Cyclic step sequencer

CycliC
v1.6 User Documentation

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Overview

The Cyclic sequencer is based on an idea for a new step sequencer developed by Olivier Gillet (founder of Mutable Instruments) in late 2011. Olivier contacted me with this idea as he knew of my interest in "esoteric" sequencers (and of their implementations in software), and together we worked through its realization over the next few months.

At a high level, Cyclic consists of a set of 32 note values (or rests). This sequence of notes is cycled through (hence the name) by up to six "subsequences." These multiple subsequences, each with different parameters, produce very interesting overall results when summed together.

Although it is easy to understand and use, Cyclic allows for sequences with a much greater degree of variation and liveliness than traditional step sequencers, often with unexpected results, even with small changes in note values and/or subsequence parameters.

Together, Olivier and I hope you enjoy using it!

What's New

Version 1.6 adds many new features to Cyclic, many of them user-requested:

* ReWire audio slave support
* Individual stereo outputs for each plugin
* Ability to freeze individual note status/value/velocity/gate/cc1/cc2 to prevent from being randomized
* Ability to solo a subsequence
* Ability to reverse a subsequence's direction
* More control of audio buffer sizes/sampling rate, to allow for better timing performance

In addition, there are several other small improvements and bug fixes included; see the Version History section at the end of this document for more details on all changes.

System Requirements

Macintosh
- OS X 10.6 – 10.10, Intel only

Windows
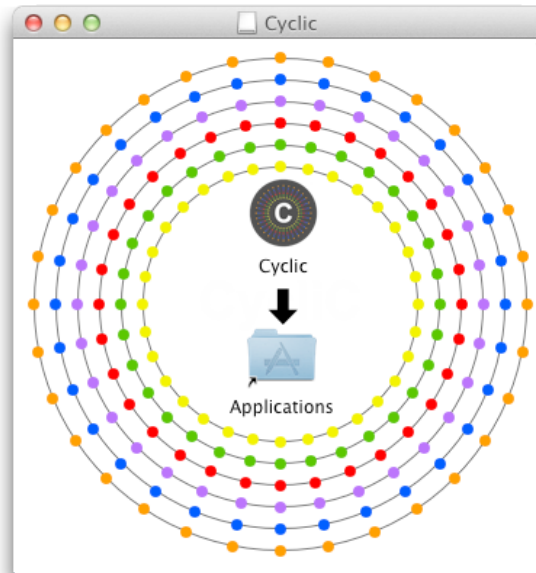- Windows XP Service Pack 2 or greater, Vista, 7 or 8

Installation

Macintosh

The Macintosh version is supplied as a Macintosh disk image file (.dmg). Just double click the downloaded file, and you will see a new window appear on your desktop. Drag the Cyclic application icon to the Applications window icon that you see – this will install the Cyclic application on your computer:

After the file has copied, you can unmount the disk image, and delete the .dmg file (or keep it somewhere safe if you'd like, for future installations).

Windows

The Windows version is supplied as a compressed .zip file. Unzip the file, and you will be left with a file called Cyclic Installer.exe (or Cyclic Demo Installer.exe if installing the demo version). Double click this file to run the installer, and follow its instructions:
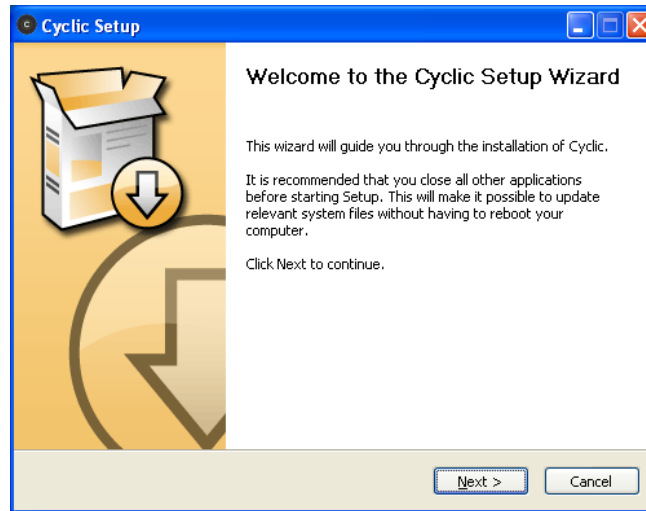
After installation, you will find a shortcut available to launch the Cyclic application in the Windows Start menu, in addition to uninstallation and documentation shortcuts. You can keep the Cyclic Installer.exe file somewhere safe if you'd like, for future installations.

Uninstallation

<u>Macintosh</u> – Just drag the Cyclic application out of the Applications folder to the Trash.

<u>Windows</u> – Use either the Windows Add/Remove Programs control panel to remove the application, or use the Uninstall shortcut in the Windows Start menu.

Authorization & Initial Startup

If you're trying the demo version of the Cyclic sequencer, you can start to use it immediately after installing it – you will not see the authorization screen shown next.

