

Orphiser

ACM26-C4

moddict



Users Manual EN 1.01

Firmware V1

2026

Orphiser

ACM26-C4

C

1.F

2.D

3.Min

4 Max

5.Slew

6.Z



tep.S

Energy

X

Y

1

X



Trigger



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Introduction

What is Orphiser?

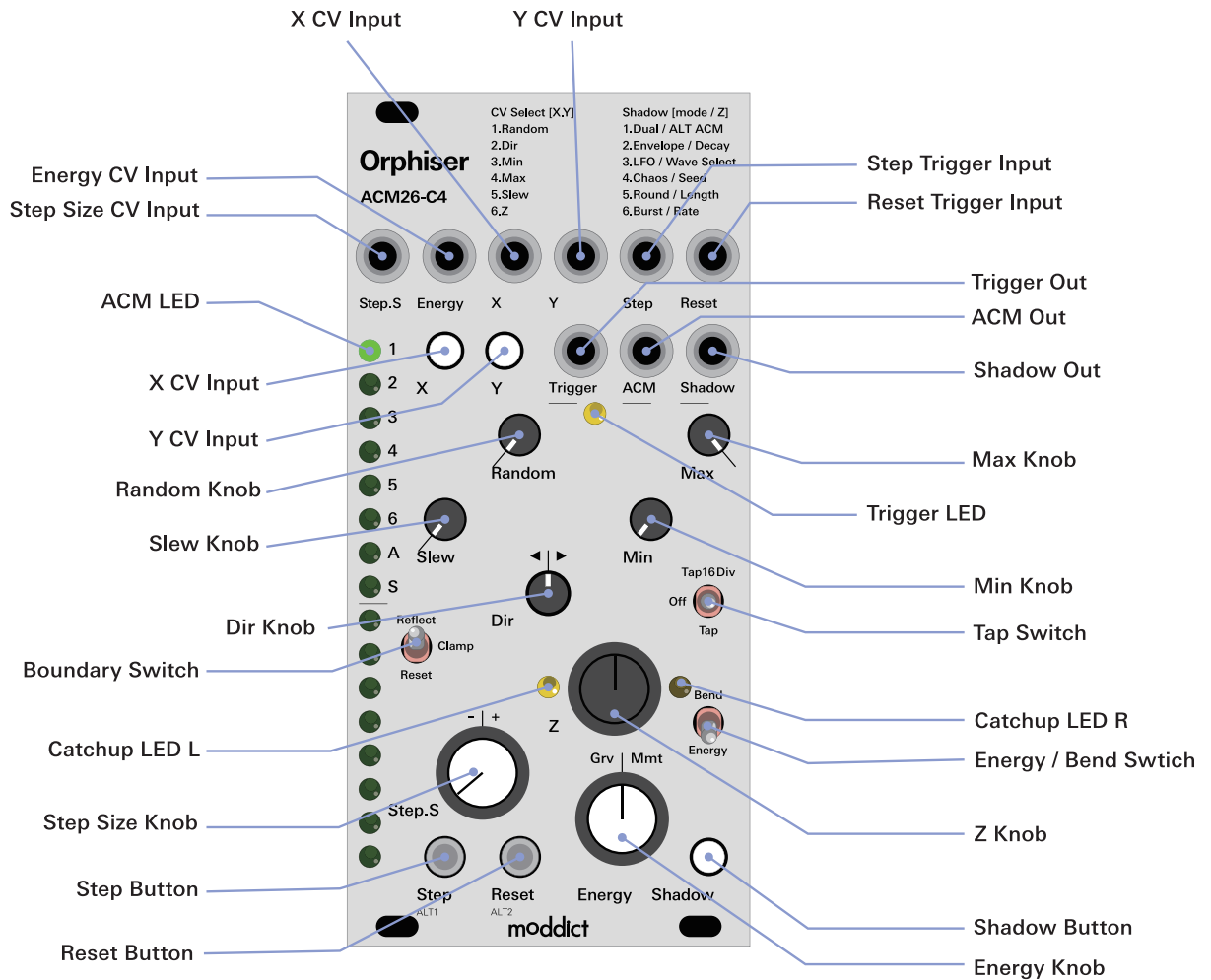
Orphiser is a module with a fresh concept, combining an Accumulator inspired by the Sequentix Cirkulon with a physics engine that adds Eurorack Slew, randomness, inertia and gravity, plus a Shadow mode that outputs a variety of CVs linked to the Accumulator.

