AL2073 INTERFACER PRODUCT LINE
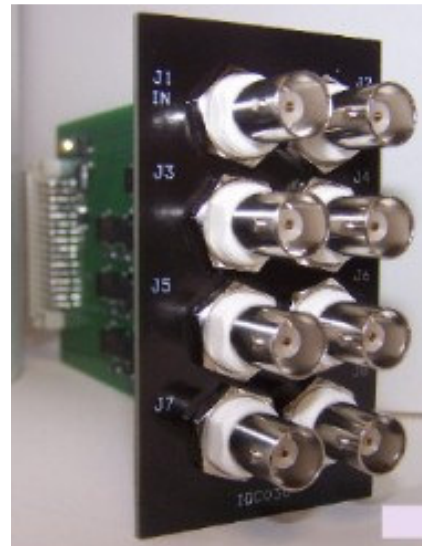
IOC030

PULSE DISTRIBUTION
MODULE

FEATURES

➢ One Input, J1

  o BNC type connector

  o ±15V input level

  o Selectable input termination 10Kohm, 50ohm

  o Input illuminates Front Panel dual color LED A

  o Minimum pulse width of 50 nanoseconds

➢ Seven Outputs, J2-J8

  o BNC type connector

  o TTL level outputs

  o 50ohm output drive capability

  o ≤ 5ns difference between all outputs

  o Isolated return paths each output

  o 250mA reverse connection protection for each output

  o Outputs illuminate Front Panel dual color LED B

OVERVIEW

The IOC030 module accepts a single positive pulse input signal which is buffered and output as seven TTL level signals. The input signal can be in the range of ±15V have a minimum pulse rise time of 5ns and a pulse width of 50ns or greater. The input is received on a isolated BNC, converted to TTL levels and buffered to 7 independent outputs. The input signal termination can be switch between 10kOhm and 50Ohm via the rotary switch located on the front pane of the 2073 chassis. When an input pulse is detected the front panel LED will change from red to green for approximately 1.5 seconds providing a quick look confirmation that a pulse is present. Seven BNC outputs are driven by 7 separate and independent drivers capable of providing TTL level outputs (4V) into a 50ohm load. Each output includes an isolated return. Latency from input to outputs is not greater than25 nanoseconds. All signal outputs are within 5 nanoseconds of each other. The IOC030 requires two slots of the 14 available slots in the Model 2073 chassis and must be placed in an odd number slot to allow for selection of 50ohm input termination selection. There are no internal adjustments or settings required to operate this module. The input termination selection is the only setting required by the operator.
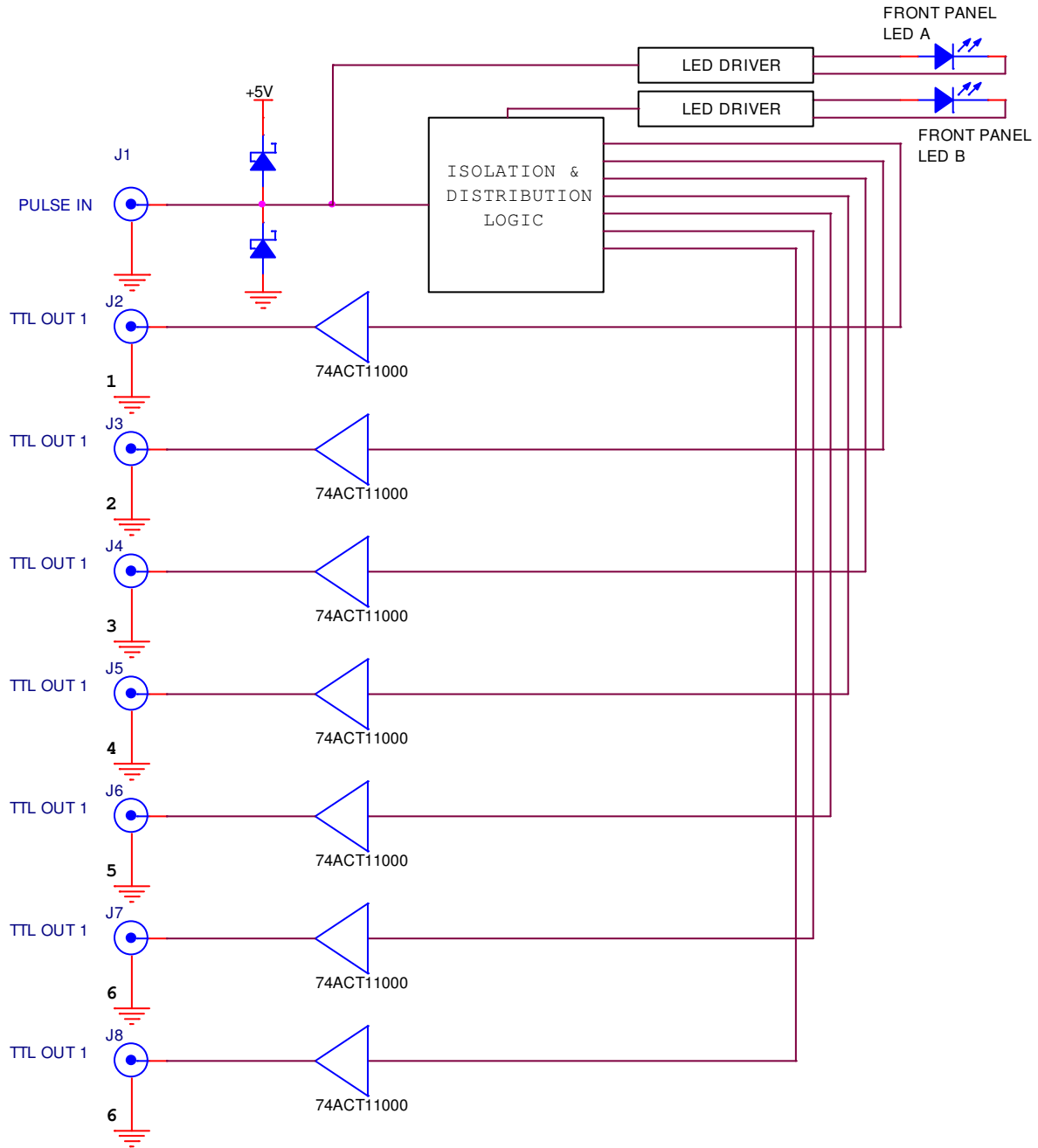
Figure 1: Model IOC030 Simplified Block Diagram

SPECIFICATIONS

GENERAL
Double Slot Module (3" x 6" x 1.8")
AL2073 Pluggable Interface Module

INPUT
BNC connector
± 15V max level
10K/50ohm switch selectable termination

OUTPUT

7 independent TTL level (4V) outputs on BNC

50ohm drive current
Isolated Return paths

APPLICATION INFORMATION

The IOC030 is used to buffer and distribute one pulse input level signal to seven TTL level output signals. This helps join equipment with unlike interfaces by properly receiving and driving the signals.

This module can also be plugged into Apogee Models:

Rotary SW	Assignment
1	10Kohm Input Termination
2	50ohm Input Termination

Table 1

Note: When the IOC030 is installed in a EVEN numbered slot the input termination is set to 10Kohm and cannot be changed.