MOTOR —[M]— SYNTH

WELCOME TO THE WORLD
OF MOTOR SYNTHESIS

INSTEAD OF TRADITIONAL ANALOG OSCILLATORS, THE MOTOR SYNTH USES
DIGITALLY CONTROLLED ELECTROMOTORS AS ITS CORE AUDIO SIGNAL SOURCE.

THE MOTOR SYNTH IS DRIVEN BY EIGHT MODERN BRUSHLESS DC MOTORS, TYPICALLY USED
FOR DRONE-RACING. THEY ARE EXTREMELY FAST, PRECISE AND DURABLE, AND WHEN OPERATED WITH
VIRTUALLY NO PHYSICAL RESISTANCE OR FRICTION THEY CAN GENERATE ENOUGH TORQUE TO REACH
A TOP SPEED OF ~300 REVOLUTIONS PER SECOND ALMOST INSTANTANEOUSLY.

WITH SO MUCH POWER AT HAND, HAVING PRECISE CONTROL OVER THE MOTORS
IS THE MOST CRUCIAL ELEMENT TO MAKING A PLAYABLE MUSICAL INSTRUMENT.
OUR ENGINEERING TEAM HAVE DESIGNED A PROPRIETARY MOTOR DRIVER AND FEEDBACK SYSTEM WHICH
ALLOWS US TO REGULATE EACH MOTOR'S ROTATION SPEED WITH EXTREME ACCURACY -
THUS CREATING A NEW KIND OF AUDIO OSCILLATOR.

WE ARE EXTREMELY PROUD OF THE MOTOR SYNTH - NOT ONLY FOR ITS RAW AND UNIQUE SOUND, BUT ALSO
FOR THE TECHNOLOGICAL ACHIEVEMENT THAT IT REPRESENTS.

GAMECHANGER | AUDIO

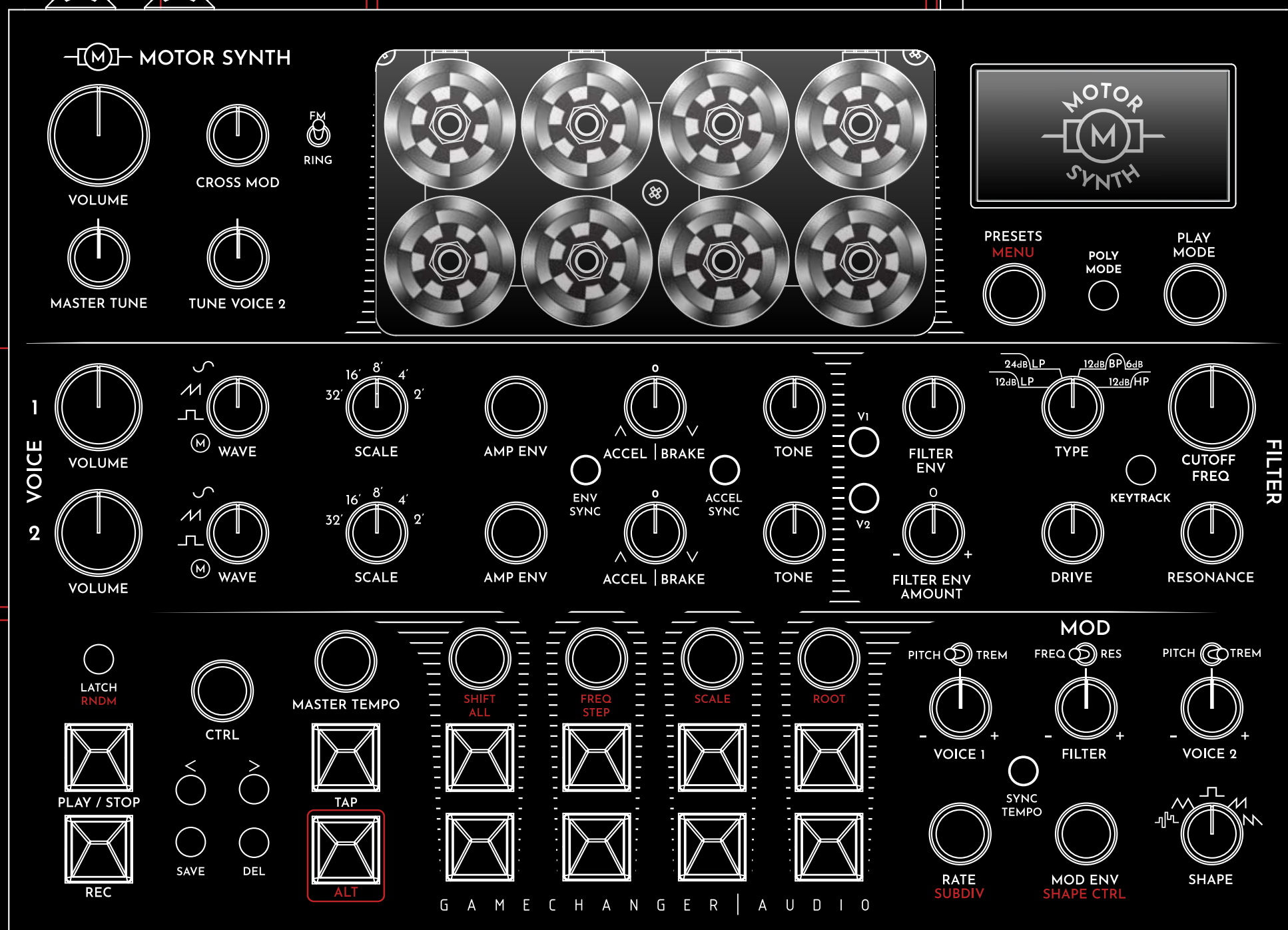# MOTOR SYTNH QUICK GUIDE

CROSS MOD

POLYPHONY

MENU SETTINGS

MOTOR SYNTH

FM
RING

VOLUME

CROSS MOD

MASTER TUNE

TUNE VOICE 2

PRESETS
MENU

POLY MODE

PLAY MODE

PLAY MODES
ARPEGGIATOR

VOICE BLOCK

VOICE 1

VOLUME

WAVE

32' 16' 8' 4' 2'

SCALE

AMP ENV

ACCEL | BRAKE

ENV SYNC

ACCEL SYNC

TONE

V1

V2

FILTER ENV

24dB LP   12dB BP 6dB
12dB LP   12dB HP

TYPE

KEYTRACK

CUTOFF FREQ

FILTER

VOICE 2

VOLUME

WAVE

32' 16' 8' 4' 2'

SCALE

AMP ENV

ACCEL | BRAKE

TONE

FILTER ENV AMOUNT

DRIVE

RESONANCE

FILTER SECTION

MOD

LATCH
RNDM

CTRL

MASTER TEMPO

SHIFT ALL

FREQ STEP

SCALE

ROOT

PITCH   TREM

VOICE 1

FREQ   RES

FILTER

PITCH   TREM

VOICE 2

PLAY / STOP

TAP

SYNC TEMPO

REC

SAVE

DEL

ALT

RATE
SUBDIV

MOD ENV
SHAPE CTRL

SHAPE

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MUSICAL INTERFACE
NOTE RECORD
MOTION RECORD

MODULATION

1 POLYPHONY

THE MOTOR SYNTH IS EQUIPPED WITH 8 MOTOR OSCILLATORS AND 2 IDENTICAL VOICE BLOCKS - VOICE 1 AND VOICE 2. THEREFORE, THE INSTRUMENT IS A 4-NOTE POLYPHONIC SYNTHESIZER WITH 2 VOICES PER MUSICAL KEY.