While offering intuitive operation and a wealth of functions, it achieves a compact 12HP size.

We aimed for a module where the very question "how will you use Orphiser?" becomes the starting point that expands your ideas for live performance and composition!



Panel Layout



Specification

Type: Eurorack module
 Size: 12HP
 Depth: 33.8mm
 Current: 12V 138 mA / -12V 8mA / 5V 0mA

Accumulator

The Accumulator, the heart of Orphiser, is a kind of register – an accumulating device that repeatedly adds values one after another. In this manual, both the accumulated value and the Accumulator itself are called ACM.

It is output from ACM Out over a 0–10V range.

Step Size Knob

Adjusts the amount added to ACM on each Step. Center is 0; the right side accumulates in the forward direction and the left side in the reverse direction. The smaller the value, the more gradually it accumulates; at the maximum value, a single Step reaches the boundary.

Step Button

Pressing it generates a Step and lights the LED. When a Step occurs, ACM advances toward its target value by the Step Size.

Reset Button

Pressing it generates a Reset and lights the LED. When a Reset occurs, all operation is cancelled and ACM returns to the initial value set by Min.

Boundary Switch

A switch that determines the behavior when ACM reaches a boundary.

Clamp

tops upon reaching the boundary value.

Reset

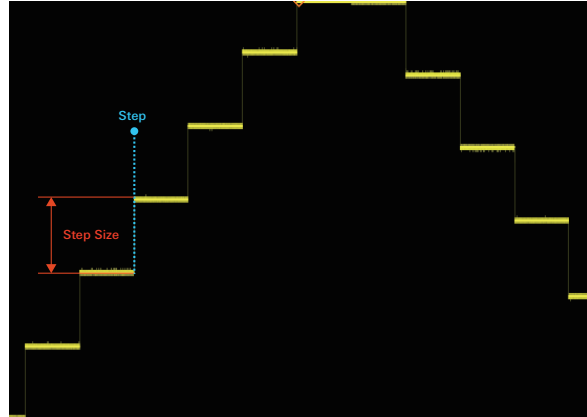
Returns to the initial value set by Min upon reaching the boundary value.

Reflect

Upon reaching the boundary value, the direction reverses and it bounces back. Upon reaching the initial value, the direction reverses again, so it keeps bouncing.

Step Size CV Input

CV input for Step Size, range $\pm 5V$. Offsets the Step Size Knob value.



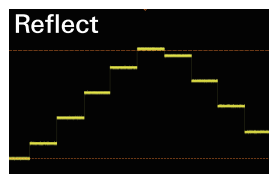
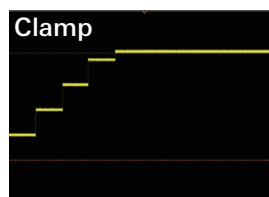
Step Size ± 8 LED

When you move the Knob within ± 8 of center, this is shown on the ACM LEDs to make fine adjustment easier.

When the Knob is at center, the 8th and 9th LEDs light.

ALL Reset

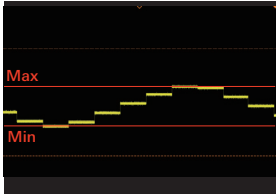
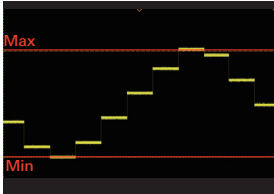
Holding the Reset Button for 10 seconds or more lights all ACM LEDs and returns every setting to its initial value.



