firmware
1.1.0

Shakmat
Bishop's Miscellany MK2

- 14HP Eurorack Module
- Built & designed in E.U.
- www.shakmat.com

Introduction

Instant riff maker, that's how the first version of the Bishop's Miscellany was described by the users, and it became a guiding mantra throughout the development of this new version.

The Bishop's Miscellany mk2 is a dual stepped CV/Gate engine built around three core components: a sequence recorder, a CV/Gate processor and a (Re)Generative engine. Sequences can be intuitively recorded, quantized, generated, edited, rearranged, mangled, stored and recalled with ease.

The module features a non-volatile memory on SD card, capable of storing thousands of sequences. Paired with its flexible playlist mode, it becomes a compact and powerful sequence player, equally suited to live performance and detailed studio composition.

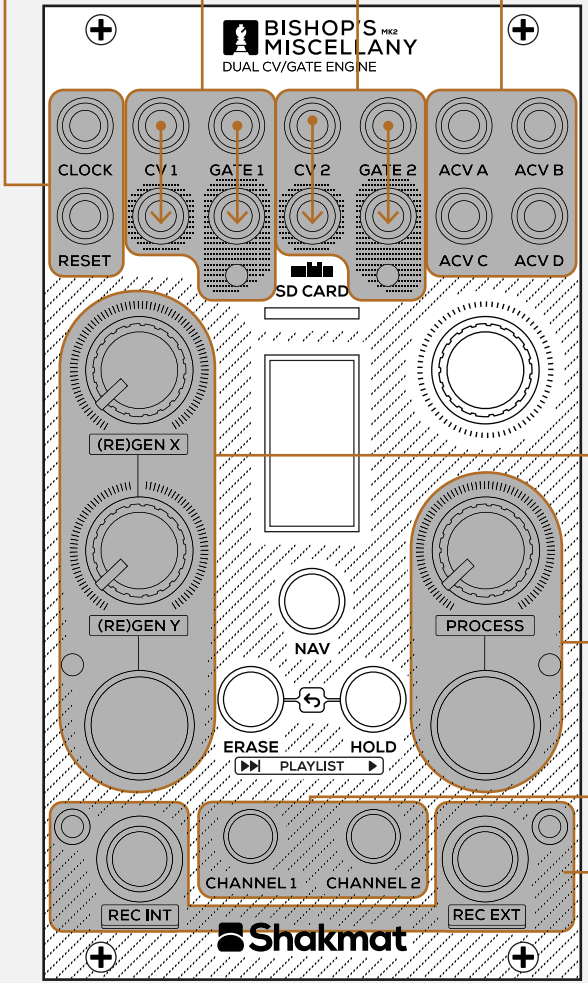
Pattern looper, CV/Gate multi-effect, duophonic generative sequencer, two-track sequence player, the Bishop's Miscellany mk2 does it all, seamlessly shapeshifting from one role to another.

Specifications

Size
14 HP
Depth
29 mm
Current Draw
70 mA @ +12V
5 mA @ -12V

CV inputs
-3 to +7V
ACV inputs
-5 to +5V

CV outputs
-3 to +7V
Gate inputs & outputs
0 to 5V



Clock & Reset inputs

Assignable CV inputs

Channels I/O
Channels 1 and 2 CV/Gate inputs and outputs.

(Re)Gen
The (Re)Gen section offers a range of innovative algorithms that generate or transform sequences. The (Re)Gen section is activated using the **(RE)GEN** button, while the parameters of the selected algorithm are controlled via the **(RE)GEN X** and **(RE)GEN Y** potentiometers.

Process
The Process section includes several handy tools to spice up your sequences, like slide, ratchet, gate length variation, vibrato, and noise. The active Process is engaged using the **PROCESS** button, while the **PROCESS** potentiometer sets the process parameter.

Channels
The Bishop's Miscellany mk2 includes two independent channels. Channel selection is performed via the **CHANNEL 1** and **CHANNEL 2** buttons, with the active channel indicated by an illuminated button.

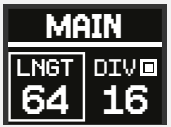
Recorder
There are two dedicated record buttons: **REC EXT** and **REC INT**. The first one (external recording) captures incoming signals from the **CV** and **Gate** inputs, while the second (internal recording) records actions performed directly on the module (such as a activating a Process or mangling the (Re)Gen potentiometers when a (Re)Gen algorithm is running).

The Bishop's Miscellany MK2 is a dual monophonic recorder: overdubbing replaces the existing content in the recording buffers rather than layering on top of it.

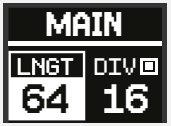
Navigation

The Bishop's Miscellany mk2 interface features a screen to navigate through various menu pages. The page title is displayed at the top of the screen. Navigation and edition of parameters are performed using the encoder. To select an item, turn the encoder until the item is framed(A), then press it to enter edition. The selected item will be boxed in white(B), allowing its value to be adjusted by turning the encoder. Press the encoder again to exit the edition.