PRESS THE "POLY MODE" BUTTON TO ADJUST THE MOTOR SYNTH'S POLYPHONY SETTINGS.
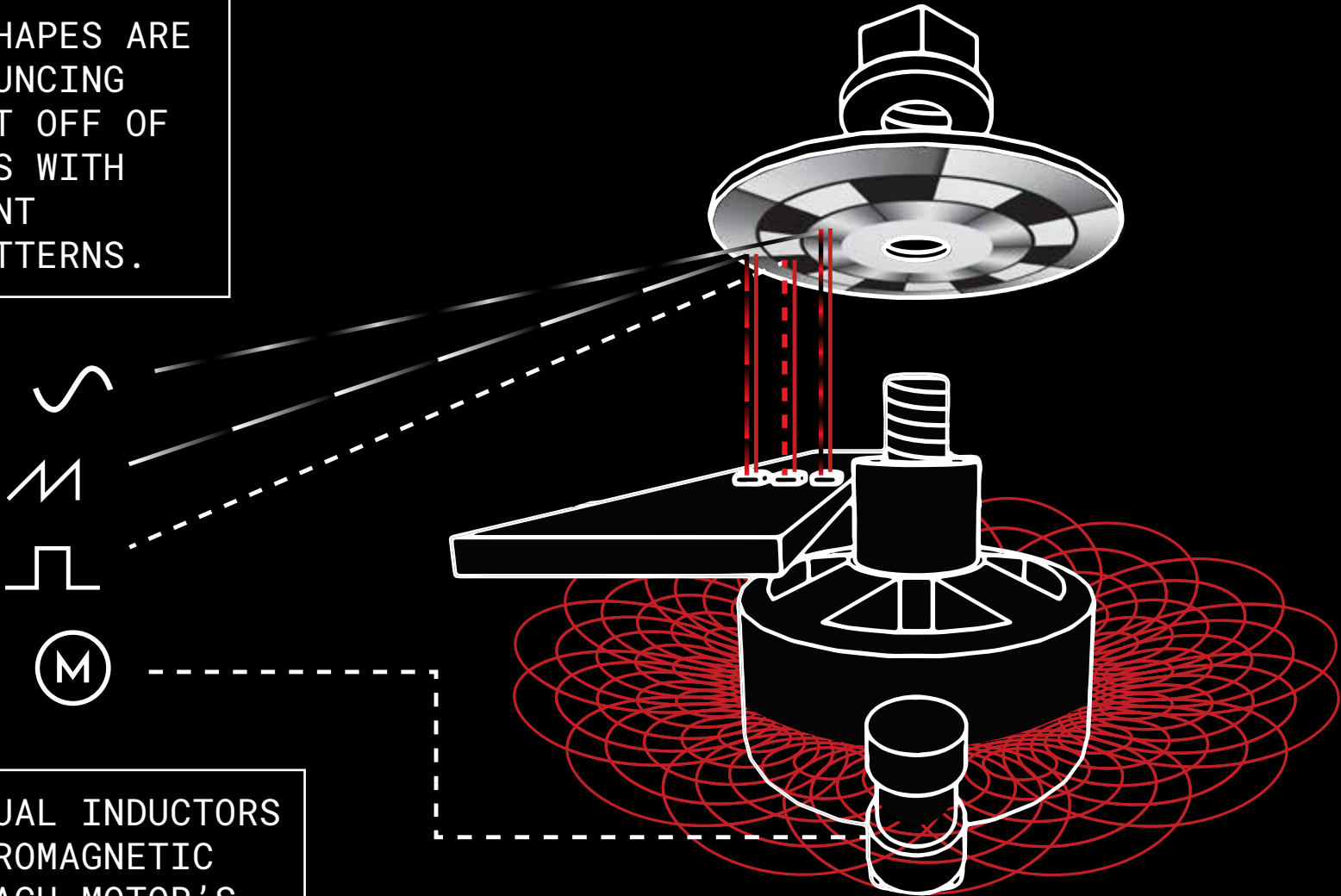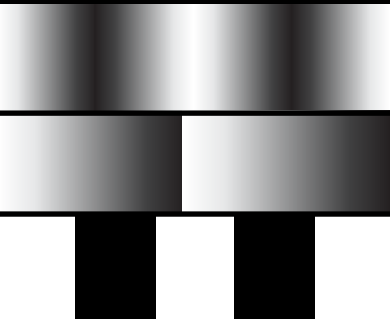
IN THE POLYPHONY MENU, USE THE LEFT ENCODER TO RESERVE A SPECIFIC AMOUNT OF MOTORS FOR EACH VOICE, AND USE THE RIGHT ENCODER TO MAKE MULTIPLE MOTORS PERFORM NOTES IN UNISON.

POLYPHONY AND UNISON SETTINGS CAN BE ADJUSTED INDIVIDUALLY FOR VOICE 1 AND VOICE 2. THE MOTOR SYNTH CAN ALSO BE USED AS AN 8 VOICE POLYPHONIC INSTRUMENT WITH 1 VOICE PER KEY WHEN VOICE 2 IS DISABLED.

