Moog 953 Duophonic Keyboard

ABOUT

The Moog 953 is a 61 note duophonic keyboard designed for use with the Moog modular System 55, 35, IIIC, IIIP, Model 15 and Model 10 analog synthesizers, as well as for use with compatible vintage Moog modular synthesizers.

WARNING: DO NOT CONNECT TO YOUR MODULAR SYSTEM WHILE POWERED ON.

CONNECTION

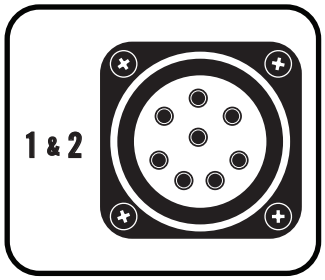
1. With the power of your modular instrument turned OFF, connect the small barrel jack end of the included keyboard controller cable to the CONTROLLER OUT jack of your 953 keyboard.

2. Connect the large barrel jack to the rear connector on your modular instrument labeled 1 & 2 (Model 15/10) or 2 & 3 (System 35/55 & Synthesizer IIIC/IIIP).

NOTE: Double check to make sure your system is connected to its correct input channels for proper behavior.

3. Because the triggers on a Model 15/10 are wired differently from a System 35/55 and Synthesizer IIIC/IIIP, your 953 keyboard can be set to adapt to either type of system.

MODEL 10/15
USE 1&2



SYSTEM 35/55 & SYNTHESIZER IIIC/IIIP
USE 2&3

Model 15/10: When using your 953 for the first time, press and hold the D3 key while powering ON your Model 15 or Model 10. Release D3 2 seconds after power-on. This setting is remembered by your 953.

System 35/55 & Synthesizer IIIC/IIIP: When using your 953 for the first time, press and hold the C3 key while powering ON your System 35/55 or Synthesizer IIIC/IIIP. Release C3 2 seconds after power-on. This setting is remembered by your 953.

NOTE: the lowest C is C0

KEYBOARD CV OUTPUTS

When connected as shown above, the keyboard control voltages appear on your modular system's CONTROLLER OUTPUTS panel as follows:

Model 15/10: Controller 1 = lowest note (CV 1); Controller 2 = highest note (CV 2)
System 35/55 & Synthesizer IIIC/IIIP: Controller 2 = lowest note (CV 1); Controller 3 = highest note (CV 2)

When only one note is played, both controllers will output the same voltage.

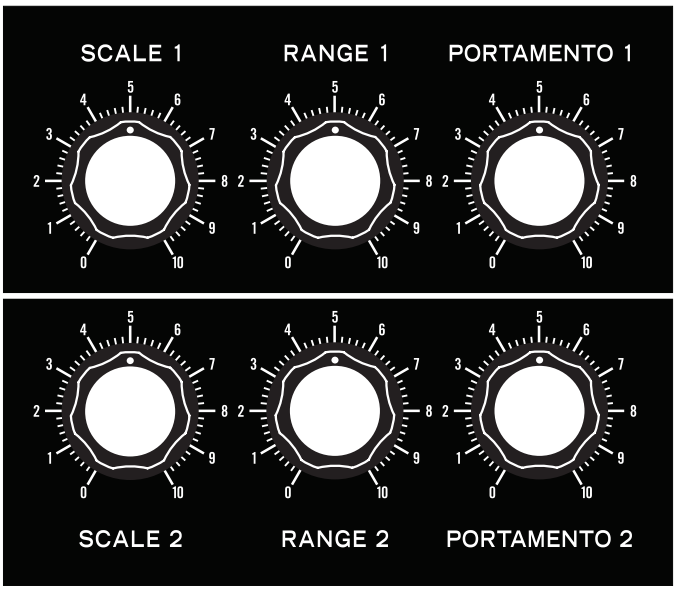
For monophonic applications, you can choose between low-note and high-note priority by simply patching only the lowest connected numerical CONTROL output (Low Note) or highest connected numerical CONTROL output (High Note).

Ex. Using a Model 15, CONTROL output 1 will output a low-note priority signal, while CONTROL output 2 will output a high-note priority signal.

TRIGGER OUPUTS

TRIGGER 1 and TRIGGER 2 signals will appear on your modular instrument's CONTROLLER OUTPUTS panel at the corresponding S-Trig TRIGGER output.

When no notes are held, TRIGGER 1 and TRIGGER 2 are inactive. When one note is held, TRIGGER 1 is active and TRIGGER 2 is inactive. When two or more notes are held, TRIGGER 1 and TRIGGER 2 are both active.



SCALE AND RANGE CONTROLS

The lowest note on the keyboard produces 0V increasing by 1/12V per half-step. This characteristic can be modified with the SCALE and RANGE knobs.

NOTE: When the SCALE and RANGE knobs are at their center position (recommended), the voltage characteristic is standard.

RANGE

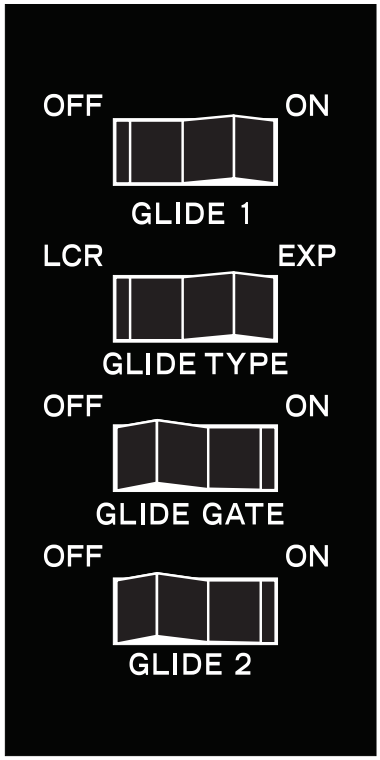
The RANGE knob adds an offset voltage to CV 1 or CV 2. When the RANGE knob is at center position, the output voltage is not altered. When the RANGE knob is at minimum, 150mV is subtracted from the output. When the RANGE knob is at maximum, 150mV is added to the output.

SCALE

The SCALE knob multiplies the output of CV 1 or CV 2 by a constant. When the SCALE knob is at center position, the output voltage is multiplied by 1. When the SCALE knob is at minimum, the output voltage is multiplied by 0.95. When the SCALE knob is at maximum, the output voltage is multiplied by 1.058.

PORTAMENTO

The PORTAMENTO control determines the time it takes for note output voltages to change smoothly from one note to the next. Rates can be adjusted independently for both CV 1 and CV 2.



GLIDE (1&2) ON/OFF

These switches activate or deactivate the portamento feature for the corresponding CV outputs.

GLIDE TYPE

This switch selects between Linear Constant Rate and Exponential glide types for both CV 1 and CV 2.

LCR (LINEAR CONSTANT RATE)

When a new note is played, the voltage changes at a constant rate determined by the PORTAMENTO knob for that channel.

EXP (EXPONENTIAL)

When a new note is played, the current voltage begins with a fast rate that then slows as it approaches the target note at a rate determined by the PORTAMENTO knob for that channel.

GLIDE GATE

Glide Gate causes the gradual gliding between notes to be started and stopped by the keyboard gate. This switch activates or deactivates the gated glide feature for both CV 1 and CV 2 outputs.

ON

The pitch CV only glides while a note is held. When a note is released, this shift between notes is paused at the last heard pitch voltage location. When a new note is pressed, the voltage will continue from its last location towards its new note.

OFF

When a note is released, the pitch CV will continue gliding to the new target pitch at the current portamento rate, regardless of whether or not a key is held.

NOTE: The different behaviors are more distinct at longer glide times.