(A)

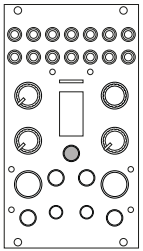


(B)



Shortcuts

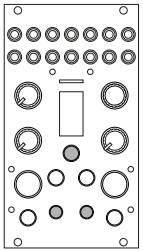
MAIN
NAV button



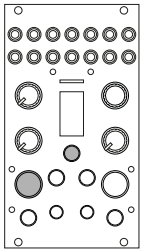
To browse through the pages, use the encoder to select and edit the page title. Alternatively, you can switch between pages by holding the **NAV** button and turning the encoder.

For quicker navigation, the **NAV** button can also be used alone or in combination with other buttons, such as illustrated here.

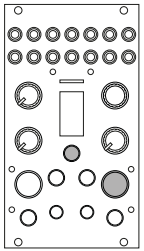
EDIT SEQ.
NAV+CHANNEL



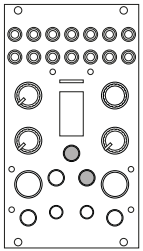
(RE)GEN
NAV+(RE)GEN



PROCESS
NAV+PROCESS



MEMORY or *PLAYLIST*
NAV+HOLD

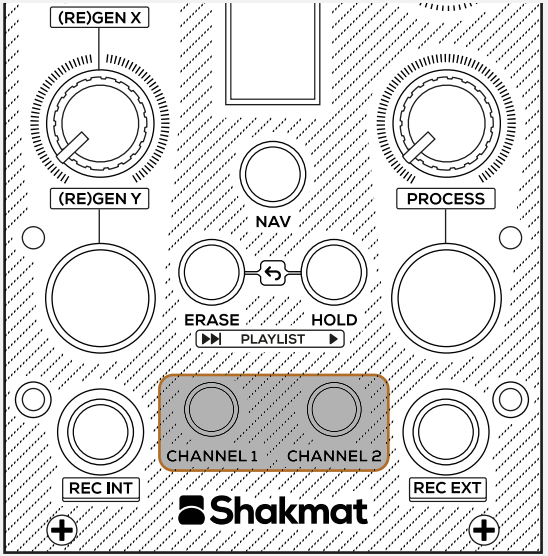


Channels

The Bishop's Miscellany features two independent channels. Nearly all values and operations are specific to the currently selected channel, indicated by the lit **CHANNEL 1** and **CHANNEL 2** buttons. To switch channels, press the corresponding button; the screen will then display information related to the selected channel.

The *MAIN* page, *PROCESS* page, *(RE)GEN* page, and *EDIT SEQ.* page are all channel-dependent, meaning they show information specific to the active channel.

The *PLAYLIST* and *MEMORY* pages are not channel-specific, as they display values for both channels simultaneously. Similarly, the *OPTIONS*, *ACV*, and *PROJECT* pages are not channel-specific since they relate to the operation of the entire module.



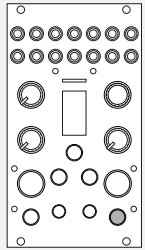
External Recording

The Bishop's Miscellany mk2 records sequences step-by-step, based on the selected sequence length and the incoming clock signal. Recording, overdubbing, and erasing a sequence are channel-specific operations, which means they affect only the currently selected channel. Two recording sources are available, accessible via dedicated **REC** buttons: external recording, which captures signals from an external CV/Gate source; and internal recording, which captures actions performed directly on the module (such as activating the (Re)Gen or Process sections). We will first focus on the external recording, internal recording will be detailed later.

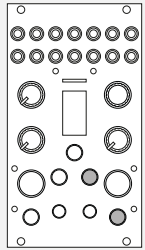
To record an external sequence, patch a clock signal into the **CLOCK** input and a CV/gate source (keyboard, joystick, sequencer, modulation source, etc.) into the **CV** and **GATE** inputs of the channel you want to record. A reset signal is not mandatory, but it's a great way to keep the module in sync with your system. Then select the patched channel using the corresponding **CHANNEL** button, and adjust the *MAIN* page settings as needed. You are now ready to start recording: to do so, press and hold the **REC EXT** button. While recording, the channel output follows the signal received at its input. Once the button is released, the channel plays back the recorded stepped sequence.

The module does not stop to record automatically after the selected length, it will go back to the first step, continuing to record in the buffer. When a sequence is playing, pressing the **REC EXT** button will overwrite the data in the recording buffer, this is a monophonic overdub. As the Bishop's Miscellany is a dual channel module you can have two recordings running at the same time.

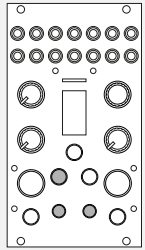
When no sequence is recorded, the sequence length parameter provides two more length options : Automatic Length (*AL*) and Quantized Length (*QL*). These advanced options are available after erasing a channel (if they are activated in the Options menu) and are located at the beginning of the list. When setting length to one of those options, the sequence is adapting its length to the recording (max 64 steps, overdubbing otherwise). For the first option, the length can be any number of steps, for the second option, the length will be quantized.



