

GRAZIE THANK YOU MERCI DANKE GRACIAS GRATIAS TIBI ありがとう 谢谢 TAK
SKAL DU HAVE TAKK SKAL DU HA BEDANKT DIOLCH KIITOS Ви
благодарам Спасибо Дякую გმადლობთ Хвала вам ചെമ്പരല
NGIYBONGA HVALA VAM நன்றி ASANTE HATUR NUHUN MAHADSANID
ĎAKUJEM GO RAIBH MAITH AGAT धन्यवाद TERIMA KASIH DANKIE
ευχαριστώ شكراً لك OBRIGADO 감사합니다 Cãm ơn WEEBALE баярлалаа
köszönöm TACK धन्यवाद Teşekkürler תודה Tapadh leat Aciù aitäh धन्यवाद

EXPLORING THE BORDERS

MUSIC, PURE SOUND, THERAPEUTIC SOUND, ENVIRONMENTAL
SOUND, SOUND ART, SOUND DESIGN, MEDITATIVE SOUND, AMBIENT,
NOISE, LISTENING, PLAYING, PERFORMANCE, RESEARCH,
COMPOSITION, IMPROVISATION, RHYTHM, FREQUENCY, PERCUSSION,
DRONE, FEEDBACK.....



THANKS VERY MUCH FOR PURCHASING ANTI RAVE SYNTH

THIS INSTRUMENT OFFERS A DEEP USER INTERFACE THAT IS FULLY MODULAR

FIRST THING TO KNOW IS THAT IN ORDER TO GET ANY SOUND OUT OF THE UNIT, ONE OF THE SOUND PRODUCING SECTIONS MUST BE PATCHED TO ONE OF THE ASSIGNABLE 3.5MM JACKS

-----POWER SUPPLY 12V CENTER POSITIVE -----



IF THE UNIT GETS WET, TURN IT OFF IMMEDIATELY AND LET IT DRY OUT BEFORE RESTARTING.

ANTI RAVE ACCEPTS AND OUTPUTS CONTROL VOLTAGE SIGNALS IN THE RANGE OF 0-10V.

USED WITH 0-10V EURORACK OR OTHER SIMILAR SYNTH EQUIPMENT OR STANDARD EFFECTS UNITS, MIXERS, SAMPLERS, AUDIO INTERFACES ETC...

DON'T CONNECT HIGH VOLTAGES LIKE THE OUTPUT OF A POWER AMPLIFIER TO THE UNIT FOR EXAMPLE. IN SUCH SITUATIONS I ASSUME NO RESPONSIBILITY.

