# Interrupt Input Module

Overview

The D4-INT is an 8-point interrupt module. This module is intended for applications that have a high-priority event that requires special operations to be performed. When this high priority event occurs, the interrupt module senses a DC level input signal. The module automatically informs the CPU to interrupt its present operation. The CPU immediately suspends its routine scan cycle and jumps to a subroutine identified with that particular interrupt input signal point. The CPU then executes the logic in the subroutine (subroutines can even use immediate I/O instructions to immediately read and write I/O points if a time-critical update is necessary). When the subroutine is complete, the CPU automatically resumes its routine scan cycle starting at the exact location where it was interrupted. The CPU continues the routine scan until another interrupt signal is sensed.

Module Specifications	
Modules per CPU	One for DL430, 2 for DL440 & DL450 (modules must be in 1st then 2nd slot of the CPU base)
Input Points	8 (requires 16 points from I/O)
Input Voltage Range	10.20-26.4VDC
Maximum Input Current	10.0mA
Impedance	~ 2.7KΩ
Input Current	4.4mA at 12VDC, 9.0 mA at 24VDC
ON Level Voltage	9.5VDC
OFF Level Voltage	3.0VDC
Maximum OFF Current	1.5mA
Minimum ON Current	4.0mA
OFF to ON Response	0.08 - 0.59ms or 0.88 - 6.47ms
ON to OFF Response	0.15 - 0.89ms or 1.64 - 9.81ms
Terminal Type	Removable connector
Operating Environment	0°C to 60°C (32°F to 140°F), 5% to 95% humidity (non-condensing)
Internal Power Consumption	100mA max
Manufacturer	Koyo Electronics
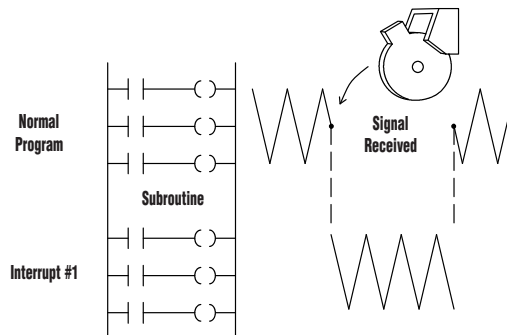
Hardware features

The D4-INT is designed to accept eight input signals. These inputs are labeled 0 through 7. If multiple inputs are received at the same time, they are prioritized by their respective label number, 0 being first and 7 being last.

Input points not used as interrupt points can be used as normal DC input points. This is accomplished with an 8-bit dipswitch located on the back of the module.

Interrupt signals can be triggered with a rising or falling edge signal. This is selectable via a dipswitch.

Two ranges of input filtering for response times are available via a dipswitch.