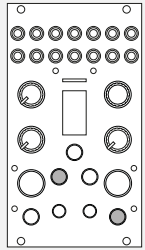
REC EXT
Enables sequence recording.
Keep the button pressed for the entire duration of the recording.



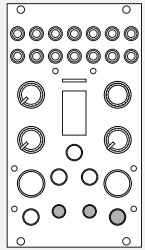
REC EXT + HOLD
Allows recording to continue without holding the Rec button.



ERASE + CHANNEL
Clears all data from a channel's recording buffer.



REC EXT + ERASE
Deletes individual steps from a recorded sequence.



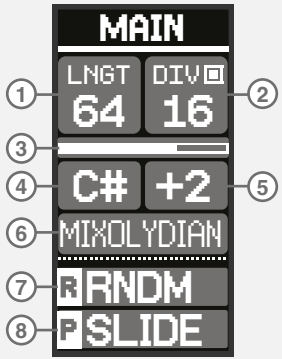
REC EXT + CHANNEL

Listen Mode

It is possible to monitor the **CV** and **GATE** inputs without affecting the recording buffers, we call this the Listen mode. To activate it, press **EXT REC** along a channel button (the external recording LED will slowly pulse to indicate that Listen mode is active).

Main page

The *MAIN* page offers direct access to key parameters of the Bishop's Miscellany MK2 sequences.



① Sequence Length

Defines the number of steps in the sequence, from 1 to 64.

② Clock Division

Sets the clock division rate from 1 to 16. The square icon in the upper-right corner blinks in sync with the selected division.

③ Progression

Displays the current sequence progression.

④ Semitones

Shifts the entire sequence by semitone.
C corresponds to no-transposition, while C# shifts the sequence up by 1 semitone and B by 11 semitones. This transposition is applied after the quantization stage.

⑤ Octave

Shifts the entire sequence up or down in octaves, from -3 to +3 octaves.

⑥ Scale

Selects the scale applied by the quantizer.

⑦ (Re)Gen

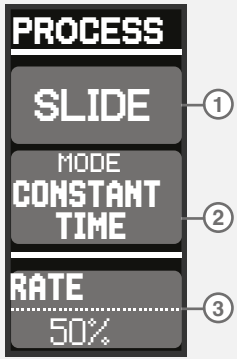
Sets the active (Re)Gen algorithm.

⑧ Process

Sets the active Process.

Process

The *PROCESS* page provides a detailed view of the selected process, it's mode (if applicable) and the parameter and value of the **PROCESS** potentiometer



① Process Type

Sets the currently selected Process.

② Process Mode

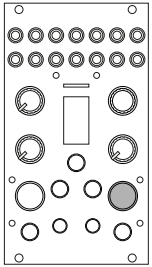
Most processes offer multiple modes. For example, the SLIDE process can operate in CONSTANT TIME or CONSTANT RATE.

③ Process potentiometer parameter and value

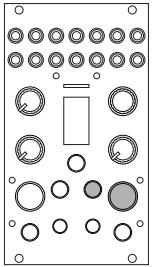
Indicates the current value set by the **PROCESS** potentiometer.

Shortcuts

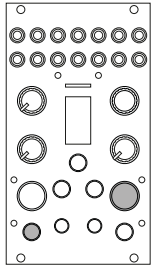
PROCESS BUTTON
Activate the process



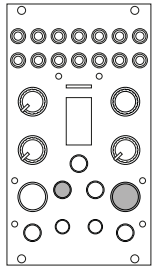
HOLD+ PROCESS
Hold the process active



REC INT+ PROCESS
Record the process



ERASE+ PROCESS
Erase the process sequence



The bishop's Miscellany mk2 features 5 different proces:

SLIDE

Slide
The Slide Process adds slew to a given step and can be set to one of two modes, either *constant time* or *Constant Rate*. The **Process** potentiometer will control the rate parameter from 0 to 100%.

GATE L.

Gate Length
The **Process** potentiometer controls the length of the gate of a given step from 0 to 100%. For an external recording, the module records the gate length. By overdubbing on an existing gate length sequence, the external gate length sequence is not recorded.

RTCHT

Ratchet
The ratchet process adds ratchets to the gate output of a given step and can be set to one of two modes, eiteher *gate length dependent* or *gate length independent*. For both modes, the **Process** potentiometer will control the type of ratchet, expressed in multiplications

VIBRTO

Vibrato
The Vibrato process adds an LFO on the outcoming pitch of a given step. The potentiometer controls the depth from 0 to 100%.

NOISE

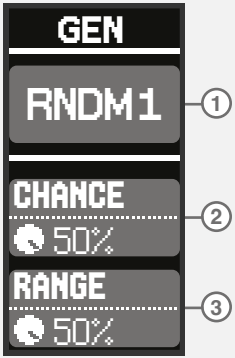
Noise
The noise process adds noise to the outcoming CV of a given step. It can be set to one of two modes, either *white* or *red*. The process potentiometer controls the amount from 0 to 100%.