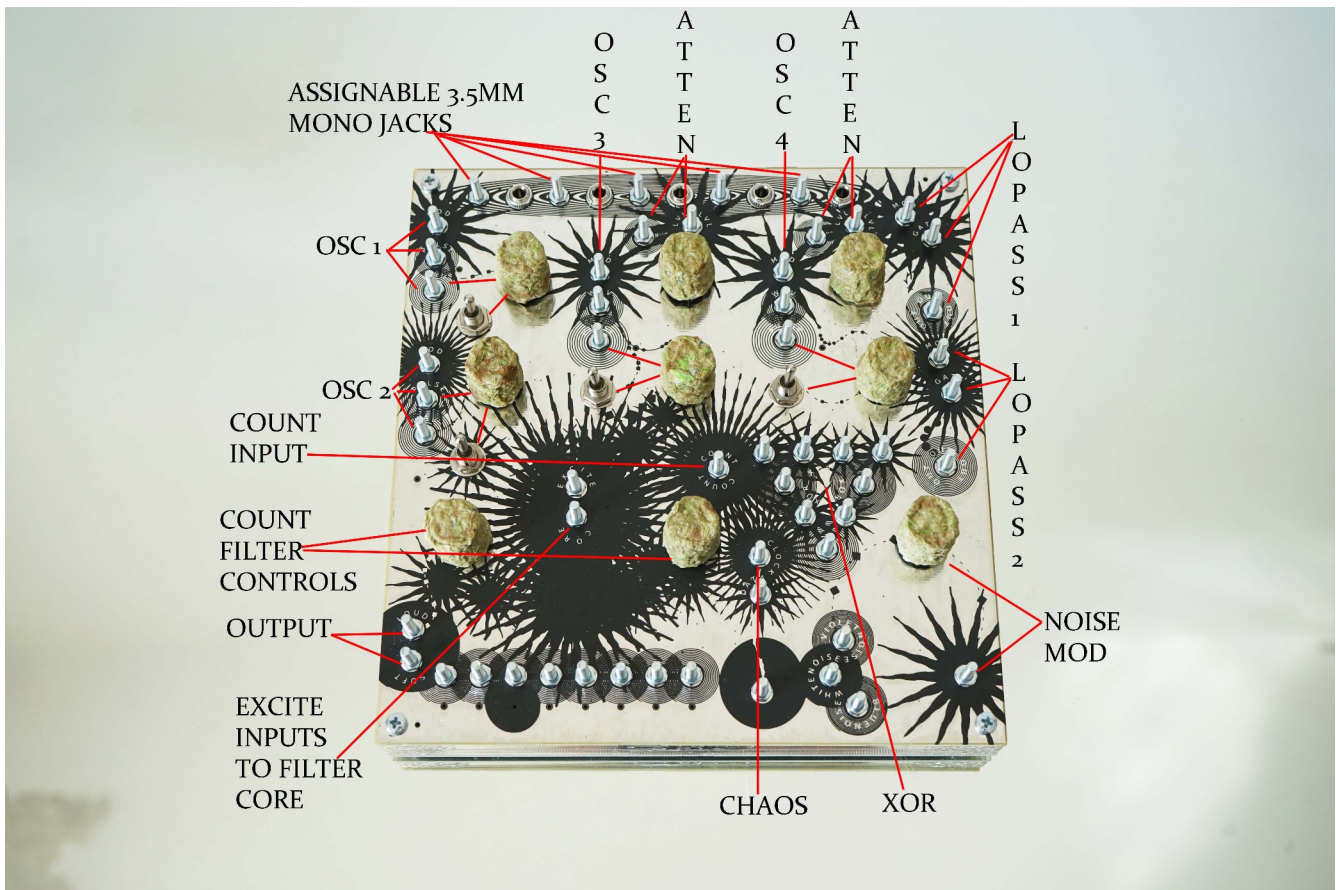
ANY SERVICE REQUIREMENTS DON'T HESITATE TO CONTACT ME INFO@TWINTROPIQUES.COM

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UN SALUTO

X

NICOLAS



-----ASSIGNABLE 3.5MM JACKS-----

THE 5 ASSIGNABLE 3.5MM JACKS ARE MONO, AND PROVIDE THE WAY FOR SOUND AND CONTROL VOLTAGE TO ENTER AND EXIT THE SYNTH. THE PATCH POINTS CORRESPOND TO THE JACK DIRECTLY TO THE RIGHT. THESE PATCH POINTS ARE GROUNDED WHEN NO CABLE IS INSERTED AND CAN BE USED AS EXTRA GROUND CONNECTIONS.

-----OSCILLATOR 1 & 2-----

3 WAY SWITCH CHOOSES FREQUENCY RANGE
 MOD IS CV INPUT
 OUTPUTS ARE PULSE AND WAVE. WAVE ON OSCILLATORS 1 & 2 CAN OPEN AND CLOSE LOW PASS GATE. PULSE CANNOT CLOCK COUNTER BUT CAN SERVE AS DIGITAL INPUT FOR ALL OTHER SECTIONS. YOU

CAN USE PULSE ON COUNTER BY ROUTING THROUGH 1 XOR GATE.
ALL PULSE OUTPUTS OF ALL OSCILLATORS PRODUCE A SICK SOUND
PULSE OSCILLATOR. IF YOU ARE SEARCHING FOR A MORE ROUNDED
CLASSIC SQUARE WAVE SOUND, RUN ANY OF THE PULSE OUTPUTS
THROUGH AN XOR GATE WITH NOTHING ATTACHED ON THE OTHER
INPUT OF THE XOR GATE.