If you are installing the full version of the Cyclic sequencer, you'll need to authorize it before being able to use it. Start the application, and you'll find yourself at the About & Authorization screen:
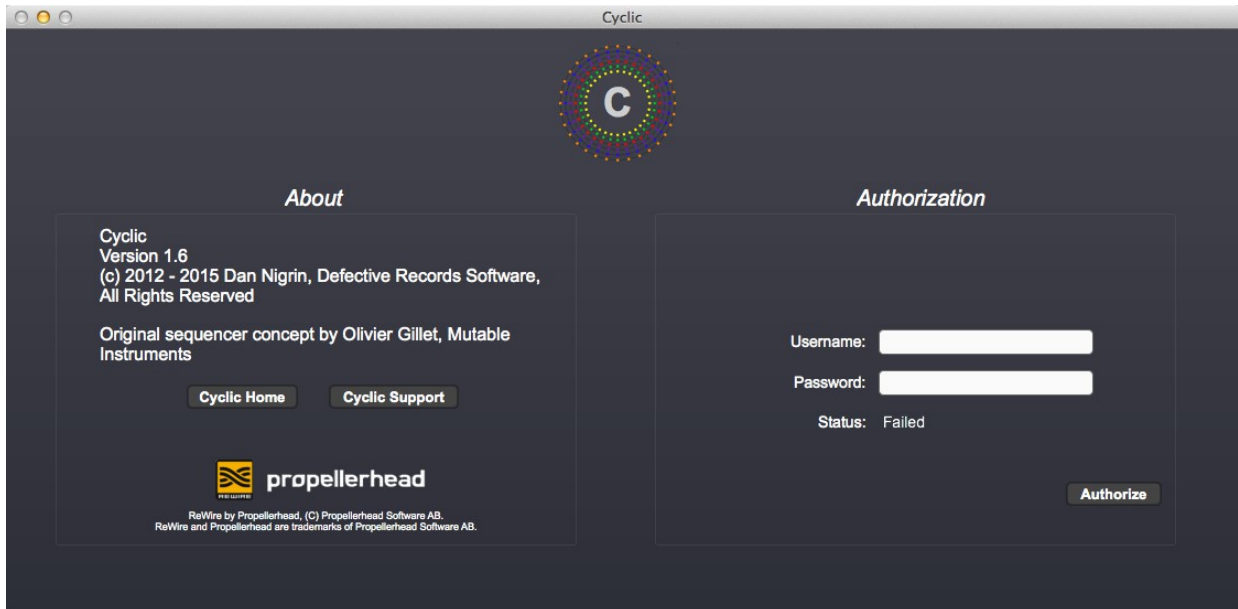
Enter your Username and Password, and then click the Authorize button. Be careful, cApiTaliZation MaTteRs! If successful, the Status field will change to "Registered", and you will see a "Start Sequencing!" button, which when clicked will allow you to begin to use the software. If not successful, you will be left at the Authorization screen to try again.

To verify your authorization status, or to remind yourself of your Username and Password, you can select the About Cyclic menu item to be brought back to the About and Authorization screen at any time.

Upon successful first authorization of the full version, or immediately after first startup when using the demo version, the application will ask whether you wish to use VST plugins or not. Your decision is saved for future application launches, but can be changed at any time in the Setup screen.
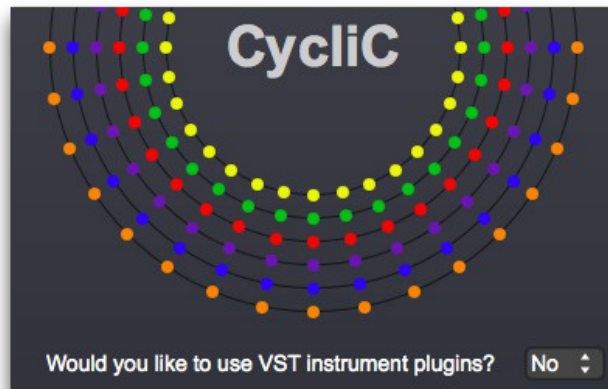
If you choose to use VST plugins, the application will then proceed to scan your plugins for compatibility, as well as to sort through which are VST instrument versus VST effect plugins. Only VST instruments are supported. If you have a large number of plu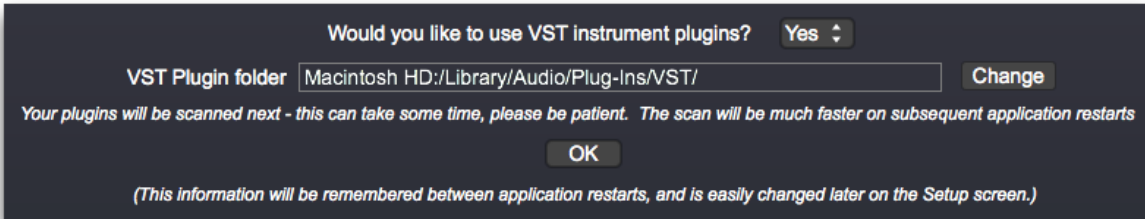gins, this scan may take some time. The program will display which plugin is currently being scanned. On subsequent startups, the program will only scan new plugins, so the scan is much faster compared to the initial scan.

The location the program will search for VST plugins is displayed, and should be the default location specified on your system. If it is not to your liking, you can change the location it scans by pressing the Change button and selecting your desired location. This too is changeable at a later time on the Setup screen.

Would you like to use VST instrument plugins? Yes

VST Plugin folder Macintosh HD:/Library/Audio/Plug-Ins/VST/ Change

Your plugins will be scanned next - this can take some time, please be patient. The scan will be much faster on subsequent application restarts

OK

(This information will be remembered between application restarts, and is easily changed later on the Setup screen.)

Setup Screen

Cyclic has a Main screen, where most sequencer interaction occurs. It also has a Setup screen, where application size, audio, plugin and MIDI controller settings are configured. The buttons on the lower left of the Cyclic interface allow you to select which window to see. You can also toggle between the two screens by pressing the "." (period) key on your keyboard.

Audio Settings

This section allows you to turn audio processing on and off, select the audio driver used, and configure the audio devices, including setting the sampling rate and audio buffer sizes. Some of the configuration options will depend on which driver and devices are selected, as well as whether you are working on a Macintosh or a Windows machine.

