ES23 Sequence Programmer

User Guide

Revision 1.0

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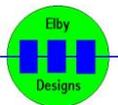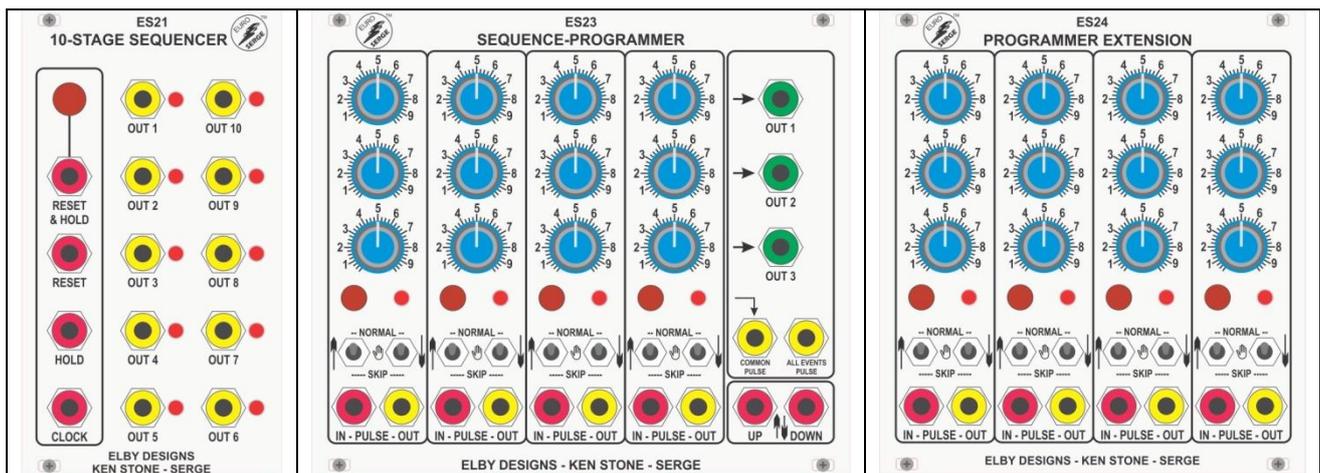
ES23 Sequence Programmer

The EuroSerge Sequencer (ESS) family comprises 3 modules:-

ES21 - 10-Step Sequencer
ES23 - Sequencer-Programmer
ES24 - 4-stage Extender

Any ESS will always have an ES23 as it is the module that generates the final sequence outputs.

In itself, the ES23 comprises 2 sub-sections:-

1. The left four columns are an ES24 and provide the ES23 with 4 stages of sequence outputs
2. The right hand column is the 'main board'. It's tasks include providing the sequenced outputs for connecting to your system, and some basic sequencer functions.

Minimal Configuration

A minimal configuration would comprise solely of an ES23. For automated operation you will need to provide a clock source such as from an LFO.

A clock pulse fed in to the [UP] or [DOWN] output of the ES23 will cycle the ES23 through its 4 stages in the chosen direction. At each stage, the 3x [OUT x] outputs will output a DC voltage as set by the 3x [LEVEL] pots of the active stage.

Each stage is equipped with 2 'control' switches which allow that stage to be 'skipped', 'stopped' or operate normally.

When the switch is set to 'SKIP', that stage will be passed over when it is the next stage in the direction shown. i.e. if the clock source is connected to [UP] and the [UP] switch for a
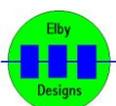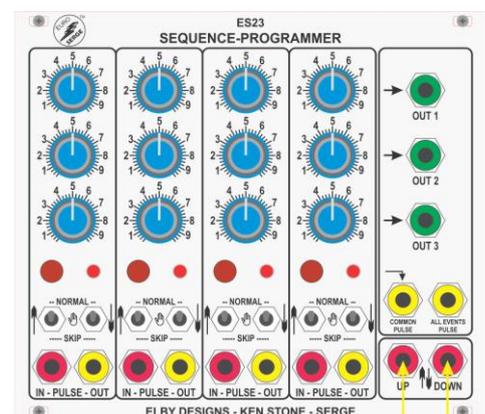
stage is set to 'SKIP', then that stage will be ignored when it is the next 'up' stage of the cycle.