03 Accumulator

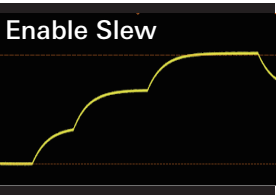
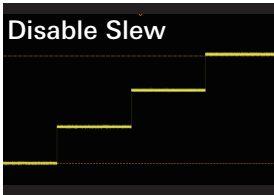
Min / Max Knob

The Min Knob sets ACM's initial value; the Max Knob sets the boundary value. When Min becomes larger than Max, the movement is inverted. ACM moves relatively within the range set by Min/Max.



Slew Knob

Applies Slew to ACM's movement. With the Slew Knob fully turned down, no Slew is applied; the more you turn it to the left, the more Slew is applied, so ACM reaches its target value slowly. If a Step arrives during Slew, the next Step begins immediately.

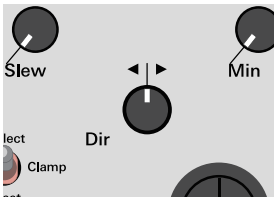


Random Knob

Adds randomness to Step Size. Fully clockwise means no randomness; the more you turn it counter-clockwise, the greater the degree of randomness. It does not affect the Step direction.

Dir Knob

Controls the Step direction by probability. Fully clockwise moves 100% in the forward direction; fully counter-clockwise moves 100% in the reverse direction. At center, forward and reverse each occur with 50% probability.



ACM LED

Displays the behavior of ACM and the Shadow (described later) on the ACM LEDs. Holding the Shadow Button and pressing the X Button toggles between the ACM and Shadow displays. The ACM LED's A/S cycles through 4 patterns of lit / dim / off.



Priority ACM



Priority Shadow



Only ACM



Only Shadow

Step / Reset Trigger Input

Trigger inputs for Step and Reset, range 0–8V. When a trigger arrives, the Step / Reset Button LED lights. The Step Trigger relates to Tap mode (described later).

Energy

Energy Knob

The Energy Knob adds physical motion to the Accumulator's behavior. Turning right from center adds Moment (Mmt); turning left adds Gravity (Grv).

At center, Energy is disabled. A major feature is that moving the Knob while Energy is active changes the motion accordingly — you can vary the intensity of Moment/Gravity, or move back and forth between the two behaviors.

Moment

Moment reproduces motion with inertia after a Step arrives and ACM reaches its target value. The further you turn right from center, the faster and longer it rolls; fully clockwise it keeps rolling, producing an LFO-like movement.

Gravity

Gravity reproduces a falling motion by adding gravity after a Step arrives and ACM reaches its target value. It falls toward the value set by the Min Knob. When set to Reflect, it bounces repeatedly. The further you turn left from center, the stronger the gravity. When gravity is weak it falls softly; when strong it reaches Min quickly.

Energy / Bend Switch

Switches behavior between Energy and Bend.

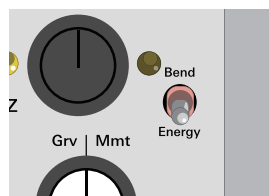
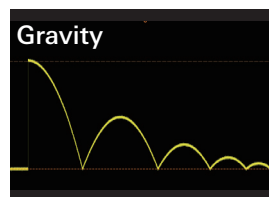
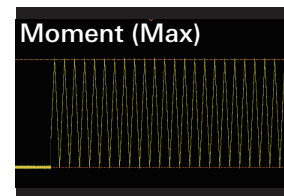
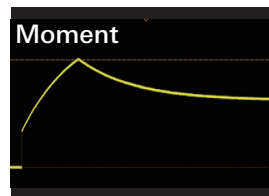
In Bend mode, the Energy Knob and CV become an offset for ACM.

Energy CV Input

CV input for Energy, range $\pm 5V$. Offsets the Energy Knob value.

Energy ± 8 LED

When you move the Knob within ± 8 of center, this is shown on the ACM LEDs for easier fine adjustment. When the Knob is at center, the 8th and 9th LEDs light. The Energy Knob's ± 8 LED is active only while stopped.



Tap mode

Orphiser has an internal Tap Tempo. The Tap source is the timing of pressing the Step Button and the Step Trigger. When a Step Trigger input is present, the source switches to it preferentially, and the Step Button can then be used like a manual fill.