Audio Settings

Audio	Off
Driver	Core Audio
Output Device	Built-in Output
--	
Sampling Rate	44100
I/O Vector Size	128
Signal Vector Size	128

Output Channels	2
Master L	1 Output 1
Master R	2 Output 2
Plugin 1 L	Off
Plugin 1 R	Off
Plugin 2 L	Off
Plugin 2 R	Off
Plugin 3 L	Off
Plugin 3 R	Off
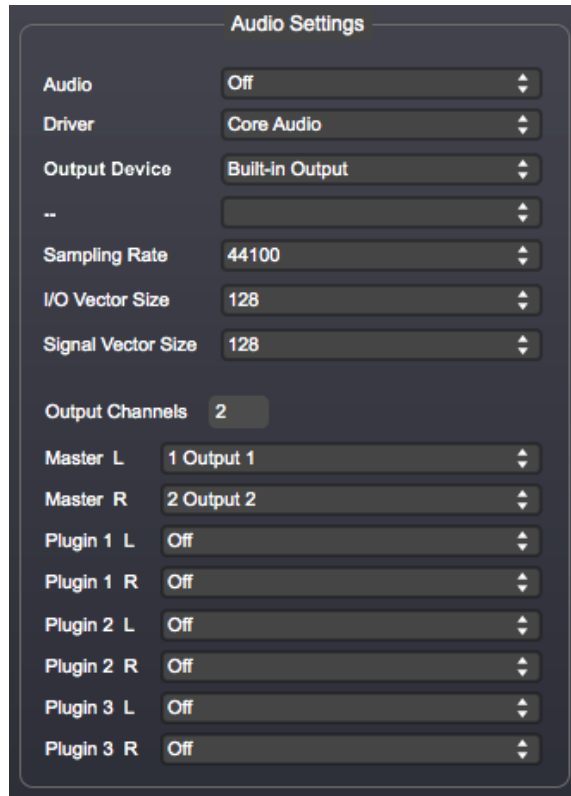
It should be noted that despite its name, Audio processing must be On when using MIDI clock sync, even if you are not using plugins!

You can also turn Audio processing off and on from the bottom of the Cyclic window, by

clicking on the Audio I/O button. You can also adjust the Master output volume there as well.


The I/O Vector Size controls the number of samples that are transferred to and from the audio interface at one time. The Signal Vector Size sets the number of samples that are calculated by Cyclic at one time. This can be less than or equal to the I/O Vector Size, but not more. Use the I/O Vector Size and Signal Vector Size adjustments to improve timing performance, and/or eliminate clicks/pops in the audio output. Lower values will improve Cyclic's timing accuracy, but at the expense of greater CPU load; if you begin to hear clicks and pops in audio coming from plugins being used in Cyclic, try increasing the values for these parameters.

You can specify which of your available audio device outputs the 3 plugin outputs are routed to (if at all), as well as the Master stereo output, which sums the outputs from the 3 plugins.

ReWire Audio Slave Support

Cyclic supports Propellerhead's ReWire standard acting as a ReWire "slave" device, allowing for audio created within Cyclic using plugins to be routed directly into a ReWire "mixer" or host device, such as most current DAWs. To use ReWire, select the "ad_rewire" audio Driver – do this *before* starting your ReWire host application (e.g. your DAW):
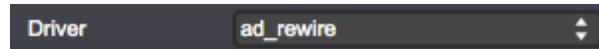
You will now see Cyclic inputs 1 through 8 in your ReWire host application once you start it – they correspond to the stereo Master and three plugin outputs from Cyclic:
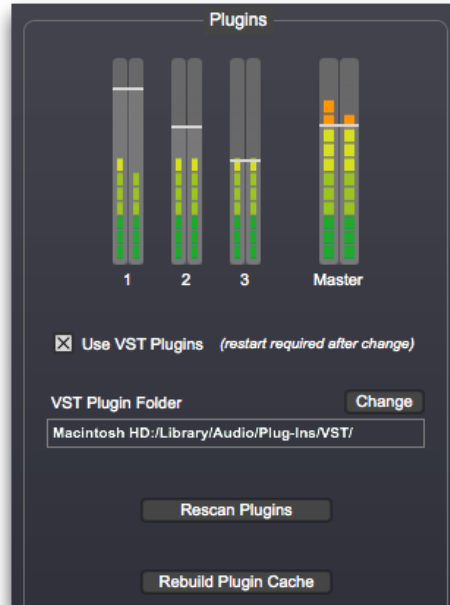
15
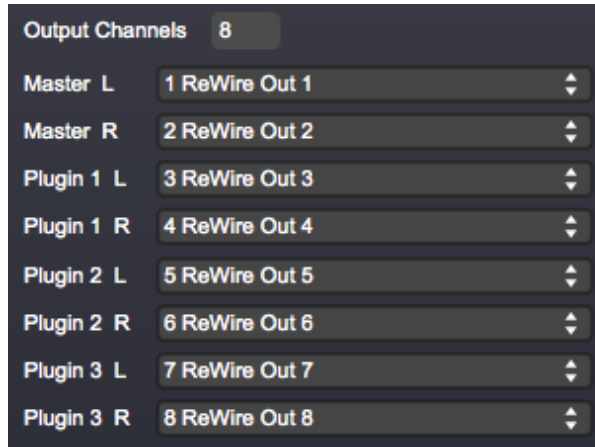
Please note that on Windows, you may need to run the Cyclic application as Administrator the first time you select the ad_rewire audio Driver. This will be the case if you don't see the individual ReWire out selections as in the above image. To run the program as an Administrator, right click the application, and select "Run As Administrator." Then select the ad_rewire Driver. This only needs to be done once to set your system up appropriately.