(Re)Gen Page

The (Re)Gen feature is a set of algorithms allowing live sequence generation and alteration. These actions are performative tools leading to many applications such as creating sequences without any external CV/gate signals, producing musical random, mangling recorded sequences or adding some variations to a playing sequence.

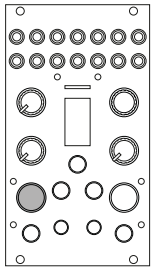
① **(Re)Gen Algorithm**
Indicates the currently selected algorithm.

②③ **Potentiometers parameters and values**
Each (Re)Gen algorithm has two parameters displayed under the algorithm name and controled by the **(RE)GEN X** and **(RE)GEN Y** potentiometers.

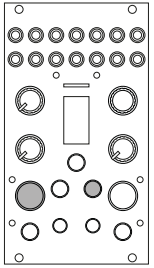


Shortcuts

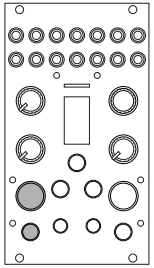
(RE)GEN
Activate
the (Re)Gen



HOLD+(RE)GEN
Hold the
(Re)Gen active



REC INT+(RE)GEN
Record
the (Re)Gen



There are two kinds of (Re)Gen algorithms: the generative algorithms which does not need any existing sequence to generate CV/gate and the regenerative algorithms which modify an existing sequence.

Generative Algorithms

Random 1
Generates random triggers and CV. The X potentiometer controls the chance of a CV/Gate change. The Y potentiometer defines the range of the CV output.

Random 2
Similar to the first random algorithm except generated CV/Gate has a gaussian distribution. The generated Gate sequences are more musically distributed than in Random 1.

Arpeggio
This algorithm creates ascending, descending or triangle-like stepped voltages. The X potentiometer defines the pattern of the stepped voltage. The Y potentiometer sets the CV range.

Path
This algorithm generates a musical phrase. A voltage ramp, with steps defined by the Y potentiometer, undergoes ornaments (direction changes, silences and jumps) with a probability given by the X potentiometer.

Knob
Records the Y potentiometer movement and generates triggers when the postition varies. The X potentiometer defines the threshold for trigger generation.

Regenerative Algorithms

Range
Offsets and re-scales the CV output (pre quantizer). The Y potentiometer controls the offset. The X potentiometer is the gain.

Speed
Causes steps of the sequence to be read at a different speed. The X potentiometer defines the direction. The Y potentiometer defines the speed (and allows backward reading).

Rate
Reduces the number of steps and repeat them. The Y potentiometer acts on the rate reduction (how many step will be kept), as the X potentiometer shifts the steps to be kept.

Slice
This algorithm slices the playing sequence into segments as in early samplers. The Y potentiometer sets the slices length. The X potentiometer defines which slice is read.

Random Slice
Slices the sequence to a given length and randomly shifts to a different slice. The X potentiometer defines the probability to jump to another slice The Y potentiometer defines the slice length.

Delay
Delays a sequence by a chosen number of steps. The X potentiometer controls the delay. The Y potentiometer controls pitch shifting.

RMBR

Remember
Randomly replaces parts of the sequence by other ones. The Y potentiometer defines the probability to initiate a replacement. The X potentiometer sets the range of the random length of the replaced part . When X is at its lowest value, the algorithm will mostly replace individual steps. Greater X values will replace longer parts.

XTALK

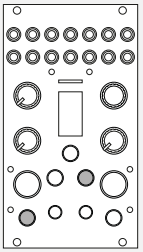
Crosstalk
Randomly replace steps of the sequence on one channel with the steps played on the other channel. The X potentiometer sets the replacement probability, while the Y potentiometer determines whether the replacement affects both CV and Gate, CV only, or Gate only. When used in Full Link mode, this algorithm swaps sequences between channels.

Internal Recording

As shown in the Process and (Re)Gen shortcuts list, the **REC INT** button can be used to record both process sequences and the output of the (Re)Gen algorithms.

To record a process sequence, press and hold the **REC INT** button while interacting with the **PROCESS** button and potentiometer.Note that each applied process can have its own independent activity. This means you can run up to five distinct process activities simultaneously.

Likewise, to record generated (or regenerated) sequences from the (Re)Gen section, press and hold the **REC INT** button while manipulating the **(RE)GEN** button and potentiometers.



REC INT + HOLD
Allows recording to continue without holding the Rec button.

Channel Linking

The Bishop's Miscellany mk2 is a dual channel CV/Gate recorder, processor and (Re)generator. By default the two channels are totally independent. However, it is possible to link them.

Press both channel buttons at the same time to link the two channels. Both channel LEDs will be on but one of the two buttons is dimmed. You can still select a channel by pressing the corresponding button, its LED will be brighter than the unselected channel.

