific one.

9.6.1 Connect WoodTroller iPad to WoodSynth iPad on the same iPad

WoodTroller TO : from Source only WoodTroller FROM ALL SOURCES : off

The WoodSynth destination dropdown can be set to "All", "All + Source" or "WoodTrollerDest0".

9.6.2 Connect WoodTroller Mac to WoodSynth Mac on the same Mac

WoodTroller TO : from Source only WoodTroller FROM ALL SOURCES : off

The WoodSynth destination dropdown can be set to "All", "All + Source" or "WoodTrollerDest0".

9.6.3 Connect WoodTroller Mac to Korg Wavestate Native Mac on the same Mac

WoodTroller TO : from Source only WoodTroller FROM ALL SOURCES : off

Wavestate midi Input : WoodTrollerSource0 Wavestate midi Output : WoodTrollerDestination0

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9.6.4 Connect WoodTroller iPad to WoodSynth Mac

Switch on WoodTroller BT (bluetooth) : see section 8.3.1

WoodTroller TO : "All" or "Mac Bluetooth" now sends to the iOS midi over BT system). WoodTroller FROM ALL SOURCES : ON ! (now receives from the iOS midi over BT system).

The WoodSynth destination dropdown can be set to "All" , "All + Source" or "WoodTroller BT Bluetooth".

9.6.5 Connect WoodTroller iPad to Korg Wavestate Native Mac

Switch on WoodTroller BT (bluetooth) : see section 8.3.1

WoodTroller TO: "All" or "Mac Bluetooth" now sends to the iOS midi over BT system). WoodTroller FROM ALL SOURCES : ON ! (now receives from the iOS midi over BT system).

Wavestate midi Input : WoodTroller BT Bluetooth Wavestate midi Output : WoodTroller BT Bluetooth

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10. VST3 for NI NKS.

NI Kontrol-S keyboards interface very well with plugins when using NI NKS Komplete Kontrol.

However when you want to control other apps/devices via midi, the NI keyboards are not so easy to use.

The WoodTroller VST3 now acts as a bridge between the keyboard and those extern midi apps/ devices.

By inserting the WoodTroller VST3 (as an effect) in Komplete Kontrol, a 2 way communication is established :

- The keyboard rotaries map to WoodTroller rotaries and/or buttons.
- All control names, ranges and values from WoodTroller are mapped on the keyboard.

The name and range mapping from WoodTroller to the keyboard is not static : changing a name (setting another WoodTroller preset ...) will be shown on the keyboard (MK3).

This becomes even more useful when using the midi v2 CI from WoodTroller : retrieved parameters from a discovered midi v2 device are now automatically mapped to the keyboard (MK3) !

To insert WoodTroller in Komplete Kontrol as effect, you need to insert any instrument first.

The VST3 plugin has to be downloaded from my website :

https://www.woodmansimmaculatemaplesyrupstudio.be/woodtroller/WoodTroller_NKS_VST3.pkg

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PC Dn Up 3 BANK 1 ~ ON RESEND Out Gain	1.15 Select Layer FiltCutoff Filt Q UT	0.33 dB -222.10 270.30 Hz 20.00 % 1 Crossfade 1&2 U2 Osc1 Detune U3 FiltCutoff U4 Analog
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