

# SCANNER 69B User Manual

	MODES		
SWITCHES	SYNC SW MODE	INTL SW MODE	CV SCAN SW MODE
<b>DIR SW</b>	5V patched to DIR/ST/LP jack changes direction of rotation	5V patched to DIR/ST/LP jack changes direction of rotation	5V patched to DIR/ST/LP jack HOLDS position of rotation
<b>ST CV SW</b>	5V patched to DIR/ST/LP jack changes start position of rotation	5V patched to DIR/ST/LP jack changes start position of rotation	5V patched to DIR/ST/LP jack changes start position of rotation
<b>SPAN CV SW</b>	5V patched to DIR/ST/LP jack changes span of rotation	5V patched to DIR/ST/LP jack changes span of rotation	5V patched to DIR/ST/LP jack changes span of rotation
<b>AC/DC SW</b>	Switches between Audio and CV input. Use AC for audio and DC for CV signals	Switches between Audio and CV input. Use AC for audio and DC for CV signals	Switches between Audio and CV input. Use AC for audio and DC for CV signals
<b>SW</b> Switch is simple ON/OFF between inputs without cross-fade	In SYNC mode SW works like a sequencer stepping thru each output with a clock patched to CV Input jack SCAN RATE and DIR CV control the direction of rotation SW amplitude can be controlled with AMP CV input	SW alternates between inputs without cross-fade or pan Output L and R can be used for alternating outputs panned left and right	SW alternates between inputs without cross-fade or pan Output L and R can be used for alternating outputs panned left and right
<b>LIN</b>	LIN is a linear cross-fade between adjacent channel inputs. Good for CV cross-fades with addition of two channels mid position total =1 (0.5+0.5=1)	LIN is a linear cross-fade between adjacent channel inputs. Good for CV cross-fades with addition of two channels mid position total =1 (0.5+0.5=1)	LIN is a linear cross-fade between adjacent channel inputs. Good for CV cross-fades with addition of two channels mid position total =1 (0.5+0.5=1)
<b>LOG</b>	LOG is an equal power cross-fade or pan between adjacent channel inputs. Ideal for audio cross-fades. The mid point for cross-fade is -3dB down. This limits the perceived amplitude change that would occur in linear mode with audio.	LOG is an equal power cross-fade or pan between adjacent channel inputs. Ideal for audio cross-fades. The mid point for cross-fade is -3dB down. This limits the perceived amplitude change that would occur in linear mode with audio.	LOG is an equal power cross-fade or pan between adjacent channel inputs. Ideal for audio cross-fades. The mid point for cross-fade is -3dB down. This limits the perceived amplitude change that would occur in linear mode with audio.
<b>KNOB CONTROLS</b>			
<b>SCAN RATE</b>	Knob set left of center sets ratio for division of sync clock. Knob set right of center multiplies the clock frequency. Ratios are marked on the dial.	Knob set to the right of center controls the rate of rotation and direction clock-wise. Set to the left of center controls Counter clock-wise rotation and rate.	No effect in this mode
<b>START</b>	Used to position the start position of scan rotation. CV control of with CV control START	Used to position the start position of scan rotation. Works in tandem with CV control START	Used to position the start position of scan rotation. Works in tandem with CV control START
<b>SPAN</b>	Used to set the width or number of input channels to be scanned CV control of SPAN is also possible	Used to set the width or number of input channels to be scanned CV control of SPAN is also possible	SPAN is used as an attenuator for CV INPUT in this mode CV Control of SPAN functions as a CV control of the attenuator.

<b>JACK FUNCTIONS</b>			
<b>AMPLITUDE</b>	Input for connecting an envelope generator or other CV source to control output dynamics	Input for connecting an envelope generator or other CV source to control output dynamics	Input for connecting an envelope generator or other CV source to control output dynamics
<b>CV INPUT</b>	Input for clock to sync to. 5+V is ideal range with 50% duty cycle preferred but not required.	Controls scan rate frequency 0-5V+ range in tandem with Rate Pot	Controls scan position 0-5V+ range input. The Span knob functions as an attenuator to control the amount of the CV input range while Start knob controls position.
<b>DIR/ST/LP</b>	Input for direction, start and span modulation. Function is selected by DIR Switch. In Direction switch mode input should be logic type 0 or 5V. High input switches rotation from CW to CCW. For Start and Span input can be 0-5V+ range	Input for direction, start and span modulation. Function is selected by DIR Switch. In Direction switch mode input should be logic type 0 or 5V. High input changes rotation in direction opposite to what is set by SCAN RATE knob. For Start and Span input can be 0-5V+ range	Input for direction, start and span modulation. Function is selected by DIR Switch. In Direction switch mode input should be logic type 0 or 5V. High input switches rotation from CW to CCW. For Start and Span input can be 0-5V+ range
<b>OUTL/SUM</b>	Left is Cross-Fade out with all channels mixed to 1 output	Left is Cross-Fade out with all channels mixed to 1 output	Left is Cross-Fade out with all channels mixed to 1 output
<b>OUTR</b>	Plugging in to Right jack routes even channels 2,4,6,8 to right jack Left jack gets 1,3,5,7	Plugging in to Right jack routes even channels 2,4,6,8 to right jack Left jack gets 1,3,5,7	Plugging in to Right jack routes even channels 2,4,6,8 to right jack Left jack gets 1,3,5,7
<b>INPUTS 1-8</b>	Signal inputs to scan. Can be either Audio signals or CVs. Set AC/DC switch appropriately. (AC=Audio)	Signal inputs to scan. Can be either Audio signals or CVs. Set AC/DC switch appropriately. (AC=Audio)	Signal inputs to scan. Can be either Audio signals or CVs. Set AC/DC switch appropriately. (AC=Audio)