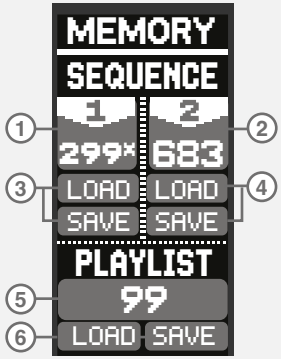
There are three modes of channel linking which can be selected in the option menu under *LINK MODE*:

1. *Independent link mode* will link only the user interface components (records, hold, erase, Process and (Re)Gen).
2. *Shared algorithms mode* is indentical to the independent mode but the process and (Re)Gen are types and values are kept identical for both channels.
3. *Full link* is identical to the previous linking but the all the parameters of the main page are also kept identical.

Memory Page

The Bishop's Miscellany mk2 features a non-volatile memory on microSD card, which stores sequences among other data. Sequences can be organized into playlists to prepare a live set or to build structured tracks.

The *MEMORY* page provides an overview of the current sequences on each channel and the active playlist. It allows you to manage sequences and playlists by performing load and save operations.



① ② Channel 1 & 2 sequences

Displays the current sequence running on each channel. A sequence number marked with an asterisk (*) indicates that it has been modified since the last loading operation.

③ ④ Channel 1 & 2 Load/Save

Use these items to load or save a sequence. A pop-up menu will appear to select a sequence and confirm or cancel the operation.

⑤ Playlist

Shows the currently active playlist, as displayed on the playlist page. A playlist marked with an asterisk (*) means it has been modified since the last loading operation.

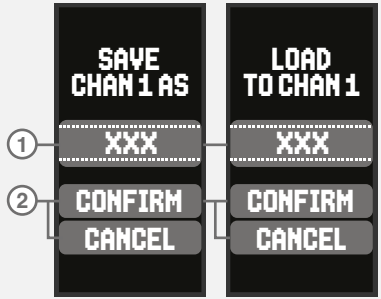
⑥ Playlist Load & Save

Use these items to load or save a playlist. A pop-up menu will appear to choose the playlist number and confirm or cancel the operation.

Clicking a *SAVE* or *LOAD* button on this page leads to a pop-up page that allows you to edit the sequence or playlist number, then confirm or cancel the operation.

When a saved sequence is loaded and then altered, an asterisk is added to the sequence number. As an option, when saving a sequence the currently associated Process and (Re)Gen algorithm and parameters can be loaded along the sequence. This behavior is set in the options page (see further in this manual).

Sequence Save/Load pop-up:



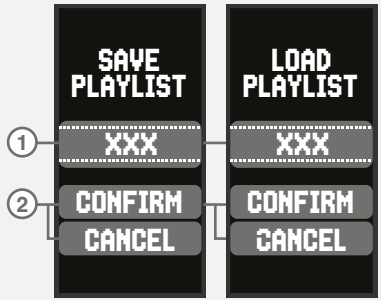
① Sequence number

Select a sequence number to perform saving/loading. Hold the encoder pushed to fast scroll.

② Confirm/Cancel

Click confirm to save or cancel to go back to the MEMORY page without saving.

Playlist Save/Load pop-up:



① Playlist number

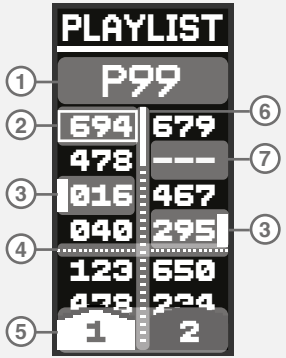
Select a playlist number to perform the saving/loading, press and hold while turning to fast scroll.

② Confirm/Cancel

Click confirm to save or cancel to go back to the MEMORY page without saving.

Playlist

The Playlist page allows to arrange sequences through slots that can be individualy looped or played sequentially. Navigation is done through the encoder or via the Erase and Hold buttons.



1 Current playlist

Use the Save/Load operations of the MEMORY page to select a playlist.

2 Selected slot

A selected slot is framed in white. To select a slot, first choose the column using the channel buttons, then turn the encoder to pick a slot. To edit it and assign a sequence number, press and hold the encoder for two seconds: the selection frame will turn into a solid rectangle, and the slot number start flashing. Turn the encoder to select a sequence number then press it to exit slot edition.

3 Playing slot

A playing slot is indicated by a flashing white bar to the left (channel 1) or to the right (channel 2) of the sequence number.

4 Slots separator

This dotted line separate groupes of 4 slots to help you navigate through the 16 slots available for each channel.

5 Channel indication

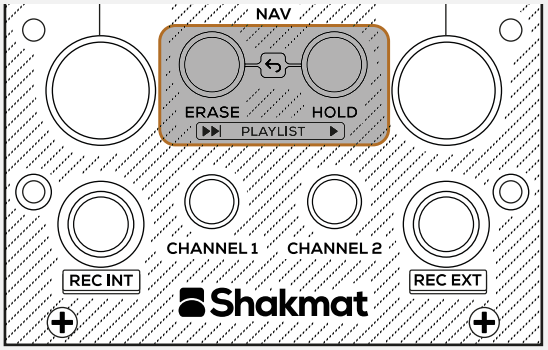
This part of the screen indicates the selected channel. To select a column, ust the channel buttons.

