

RTM AUDIO · DOUBLING & WIDENING

# STACK

USER MANUAL · VERSION 1.3.1

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A DOUBLER THAT THICKENS WITHOUT SMEARING. STACK GENERATES UP TO 32 MUSICALLY DETUNED, HUMANIZED VOICES AROUND YOUR SOURCE, KEEPS THEM MONO-SAFE BY CONSTRUCTION, AND LETS YOU SHAPE THE FIELD LIKE A MIXING DESK.

UP TO 32 VOICES

MONO-SAFE BY DESIGN

PER-VOICE STAGING

BIT-EXACT AT ZERO

## OVERVIEW

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STACK BUILDS A CHORUS OF GENERATED DOUBLES AROUND YOUR TRACK. UNLIKE A NAIVE DELAY/DETUNE, EVERY VOICE IS DECORRELATED AND LEVEL-STAGED INDIVIDUALLY, SO YOU GET WIDTH AND THICKNESS WITHOUT COMB FILTERING OR A PHASEY MONO FOLD-DOWN. AT AMOUNT 0 THE OUTPUT IS A BIT-EXACT COPY OF YOUR DRY SIGNAL, SO THE PLUGIN IS SAFE TO LEAVE IN THE CHAIN.

## HOW IT WORKS

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EACH VOICE GETS ITS OWN MICRO-DELAY, STATIC DETUNE (ALTERNATING SIGNS SO THE FIELD STAYS CENTRED), AND OPTIONAL PER-VOICE SPECTRAL DIFFERENTIATION. THE MONO-SAFE GUARANTEE ENFORCES A DELAY FLOOR AND DECORRELATION SO THAT FOLDING TO MONO NEVER COLLAPSES THE DOUBLES OR INVERTS PHASE. THE DRAGGABLE STAGE NODES SET EACH VOICE'S LEVEL LIKE FADERS ON A CONSOLE, WITH THE LEAD BAR CONTROLLING YOUR DRY/CENTRE LEVEL.

## CONTROL REFERENCE

### THE FIELD

|        |            |                                                                                                                                                                                                          |
|--------|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| VOICES | 1-32       | HOW MANY GENERATED DOUBLES SURROUND THE SOURCE. MORE VOICES = DENSER, WIDER. 16-32 TURNS ONE PERFORMANCE INTO A SECTION: A CHOIR OR STRING WALL FROM A SINGLE TAKE.                                      |
| AMOUNT | 0-100%     | WET LEVEL OF THE DOUBLES. 0 = BIT-EXACT DRY (NO PROCESSING).                                                                                                                                             |
| WIDTH  | 0-100%     | PAN SPREAD OF THE VOICE FIELD ACROSS THE STEREO IMAGE.                                                                                                                                                   |
| DEPTH  | 0-100%     | FRONT-TO-BACK SPREAD. OUTER VOICES STEP BACK WITH A TOUCH OF PRE-DELAY, A SOFTER TOP END AND A SMALL LEVEL DIP, PLACING A ROOM BEHIND THE LEAD. WET-ONLY: THE DRY PATH STAYS UNTOUCHED AND ZERO-LATENCY. |
| FOCUS  | 20-1000 HZ | HIGH-PASS ON THE WET VOICES; EVERYTHING BELOW STAYS DRY AND CENTRED (KEEPS LOW END MONO).                                                                                                                |