POLY   UNI
< 4 >   < 1.1 >
< 1 >   < 4.0 >

<POLY>/V   OK   <UNI>/V

PRESETS   POLY   PLAY
MENU   MODE   MODE
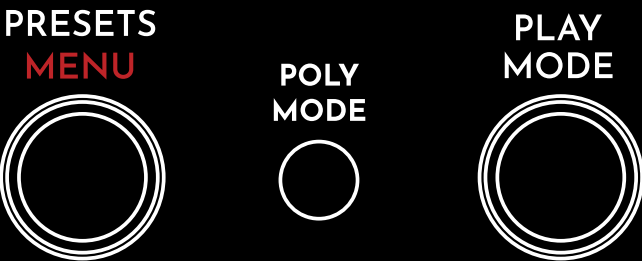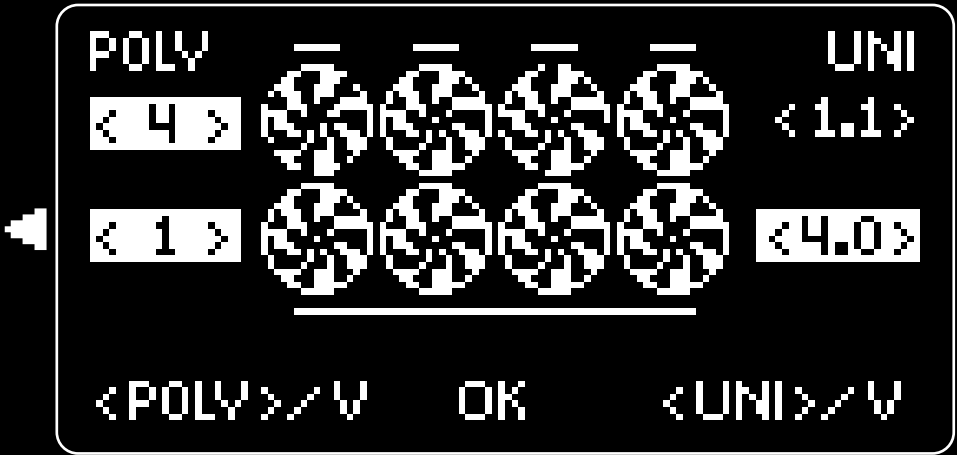
PRESS THE "POLY MODE" BUTTON TO EXIT ANY MENU AND RETURN TO THE MAIN "PLAY SCREEN".

OPTICAL WAVESHAPES ARE CREATED BY BOUNCING INFRARED LIGHT OFF OF ROTATING DISCS WITH THREE DIFFERENT REFLECTIVE PATTERNS.

A DECORATIVE STROBOSCOPE PATTERN IS PRINTED ON THE TOP SIDE OF THE DISCS.

THIS PATTERN IS FOR VISUAL REFERENCE ONLY AND IS NOT PART OF THE AUDIO SIGNAL.

EIGHT INDIVIDUAL INDUCTORS PICK UP ELECTROMAGNETIC ENERGY FROM EACH MOTOR'S ROTATING COILS.

2 VOICE BLOCK

THE MOTOR SYNTH FEATURES TWO IDENTICAL ROWS OF CONTROLS THAT LET YOU CONFIGURE EACH VOICE'S VOLUME, WAVESHAPE TYPE, SCALE, AMP ENVELOPE, ACCELERATION AND TONE.

- THE "ENV SYNC" BUTTON APPLIES THE VCA ENVELOPE SETTINGS OF VOICE 1 TO BOTH VOICES.

- THE "ACCEL SYNC" BUTTON APPLIES THE ACCELERATION AND BRAKE PARAMETERS OF VOICE 1 TO BOTH VOICES.

- BOTH VOICES HAVE A "FILTER ON/OFF" BUTTON (V1 AND V2), SO YOU CAN SELECT WHICH VOICES GO INTO THE MOTOR SYNTH'S FILTER SECTION.
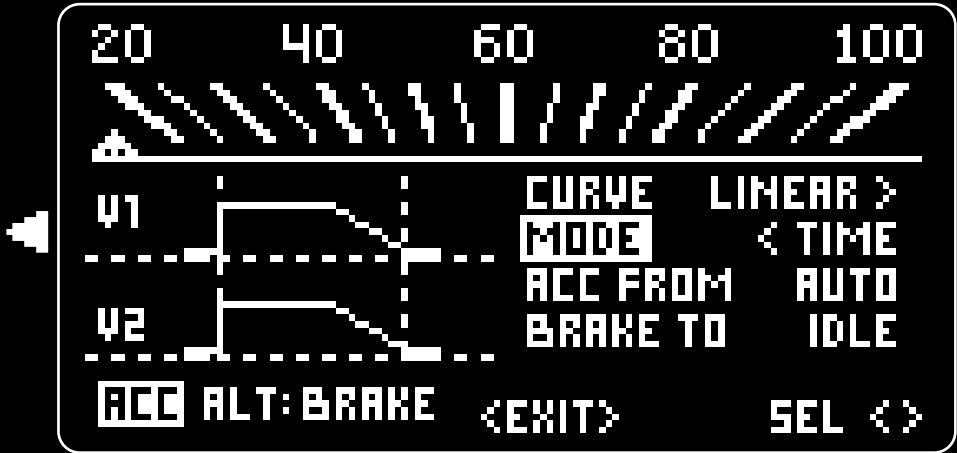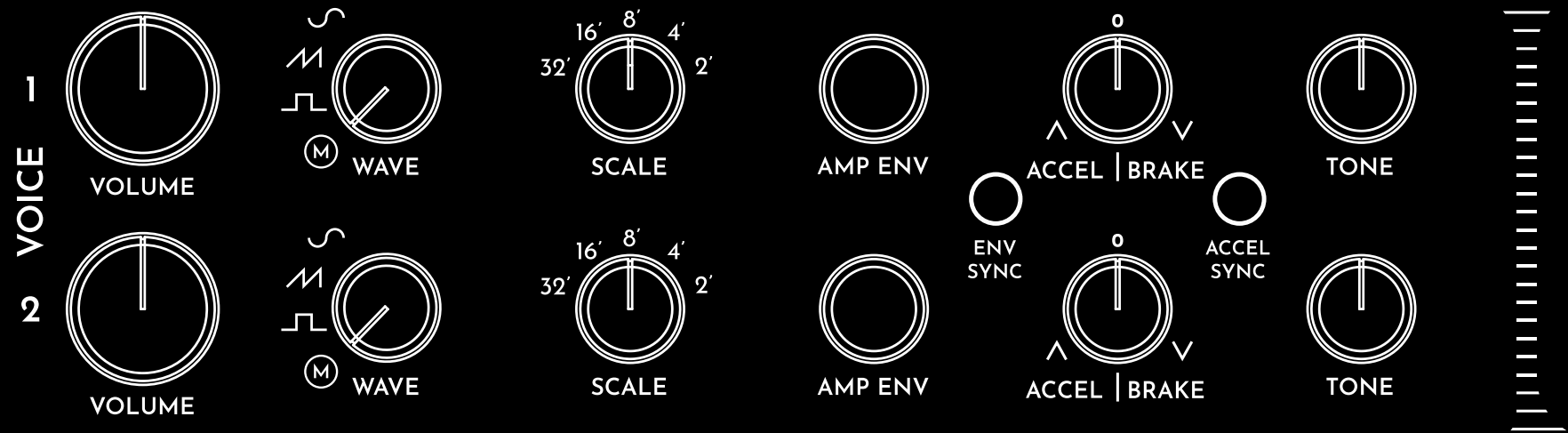
WHEN ACCEL. MENU IS ACTIVE ADJUST VARIOUS ACCELERATION/BRAKE PARAMETERS WITH THE "CTRL" ENCODER AND ⊲ ⊳ BUTTONS.
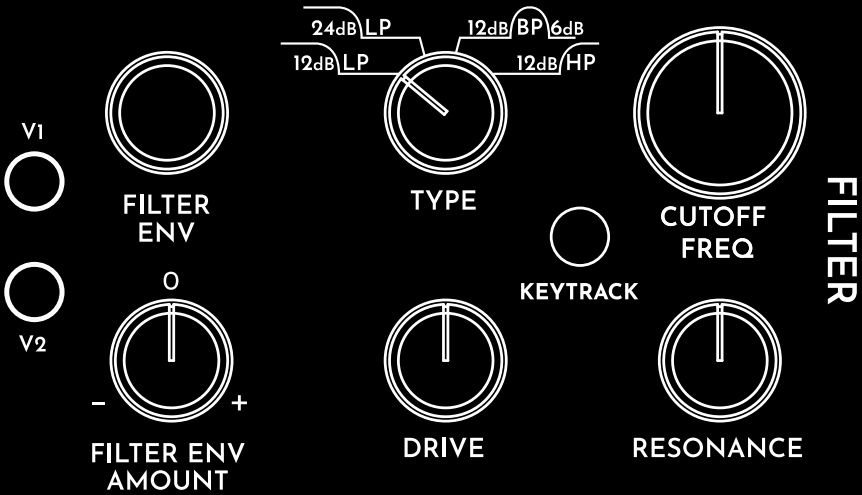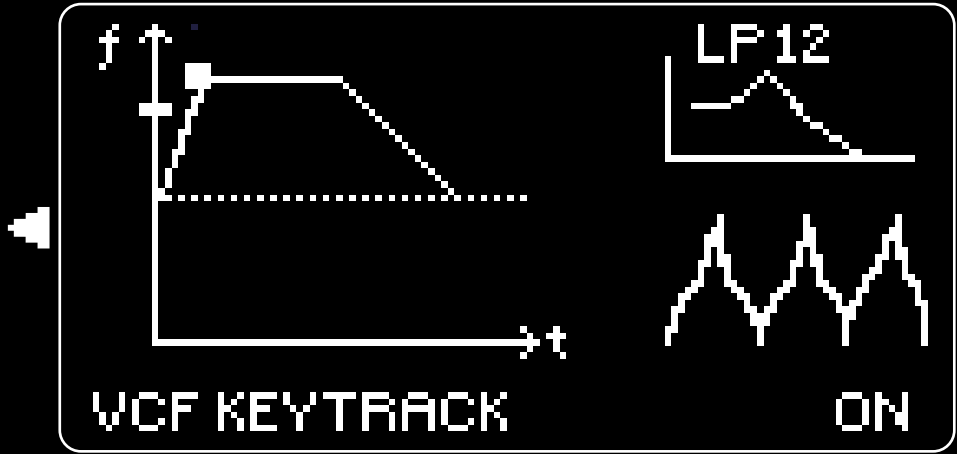
3 FILTER SECTION