Plugins

This section is where choices relating to whether the application uses VST plugins or not, and if so, where on your computer it searches for plugins are made. It also provides the ability to rescan the plugins, or to rebuild the plugin cache. It also allows for adjusting the individual output level of each plugin, as well as the master audio output.

Plugins

1   2   3   Master

☒ Use VST Plugins *(restart required after change)*

VST Plugin Folder   Change

Macintosh HD:/Library/Audio/Plug-Ins/VST/

Rescan Plugins

Rebuild Plugin Cache

If you would like to turn plugin support on or off, check or uncheck the Use VST Plugins box. Note that you will need to restart the application after a change in this setting to see the effect of the change.

You can change the location that is searched for VST plugins by changing the VST Plugin Folder setting. Click the Change button, and browse to the desired new folder. You can then press the Rescan Plugins button to get access to the plugins in this new folder.

Finally, if you have trouble with long startup times while the application scans VST plugins, you can try having it rebuild its plugin cache. This is done by clicking the Rebuild Plugin Cache button. Please be patient if you have many plugins, this process can take some time.

Plugins are selected at the bottom right of the Cyclic user interface – once a plugin is selected from the dropdown list in each of the three Plugin sections, if available, patch names will be populated into the second dropdown list. You can navigate through the plugin presets using either the dropdown or the up and down arrows. Click the "..." button to see the full plugin user interface.
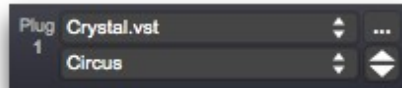
Application Size

Cyclic allows you to scale the application window smaller or larger depending on your screen resolution and personal preference:
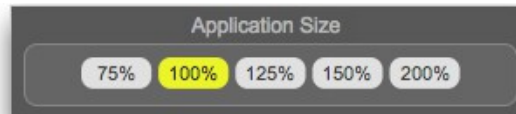
MIDI Controllers

See **External MIDI Control** section below for a detailed description of these functions.

Usage

The Cyclic sequencer is composed of two main components: the circular **event array** of 32 note and/or continuous controller (CC) values, and a set of 6 identical "**subsequences**." MIDI notes and/or CC values are generated as the subsequences traverse the events in the event array.

Event Array

Cyclic's event array is displayed in the outer circular ring, with the array's event values displayed just outside of each step. The type of event is specified by which event tab is selected just below the circular array. In this example, the Note tab is selected, and so note values are displayed in the outer circular ring:

There are 5 event tabs: Note, Velocity, Gate, CC1 and CC2. The first three specify attributes of MIDI notes, and the last two specify continuous controller values which can also be transmitted in addition to the notes.

The first step in the array is the top middle step. Active events are displayed in white; inactive events, or rests, are dimly displayed in grey. To activate a step, click its dot; this will cause it to display in white. To inactive a step, click its dot again.

Event values can only be changed when a step is active. To change the value, click and hold the event value, and scroll up or down. Alternatively, you can change the event value (once selected, indicated with a grey triangle next to the event value) using the up or down arrow keys on your computer keyboard. You can also type a new value for the selected note on your keyboard, followed by the Return key. The 5 event types each have different allowable ranges:

<div align="center">

Note: C0-C9
Velocity: 0-127
Gate: 10-1000 (milliseconds)
CC1: 0-127
CC2: 0-127

</div>

Subsequences

There are six subsequences. As mentioned above, subsequences generate MIDI notes and/or continuous controller messages as they traverse the events in the event array. Each subsequence has identical features, which will be described below.
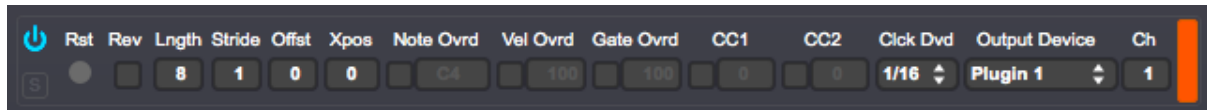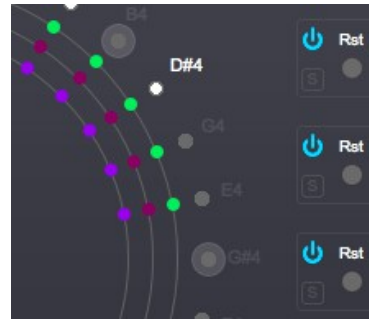

Mute

Subsequences can be turned on and off using the Mute button, in the upper left of each

subsequence panel:

Muting a subsequence will remove its ring from the subsequence ring display on the left. In the example below on the left, the first and third subsequences are on, while the second is off, and so therefore its ring is not displayed. In the example on the right, the second subsequence has been turned on, and so its ring is displayed:


