



MODEL P770A FREQUENCY SPLITTER / ISOLATOR



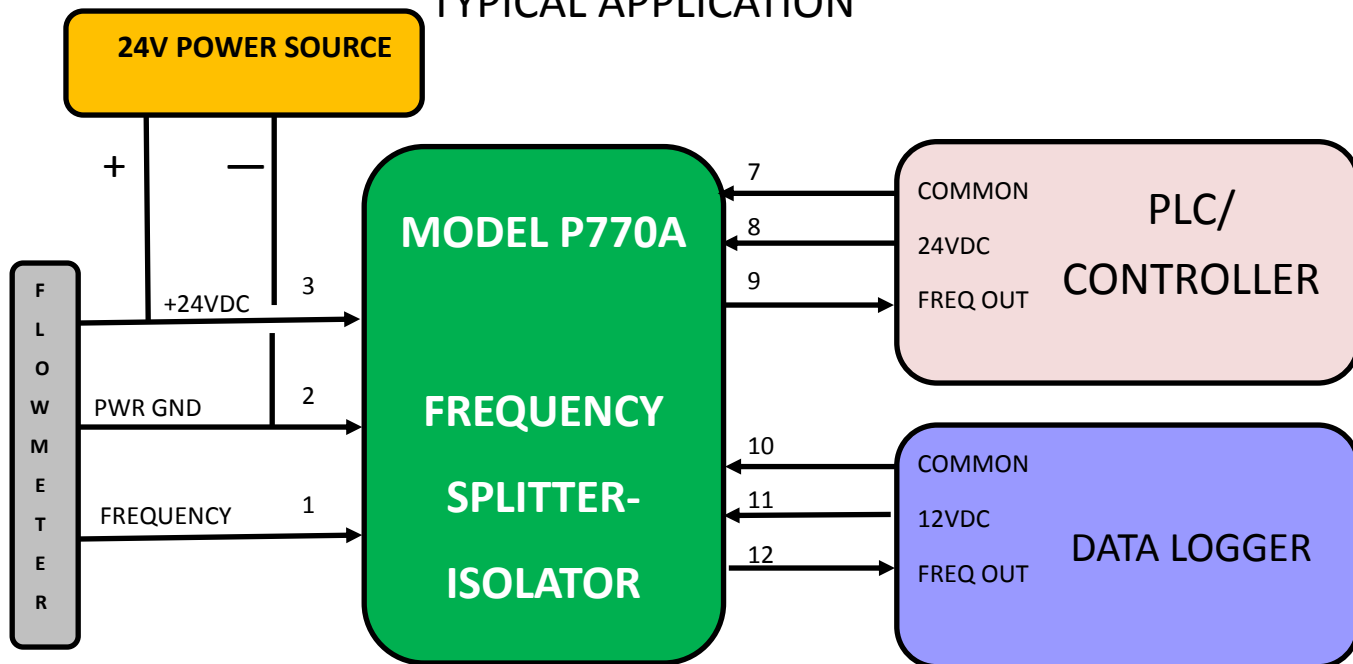
The Compass Instruments P770A Frequency Splitter/Isolator may be used to create two identical isolated frequency outputs from one frequency/pulse input.

The input pulse should go from near zero volts and the amplitude should be at least 3 volts. The threshold is approximately 2.4V and there is 45 millivolts hysteresis to prevent double pulsing. Higher signal amplitudes (up to 24V) may also be used and will not cause damage.

Input impedance is two meg-ohms.

Outputs are isolated and may be powered separately with 5 to 24 volts. Each output has a 5100 ohm pull up to the applied voltage. For higher frequencies, it may be necessary to add an external pull up. Frequency range is from zero to 35KHz.

TYPICAL APPLICATION



NOTE: If isolation is not required, all power grounds and commons may be tied together (Terminals 2, 7 and 10).

Also, if signal levels are not an issue, all power terminals may be powered from the same source (Terminals 3, 8, and 11).

Cost is \$265 each. Order on-line at www.CompassInstruments.com or call 832.326.4692.



MODEL P770A
FREQUENCY
SPLITTER / ISOLATOR

NOTE: If the input is from a magnetic pick-up, it must have an amplifier so that the output signal amplitude goes from less than one volt to more than 3 volts. The actual switching threshold is about 2.4 volts. If your signal level is too low, contact Compass Instruments, LLC —we may have an amplified mag pick-up or a hall effect device that will work in your application.

INPUT

The input impedance is 2M ohms — so it will not load your input signal down.

The input must be powered with 9—30 VDC

ISOLATION

The unit has three way isolation. The outputs are isolated from each other and from the input.

OUTPUTS

An output pulse occurs for each input pulse.

Each output section must be powered with 5 -24 VDC

Each output has an internal pull-up resistor to it's respective power input . So the amplitude of the output square wave will be approximately the same as the applied power.

The output transistor is quite robust and will handle currents up to one amp.

Compass Instruments Model P771A is identical to this unit except it is supplied without pull-up resistors. This allows the signal amplitude to be different from the applied power. This would be used when the output signal is connected to an instrument with internal pull-ups. Please note that if pull up resistors are not installed, signal will not be visible unless connected to an instrument with internal pull up resistors. (Or you may add your own pull up resistors to any external voltage from 5 to 30 VDC. For this to function, connect the power supply common to the output common. Then install a the pull up resistor between the signal out and the power supply.)

COMPASS INSTRUMENTS, LLC designs and builds instrumentation modules such as this to help make systems easier to implement and their operation more reliable. Check out our other products on our web site at www.CompassInstruments.com.

Compass Instruments, LLC, 321 S. Persimmon Street, Tomball, TX 77375

www.CompassInstruments.com

(832)326.4692