THE MOTOR SYNTH HAS FOUR BUILT-IN ANALOG FILTERS WITH CONTROLS FOR FILTER CUTOFF FREQUENCY, RESONANCE, AND ALSO A "DRIVE" KNOB THAT LETS YOU INCREASE GAIN BEFORE THE FILTER STAGE.

THE "FILTER ENV AMOUNT" KNOB GOES INTO POSITIVE AND NEGATIVE VALUES. AT 12 O'CLOCK - THE VALUE IS ZERO AND THE FILTER IS STATIC. "FILTER ENV" ENCODER ADJUSTS THE ENVELOPE'S ATTACK AND RELEASE CURVE.

THE "KEYTRACK" FUNCTION CAN BE ASSIGNED TO EITHER THE FILTER'S CUTOFF FREQUENCY OR TO THE FILTER ENVELOPE TARGET FREQUENCY.

ACCESS ADDITIONAL FILTER RETRIG AND KEYTRACK SETTINGS IN MAIN MENU.

4 MODULATION

THE MOTOR SYNTH'S MOD SECTION LETS YOU DIAL IN THE MODULATION DEPTH INDIVIDUALLY FOR VOICE 1, VOICE 2 AND THE FILTER.

THE **"PITCH-TREM"** SWITCHES LET YOU CHOOSE BETWEEN AMPLITUDE AND FREQUENCY MODULATION FOR EACH VOICE.

THE **"FREQ-RES"** SWITCH LETS YOU CHOOSE BETWEEN FILTER CUTOFF FREQ. MODULATION OR FILTER RESONANCE MODULATION.

THE OVERALL MODULATION ENVELOPE CAN BE SET UP WITH THE **"MOD ENV"** ENCODER. PARAMETERS INCLUDE ATTACK, RELEASE AND DELAY.
MOD ENVELOPE RETRIGGER PARAMETERS CAN BE SET UP FROM THEW MAIN MENU.

USE THE **"SHAPE"** SELECTOR TO APPLY ONE OF FIVE MODULATION SHAPES TO THE ACTIVE COLUMN IN THE MOD MENU.
ALT + "SHAPE" KNOB WILL CHANGE MOD SHAPES FOR ALL COLUMNS AT ONCE.

USE ALT + "SHAPE CTRL" ENCODER TO MORPH THE MODULATION SHAPES.

MODULATION SPEED CAN BE FREELY ADJUSTED WITH THE **"RATE"** ENCODER.
USE ALT + "RATE" KNOB TO SET MOD SUBDIVISIONS FOR THE ACTIVE COLUMN.

PRESS THE **"SYNC TEMPO"** BUTTON TO LINK THE MOD RATE TO THE MOTOR SYNTH'S MASTER TEMPO (CLK: BPM) OR TO THE FREQUENCY OF VOICE 2 - (CLK: V2 F)- THIS WILL PRODUCE DYNAMIC, UNPREDICTABLE MODULATIONS.

WHEN THE MODULATION MENU IS OPEN USE ◁ ▷ **BUTTONS** TO SWITCH COLUMNS.

5 CROSS MOD

USE THE **"CROSS MOD"** KNOB TO DIAL IN THE AMOUNT OF CROSS-MODULATION BETWEEN VOICES 1 AND 2.

THE **"FM-RING"** SWITCH LETS YOU TOGGLE BETWEEN FREQUENCY AND AMPLITUDE CROSS-MODULATION MODES.

USE **ALT + "SHAPE MOD"** TO MORPH MODULATION WAVESHAPES.