Tap Switch

Switches between Off / Tap / Tap 16Div.

Off

Tap mode is turned off. Even when Off, Tap tempo is always being acquired.

Tap

Tap mode is enabled. Steps are entered automatically at the Tap Tempo speed.

Tap16Div

Tap16Div mode is enabled. A Step becomes active once every 16 Tap Tempo counts. You can feed a clock into Step Trigger and use it as a clock divider.



Shadow mode

In Shadow mode you can output various CVs linked to the Accumulator. Shadow mode is output from Shadow OUT over a 0–10V range.

Shadow Button

Pressing the Shadow Button briefly once, or holding it, displays the Shadow mode state on the ACM LEDs.

While holding it, pressing the Step / Reset Button toggles ALT1 / 2 on/off. ALT1 / 2 provide a variety of functions in each Shadow mode.

Pressing the Shadow Button again during the state display switches the Shadow mode.

The selected Shadow mode is indicated by ACM LEDs 1–6 blinking.

Shadow mode is saved automatically and restored when the power is turned back on.

The ALT1/ALT2 state is saved — depending on the parameter — at the moment the Shadow mode is switched.

This avoids unnecessary saving. If you want to be sure it is saved, cycle through the Shadow modes.



Z Knob / Shadow + Z Knob

The Z Knob's function changes with the Shadow mode.

In some Shadow modes, holding the Shadow Button while turning the Z Knob gives access to a different function.

Each Shadow mode holds its own Z Knob / Shadow+Z Knob values, which are restored when the power is turned back on.



Z Knob LED

lights when the held value and the Knob position differ — for example when the Shadow mode changes or when switching to Shadow+Z. If the held value is smaller than the Knob position, the left LED lights;

if larger, the right LED lights. If you move the Knob while the Z Knob LED is lit, values are added relative to the held value.

For example, if the held value is 20 and the Knob value is 40, turning right adds starting from 20 — so turning fully clockwise yields (maximum value – 20).

When you bring the Knob back to the held value, the Z Knob LED turns off and normal Knob operation resumes.

Shadow mode List

The table below shows each function of the Shadow modes.

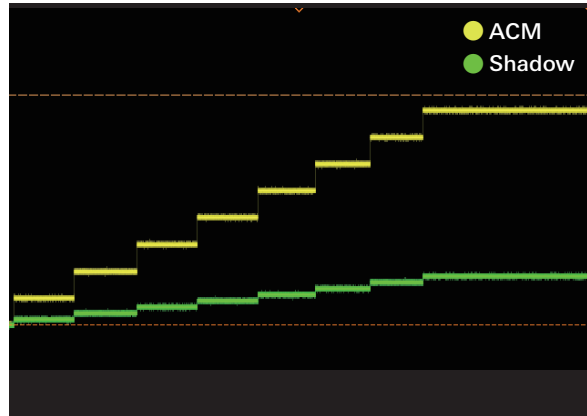
Shadow mode	Z	Shadow + Z	ALT1 [Shadow + Step]	ALT2 [Shadow + Reset]
Dual	ALT Step Size	-	Separate Step Trigger	Pingpong Trigger
Envelope	Decay	Attack	ACM VCA	Envelope Restart
LFO	Wave Select	LFO Speed	Noise Smooth/Step	LFO Sync
Chaos	Seed	-	Chaos / Lorenz	Segment Loop
Round	Length	-	Distance Out	Round Loop
Burst	Burst Rate	-	Burst Button	Glitch Button

Dual

Dual lets you use ACM and a separate ALT ACM at the same time. ALT ACM shares Step / Reset / Energy / Random / Dir / Min / Max with ACM.

ALT Step Size [Z Knob]

In Dual, the Z Knob works as ALT Step Size. Its basic behavior is the same as ACM's Step Size, but it acts as a dedicated Step Size for ALT ACM.

