

Electronic Preset Delivery System

Smith Meter™ AccuLoad III®

High Speed Prover Output

Issue/Rev. 0.1 (4/03) Bulletin AB06053

When using Firmware Revision 10.00 and above, AccuLoad III-X supports high speed proving. This feature also requires a PIB III Series 2 board, Part Number 236062-1-01.

Specifications

Function: High Speed Prover Pulse

Type: Optically-isolated open collector solid state output. Repeat of transmitter input.

Switch Block Voltage (Switch Off): 30 Vdc maxi-

Load Current (Switch On): 10mA with 0.6 volts

drop

Frequency Range: 0 to 3000 Hz

Duty Cycle: 50/50 (on/off)

Programming

The AccuLoad III can be configured for proving using the high speed prover output in one of two ways.

To utilize the first method, the AccuLoad III can be configured to allow the operator to use the keypad to select the meter to be proved, thus bypassing Program Mode after initial configuration.

Configuring the AccuLoad for the Auto Prove Method

- 1. From System Program Code 323, select the "Auto Prove Meter" option.
- 2. Exit Program Mode.
- Configuring the AccuLoad for "Auto Prove" is only done once; thereafter, to initiate the proving process, just choose the Arm/Meter to be proved (just like loading a truck). The AccuLoad will automatically output the pulse related to this arm/meter.

A second method of selecting a meter to be proved is to enter Program Mode and select the input associated with the meter to be proved (Inputs 1 through 12).

Manual Input Selection

- 1. From System Program Code 323, select the meter input to be proved (1 through 12).
- 2. Exit Program Mode.
- To initiate the proving process, start a batch on the load arm/meter with which the programmed input is associated.

Once the meter input is selected, the incoming pulses for that input are channeled through the PIB to the EAAI or BSE board and out through Terminals 1 and 2 on Terminal Block 6 of the EAAI, or Terminals 1 and 2 on Terminal Block 14 of the BSE, as shown on the wiring diagram. Refer to the following tables for meter and input associations.

AccuLoad III-S Hardware Inputs for Proving		
Single Pulse Transmitter		
Meter #1	Input #1	
Meter #2	Input #2	
Meter #3	Input #3	
Dual Pulse Transmitter		
Meter #1A	Input #1	
Meter #1B	Input #2	
Meter #2A	Input #4	
Meter #2B	Input #5	
Meter #3A	Input #3	
Meter #3B	Input #6	

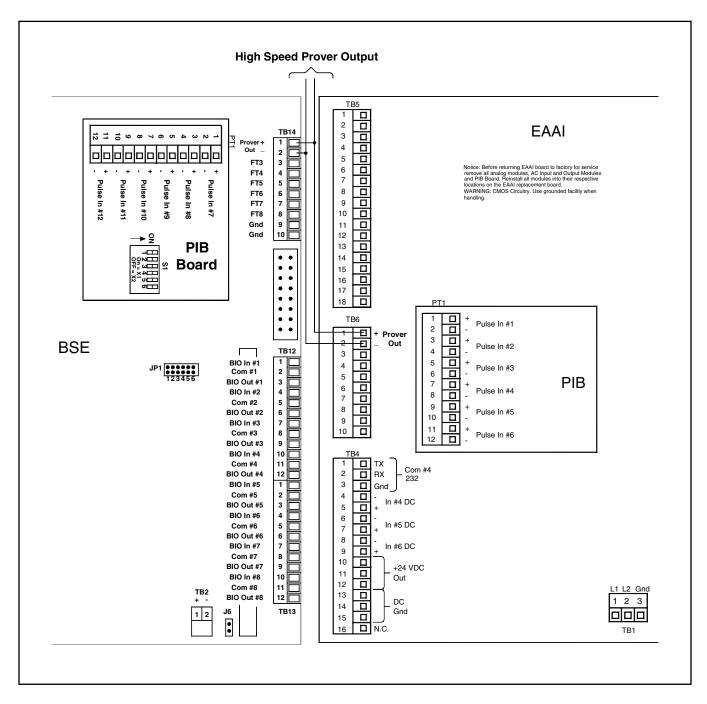
AccuLoad III-Q Hardware Inputs for Proving Single Pulse Transmitter		
One Meter Programmed for Use		
Meter #1	Input #1	
Two Meters Programmed for Use		
Meter #1	Input #1	
Meter #2	Input #2	
Three Meters Programmed for Use		
Meter #1	Input #1	
Meter #2	Input #2	
Meter #3	Input #7	
Four Meters Programmed for Use		
Meter #1	Input #1	
Meter #2	Input #2	
Meter #3	Input #7	
Meter #4	Input #8	
Five Meters Programmed for Use		
Meter #1	Input #1	
Meter #2	Input #2	
Meter #3	Input #3	
Meter #4	Input #7	
Meter #5	Input #8	
Six Meters Programmed for Use		
Meter #1	Input #1	
Meter #2	Input #2	
Meter #3	Input #3	
Meter #4	Input #7	
Meter #5	Input #8	
Meter #6	Input #9	

AccuLoad III-Q Hardware Inputs for Proving Dual Pulse Transmitter		
One Meter Programmed for Use		
Meter #1A	Input #1	
Meter #1B	Input 32	
Two Meters Programmed for Use		
Meter #1A	Input #1	
Meter #1B	Input #2	
Meter #2A	Input #4	
Meter #2B	Input #5	
Three Meters Programmed for Use		
Meter #1A	Input #1	
Meter #1B	Input #2	
Meter #2A	Input #4	
Meter #2B	Input #5	
Meter #3A	Input #7	
Meter #3B	Input #8	
Four Meters Programmed for Use		
Meter #1A	Input #1	
Meter #1B	Input #2	
Meter #2A	Input #4	
Meter #2B	Input #5	
Meter #3A	Input #7	
Meter #3B	Input #8	
Meter #4A	Input #10	
Meter #4B	Input #11	

AccuLoad III-Q Hardware Inputs for Proving Dual Pulse Transmitter		
Five Meters Programmed for Use		
Meter #1A	Input #1	
Meter #1B	Input #2	
Meter #2A	Input #4	
Meter #2B	Input #5	
Meter #3A	Input #3	
Meter #3B	Input #6	
Meter #4A	Input #7	
Meter #4B	Input #8	
Meter #5A	Input #10	
Meter #5B	Meter #11	

AccuLoad III-Q Hardware Inputs for Proving Dual Pulse Transmitter		
Six Meters Programmed for Use		
Meter #1A	Input #1	
Meter #1B	Input #2	
Meter #2A	Input #4	
Meter #2B	Input #5	
Meter #3A	Input #3	
Meter #3B	Input #6	
Meter #4A	Input #7	
Meter #4B	Input #8	
Meter #5A	Input #10	
Meter #5B	Input #11	
Meter #6A	Input #9	
Meter #6B	Input #12	

The AccuLoad III-S hardware uses the EAAI connection only for high speed prover output wiring. Wire the Accu-Load III-Q hardware as shown in the diagram below.



Note: When connecting to the LCPC-22 proving totalizer, a pull up resistor is needed because the high speed prover is an open collector output.

Revisions included in AB06053, Issue/Rev. 0.1 (4/03): Added note on Page 4

The specifications contained herein are subject to change without notice and any user of said specifications should verify from the manufacturer that the specifications are currently in effect. Otherwise, the manufacturer assumes no responsibility for the use of specifications which may have been changed and are no longer in effect.

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