6 MUSICAL INTERFACE

THE MOTOR SYNTH'S BUILT-IN MUSICAL INTERFACE CONSISTS OF EIGHT KEYS AND FOUR ROTARY ENCODERS. EACH KEY'S NOTE VALUES ARE INDICATED ON THE **MAIN PLAY SCREEN**, AND YOU CAN RAISE OR LOWER THE PITCH OF THE KEYS BY TURNING THE ENCODER IN THE KEY'S RESPECTIVE COLUMN.

PRESS THE **ENCODER** TO RETURN THE KEY TO THE PREVIOUS NOTE PLAYED. DOUBLE-PRESS THE **ENCODER** TO RETURN THE KEY TO THE LAST SAVED STATE (SCALE, NOTEBANK).

WITH THE **"LATCH"** ON - ALL NEW NOTES WILL STICK. WHEN POLYPHONY SLOTS ARE FULL, NEW NOTES WILL STEAL LAST NOTE PLAYED.

TO REPLACE ALL LATCHED KEYS - **HOLD ALT + PLAY NEW NOTES** ON THE KEYPAD.

PRESS ALT + LATCH TO GENERATE A RANDOM PATCH.

ALT + ENCODER 1 - PITCH-SHIFT ALL NOTES ON THE KEYPAD AT ONCE.

ALT + ENCODER 2 - ADJUST PITCH-SHIFT FROM SMOOTH TO QUANTIZED STEPS.

ALT + ENCODERS 3 AND 4 - SET UP THE TYPE OF SCALE AND THE SCALE'S ROOT.

LATCH
RNDM

CTRL

MASTER TEMPO

PLAY / STOP

<
>

TAP

REC

SAVE

DEL

ALT

SHIFT ALL

FREQ STEP

SCALE

ROOT

USE THE **"DEL"** BUTTON TO ERASE VALUES IN VARIOUS SCREENS, FOR EXAMPLE, THE MOD MENU.

USE THE **"SAVE"** BUTTON TO SAVE PRESETS AND NOTE-BANKS - TYPE PRESET NAMES WITH THE KEYPAD AND ⊘ ⊘ BUTTONS.

RED KEYS	WHITE KEYS	DARK KEYS
CURRENTLY PLAYING	LINKED TO ENCODER	CURRENTLY INACTIVE

PRESS ALT + TAP TO FLIP LINKED KEYS. THIS ALLOWS YOU TO CHANGE A KEY'S PITCH WITHOUT AUDIBLY PLAYING IT.
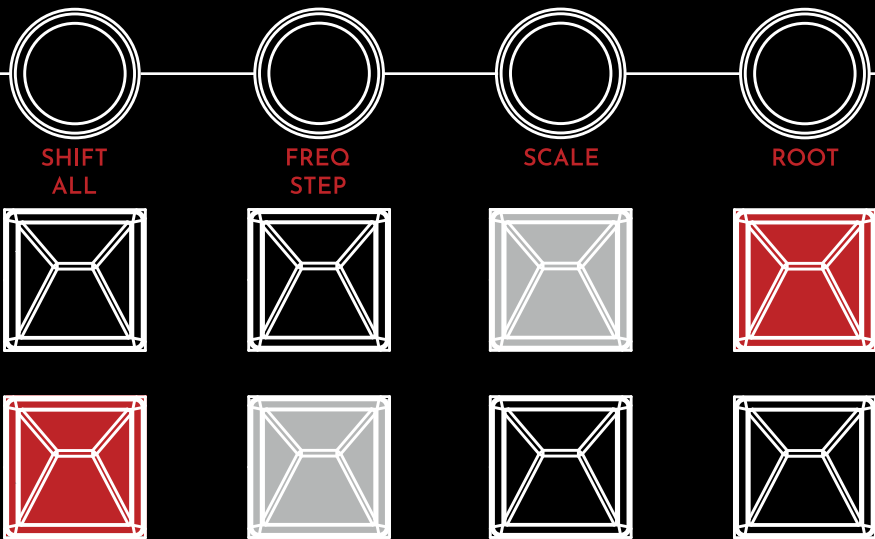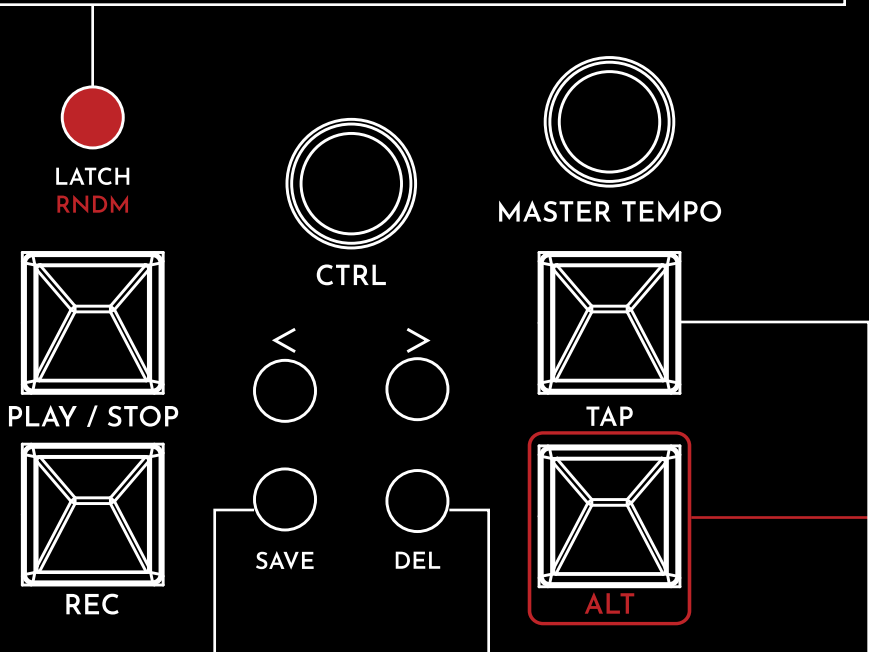
7 NOTE-BANKS

THE KEYPAD IS SPLIT INTO FOUR SEPARATE **NOTE-BANKS**, AND YOU CAN ALWAYS MOVE BETWEEN THEM BY:

PRESSING ALT + ⊘ ⊘ BUTTONS

BY DEFAULT THE **NOTE-BANKS** ARE SET UP AS OCTAVES, BUT YOU CAN CON-FIGURE THEM TO FIT YOUR PLAYING STYLE, OR FOR SPECIFIC SONGS.

EACH TIME THE MOTOR SYNTH IS SWITCHED ON, **NOTE-BANKS** FROM THE LAST SESSION WILL BE RECALLED.