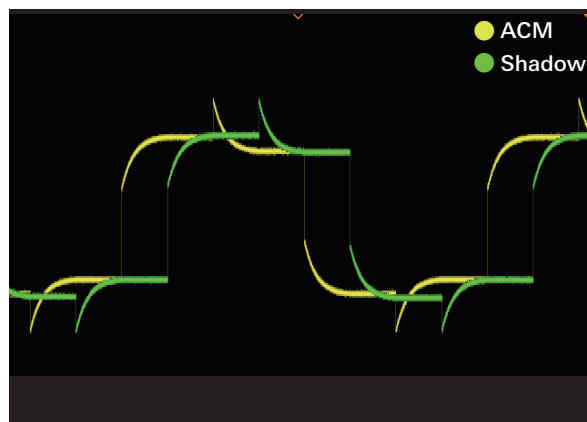


Separate Step Trigger [ALT1]

The Step Button is assigned to ACM and the Step Trigger to ALT ACM. This is mutually exclusive with ALT2's Pingpong Trigger.

Pingpong Trigger [ALT2]

The Step Button and Step Trigger become connected alternately to ACM and ALT ACM, so ACM and ALT ACM move in turn.



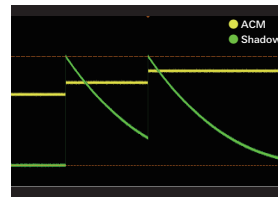
06 Shadow mode 2

Envelope

Envelope outputs an envelope at the moment ACM's Step arrives.

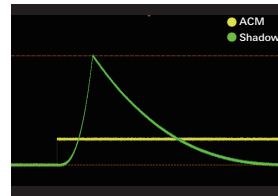
Decay [Z Knob]

Adjusts the envelope's Decay.



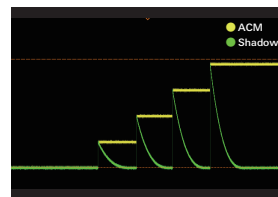
Attack [Shadow + Z Knob]

Adjusts the envelope's Attack.



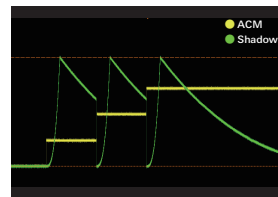
ACM VCA [ALT1]

Outputs an envelope that follows ACM's output.



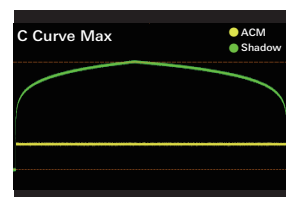
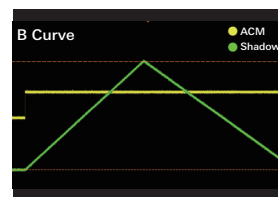
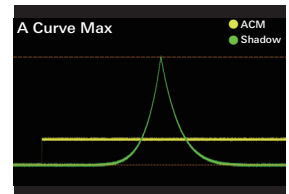
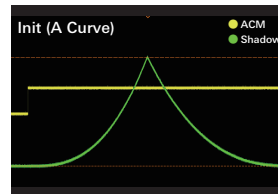
Envelope Restart [ALT2]

If an envelope is already being output when a Step arrives, the envelope restarts from the Min value. When off, the envelope starts from wherever it currently is.



Envelope Curve [Shadow + Slew]

An Envelope-specific button combo. Holding the Shadow Button while moving Slew changes the envelope curve. Left is the A curve, center is the B curve, right is the C curve; the closer to fully turned, the more strongly the curve is applied. The default is a gentle A curve. The value is held while running and reset to the default at startup.

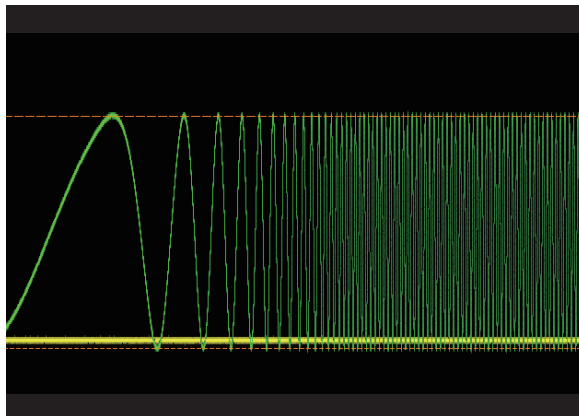


LFO

LFO outputs an LFO that runs at a multiple of ACM's Tap tempo.

