

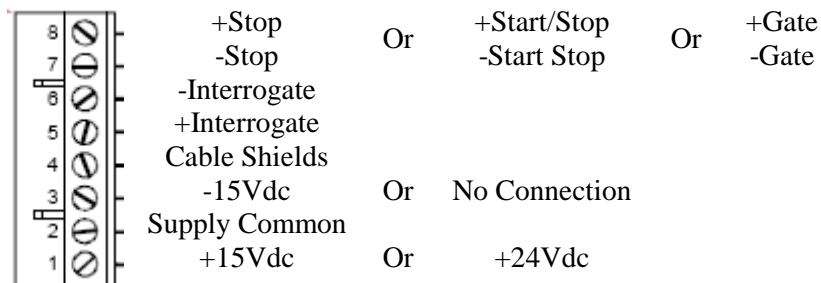
## User Supplied Power

The cable diagrams in the 7551 manual show that the module was designed to be used with sensors that operate from a  $\pm 15\text{Vdc}$  supply. While this is still true, the 7551 module will also operate with sensors that operate from a 24Vdc supply.

The 7551 module will draw a maximum of 60mA of current from the positive side of the external supply. Add this amount to the amount of current that your sensor will require when sizing your external power supply. The 7551 module does not draw any power from the negative side of your external power supply.

## Wiring Information

### 7551 module, MS-8 Connector



1. When the connector is plugged into the 7551 module, pin 1 is located at the **BOTTOM** of the module.
2. Because a 7551 module can be used with sensors from several manufacturers that use different cable types and wire colors, only the module's connector along with the appropriate signal names are shown in this document.
3. The  $\pm 15\text{Vdc}$  or  $+24\text{Vdc}$  external power supply shown in the above diagram must be externally supplied by the user.
4. The 7551 module does not use any power from the  $-15\text{V}$  supply side. This terminal is simply a convenient place to connect the sensor to the  $-15\text{Vdc}$  power supply.
5. Based on the sensor's manufacturer and output type, the  $\pm\text{Stop}$  signals shown above may be named  $\pm\text{Start/Stop}$  or  $\pm\text{Gate}$ .
6. Use the information provided by the sensor's manufacture to determine the type and maximum length of cable that should be used to connect the sensor to the 7551 module.
7. Transducer signals are generally low voltage, low power signals. If you are using A-B guidelines for cabling installation, treat the transducer cable as a Category 2 cable. It can be installed in conduit along with other low power cabling such as communication cables and low power ac/dc I/O lines. It cannot be installed in conduit with ac power lines or high power ac/dc I/O lines.
8. Like all signal and communication cable, the transducer cable should be shielded. These shields must be grounded at one end of the cable *only*. Because the rack cabinet is typically a better ground than the machine, AMCI recommends that the cable shields be terminated at the 7551 module.

## Rack Installation

The 7551 module uses an ID code of 3515, which configures the slot for 8 input and 8 output words. RSLogix 500 will list a module with this ID code as a *1746-INT4 Ch Isolated Thermocouple Input*. This is normal. The 7551 module will still operate correctly.

## Additional Programming Bits

AMCI has made a modification to the module's firmware to allow the 7551 module to function with additional LDT transducers. These changes will not affect current systems or their programming if a new 7551 module replaces an existing unit in a system. This change is available only on modules with Version 6 firmware or above. (You can determine the firmware version by looking at the label on the smaller of the two labeled devices on the PC board.)

Upgrade: The 7551 now has the capability of selecting the number of recirculations sent to the LDT sensor. Balluff BTL-5 LDTs with output type L only function when the sensor receives one recirculation pulse per measurement cycle.

Programming: The following table describes the bit format for the addition of programmable recirculations.

1. Units will be shipped with the default setting of 4 recirculations.
2. Configuration bits O:X.0/10 and O:X.0/11, where X is the slot number, determine the setting of the number of recirculations. See table below

Bit 11	Bit 10	# of recirculations
0	0	Retains last programmed value
0	1	1
1	0	4
1	1	error

## Compatible Transducers

In addition to the MTS Temposonic II and Balluff BTL-2 sensors shown in the standard users manual, the following sensors supplied by these two manufactures with also work with the 7551 module.

**X = Any Character**

Manufacturer	LDT Part Number	Gradient Units	Command Word Data (transmit bit not set)
Balluff	BTL-X-KX-XXXX-X-XXXX-XX	μs/in	2058
	BTL-X-MX-XXXX-X-XXXX-XX		2058
	BTL-X-RX-XXXX-X-XXXX-E4		2050
	BTL-X-LX-XXXX-X-XXXX-XX		1026
MTS	TTSXXXXXXXXDE004	μs/in	2050
	LPXXPXXXXXXXX00E04		
	LHXXXXXXXXXXXXDE04		
MTS	TTSXXXXXXXXR	μs/in	2058
	LPXXSXXXXXXXX		
	LHXXXXXXXXXXXXR0		
MTS	GX X XXXXX XXX X R0	μs/in	2058
MTS	GX X XXXXX XXX X DE4	μs/in	2050

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Date: 8/15/06