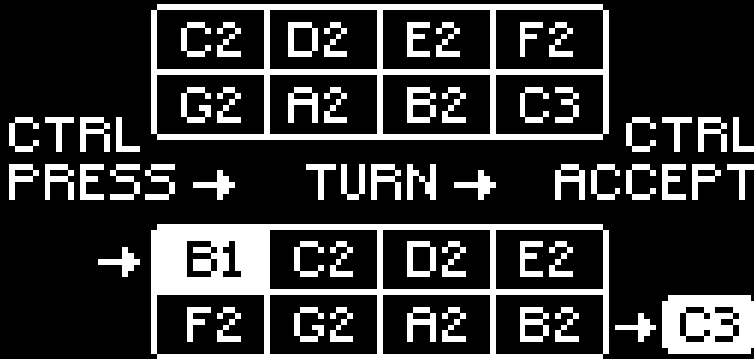YOU CAN ALSO SAVE AND LOAD **NOTE-BANKS** JUST LIKE WITH **PRESETS**.

C2	D2	E2	F2
G2	A2	B2	C3

CTRL PRESS → TURN → CTRL ACCEPT

→ B1	C2	D2	E2
F2	G2	A2	B2	→ C3

USE THE **"CTRL"** ENCODER TO ROTATE KEYS IN THE ACTIVE NOTE-BANK.

8 NOTE RECORD

THE MOTOR SYNTH CAN RECORD AND PLAY BACK NOTE SEQUENCES PERFORMED IN REAL TIME. NOTE SEQUENCES MAY BE STACKED IN MULTIPLE LAYERS AND PLAYED BACK AS VARIABLE-LENGTH LOOPS.

PRESS THE **"REC"** KEY TO ARM THE RECORDING ENGINE - YOU WILL SEE THE **"REC"** KEY AND RECORD SYMBOL ON THE MAIN SCREEN START TO BLINK.

ONCE THE REC ENGINE IS ARMED, IT WILL START RECORDING AS SOON AS YOU ENTER THE FIRST NOTE

ALTERNATIVELY, YOU CAN START RECORDING FROM SILENCE BY FIRST ARMING THE **"REC"** KEY AND THEN PRESSING THE **"PLAY/STOP"** KEY.

PRESS THE **"REC"** KEY AGAIN TO STOP RECORDING AND COMPLETE THE LOOP.

USE THE **"PLAY/STOP"** KEY TO PAUSE OR RESTART THE REC ENGINE.

USE THE **"CTRL"** ENCODER TO START AND STOP INDIVIDUAL TRACKS AND ADJUST EACH LOOP'S LENGTH AND ASSIGN VOICES.

USE **"DEL"** TO ERASE INDIVIDUAL TRACKS, OR **ALT + "DEL"** TO ERASE ALL.

NOTES CAN BE RECORDED FROM THE MOTOR SYNTH'S BUILT IN MUSICAL INTERFACE, OR FROM AN EXTERNAL MIDI INSTRUMENT OR CV SOURCE.

DISCLAIMER!

THE NOTE RECORD FUNCTION IS NOT YET FULLY READY FOR LAUNCH.

IT WILL BE RELEASED WITH THE FIRST FIRMWARE UPDATE IN THE BEGINNING OF AUGUST 2020!

PRESS ALT + "REC" TO SWITCH BETWEEN THE **KEYPAD**, THE **NOTE RECORD** AND **MOTION RECORD** SCREENS.

9 MOTION RECORD

YOU CAN ALSO USE THE MOTOR SYNTH'S RECORDING ENGINE TO RECORD UP TO THREE LAYERS OF KNOB MOVEMENTS AND OTHER PARAMETER CHANGES.

PRESS AND HOLD THE **"REC"** KEY TO ARM THE MOTION RECORD ENGINE.

NOW ANY KNOB, ENCODER, BUTTON OR SWITCH YOU TOUCH WILL BE ASSIGNED TO ONE OF THREE MOTION REC TRACKS, AND THE PARAMETER CHANGES WILL BE RECORDED - THE RECORDING STOPS AS SOON AS THE "REC" KEY IS RELEASED.

WHEN RECORDED SEPARATELY, TRACKS WILL HAVE VARIABLE LOOP LENGTHS. IF MULTIPLE PARAMETERS ARE RECORDED IN ONE TAKE, THEN ALL TRACKS WILL HAVE THE SAME LOOP LENGTH.

USE **"DEL"** TO ERASE INDIVIDUAL TRACKS, OR **ALT + "DEL"** TO ERASE ALL.

USE THE **"CTRL"** ENCODER TO PAUSE OR PLAY SEPARATE TRACKS, TO ADJUST THEIR PLAYBACK SPEED AND DIRECTION.

10 PLAY MODES

THE MOTOR SYNTH CURRENTLY HAS TWO PLAY MODES - **"FREE MODE"** AND **"ARP MODE"**.
TOGGLE DIFFERENT PLAY MODES BY PRESSING THE **"PLAY MODE"** ENCODER ON THE INSTRUMENT'S FRONT PANEL.

NEW PLAY MODES SUCH AS SEQUENCER MODE, DELAY MODE, CHORD MODE, DRONE MODE AND OTHERS WILL BE UNLOCKED IN FUTURE VERSIONS OF THE MOTOR SYNTH FIRMWARE.

11 ARPEGGIATOR

THE MOTOR SYNTH'S ARPEGGIATOR ENGINE CAN BE ASSIGNED TO BOTH VOICES INDIVIDUALLY VIA THE **"PLAY MODE"** ENCODER.
ADJUST ARPEGGIATION PARAMETERS THROUGH THE **<ARP SETTINGS>** MENU:

- **MODE**   <SETS THE ARP TYPE - UP, DOWN, INCL, EXCL, ORDER, RANDOM AND OTHER MODES>
- **TIME DIV**   <SETS THE ARP'S SUBDIVISION AGAINST THE MAIN BPM>
- **GATE LENGTH**
- **SWING**
- **NOTE REPEAT**   <SETS HOW MANY TIMES EACH NOTE IS REPEATED>
- **NOTE SHIFT**   <REPEATED NOTES CAN BE SHIFTED BY AN INTERVAL>
- **PATT REPEAT**   <SETS HOW MANY TIMES EACH PATTERN IS REPEATED>
- **PATT SHIFT**   <REPEATED PATTERNS CAN BE SHIFTED BY AN INTERVAL>

```
          < ARP SETTINGS >
 MODE           <EXCL>              ■
 TIME DIV       <1H2>         ■
 GATE LEN        0.5               ■   ■
 SWING           0.0            ■
◄ NOTE REPEAT   <2X>              ■   ■
 NOTE SHIFT     <+5>            ■  ■
 PATT REPEAT    <2X>     ■
 PATT SHIFT     <+12> ■
```

PRESS THE **"PLAY MODE"** ENCODER
TO ACCESS THE **<ARP SETTINGS>** MENU.