Solo

You can solo a subsequence by using the Solo button, in the lower left of each subsequence panel. This will cause any other activated sequences to be temporarily muted, and the solo'd subsequence will be highlighted with a red rectangle surrounding it. This is shown below; the

left image shows the state before solo'ing the first subsequence, the middle shows just after soloing, and the right shows the initial state again after clicking the solo button again:
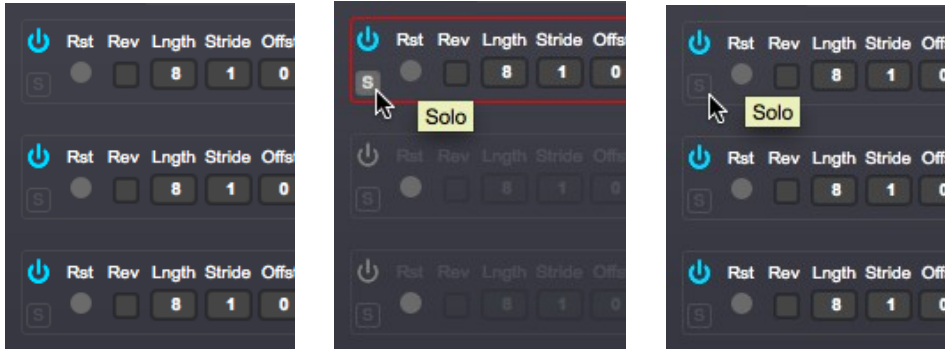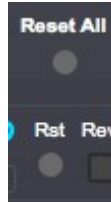

Reset, Reset All

Each subsequence can be "reset", or "rewound," to its starting position by clicking this LED (abbreviated "Rst"). In addition, the Reset LED will blink each time the subsequence cycles through its starting position.

If you would like to reset all subsequences at once, click the Reset All LED.

When in MIDI clock mode, Cyclic internally sends a Reset All message when incoming MIDI song position pointer information indicates a sequence restart.

Reverse

Each subsequence normally traverses the event array in a clockwise direction; you can reverse this for any individual subsequence by checking its Reverse (abbreviated "Rev") checkbox.

Length, Stride, Offset

Each subsequence has three parameters which affect how it traverses the event array:

- A length (number of steps), from 1 to 32
- A "stride," from 1 to 8 (a stride is how many steps are moved through the event array at each clock tick)
- An offset, from 0 to 31 (the number of steps offset from the first step, the top center one)

Changing these parameters will affect the display of the subsequence's "dots" within the subsequence rings on the left. "Active" steps in the subsequence are reflected with a colored dot at that step in the ring display.

Let's look at an example subsequence below. You will note that the first active step is offset by one from the top center step (Offset = 1), that every other step is active (Stride = 2), and that the total length of the subsequence is 8 (Length = 8):

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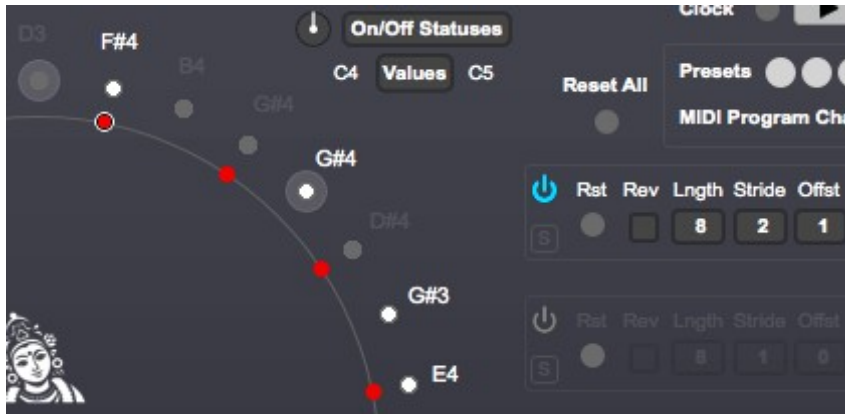
So which MIDI notes will this subsequence send? Only notes that are active in **both** the event array (white dot) as well as in the subsequence (red dot) will be triggered. In this case therefore, only notes F#4 and E4 will be created, as the transport cycles through the steps in the subsequence. When the transport is on, the currently active step in the subsequence will have a colored dot outlined by a white ring. For subsequences that have a length value that is not evenly divisible by the Stride value, you will occasionally see some "unfilled" white rings. These represent active steps as the sequence "wraps" around. Best to explain this with an example.

The following subsequence has length = 4, stride = 3, and offset = 0. In the first image below, you see the active step (white-outlined green dot) at position 1. As the stride is set to 3, at the next clock tick the active step moves to position 4, and so the green dot there is white-outlined (2nd image below). Next however, the subsequence "wraps around" by 3 steps, so that the active step is now at position 3. For simplicity of display, this dot is not normally "filled in" in the staticly displayed pattern, but it is a transiently active step on this cycle, so it is displayed as an *unfilled* white circle (3rd image below). Finally, as the subsequence moves forward by another 3 steps, and wraps around again, the active step is now at position 2. This is shown in the last image. As the subsequence progresses forward another 3 steps, we are back at active step at position 1, which is the first image below.

Transpose

You can transpose the played notes from the event array for each subsequence by a fixed amount by using the Transpose (abbreviated "Xpos") setting. It allows for + or − transposition of up to 24 semitones.

Note, Velocity and Gate Override

Rather than triggering the note, velocity and gate values stored in the event array, a subsequence can instead trigger fixed values for these. This is accomplished by checking the Override ("Ovrd") checkboxes for Note, Velocity and/or Gate, and then choosing the desired values next to them. Note that choosing a Velocity override of zero will effectively create a subsequence that does not trigger any notes; this can be used for creating "CC only" subsequences (see next section).

CC1 and CC2

Each subsequence can send up to two continuous controller (CC) MIDI messages in addition to notes. Enable one or both of these by checking their respective checkboxes, and then specifying which continuous controller number to transmit. The values specified in the event array will then be transmitted for that CC number. As mentioned above, choosing a Velocity override value of zero for a subsequence can enable a subsequence to be used as a "CC only" subsequence.