-----OSCILLATOR 3 & 4-----

SAME AS ABOVE BUT FUNCTIONS ARE REVERSED IN THE SENSE THAT
PULSE CAN CLOCK COUNTER AND ALL DIGITAL INPUTS, AND WAVE
CANNOT FULLY OPEN AND CLOSE THE LOW PASS GATES.

-----ATTENUATORS-----

2 ATTENUATORS ALLOW YOU TO ATTENUATE ANY SIGNAL

-----CHAOS REGISTER-----

THE CHAOS REGISTER USES SOMETHING CALLED A SHIFT REGISTER
TO CREATE A SEMI-CONTROLLABLE PSEUDO RANDOM VOLTAGE
GENERATOR.

CLOCK INPUT FOR THE CHAOS REGISTER DETERMINES THE SPEED AT
WHICH THE REGISTER CHANGES ITS RANDOMIZED OUTPUT.

THE DATA INPUT DETERMINE WHAT THE ACTUAL VOLTAGE OUTPUT IS.
IF THE CLOCK AND THE DATA INPUTS ARE IN SOME WAY
NUMERICALLY RELATED TO ONE ANOTHER, FOR EXAMPLE THE DATA IS
A DIVISION OF THE CLOCK FREQUENCY, THEN THE "RANDOMIZED"
OUTPUT WILL ACTUALLY BE A REPEATING PATTERN.

***IF THE DATA INPUT IS UNPLUGGED, THE LAST 8 VALUES OF
DATA ENTERED WILL BE LOOPED.

****BOTH THE CLOCK AND THE DATA INPUT OF THE REGISTER
ACCEPT WHAT ARE CALLED LOGIC OR BINARY SIGNALS- THAT IS
SIGNALS THAT ARE EITHER IN AN ON OR OFF STATE. THE PULSE

OUTPUT OF THE OSCILLATORS, WHITE NOISE OUTPUT, AND THE DIVIDE DOWN OUTPUTS OF THE COUNTER PRODUCE SUCH SIGNALS.

-----NOISE-----

NOISE MODIFIER ACCEPTS CV. THE MODIFIER CAN BE OFFSET BY THE NOISE CONTROL KNOB WHICH IS LOCATED BETWEEN THE NOISE MODIFIER INPUT POINT AND NOISE OUTPUTS. AT THE EXTREME ENDS OF THE KNOB WILL BE SILENCE. AS YOU APPROACH THE CENTER OF THE KNOB FROM EITHER DIRECTION THE NOISE DENSITY WILL BECOME HIGHER GOING FROM SPORADIC CRACKLING TO FULL ON WHITE NOISE.

WHITE NOISE IS THE STRONGEST OUTPUT AND CAN BE USED TO DRIVE THE COUNTER OR THE CHAOS CLOCK OR DATA. IT IS UNFILTERED AND UNATTENUATED

BLUE NOISE IS HIGH PASS FILTERED AND ATTENUATED GIVING WHAT IS SOMETIMES REFERRED TO AS BLUE NOISE

VIOLET NOISE IS HIGH PASS FILTERED AND ATTENUATED EVEN MORE GIVING WHAT IS SOMETIMES REFERRED TO AS VIOLET NOISE

ANY OF THE NOISE OUTPUTS CAN BE MIXED WITH THE FINAL OUTPUT. BUT BLUE AND VIOLET NOISE ARE MOST SUITED FOR THIS BECAUSE THEY ARE ATTENUATED AND SO WON'T OVERPOWER OTHER ELEMENTS THAT MIGHT BE PRESENT IN THE AUDIO MIX