USE THE ⊘ ⊘ BUTTONS AND **"CTRL"**
ENCODER TO CONFIGURE
THE ARPEGGIATION ENGINE.

12 INPUTS / OUTPUTS

- MIDI IN AND MIDI OUT
- USB-B CONNECTOR FOR TRANSFERRING DATA TO THE MOTOR SYNTH'S MEMORY CARD (FIRMWARE UPDATES, MOTOR FIRMWARE UPDATES, PRESETS, NOTE-BANKS).
  MICRO-SD MEMORY CARD SLOT IS LOCATED ON THE INSTRUMENT'S RIGHT SIDE-PANEL.
- 24V DC (CENTER POSITIVE) POWER SUPPLY PLUG.
- 3 CV INPUTS AND 3 TRIGGER INPUTS - ASSIGNABLE TO ANY PARAMETER THROUGH THE MOTOR SYNTH'S MAIN MENU.
- 2 STEREO SEND/RETURN OUTPUTS FOR SENDING VOICE 1 AND VOICE 2 (PRE-FILTER) THROUGH EXTERNAL DEVICES / EFFECTS UNITS.
- HEADPHONE OUT (3.5 MM, STEREO).
- AUDIO OUT (1/4', MONO).
- ¼ JACK INPUT FOR: SIGNAL THROUGH (PRE OR POST FILTER), AND MULTIPLE UPCOMING FUNCTIONS (RELEASED IN FUTURE FIRMWARE VERSIONS - INCLUDING VOCODER, TEMPO DETECT, SIDECHAIN INPUT, AND MORE).

13 UPDATING YOUR SYNTH + UPLOADING PRESETS

THE MOTOR SYNTH WILL RECEIVE REGULAR FIRMWARE UPDATES. THE FIRMWARE FILES WILL BE FORMATTED AS .ZIP ARCHIVES AND DOWNLOAD LINKS SENT TO ALL CUSTOMERS VIA E-MAIL. ALSO AVAILABLE FOR DOWNLOAD (ALONG WITH OTHER FILES, SUCH AS PRESETS AND NOTE-BANKS) AT WWW.GAMECHANGERAUDIO.COM/MOTOR-SYNTH/DOWNLOADS

TAKE THE FOLLOWING STEPS TO PERFORM A FIRMWARE UPDATE:
1 DOWNLOAD THE UPDATE ARCHIVE AND EXTRACT THE **"MAIN.HEX"** FILE.
2 CONNECT YOUR MOTOR SYNTH TO YOUR COMPUTER WITH THE USB-B CABLE PROVIDED.
3 PUT THE MOTOR SYNTH INTO **"USB MODE"** BY PRESSING THE **"CTRL"**, **"ALT"** AND **"DEL"** KEYS TOGETHER.
4 OPEN THE MOTOR SYNTH'S STORAGE ON YOUR COMPUTER AND DELETE THE EXISTING **"MAIN.HEX"** FILE.
5 DRAG AND DROP THE NEW **"MAIN.HEX"** FIRMWARE FILE INTO THE MOTOR SYNTH'S MEMORY CARD.
        NOTE: THE MOTOR SYNTH WILL NOT RECOGNIZE RENAMED FIRMWARE FILES - IT MUST BE **"MAIN.HEX"**.
6 EXIT USB MODE BY PRESSING **"NEXT"** WITH THE **"PLAY MODE"** ENCODER, AND RESTART THE MOTOR SYNTH.
7 COMPLETE INSTALLATION BY PRESSING **"YES"** WITH THE **"PLAY MODE"** ENCODER AGAIN.

PRESETS AND **NOTEBANKS** MAY ALSO BE IMPORTED INTO THE MOTOR SYNTH'S MEMORY CARD WHILE IT IS IN USB MODE. ALL **".MSPR"** PRESET FILES MUST BE DROPPED INTO A SUBDIRECTORY OF THE **"PRESETS"** FOLDER, AKA **"<GROUPS>"**.
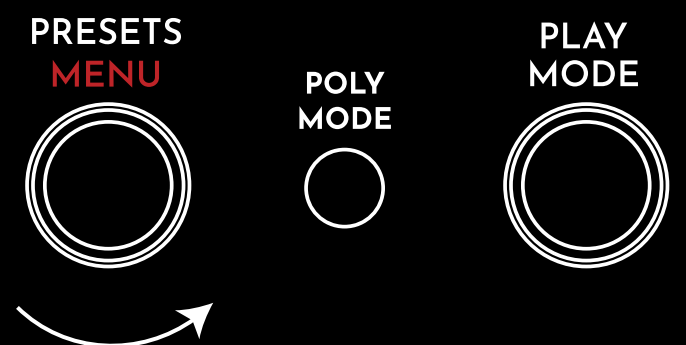
14 MENU AND SIGNAL PATH
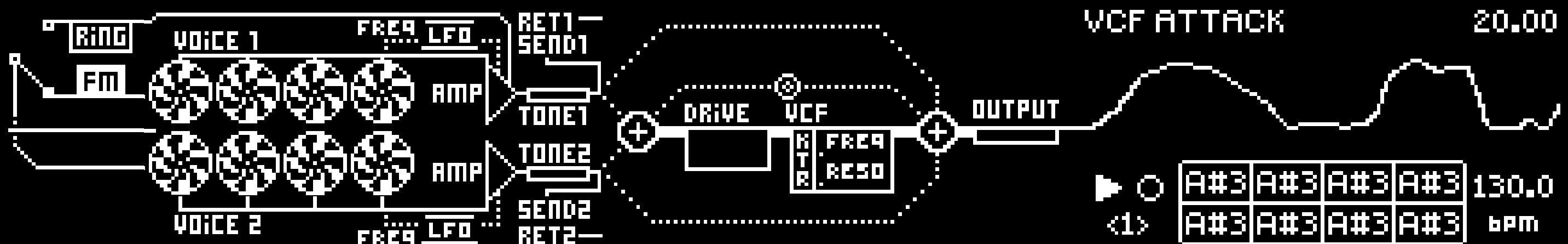
PRESS ALT + "PRESETS/MENU" ENCODER TO ENTER THE MAIN MENU SCREEN.

USE THE **"PRESETS/MENU"** ENCODER TO SCROLL THROUGH THE MENU, AND THE **"PLAY MODE"** ENCODER TO SELECT VARIOUS ADJUSTABLE PARAMETERS (LISTED BELOW).

ALTERNATIVELY, YOU CAN USE THE ⊗ ⊗ **BUTTONS,** AND THE **"CTRL"** ENCODER.

PRESS THE **"POLY MODE"** BUTTON TO EXIT THE MENU SCREEN.