6 Scrollbar

7 Empty slot

If no sequence is assigned to a slot, three dashes are displayed.

on the PLAYLIST page, the ERASE and HOLD buttons have unsual functions and are dedicated, respectively, to select the next launch, and launch the playbzkc of a selected slot:

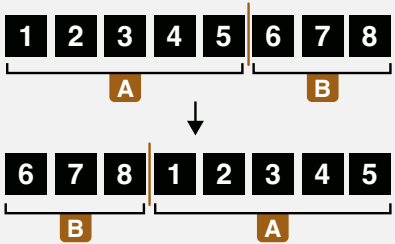


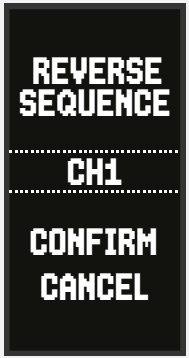
In the option menu, playlists can be configured in setlist or tracker mode. In **setlist mode,** the playlist pointer is only set manually. As an option, both channels can be launched simultaneously. When activated, this option makes the selection slot to span accros the two collumns. In **tracker mode,** once a sequence reaches its end, the playlist pointer jumps to the next sequence. If the playback suite falls on an empty slot, it goes back to the first sequence of the suite of sequences.

Edit Sequence

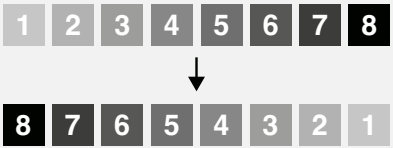
The sequence edition page features a selection of handy tools for sequence manipulation. All the actions performed on this page are destructive. To apply an action, turn the encoder then push it. When an edition action is clicked, a pop-up will appear allowing you to set and perform the action. Six different actions are performable form the Edit Sequence page :

Shift the sequence by steps, forward or backward. This is useful to adjust the beginning of the sequence when a reset is used or for a pattern memory recall.



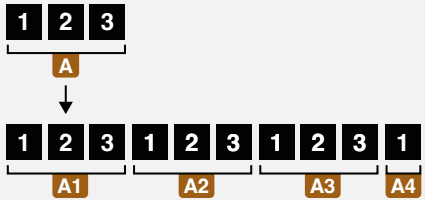


Reverse the sequence segments. First segment becomes the last and so on. Here is an example for an 8 steps sequence :

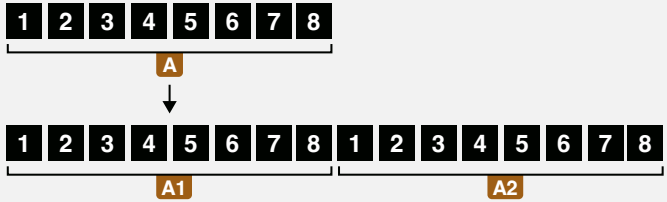


Duplicate repeatedly duplicates the sequence, by selecting a new sequence length. When performing the duplication, you have to set the number of steps of the new sequence. The sequence will be copied several time if the new length is greater then twice the original length.

Here is an example of a 3 steps sequence duplicated to 10 steps :

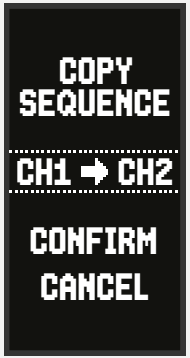


Here is an example of an 8 steps sequence duplicated to 16 steps:



Copy the sequence **parameters** (length, div, root note, scale, octave) from the selected channel to the other channel.

Copy the **sequence & parameters** (length, div, root note, scale, octave) from the selected channel to the other channel.

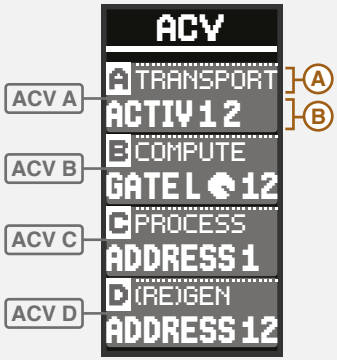


Copy the **sequence** of the selected channel to the other channel.

Assignable CVs

The Bishop's Miscellany mk2 has four assignable CV inputs which can be assigned to dozens of assignations(B) classified into 5 categories(A): *TRANSPORT*, *PLAYLIST*, *COMPUTE PROCESS* and *(RE)GEN.*

In order to assign a parameter to a CV input, first select the input (using the encoder), then scroll through the categories, select one by pushing the encoder, then scroll again through the assignations and select one by pushing the encoder.