### CHARACTER & MOVEMENT

|           |                             |                                                                                                                   |
|-----------|-----------------------------|-------------------------------------------------------------------------------------------------------------------|
| TIGHTNESS | 0-100%                      | TIGHT ADT FEEL AT LOW VALUES, LOOSE GARAGE-BAND DOUBLING AT HIGH VALUES.                                          |
| DETUNE    | 0-50 CENTS                  | STATIC PER-VOICE PITCH OFFSET (ALTERNATING SIGNS).                                                                |
| TIMBRE    | 0-100%                      | PER-VOICE SPECTRAL DIFFERENTIATION (TILT + BELL) SO VOICES DON'T STACK IDENTICALLY.                               |
| TILT      | -6-+6 DB                    | BAXANDALL TILT EQ ON THE DOUBLES, PIVOT AT 700 HZ.                                                                |
| CHARACTER | CLEAN / TAPE / ANALOG / ADT | WET-ONLY COLOUR APPLIED TO THE VOICE FIELD. ADT IS A SLOW TAPE-MACHINE VARISPEED WOBBLE, THE CLASSIC '60S DOUBLE. |
| SEED      | 0-999                       | RE-ROLL THE HUMANIZATION FOR A DIFFERENT BUT EQUALLY VALID FIELD.                                                 |

### OUTPUT & MONITORING

|                     |            |                                                                                  |
|---------------------|------------|----------------------------------------------------------------------------------|
| LEAD / VOICE LEVELS | DB         | DRAGGABLE STAGE NODES: LEAD SETS DRY/CENTRE; EACH VOICE NODE SETS ITS OWN LEVEL. |
| MONO-SAFE           | ON/OFF     | ENFORCE THE DELAY FLOOR + DECORRELATION GUARANTEE (RECOMMENDED ON).              |
| TRIM                | -12-+12 DB | OUTPUT TRIM.                                                                     |
| MATCH               | ON/OFF     | K-WEIGHTED LOUDNESS-MATCHED A/B. OFF = BIT-IDENTICAL BYPASS.                     |
| SOLO                | ON/OFF     | MONITOR THE GENERATED DOUBLES ONLY.                                              |
| MONO                | ON/OFF     | FOLD TO MONO TO CHECK MONO-SAFETY.                                               |



# GETTING THE MOST OUT OF STACK

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- 1. START WITH VOICES 2–3 AND AMOUNT AROUND 30–40% FOR A NATURAL THICKENING; PUSH BOTH FOR A LUSH, WIDE PAD.
- 2. USE FOCUS TO KEEP BASS AND LEAD VOCALS CENTRED WHILE THE HIGHS SPREAD.
- 3. CHECK MONO OFTEN — STACK IS BUILT TO SURVIVE IT, BUT IT CONFIRMS YOUR LOW END STAYS SOLID.
- 4. AUTOMATE AMOUNT TO OPEN THE DOUBLE UP IN CHORUSES.
- 5. MATCH ON MAKES A/B FAIR WHEN AUDITIONING; TURN IT OFF FOR A TRUE NULL TEST.

# ACTIVATION

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YOUR LICENSE IS MANAGED ONLINE. ON FIRST LAUNCH, OPEN THE LICENSE PANEL AND CHOOSE ACTIVATE; A BROWSER WINDOW CONFIRMS YOUR SEAT. ACTIVATION IS PER-MACHINE AND WORKS OFFLINE AFTERWARD WITH A GRACE PERIOD. USE DEACTIVATE TO RELEASE A SEAT BEFORE MOVING TO ANOTHER MACHINE. AN OFFLINE FLOW (DEVICE TOKEN → LICENSE FILE) IS AVAILABLE FOR STUDIOS WITHOUT INTERNET ON THE AUDIO MACHINE.

# FORMATS & REQUIREMENTS

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|--------------|-------------------------------------------------------------------------------------|
| MACOS        | 11 BIG SUR OR LATER · APPLE SILICON + INTEL (UNIVERSAL) · AU, VST3, AAX (PRO TOOLS) |
| WINDOWS      | 10 / 11 (64-BIT) · VST3 · WEBVIEW2 RUNTIME (BUNDLED BY THE INSTALLER)               |
| SAMPLE RATES | 44.1 KHZ AND UP, MONO OR STEREO                                                     |

SIGNED AND NOTARIZED ON MACOS; THE WINDOWS INSTALLER BUNDLES THE MICROSOFT EDGE WEBVIEW2 RUNTIME AND INSTALLS IT ONLY IF MISSING. © 2026 RTM AUDIO. ALL RIGHTS RESERVED.