

Presetting the Position from the keypad

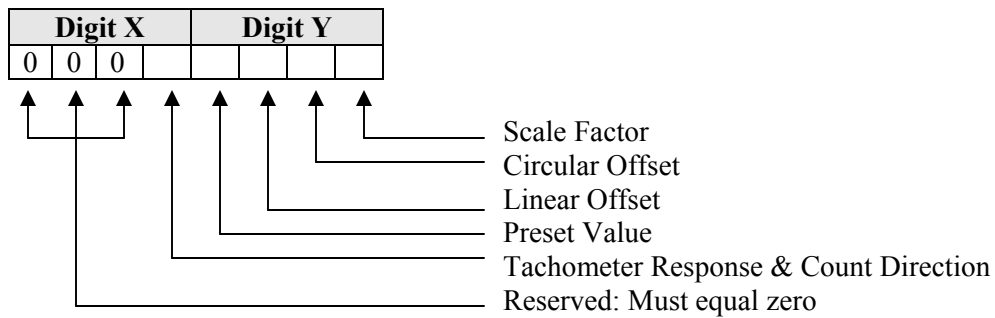
Pressing the module's CLEAR key when the position data is being displayed will cause the Position Data to be changed to the programmed *Preset* value. Applying the Preset Value in this way will also cause the module to calculate and change the *Circular Offset* parameter value.

Please note that the Apply Preset operation will only occur if the 1700 module is in program mode. That is, when keyboard programming has been enabled and the yellow Program LED is on.

Programming the Increasing Count Direction using a BTW

Page 6-3 of the users manual does not show that it is possible to use Block Transfer Writes to program the Increasing Count Direction along with the other Transducer Setup parameters. The Count Direction parameter is programmed in the same data word as the Tachometer Response.

88XYh X={0,1}, Y = {1...F} Use this instruction to program the transducer setup parameters of transducer 1.



Tach Response and Count Direction Data word

Bits 0 to 3 = Hexadecimal value for Tachometer Response

- 0 = 32ms Response
- 1 = 60ms Response
- 2 = 120ms Response
- 3 = 240ms Response / 1.0 RPM resolution
- 4 = 240ms Response / 0.1 RPM resolution

Bit 12 = Count Direction, reset "0" for Positive Direction, set "1" for Negative Direction

Sample Data (program Circular Offset, Tachometer Response, and Count Direction)

Command Word: 8812h
 Data Words: 0090h (Circular Offset = 90)
 1002h (Count Direction = negative, 120ms tachometer response)

Updated Cable Information

While all of the cable drawings shown in the manual are still valid, the pre-made C1T-X, C2T-X, C3T-X, and C4T-X cables are no longer available from AMCI. Instead, AMCI now supplies a CTL-X cable, where X is the length in feet. This cable still has the MS-16 resolver transducer connector, but tinned pig-tailed wires are supplied in place of the module's connector. These tinned wires can easily be pulled through conduit and attached to the MS-8 or MS-14 connector that is now supplied with the 1700 module.

Single Transfer Addressing Information

1. A 1731 or 1741 module in single transfer mode places its data into the PLC's input image table. These modules have two Single transfer mode options, 16 bit transfer (position data only) or 32 bit transfer (position and velocity data). The type of rack addressing used will determine where the 1700 module places its position and velocity data.

The following table shows where the position and velocity data would be located if the 1731 or 1741 module was located in the local rack directly to the right of the PLC. The addresses used in your program may be different.

	1 Slot Addressing	½ Slot Addressing
16 Bit Transfer	Position = I:001	Position = I:002
32 Bit Transfer	Position = I:000 Velocity = I:001	Position = I:002 Velocity = I:003

2. The PLC may not correctly read the data from a 1731 or 1741 module operating in single transfer mode when it is installed in a remote rack. Because Remote I/O data is transferred one byte at a time, you may occasionally get one byte of "old" data combined with one byte of "new" data in the same I/O scan. There are three options that you can use to compensate for this data transfer problem.
 - Set the Scale Factor parameter to a value less than or equal to 255. This will ensure that the position data is only contained only in one byte. Therefore, the PLC's method of transferring one byte of data at a time will not cause any problems.
 - Create some logic that ignores any input data that has changed by more than a predetermined amount.
 - Place the unit in Block Transfer Mode. Block transfers will always transfer the data correctly, regardless of the location of the module or the type of rack addressing used.

Autotech Wiring Information

1. AMCI does not guarantee the correct operation of a 1700 module connected to an Autotech transducer if it is used with the Autotech recommended cable. If you want to use the Autotech transducer with the 1700 module, than you must replace the Autotech cable with the AMCI recommended Bendin 9873 or 9730 cable.
2. The S3 S2 signals in the SAC-RL100-Gxxx column of the Autotech transducer wiring table shown on page 3-13 are reversed. The following table shows the corrected wiring information.

AMCI Wire Color	Resolver Designations	SAC-RL101-010 Wire Color	SAC-RL100-010 Terminals	SAC-RL100-Gxxx Terminals	Autotech MS Conn.
BLK/RED	R1	RED/WHT	R1(RL)	1	F
RED	R2	YEL/WHT	R2(RH)	2	E
WHT	S1	RED	S1	3	D
BLK/WHT	S3	BLK	S3	5	C
BLK/GRN	S2	YEL	S2	4	B
GRN	S4	BLU	S4	6	A

- The BLK/color wire shown in the AMCI Wire Color column indicates the black wire of a black and colored pair.
- The color/white wire shown in the SAC-RL101-010 column indicates a colored wire with a white stripe.

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