TRANSPORT	*RUN 1*	**Activates and resets the channel 1**
	RUN 2	**Activates and resets the channel 2**
	RUN 12	**Activates and resets the channels 1 & 2**
	ACT 1	**Activate the channel 1**
	ACT 2	**Activate the channel 2**
	ACT 12	**Activate the channels 1 & 2**
	EXT REC 1	**Launch external recording on channel 1**
	EXT REC 2	**Launch external recording on channel 2**
	EXT REC 12	**Launch external recording on channel 1 & 2**

TRANSPORT	*CLOCK 2*	**Clock channel 2 with a different clock signal than channel 1**
	RESET 2	**Reset the channel 2**
PLAYLIST	*ADDRESS 1*	**Select a slot on channel 1**
	ADDRESS 2	**Select a slot on channel 2**
	ADDRESS 12	**Select a slot on channel 1 & 2**
	NEXT 1	**Select next slot on channel 1**
	NEXT 2	**Select next slot on channel 2**
	NEXT 12	**Select next slot on channel 1 & 2**
COMPUTE	*PRE 1*	**Adds CV to channel 1 pre-quantizer**
	PRE 2	**Adds CV to channel 2 pre-quantizer**
	PRE 12	**Adds CV to channel 1 & 2 pre-quantizer**
	POST 1	**Adds CV to channel 1 post-quantizer**
	POST 2	**Adds CV to channel 2 post-quantizer**
	POST 12	**Adds CV to channel 1 & 2 post-quantizer**
	OCTAVE 1	**Transpose octave of channel 1**
	OCTAVE 2	**Transpose octave of channel 2**
	OCTAVE 12	**Transpose octave of channel 1 & 2**
PROCESS	*SLIDE ON 1*	**Activates Slide on channel 1**
	SLIDE ON 2	**Activates Slide on channel 2**
	SLIDE ON 12	**Activates Slide on channel 1 & 2**
	SLIDE 1	**Slide amount for channel 1**
PROCESS	*SLIDE 2*	**Slide amount for channel 2**
	SLIDE 12	**Slide amount for channel 1 & 2**
	GATEL ON1	**Activates Gate Length on channel 1**
	GATEL ON2	**Activates Gate Length on channel 2**
	GATEL ON12	**Activates Gate Length on channel 1 & 2**
	GATEL 1	**Gate Length amount on channel 1**
	GATEL 2	**Gate Length amount on channel 2**
	GATEL 12	**Gate Length amount on channel 1 & 2**
	RTCH ON 1	**Activates Ratchet on channel 1**
	RTCH ON 2	**Activates Ratchet on channel 2**
	RTCH ON 12	**Activates Ratchet on channel 1 & 2**
	RTCH 1	**Ratchet amount on channel 1**
	RTCH 2	**Ratchet amount on channel 2**
	RTCH 12	**Ratchet amount on channel 1 & 2**
	VBRT ON 1	**Activates Vibrato on channel 1**
	VBRT ON 2	**Activates Vibrato on channel 2**
	VBRT ON 12	**Activates Vibrato on channel 1 & 2**
	VBRT 1	**Vibrato amount on channel 1**
	VBRT 2	**Vibrato amount on channel 2**
	VBRT 12	**Vibrato amount on channel 1 & 2**
	NOISE ON 1	**Activates Noise on channel 1**
	NOISE ON 2	**Activates Noise on channel 2**

PROCESS	*NOISE ON 12*	**Activates Noise on channel 1 & 2**
	NOISE 1	**Noise amount on channel 1**
	NOISE 2	**Noise amount on channel 2**
	NOISE 12	**Noise amount on channel 1 & 2**
(RE)GEN	*ON 1*	**Activates (Re)Gen on channel 1**
	ON 2	**Activates (Re)Gen on channel 2**
	ON 12	**Activates (Re)Gen on channel 1 & 2**
	X1	**(Re)Gen X param for channel 1**
	X2	**(Re)Gen X param for channel 2**
	X12	**(Re)Gen X param for channel 1 & 2**
	Y1	**(Re)Gen Y param for channel 1**
	Y2	**(Re)Gen Y param for channel 2**
	Y12	**(Re)Gen Y param for channel 1 & 2**

Options

The Bishop's Miscellany mk2 includes a bunch of options that enable to customize its behavior. All these options are grouped on the options page. Simply use the encoder to select an option and edit it's parameter.

SELECT BUS	*OFF/RECEIVE*	**Select Bus OFF or as Receiver**
CHANNEL 2 SOURCE	*IN 2*	**Source Channel 2 external recording from CV/Gate inputs 2**
	IN 1	**Source Channel 2 external recording from CV/Gate inputs 1**
	OUT 1	**Source Channel 2 external recording from CV/Gate outputs 1**

PLAYLIST MODE	*LIST*	**Set Playlist mode to Setlist** Slots are only launched manually
	TRACKER	**Set Playlist mode to Tracker** Slots are read sequentially one after another. When a group of sequences is followed by an empty slot the group is looped.
PLAYLIST NEXT	*NEXT CLOCK*	**Next Clock** launches playback of a slot at the next incoming clock signal. The reading position isn't resetted from a slot to another.
	END OF SEQ	**End of Sequence** waits to launch playback of a slot until the end of the currently read sequence.
	NEXT CLOCK RESET	**Next Clock and reset** launches a slot playback at the next incoming clock signal and resets the pointer to the beginning of the sequence.
PLAYLIST LAUNCH	*SINGLE CHANNEL*	Launches playback of a slot **one channel at a time**
	BOTH CHANNELS	Launches playback of a slot **on both channels.**
CHANNEL 1 OUTPUT	*V/OCT*	Channel 1 output norm is Volt/octave.
	HzV	Channel 1 output norm is Hertz/Volt.
	BUCHLA	Channel 1 output norm is buchla (1.2v/Octave).