Wave Select [Z Knob]

Changes the LFO waveform. Starting from the Z Knob fully counter-clockwise, it changes in order: sine, triangle, square, sawtooth, noise. Between waveforms, a mixed state is output.

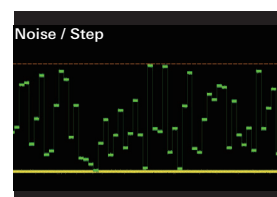
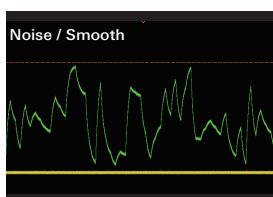


LFO Speed [Shadow + Z Knob]

Changes the LFO speed. It is a multiple of the Tap tempo — turning left makes it slower, turning right faster. At center it matches ACM's Tap Tempo.

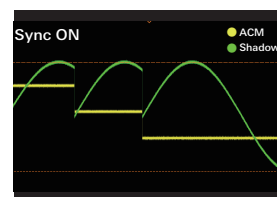
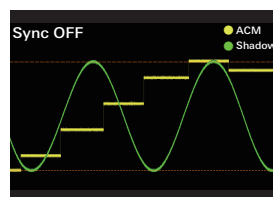
Noise Smooth/Step [ALT1]

Switches the noise output between smooth and stepped. When ALT1 is enabled, it becomes Step (stepped/staircase).



LFO Sync [ALT2]

Hard-syncs the LFO at the Step timing.



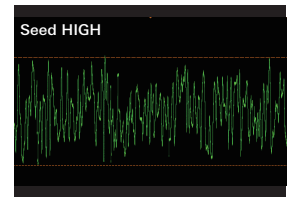
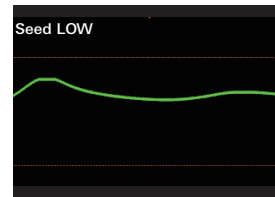
06 Shadow mode 4

Chaos

Chaos outputs moddict's original randomness and Lorenz-attractor-style randomness. Outputting randomness linked to ACM and the Z Knob, it is one of Orphiser's signature modes.

Seed [Z Knob]

The first waveform fragment when a Step arrives is determined by the Z Knob. The waveform fragment is regenerated on each Step. Turning the Z Knob left makes longer-amplitude fragments more likely to appear; turning right makes shorter fragments more likely. After the first fragment plays, random fragments play one after another.



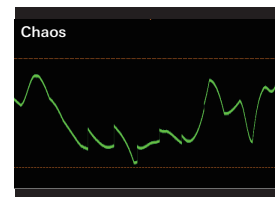
Chaos / Lorenz Attractor [ALT1]

ALT1 消灯 [Chaos]

Outputs moddict's original randomness.

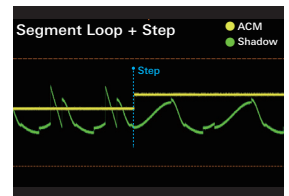
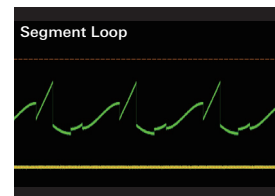
ALT1 点灯 [Lorenz attractor]

Outputs randomness that moves back and forth between two ellipses.



Segment Loop [ALT2]

Loops the random-fragment portion. Pressing Shadow and Reset briefly makes it latching (alternate); holding makes it momentary. When a Step arrives, a new Segment is looped.