Clock Divide

The Clock Divide (abbreviated "Clck Dvd") parameter in each subsequence controls how frequently clock pulses are triggered for that subsequence, based on the master clock tempo. The range of this parameter goes from whole notes (1/1) to one thirty-second notes (1/32). The master clock is controlled internally, or by MIDI beat clock. (see **Transport and Clock** section below).

Output Device

Each subsequence routes the notes and/or continuous controller messages it creates to a specific MIDI device and channel. These are selected using the Output Device and Ch drop down menus. To route the subsequence information to one of the 3 hosted VST plugin instruments, simply select Plugin 1, Plugin 2 or Plugin 3 as desired.

Color

You can change a subsequence's dot color by clicking the colored rectangle in the right of the subsequence settings area. This will show a standard color picker window, which you can use to select a new color for the subsequence's dots.

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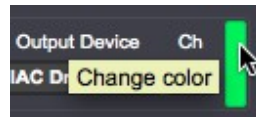
Transport and Clock

Cyclic can be driven from either its internal clock, or via MIDI clock routed to it from either a hardware or software synthesizer. Select the option you prefer using the drop down menu to the right of the Play button. When in MIDI clock mode, select the MIDI device using the drop down menu which will appear to select the MIDI clock source. You need to ensure that the device you have selected is properly configured to send MIDI clock.

When in internal clock mode, the Play button will start the clock as well as Cyclic's transport.

When in MIDI clock mode, starting the transport in your MIDI-clock generating application or hardware should both start Cyclic's clock as well as its transport (whether it starts the transport or not will depend on the specific application/hardware, and whether it sends MIDI transport information). Once the MIDI clock is running, you can stop Cyclic's transport with the Play button, but the MIDI clock information will continue to be received by Cyclic. This allows you to stop/start Cyclic's sequence independently of your MIDI-clock generating device. When in MIDI clock mode, Cyclic internally sends a Reset All message when the incoming MIDI song position pointer information indicates a sequence restart.

When in internal clock mode, you can adjust the speed of the clock using the Tempo parameter. It allows adjustment from 20 to 240 beats per minute (BPM). When in MIDI clock mode, the tempo is set by the MIDI clock-generating device, and is not adjustable from within Cyclic.

Event Randomization

Cyclic allows for its event array values to be randomly adjusted. One can randomly change the event **on/off statuses**, as well as the event **values**.

On/Off Statuses

To randomly alter the event on/off values within the event array, press the On/Off Statuses button. The Percent Notes On dial just to the left of this button will control the percentage of events that are on within the array after pressing the button. Turning the dial clockwise will increase the likelihood of a note/event being turned on.

Values

To randomly alter the event values as displayed on each of the event tabs, simply click the Values button. The lower and upper bounds of the randomization are displayed to the left and right of the Values button, respectively, and will adjust as each of the event tabs (Note, Velocity, Gate, CC1 and CC2) are selected below the event array circle. The bounds can be adjusted by clicking on them and dragging up or down. For note randomization, notes will also be

constrained by the current Note Scaling setting (see next section).

Freezing Events

To prevent specific events from having their on/off status or value from being randomized, you can "freeze" them, by shift-clicking them. This will highlight them red, which indicates that they have been frozen and will not be randomized when the randomize button is pressed. To unfreeze them, simply shift-click them again. In the example below, the F#4 event value will never be randomized when the Values randomize button is pressed, and the B4 event will never be turned off when the On/Off Statuses randomize button is pressed:

Note Scaling

You can constrain the notes within the note array to a specific scale and root note by using the Note Scaling options.

Simply choose the desired scale in the drop down menu, and the desired root note just below. If no scaling is desired, choose the "No Constraint" option in the scale drop down menu. If applying a scale, existing note values in the note array will be adjusted to conform to the scale selected. In addition, after selecting a scale constraint, only the appropriate scale values will be manually selectable in the note array.

Presets

The Cyclic sequencer allows you to store up to twenty presets in its memory at one time, each of which can be invoked with a single mouse click once stored, or selected via MIDI program change messages. Furthermore, sets of presets can be named and stored to computer hard disk, and then recalled and loaded back in later.

Presets will store and recall almost all user adjustable parameters.

Storing and Recalling Presets

When a preset location is empty, it will be a grey color. When hovering your mouse over a preset location, the preset's number will be displayed.

To store a preset, simply press and hold the Shift key on your keyboard, and click the desired preset location you would like to store it in (Shift-Click). The preset location will then turn dark grey:

To recall a preset, simply click on one of the desired dark grey preset locations. The selected

preset will then turn yellow:

To clear all presets locations, press the Clear button.

You can also recall presets using MIDI program changes. To enable MIDI program change control, check the box next to MIDI Program Changes, and choose the appropriate MIDI device and channel that you would like to receive MIDI program changes on.

Programs 1 through 20 correspond to the presets 1 through 20 in Cyclic.

Note that you can also control presets using MIDI CC messages, see External MIDI Control section below.

Saving and Loading Presets

Each collection of twenty presets can be saved to disk for later recall. To save them, press the Save button, and specify your desired file name and location. Presets can be stored in either JSON or XML formats, either works fine.

To load a preset set, press the Load button, and navigate to the location on your hard disk where the desired preset file is stored.   **Loading presets will overwrite *all twenty* preset locations, even if there is not a preset stored in the slot of the set that you are loading.**

Note that presets saved from Cyclic v1.0 will not work correctly in later versions of Cyclic.

External MIDI Control

Most of Cyclic's functions can be controlled using MIDI continuous controller (CC) messages sent from a hardware-based MIDI device, or from another MIDI application. These are configured using either the MIDI Learn function, or by the manual mapping of MIDI CC value to user interface element.

