TECHNICAL INFORMATION SHEET – NUMBER 181

2400 MODE 4: PDSIO - SETPOINT TRANSMISSION SETUP



9/9/98

ISSUED BY THE APPLICATIONS ENGINEERING DEPARTMENT

APPLICATION

PDSIO Mode 4 can transmit analog data from one Series 2400 instrument to any Series 2000 instrument equipped with PDSIO remote input capability This is accomplished with no calibration difference between the sending and receiving instruments, with absolute digital accuracy and resolution, and with all units receiving sent data at the same time. The receiving controllers can be configured to add a local trim or offset. In a setpoint-programmed system, any lagging subordinate controller can signal its difficulty to the master controller which can institute a holdback and permit lagging controllers to catch up.

HARDWARE

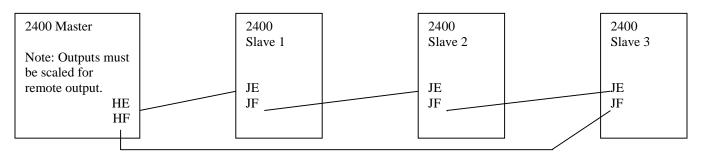
The master instrument must be equipped with a PDSIO retransmission board and all slave instruments must be equipped with a PDSIO remote setpoint board.

CONFIGURATION AND SCALING

2400 master units are configured at HA or JA. With PDSIO retransmission board installed, *id* will be *PdS* (PDSIO retransmission). At *Func* (function) mnenomic, select *SP.oP* (setpoint retransmission). *VAL.L* and *VAL.H* follow *Func* mnenomic and should be set to the low and high values which are to be retransmitted.

If the slave unit is a 2200 with PDSIO remote setpoint board installed, *id* will be *PDS.i* (PDSIO setpoint input). Select *SP.iP* (PDSIO setpoint input) at *Func* (function). *VAL.H* and *VAL.L* should be set the same as in the master unit. The units are to be wired in <u>series</u>.

Example:



NOTE: VAL.L and VAL.H on slaves must equal VAL.L and VAL.H on master.

*There is a maximum of three slave instruments if holdback is employed; there can be as many as six slave instruments if no holdback is required, if more than six slave units are to be used, consult the factory for details.

OPERATION

Slave instruments must be set up in Operation list, SP, mnenomic, rm.SP.