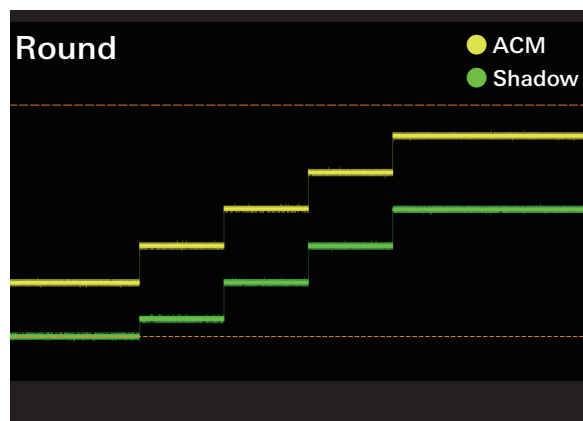


Round

Round outputs a round (a canon — the so-called "frog chorus"). Orphiser always holds 16 steps' worth of ACM values, so with Round loop you can also use it like a sequencer.

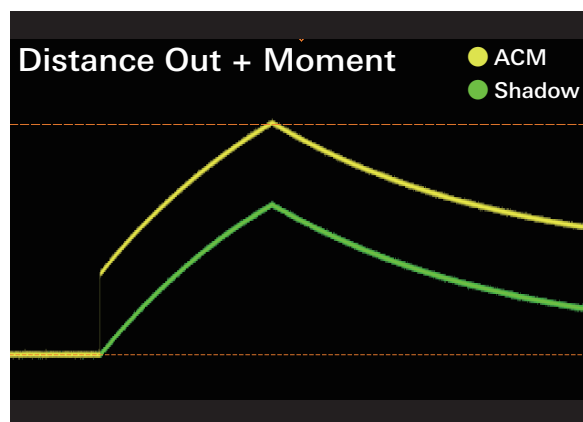
Length [Z Knob]

Length outputs the ACM value from up to 16 Steps before the main ACM. Slew / Energy / Min / Max use the current values. Fully counter-clockwise is 0 Step (same as ACM); fully clockwise outputs the ACM from 16 Steps earlier. The ACM LEDs show how many Steps back it is.



Distance Out [ALT1]

Compares the ACM target value with Round's ACM value and outputs the difference as a distance based on 0. Unlike Diff, it outputs not the $\pm$ relative to ACM, but how far apart the two are. Because the comparison target is the ACM target value, you can extract Slew and Energy. By combining the ALT Trigger (Negative Gate) described later with a bipolar VCA, you can extract Diff.



Round Loop [ALT2]

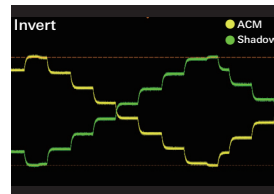
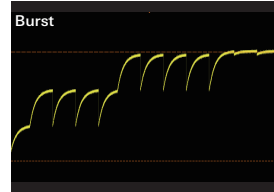
Loops the Steps set with the Z Knob. While Round Loop is active, the 16-Step memory is not overwritten and stays fixed. Pressing Shadow and Reset briefly makes it latching; holding makes it momentary.

06 Shadow mode 6

Burst

Burst fires Steps repeatedly toward the same ACM target value. Shadow Out becomes the inverted output of ACM Out.

With ALT2, Glitch is added. Burst / Glitch apply to both ACM and Shadow. The state is held while running, but a power cycle starts up in a reset state.



Burst Rate [Z Knob]

Adjusts the number of Burst repeats. Turning left is no Burst; the more you turn right, the faster the repeats.

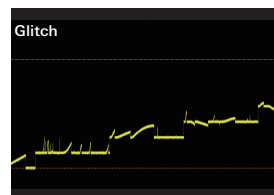
The repeat speed is variable from 1x to 32x the Tap Tempo.

Burst Button [ALT1]

Burst is applied only while enabled. Pressing Shadow and Reset briefly makes it latching; holding makes it momentary.

Glitch Button [ALT2]

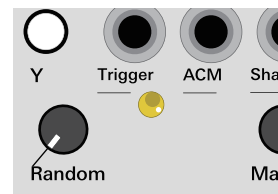
A Glitch using Chaos is added. Glitch is applied only while enabled. The amount is adjusted by the Z Knob position. Pressing Shadow and Reset briefly makes it latching; holding makes it momentary.