-----XOR GATES-----

XOR GATES ARE LOGIC GATES MEANING THAT THEY ACCEPT LOGIC OR BINARY SIGNALS. OTHER TYPES OF SIGNALS MIGHT OFFER INTERESTING RESULTS HERE BUT RESULTS WILL VARY. AN XOR LOGIC GATE WILL OUTPUT 1 IF THE TWO INPUTS ARE NOT THE SAME. AN XOR TRUTH TABLE LOOKS LIKE THIS:

INPUT A INPUT B OUTPUT

1	1	0
1	0	1
0	1	1
0	0	0

IN MUSIC INSTRUMENTS, XOR GATES HAVE OFTEN BEEN USED TO MAKE METALLIC SOUNDS OR AS RING MODULATORS. FOR EXAMPLE, THE ARP ODYSSEY RING MOD SECTION IS AN XOR GATE THAT COMBINES THE 2 SQUARE WAVE OSCILLATORS. AND THE HI HAT AND CYMBAL SOUNDS ON THE BOSS DR 110 DRUM MACHINE ARE CREATED BY SENDING 4 SQUARE OSCILLATORS AT SPECIFIC PITCHES THROUGH MULTIPLE XOR GATES

-----LOW PASS GATES-----

THE 2 LOW PASS GATES CAN BE USED FOR CHOPPING UP/GATING AUDIO OR CV SIGNALS. CV INPUT CONTROLS IF THE GATE IS OPEN OR CLOSED. INPUT AND OUTPUT PASS A GIVEN SIGNAL THROUGH THE GATE

-----COUNTER / FILTER-----

THE COUNTER / FILTER IS THE CORE OF ANTI RAVE. THE COMBINATION OF THIS SECTION WITH THE LOW PASS GATES IS WHERE SO MANY OF THE INTERESTING SOUNDS LIE. THE COUNTER CAN DIVIDE A BINARY SIGNAL IN THE FOLLOWING DIVISIONS: /2, /4, /8, /16, /32, /64, /128, /256. AT THE SAME TIME WHATEVER SIGNAL IS SENT INTO THE COUNTER WILL ALSO CLOCK A SWITCHING CAPACITOR FILTER. THERE ARE TWO EXCITER INPUTS. NORMAL AUDIO FROM LIKE AN MP3 COULD BE SENT HERE BUT THIS IS NOT REALLY WHAT THIS FILTER'S PRIMARY USE WOULD BE. SOME OF THE MOST INTERESTING SOUNDS THAT CAN BE HAD WITH THE FILTER COME IF YOU SEND THE SAME SIGNAL THAT IS DRIVING THE CLOCK OR DIVISIBLE OUTPUTS OF THE CLOCK INTO THE EXCITER

INPUTS. IT IS HARD TO DESCRIBE EXACTLY WHAT IS HAPPENING, BUT ADDITIVE SYNTHESIS, PSEUDO COMB FILTER, SPIKY PERCUSSIVES ARE SOME OF THE TYPES OF SOUNDS THAT THE FILTER CAN EASILY PRODUCE. IF YOU DO WANT TO TRY RUNNING DIVERSE AUDIO SOURCES - LESS POWERFUL THAN MODULAR 0-10V (MP3 OR OUTPUT OF 23 TWIN FILTERS FOR EXAMPLE) THESE LESS POWERFUL SIGNALS MUST BE BOOSTED WITH A BOOST/PREAMP, OVERDRIVE, LEVEL SHIFTER OR SIMILAR TO BE ABLE TO HEAR THE EFFECT.

THERE ARE TWO OUTPUTS - LOUD AND SOFT. LOUD IS THE NORMAL OUTPUT AND SOFT IS ATTENUATED TO MAKE PASSIVE MIXING WITH 23 EASIER SINCE 23'S OUTPUT LEVELS ARE A BIT LOWER THAN ANTI RAVE. SOFT IS ALSO CONVENIENT IF YOU WANT TO RUN ANTIRAVE FILTER OUTPUT THROUGH GUITAR PEDALS OR EFFECTS WHERE A 0-10V SIGNAL MIGHT BE TOO POWERFUL AND CAUSE UNWANTED DISTORTION.