Inbound CC messages are scaled from their full range of 0-127 to the range of the interface element in question. This allows for the full travel of a midi controller to be utilized, even if the target user interface element only has a few different settings.

The first step in enabling external MIDI control is to choose which MIDI input device you wish to monitor for CC information. This is done at the top of the MIDI Controllers section, on the Setup screen.
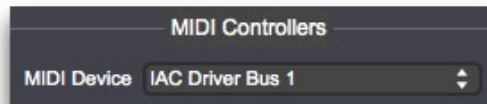
Map MIDI controllers via MIDI Learn

Once the MIDI controller device is selected, switch back to the Main screen, and enable MIDI Learn mode by clicking the MIDI Learn button at the lower left. It will pulse yellow to red, to indicate its active state.

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When MIDI Learn is active, mousing over various parts of Cyclic's Main screen user interface will turn those user interface controls blue; this indicates that that control is "learnable" and in turn configurable for external control.


To link a user interface item with an external controller, simply click it; it will then turn orange, indicating that it is then actively "listening" for external MIDI controller information.
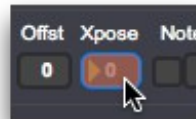
Now just move the desired controller on your hardware interface, or within another software application, to send Cyclic a CC message. This will link that CC message to the selected user interface control. The controller will revert to its usual color, and you should see it move as you

move your MIDI controller. You can also see the MIDI controller assignment on the Setup screen, in the MIDI Controllers section.

-Control-	-CC-	-Channel-
Note_Value_0	0	1
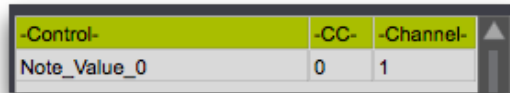
Continue this same process for each Cyclic control that you would like to map to an external controller. When done, click the MIDI Learn button again to inactivate MIDI Learn mode.

Map MIDI controllers manually

If you prefer to map the MIDI CC controls to user interface elements manually (for example, if you will be sending CC messages from a Digital Audio Workstation (DAW) and not from a hardware MIDI controller), you can do so within the "Manual Add" part of the MIDI Controllers section, on the Setup screen.
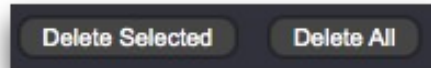
Control ---

CC 0   Channel 1   Manual Add
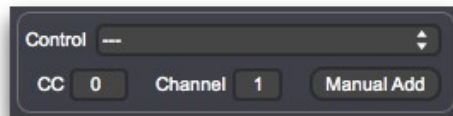
Select the user interface control from the Control drop down menu, then select the CC number and MIDI channel that you would like to control it with. Then press the Manual Add button,

and you will see a new entry in the Controller map table below.

Modifying, Saving and Loading Controller maps

Once you are done, you can modify and/or save your controller assignments on the Setup screen in the MIDI Controllers section. You can either delete one or all assignments, using the Delete Selected or Delete All buttons.
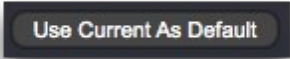

You can save your MIDI controller mapping by using the Save button. Save the mapping as a text file, using the .txt extension. If you forget to add a .txt extension, one will be added automatically to your filename. Similarly, you can load a previously saved set of controller assignment by using the Load button, and browsing for your saved controller assignment .txt file.
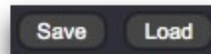
Finally, you can set your currently loaded set of controller assignments and controller MIDI device to be automatically loaded by default each time you start Cyclic. To do so, just press the

Use Current As Default button.

Keyboard Control

The Cyclic sequencer responds to certain key presses on your computer keyboard to control some of its functions.

Start / Stop – Each press of the Spacebar will toggle the transport (Play button) on and off.

Numeric values – Some numeric parameters can be controlled using the number keys and/or by the up and down arrows on the computer keyboard. After entering a desired value using the number keys, follow by pressing the Return/Enter key. The controllable parameters include:

- All event values in the event array (including Note, Velocity, Gate, CC1 and CC2)
- The following subsequence parameters: Length, Stride, Offset, Transpose, Note Override value, Velocity Override value, Gate Override value, CC1 number, CC2 number, and MIDI channel.

Panic – If the sequencer gets into a state in which there are "hung" notes, or other situations in which you would like to send an "All Notes Off" command, press P (upper or lower case) on your keyboard. "P" stands for "panic." There is also a dedicated Panic button in the upper right corner of the main Cyclic application window.

Main / Setup – To easily toggle between the Main and Setup screens, press the "." (period) key.

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Documentation & Help

The Cyclic sequencer can launch its full documentation (this document) from within the application itself; just go to the Documentation menu, and choose "Cyclic Documentation". This will launch a PDF viewing application in which to view the documentation:
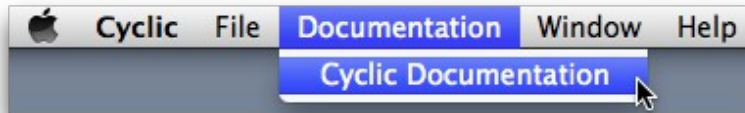
On Windows, you can also find a shortcut to the documentation in the Cyclic Start menu shortcuts.