Trigger / ALT Trigger

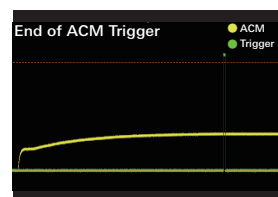
A 10V / 10ms Trigger is output from Trigger Out. Holding the Shadow Button and pressing the Y Button switches between Trigger / ALT Trigger.

[Trigger] Trigger LED off
[ALT Trigger] Trigger LED on



Trigger / End of ACM Trigger

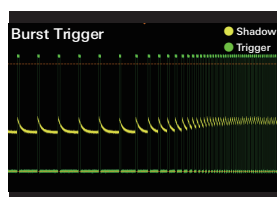
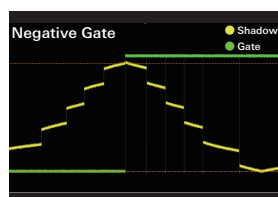
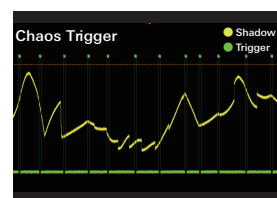
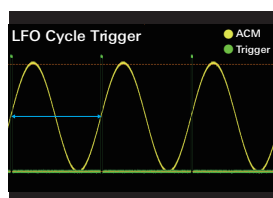
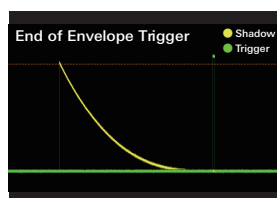
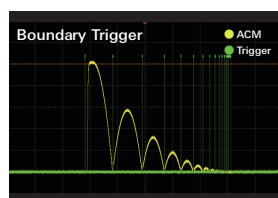
In every Shadow mode, Trigger commonly outputs the main ACM's End of ACM Trigger. When there is no Slew or Energy, it is output at the Step timing; when Slew or Energy is present, it is output at the moment the movement completes.



ALT Trigger

The table below shows the ALT Trigger for each Shadow mode.

Shadow mode	ALT Trigger	Features
Dual	Boundary Trigger	Outputs a Trigger when ACM touches a boundary
Envelope	End of Envelope Trigger	Outputs a Trigger at the end of the Envelope
LFO	LFO Cycle Trigger	Outputs a Trigger on the LFO cycle
Chaos	Chaos Trigger	Outputs random Triggers
Round	Negative Gate	Outputs a GATE when lower than ACM
Burst	Burst Trigger	Outputs a Trigger linked to Burst



CV Select

CV Select

Pressing the X/Y Button lights ACM LEDs 1–6 and changes the assignment of the X / Y CV input.
Pressing briefly or holding shows the state;
pressing again cycles the assignment target in order. The X/Y CV Input voltage range is $\pm 5V$.

- 1. Random
- 2. Dir
- 3. Min
- 4. Max
- 5. Slew
- 6. Z

When Z is selected, the CV is assigned to the currently selected Shadow mode. As shown in the table below, the target can be Z, ALT1, or ALT2. Holding the X/Y Button and pressing Step selects ALT1; pressing Reset selects ALT2. If there is no assignment for ALT1/2, the Step/Reset button blinks to indicate it. If the same CV is assigned to both X and Y, the summed value is offset.

Segment Loop / Round Loop / Burst / Glitch behave like the mode's Switch and go High at 2.5V or above.

Shadow mode	Z	ALT1	ALT2
Dual	ALT Step Size	-	-
Envelope	Decay	Attack	Envelope Curve
LFO	Wave Select	LFO Speed	-
Chaos	Seed	-	Segment Loop
Round	Length	-	Round Loop

X/Y CV Attenuator [X/Y + Z Knob]

Holding the X/Y Button and turning the Z Knob operates the X/Y CV attenuverter.
The default is the maximum positive value (fully clockwise). Right is positive, center is 0, left is negative (inverted).
While operating the X/Y CV attenuverter, the state is shown on the ACM LEDs.
The setting is held while running and reset to wthe default when the power is cycled.

moddict