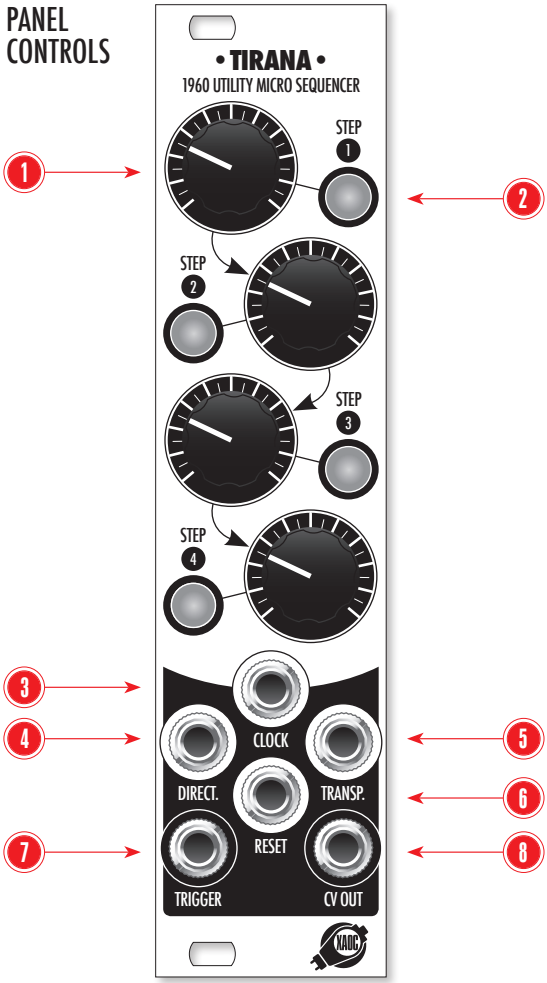
Tirana

UTILITY MICRO SEQUENCER MODEL OF 1960

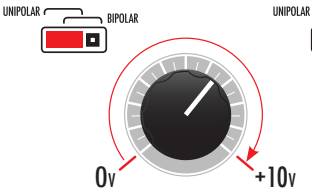
SALUT

Thank you for purchasing the Xaoc Devices product. The Tirana module comes in handy as a classic step sequencer, modulation source, voltage bank, arpeggiator etc., serving as the utility module for supporting other sequencers, but it also shines on its own terms. Due to smart features to be described in this manual, Tirana provides a number of very interesting possibilities, and turns out to be surprisingly powerful module, while preserving the ease of use and minimal real estate in the system. It is only 6hp, and therefore a perfect solution for compact and portable modular setups, but can empower just any system to a great extent.

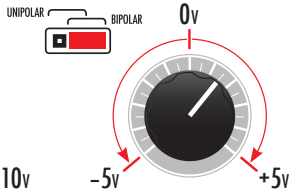
PANEL CONTROLS



UNIPOLAR VOLTAGE



BIPOLAR VOLTAGE



GETTING STARTED

Clear 6hp space in your eurorack cabinet and turn the power off. Ensure that the jumper on the IN *header remains in place (for single unit operation; for multiplied setups read the instructions further down in the manual). Now plug in the ribbon cable to the bus board, observing the red stripe orientation. Tirana has been secured against reversed power connection but it is always a good habit to pay attention to this. Mount the screws and turn your system back on.*

CONTROLS & OPERATION

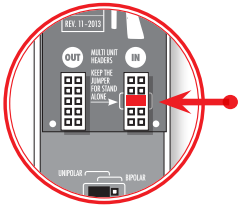
In order to operate, an external clock needs to be fed to the CLOCK *input* ❸ *– usually the pulse from a LFO or any clock generator of choice. Steps will now be played subsequently in a loop. Adjust the desired pitch by turning knobs* ❶*. Generated pitch and trigger voltages are available at* CV OUT ❽ *and* TRIGGER ❼ *sockets.*

Each step may now be removed from the sequence (muted) by pressing the corresponding button ❷ *. Please note that only the* TRIGGER *output is being muted; the pitch voltage is available as usual.*