CHANNEL 2 OUTPUT	*V/OCT*	Channel 2 output norm is Volt/octave.
	HzV	Channel 2 output norm is Hertz/Volt.
	BUCHLA	Channel 2 output norm is buchla (1.2v/Octave).
CHANNEL 1 INPUT	*0 TO 5V*	Channel 1 input range is from 0V to 5V.
	-3 TO 7V	Channel 1 input range is from -3V to 7V.
CHANNEL 2 INPUT	*0 TO 5V*	Channel 2 input range is from 0V to 5V.
	-3 TO 7V	Channel 2 input range is from -3V to 7V.
DEFAULT LENGTH	*16 STEPS*	The default length of a sequence is 16 Steps.
	AUTO LENGTH	The default length of a sequence is set automatically.
	QNTZD A.LNGT	The default length of a sequence is set automatically and quantized.
	KEEP SAME	The default length of a sequence is kept identical to the previously loaded sequence
TIME SIGNATURE	*4*	Defines the time signature wxhen in Quantized Length.
	5	
	6	
	7	

DEFAULT DIVISION	*1*	Default division is set to 1.
	Keep	Default division is kept identical.
LINK MODE	*INDEP LINK*	Links only the user interface components (records, hold, erase, Process and (Re)Gen).
	SHARED ALGO	Is indentical to the independent link mode but the process and (Re)Gen types and values are kept identical for both channels.
	FULL LINK	is identical to the previous linking mode but all the parameters of the main page (sequence length, division...) are also kept identical.
Screen Saver	*ON/OFF*	Enable or disable the screen saver (screen is turned off if the module is untouched for at least 10 minutes.

Quantizer

Factory Scales	
NONE	No quantization
SEMITONE	Semitone
OCTAVE	Octave
OCTAVE +5TH	Octave 5th
TRIAD MAJ	Major Triad
TRIAD MIN	Minor Triad

HARM MAJ	Harmonic Major
HARM MIN	Harmonic Minor
IONIAN	Ionian
DORIAN	Dorian
PHRYGIAN	Phrygian
LYDIAN	Lydian
MIXOLYDIAN	Mixolydian
AEOLIAN	Aeolian
LOCRIAN	Locrian
SUP LOCRI	Super Locrian
BLUES	Blues
PENTA MIN	Minor Pentatonic
PENTA MAJ	Major Pentatonic
WHOLETONE	Wholetone
DIMINISHED	Diminshed
SIXSYM	Six-Tone Symmetrical
ARABIC	Arabic
HUNGARIAN	Hungarian
ZIRAFK	Zirafk
PERSIAN	Perisan
PHRYG DOM	Dominant Phrygian
ENIGMATIC	Enigmatic

User Scales

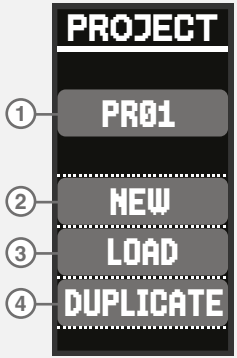
16 user scales can be added to your Bishop's Miscellany MK2. These custom scales are stored in a .txt file on the SD-Card. Use the scale editor on our website to create the file and copy it to your SD-Card in the BMmk2 folder. The module will automatically detect and load the file.

CV/Gate Multi-Effect

The module can be used as a CV/Gate multi-effect for external sequences. To do so, either hold the **EXT REC** button or activate Listen mode by pressing the **EXT REC** and **CHANNEL** button together. Process actions (or sequences) and regenerative algorithms are then applied in real-time to the incoming sequence.

Project

A project can contain up to 999 sequences, 99 playlists and all the settings selected in the assignable CV and option menus. As long as you've saved sequences and/or playlists, there's no need to save a project as CV assignations and Options are automatically stored for the current project.



1. **Current project name**
2. **Create a new project**
3. **Load a project**
4. **Duplicate the current project**

Undo

The Bishop's Miscellany mk2 supports a single-level undo ( ) function, allowing you to cancel the most recent recording (whether it was an external recording, (re)generative or process recording). To undo, press **ERASE** and **HOLD** together.

Select Bus

The Select Bus protocol enables digital communication between modules through the ribbon cable used for power (at the back of the module). Communication occurs via pins 15 & 16 of the power connector, making it feasible only for modules employing large power cables (16 pins to 16 pins).

To enable Select Bus communication, a module needs to be set as a transmitter (master) and one or several modules must be set as receivers (slaves). The Bishop's Miscellany mk2 handles the Select Bus protocol as a receiver. All the modules involved in the communication need to be connected to the same bus board.

Firmware Update

To update your Bishop's Miscellany MK2 download the latest firmware from shakmat.com/support. Turn off the module, take the SD card out and copy the .bin file to its root. Insert the card back in and turn the module on while maintaining the **PROCESS** button pressed. The screen will guide you through the end of the procedure.