15 SETTINGS ADJUSTABLE FROM MENU

1 INPUT SIGNAL
- INPUT GAIN
- WHETHER THE INPUT IS BEFORE OR AFTER THE FILTER

2 TRIGGERS
- MODULATION AND FILTER ENVELOPE RETRIGGER MODES - FIRST, EACH, POLY
- CONFIGURE KEYTRACK TO FOLLOW EITHER LOWEST, HIGHEST OR EACH NOTE
- MODULATION PHASE RESET - EACH NEW NOTE EVENT CAN RESET MOD PHASE

3 TUNING RANGE
- ADJUST THE POSITIVE AND NEGATIVE RANGE OF THE "MASTER TUNE" AND "VOICE 2 TUNE" KNOBS

4 NOTE INPUT SETTINGS
- MIDI CHANNELS FOR VOICE 1 AND VOICE 2
- MIDI HOLD - ON/OFF
- "LATCH" BUTTON CONFIG
- KEYPAD ASSIGN TO VOICES 1 AND 2

5 MIDI PARAMETERS
- VELOCITY PARAMETERS - AMP VELOCITY AMOUNT, FILTER ENVELOPE AMOUNT + 1 EMPTY SLOT ASSIGNABLE TO ANY GRADUAL PARAMETER/VALUE
- AFTERTOUCH PARAMETERS - DETUNE AMOUNT, MODULATION DEPTH + 1 EMPTY ASSIGNABLE SLOT
- PITCHWHEEL - UPPER AND LOWER RANGE + ONE ASSIGNABLE SLOT
- MODWHEEL - FILTER CUTOFF VALUE, MODULATION DEPTH + ONE ASSIGNABLE SLOT

6 MIDI OUT FUNCTIONALITY
- ENABLE/DISABLE - SEND NOTE INFORMATION, CONTROL CHANGE AND CV INFORMATION AS MIDI OUT
- ENABLE/DISABLE MIDI THRU VIA DIN 5-PIN MIDI OUTPUT
- ENABLE/DISABLE MIDI CLOCK SEND

7 CLOCK SYNC SOURCE
- INTERNAL, MIDI IN, TRIG, OR MOST RECENT SOURCE (AUTO)

8 ASSIGN CV INPUT DESTINATIONS
- 1V/OCTAVE TOGGLE (CV1)
- AMP MODULATION TOGGLE (CV2)
- EMPTY SLOTS CAN BE MAPPED TO CUSTOM GRADUAL PARAMETERS (KNOB AND ENCODER VALUES)

9 ASSIGN TRIGGER DESTINATIONS
- CLOCK TOGGLE (TRIG1)
- ENABLE NOTE GATE (TRIG2)
- ENABLE CLOCK RESET (TRIG3)
- EMPTY SLOTS CAN BE MAPPED TO CUSTOM DISCRETE PARAMETERS (BUTTON AND SWITCH VALUES)

10 OTHER SETTINGS
- SET UP THE MOTOR SYNTH'S STANDBY TIMER
- ADJUST KEYPAD BRIGHTNESS
- ADJUST STROBOSCOPE RANGE AND BRIGHTNESS

11 DIAGNOSTICS
- SEE INFORMATION ABOUT THE MOTOR SYNTH'S POWER CONSUMPTION, AS WELL AS EACH INDIVIDUAL MOTOR'S PERFORMANCE SUMMARY (TOTAL NR. OF REVOLUTIONS, TOTAL RUNTIME) AND CURRENT STATUS (RPM, TEMPERATURE, LOAD AND VOLTAGE).

THE INFORMATION IN THIS MANUAL IS RELEVANT FOR THE FIRST VERSION OF THE MOTOR SYNTH AND FUTURE FIRMWARE UPDATES MAY CAUSE CHANGES IN THE WORKFLOW.

GO TO GAMECHANGERAUDIO.COM TO FIND THE MOST RECENT DETAILED MANUAL, FULL TECHNICAL SPECS, AS WELL AS FREQUENTLY ASKED QUESTIONS AND FORUM THREADS.

1 THE MOTOR SYNTH IS AN ELECTROMECHANICAL INSTRUMENT THAT ROTATES SHARP METALLIC DISCS AT VERY HIGH SPEEDS. NEVER, UNDER ANY CIRCUMSTANCES, ATTEMPT TO DISASSEMBLE THE MOTOR SYNTH, OR TO REMOVE THE MOTOR SYNTH'S PROTECTIVE PLEXI-GLASS PANELS. NEVER ATTEMPT TO INSERT ANY FOREIGN OBJECTS INTO THE MOTOR SYNTH'S ENCLOSURE.

ALWAYS CONSULT WITH A REPRESENTATIVE OF GAMECHANGER AUDIO, IF YOU SUSPECT THAT THERE MIGHT BE A MECHANICAL OR ELECTRICAL DEFECT WITH YOUR MOTOR SYNTH.

2 THE MOTOR SYNTH REQUIRES CONSISTENT VENTILATION, TO ENSURE STABLE PERFORMANCE AND LONGEVITY. DO NOT COVER THE MOTOR SYNTH'S VENT-HOLES ON THE RIGHT-HAND SIDE AND ON THE SYNTH'S UNDERSIDE. DO NOT OPERATE OR PLACE THE MOTOR SYNTH ON SOFT, SUPPLE SURFACES OR FABRICS.

3 EXPOSURE TO WATER AND OTHER LIQUIDS MAY CAUSE CRITICAL DAMAGE AND SAFETY HAZARD. DO NOT OPERATE THE MOTOR SYNTH NEAR WATER/LIQUIDS OR IN EXTREMELY HUMID OUTDOORS CONDITIONS.

4 ALWAYS OPERATE WITH THE 24V DC POWER SUPPLY PROVIDED. IN CASE OF A BROKEN OR LOST POWER SUPPLY, PLEASE CONTACT GCA TO PURCHASE A REPLACEMENT POWER SUPPLY.

5 GAMECHANGER AUDIO PROVIDES A FULL 2-YEAR SERVICE WARRANTY FOR THE MOTOR SYNTH. IN CASE OF TECHNICAL FAILURE, THE DEVICE MUST BE SERVICED ONLY BY GAMECHANGER LTD AUDIO OR A THIRD PARTY TECHNICIAN CERTIFIED BY GAMECHANGER AUDIO LTD.

YOU HAVE A 30 DAY RETURN PERIOD WHEN YOU MAY RETURN THE PRODUCT AND RECEIVE A FULL REFUND. YOU WILL ONLY BE RESPONSIBLE FOR RETURN SHIPPING CHARGES.

MOTOR —[M]— SYNTH

DESIGNED AND MANUFACTURED IN LATVIA
BY GAMECHANGER AUDIO LTD.

GAMECHANGER | AUDIO