

818.781.2185 Sales
sales@eoninstrumentation.com



General

The Blanking Combiner Unit is designed to combine blanking pulses from five inputs into a serial composite pulse stream made available on two separate buffered outputs. Each of the five inputs are equipped with delay and threshold level adjustments accessible from the front panel. The output level pot, accessible from the front panel, controls the amplitude of the two outputs simultaneously. When a pulse appears at an input meeting the threshold level settings of the comparator, the comparator will transfer the pulse to the input of the delay circuit and an OR gate simultaneously. This pulse will initiate a pulse at the output of the re-triggerable delay circuit. The output of the delay circuit and the output of the comparator are connected to an OR gate to form a pulse with an adjustable width. The width is adjustable from a minimum of $1\mu\text{S}$ to a maximum of $100\mu\text{S}$. The minimum pulse width will never be less than the input pulse width. The five individual OR gate outputs are connected to another OR gate to form a composite serial stream of pulses from all five inputs. This serial stream is fed to a level shifter and then through an output level potentiometer and finally to two buffered outputs.

Input

- Inputs: Five, Single Ended, $93\ \Omega$, J2 through J6, BNC connectors.
- Input Threshold Level: Adjustable, 3.5 to 10.0 VDC. One adjustment for each input.
- Delay: Re-Triggerable and adjustable from $1\mu\text{S}$ to $100\mu\text{S}$. One adjustment for each input.

Output

- Outputs: Two, Single Ended, $93\ \Omega$, J7 and J8, BNC connectors.
- Output Amplitude: Adjustable 5 to 12 VDC un-terminated, 2.5 to 6 VDC when terminated into $93\ \Omega$. One adjustment affects both outputs.

System

- Throughput Delay: $< 75\text{ns}$, typically 65ns .

Environmental

- Operating Temperature Range
 - Full Performance: 0 °C to +55 °C
 - Degraded Performance: -25°C to -1 °C
- Non-Operating Temperature: -40 °C to +71 °C
- Shock: 10 g's for 11mS.
- Vibration: Double Amplitude, Sinusoidal excitation of 0.1 inches from 5 Hz to 20 Hz, and ± 2 g's between 20 Hz and 500 Hz.
- Cooling: Conduction, through base plate.

Mechanical

- Weight: < 4 LBS.
- Size: Depth 5.950" Max,
Width 6.780",
Height 2.400" Max.
- Mounting: 6 each 0.169 diameter through holes.

Primary Power

- Primary Power: 28 \pm 6 VDC, Isolated from signal ground, J1 M38999 Series III connector.
- Power Consumption: < 6 Watts
- Power Switch: Locking Toggle Switch.

Connectors

- J1: D38999/20-W-A-98-P-N
Pin A 28 VDC
Pin B 28 VDC RTN
Pin C Chassis
- J2: Input, BNC, Kings KC-79-46
- J3: Input, BNC, Kings KC-79-46
- J4: Input, BNC, Kings KC-79-46
- J5: Input, BNC, Kings KC-79-46
- J6: Input, BNC, Kings KC-79-46
- J7: Output, BNC, Kings KC-79-46
- J8: Output, BNC, Kings KC-79-46

Outline & Mounting