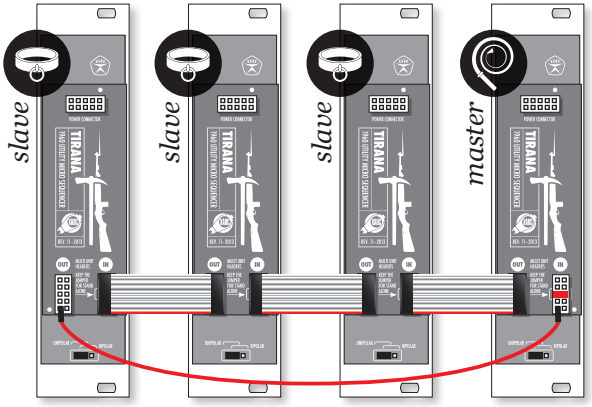
The sequence direction can be changed by feeding a trigger impulse into the DIRECT. *input* ❹*. To reset the sequence, a trigger needs to be fed into the* RESET *input* ❻*.*

The sequence can be also transposed (offset) by providing control voltage into the TRANSP. *input jack* ❺*.*

CHAINING UP UNITS



Remove the jumper from every module but master! Then, attach supplied cables exactly as shown on the picture.



STEP REPEAT

Each step can be repeated up to 4 times (resulting in up to 16 steps in the sequence). To set a desired number of repeats for a given step, hold its mute button down for approx. 2 seconds until the menu mode is confirmed by all buttons dimmed for a moment. Then, push the **BUTTON NO. 2** *for one repetition (2 note events),* **BUTTON NO. 3** *for double repetition (3 events) or* **BUTTON NO.** *4 for triple repetition of the given step (4 events). To reset the desired step to generate just one note, push* **BUTTON NO. 1.**

SETTING THE POLARITY

Tirana ships set to unipolar 0 to 10 V mode (as most users will probably want to use it as a melody generator). Still, the module makes a great modulation source when set to bipolar -5 to +5V operation. To adjust the desired mode, simply set the jumper on the back of the module.

MULTIPLE TIRANA SETUPS

You can easily chain up a number of Tirana units together to open up a lot of interesting possibilities.

Every Tirana ships with one 10-pin ribbon cable and a loop wire. Attach them exactly as shown on the picture! First, every slave unit requires jumpers to be removed (these are required for single-unit operation). Then, every ribbon should connect the **OUT** *header of the master unit with the* **IN** *header of slave unit. The first unit in a chain should only have the* **OUT** *header occupied.*

The single wire cable needs to connect the lowest left pin of the **IN** *header on the master unit, and the same lowest left pin of the* **OUT** *header on the last slave unit in a chain.*

Please double check that if it is mounted correctly and put the whole set in your cabinet. Don't forget about powering every single Tirana unit.

SUGGESTED PATCHES

• Build a 8, 12, 16, 32 (and longer) – step sequencer subsystem using multiple Tiranas. The first unit in a linked chain acts as the master, and this is where all the patch cables should be fed. The mutes and repetitions work for each slave unit independently.

• Use one Tirana to transpose the other one (unlinked) for a pseudo arpeggio effect. Use different divisions of the same clock and step repeat function.

• Let one Tirana trigger the reset or direction change function of another unit (unlinked).

• Use a couple of unlinked Tiranas for complex sequencing: feed them different clocks, combine their trigger outputs with Xaoc Bytom and CV outputs with Xaoc Warna mixer.

• Make the trigger output a source of complex clock for another Tirana.

• Tirana comes in handy as an utility clock divider. Feed a clock and adjust the same repeat setting on every step. Division is available at the trigger output.

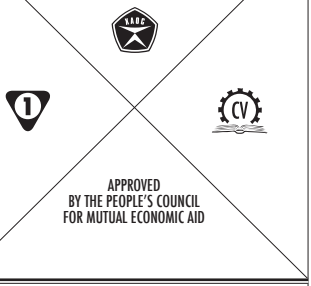
PRODUCT FEATURES

- *4 steps of pitch and trigger impulse generation*
- *step repetition (up to 4 note events per step)*
- *unipolar and bipolar voltages*
- *mutable trigger (per step)*
- *playback direction change via CV*
- *sequence trasposition via CV*
- *sequence reset via CV*
- *backward power protection*
- *expandability via chaining up more Tirana units together*

TECHNICAL DETAILS

- *eurorack standard synthesizer module, fully Doepfer compatible*
- *6 hp wide*
- *+12/-12V powered*
- *current draw: 30 mA*

WORKING CLASS ELECTRONICS



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