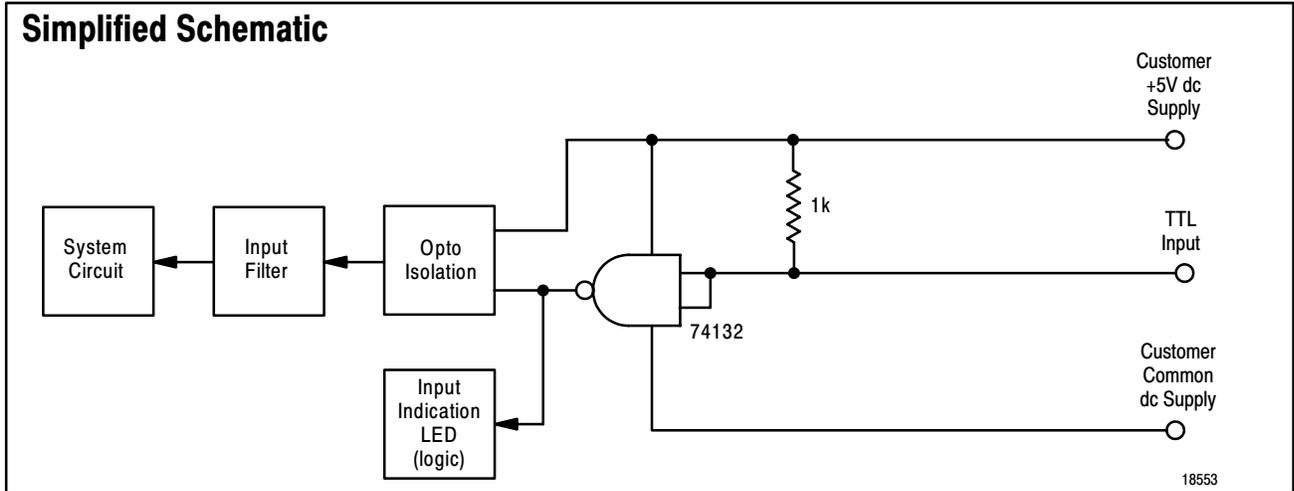


TTL Input Module (Cat. No. 1771-IG)

Simplified Schematic



Application Notes

Device Compatibility. You can use any TTL device that meets the output logic level specification of $-0.2V$ dc to $+0.8V$ dc (low), and $2.0V$ dc to $5.25V$ dc (high).

This module contains input filtering to limit the effects of voltage transients caused by contact bounce and/or radiated electrical noise. The delay due to filtering is nominally 1ms.

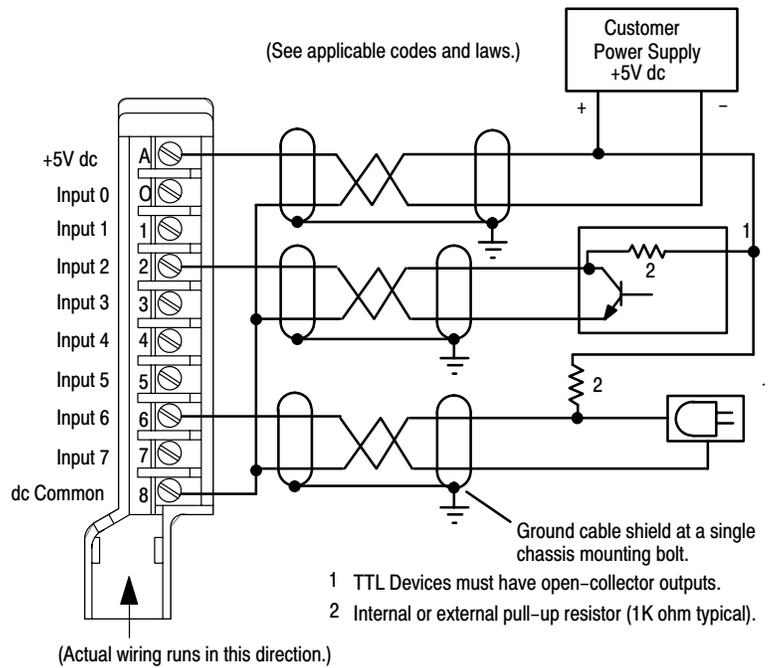
For maximum noise immunity, the output of the TTL device that is driving the input should have a pull-up resistor of 1k ohm (typical). If you add a pull-up resistor, be sure the TTL device maintains the low state requirement of $-0.2V$ dc to $+0.8V$ dc with the increased load.

Connection to Output Modules. Input terminals of the TTL Input Module may be directly driven by outputs of the TTL Output Module (Cat. No. 1771-OG).

Status Indicators. The front panel contains eight indicator lights. Each indicator lights when its corresponding input terminal senses TTL voltages in the true state. Indicators may appear dim during rapid pulsing of input signals.

Module Application. You can select "High = True" or "Low = True" logic operation using logic switches located on the module.

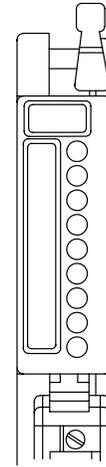
Connection Diagram



TTL Input Module (Cat. No. 1771-IG)**Specifications (Cat. No. 1771-IG)**

Inputs per Module	8
Module Location	Series A or B 1771 I/O chassis
Input Voltage Range	ON: 2.4 to 5.25V dc OFF: -0.2 to +0.8V dc
HIGH = TRUE	ON: -0.2 to +0.8V dc OFF: 2.4 to 5.25V dc
LOW = TRUE	
Customer Current Sink Requirements	7mA (source per input) 0.8mA (sink per input)
Customer Supply Voltage	5V dc ($\pm 0.25V$) 50mV peak-to-peak ripple max.
Customer Supply Current per Module	500mA max.
Input Signal Delay	Less than 1ms
Power Dissipation	3.3 Watts (max.), 0.6 Watts (min.)
Thermal Dissipation	11.3 BTU/hr (max.), 2.0 BTU/hr (min.)
Backplane Current	122mA max.
Isolation Voltage	1500V ac rms
Environmental Conditions	
Operational Temperature	0° to 60°C (32° to 140°F)
Storage Temperature	-40° to 85°C (-40° to 185°F)
Relative Humidity	5 to 95% (without condensation)
Conductors Wire Size	14 gauge (2mm ²) stranded maximum 3/64 inch (1.2mm) insulation maximum
Cable Category	Shielded (Belden 8761) 2 ¹
Keying	Between 4 and 6 Between 34 and 36
Field Wiring Arm	Catalog Number 1771-WC
Wiring Arm Screw Torque	7-9 inch-pounds
Agency Certification (when product or packaging is marked)	<ul style="list-style-type: none"> • CSA certified • CSA Class I, Division 2 Groups A, B, C, D certified • UL listed • CE marked for all applicable directives
Installation Instructions	1771-2.9

¹ You use this conductor-category information for planning conductor routing as described in the system-level installation manual.

Status Indicators

HIGH = TRUE indicator
 Input 0
 Input 1
 Input 2
 Input 3
 Input 4
 Input 5
 Input 6
 Input 7

} Status Indicators

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