About and Authorization screen

The About Cyclic menu item (in the Cyclic menu on Macintosh, and in the Help menu on Windows) will replace the Cyclic main screen with the About and Authorization screen. In addition to the Authorization information described earlier, it shows version information about the application, copyright information, acknowledgments and has direct links to the Cyclic home and support pages.
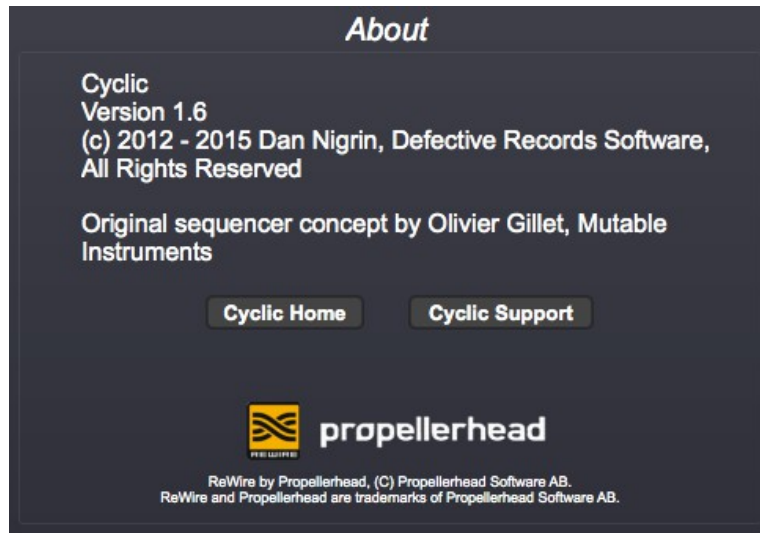
You can also link to the Defective Records and Mutable Instruments home pages by clicking their respective logos on the application Main screen.

Demo Limitations

The demo version of the Cyclic sequencer is feature complete compared with the full version, with some exceptions:

- It does not allow use of presets. Although the presets slots and Save and Load buttons are visible, the presets are not usable in any way.
- Only 1 VST plugin slot is available, rather than 3.
- It will time out after 30 minutes of use, showing the following message:

Acknowledgments and Thanks

I would like to thank Olivier Gillet of Mutable Instruments for the great idea behind this sequencer, as well as for his programming suggestions along the way. He's a brilliant synthesizer designer and hardware developer, not to mention software engineer!

The Cyclic sequencer was created using Cycling '74's Max (http://www.cycling74.com) software. In addition, it uses, with permission, some 3rd party external objects – I'm indebted to their creators for them:

- getpaths, creatfolder (Mac); getenv (Windows), by Jasch
  - http://www.jasch.ch/dl
  - Jasch's externals are LGPL licensed, http://www.gnu.org/licenses/lgpl.html
- mkdir (Windows), by Bill Orcutt
  - http://publicbeta.cx/max
- Modal Object Library (Mac, Windows), by VJ Manzo
  - http://www.vjmanzo.com/clients/mol
- LCount (Mac, Windows), by Peter Elsea
  - http://artsites.ucsc.edu/EMS/music/research/lobjects.readme.html
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Thanks to everyone at Cycling '74 and on the Cycling '74 forums (http://www.cycling74.com/forums) for their invaluable help with Max issues.

Contact & Support

Support Forum
http://defectiverecords.com/forum/index.php?p=/categories/cyclic

Dan Nigrin
dan@defectiverecords.com

Copyright

Version History

Version 1.6 (April 12, 2015)

  New Features
- ReWire audio slave support
- Individual stereo outputs for each plugin
- Ability to freeze individual note status/value/velocity/gate/cc1/cc2 to prevent from being randomized
- Ability to solo a subsequence
- Ability to reverse a subsequence's direction
- More control of audio I/O and signal vector sizes/sampling rate, to allow for better timing performance

  Improvements/Bug Fixes
- Highlighted every 4th step on circle
- Status of Play/Stop button no longer stored as part of a Preset
- Changing Presets is now more responsive
- Changed "M" button (Mute) to power icon instead for each subsequence
- Moved position of color identifier/selector for each subsequence to the right
- Added Panic button (in addition to existing "P" keyboard command) to send all-notes-off command
- Fixed bug in which MIDI start/stop messages were recognized even when in Internal transport mode
- MIDI Program Change status no longer saved as part of presets.

- Built with Max version 6.1.9 (c65762b, 32 bit)

Version 1.5.1 (November 29, 2013)
- Added ability to use Tab key to cycle through event array sections (Note, Velocity, Gate, CC1 and CC2)
- Fixed bug that prevented Reset All and subsequence Reset controls from being controlled remotely by CC messages
- Added note in documentation that version 1.0 presets will not work correctly with v1.5 application
- Built with Max version 6.1.5 (2117171, 32 bit)

Version 1.5 (November 19, 2013)
   New Features
- VST plugin instrument hosting for up to 3 plugins
- Per step Velocity, Gate, CC1 and CC2 control
- Override Note, Velocity and/or Gate options per track
- Override Velocity to zero, allows for "CC-only" tracks
- MIDI CC control of almost all parameters, including easy to use MIDI learn feature
- Constrain random value ranges
- Ability to constrain random parameter range
- Added . key to toggle between Main and Setup
- Added P key for Panic
- Added LED for MIDI clock

   Improvements/Bug Fixes
- Significantly reduced CPU use, especially on graphics-challenged systems

- Active step now highlighted in white, easier to see
- Updated Mutable Instruments logo
- Added tool tip for presets to remind how to store/recall presets
- Fixed Preferences name

- Built with Max version 6.1.5 (2117171, 32 bit)

Version 1.0 (February 16, 2012)
- First version released, including demo version.
- Built with Max version 6.0.4 (52278)

Version 1.0 Betas (October, 2011 – January, 2012)
- Bug fixes and firming up of feature set.