At any time the user may either trigger a stage using the [MANUAL] button or by applying a logic pulse to the stages [IN] jack.

When a switch is set to 'STOP' the cycle will freeze when that stage is reached. The cycle may be reactivated by either changing the switch setting or by activating one of the other stages.

The [Common Pulse] output remains high while a push button is pushed.

The [All Events Pulse] gives a trigger pulse on any change of stage

Extending the ES23

Additional stages can be added to the ES23 by connecting one or more ES24s. There is an internal cable which is used to link the modules together. The ES24s are always added to the left side of the ES23 which logically makes the left-most stage of the chain the first-stage and the right-most stage of the ES23 the last-stage. The ESS will always cycle from the last to the first stage when being clocked in the 'UP' direction and from the first to the last when clocked in the 'DOWN' direction.
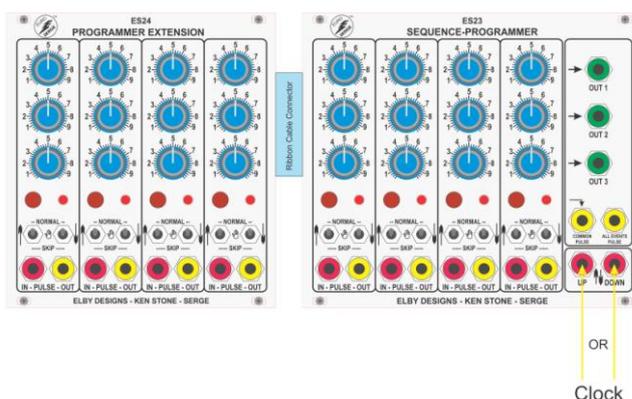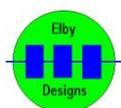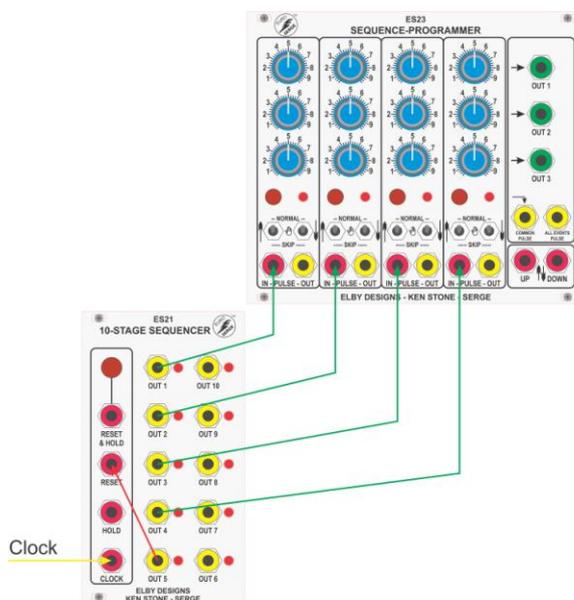
The real power of the shorter length Sequencer Programmers, however, is their use in tandem with one another. Two sequencers are more interesting than one.

Alternate Staging

The 10-stage Sequencer was the original 'sequencer' stage for the Sequence-Programmer in the original Serge Modular System. The upgraded ES23 somewhat replaces the need for the ES21.

When it is used in an ESS system the ES21 [OUT x] outputs can be patched to the [IN] jacks of each stage as required. Skipping some of the [OUT x] jacks allows 'extended notes' to be programmed without sacrificing any stages e.g. with [OUT 1], [OUT 3], [OUT 4] and [OUT 6] patched to the four stages of an ES23 you will get a 6-beat sequence with the first and third steps being double-notes.