Monitor/Control Signals

**Algorithms**

1. Store Output Value to Memory
2. Pick Lowest Analog Value
3. Enter Number of Bins < 200
4. Update Output

**Legend**

- Begin Algorithm
- End Algorithm

**Vocabulary List**

- PERIOD #1/#2
- ANALOG OUTPUT
- MEMORY
- ANALOG FILTER LIMITS

**Field-Equipment**

**Monitor/Control Signals**

- Datalog Delay
- Analog Delay
- Analog Output 4/20 mADC

**Monitor/Control Signals**

- Digital Input
- RS232C

**Legend**

( ) = Algorithm Number

- Begin Algorithm
- End Algorithm

**Vocabulary List**

- PERIOD #1/#2
- ANALOG OUTPUT
- MEMORY
- ANALOG FILTER LIMITS

**Field-Equipment**

- STPT CAL DELAY
- D1 Bypass Bins
- D2 Not Used
- Bypass Bins for Output Calibration
**Data Handler Operations**

The Data Handler (SPM 9000-D21) is designed to pick the lowest analog value during a specific time period. The analog input will be filtered (averaged) by a customer adjustable setpoint and the lowest signal will be placed to the analog output at the end of last period or bin. The analog output will be recorded to memory at the datalog interval. The setpoints and calibration are operator adjustable through the RS232C communication port.

**Active Commands**

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**Power:** 9-26 VDC @ 50 maDC

**Digital Inputs:** 28 VDC/VAC @ 500 maDC, non-inductive
To access the Super Puk configuration, type 'SCADA' from the drive/directory installed with the software provided in this shipment. You can use any terminal that supports serial ASCII communications and use the same SCADA commands. Use the menu to choose the type of controller and the baud rate and path of the communications.

Store (sec): Enter the data logging delay in seconds. This value is used to record the analog output to memory and enter the value into the front display.

BIN COUNT (200). Enter the number of intervals or bins to store analog input (less than 200). The puck will output the low value of the bins or sliding window.

Date: MM/DD/YY. This message will display the current date as seen from the data handler. If different than the actual date then enter it as it is formatted above (i.e., MM/DD/YY, example: 03/13/94). Then hit <CR> to store the data. If the current date is correct then you can just hit <CR> and the DATE will not be updated. If you make an error on data entry you may use the backspace key.

Time: HH:MM:SS. This message will display the current time as seen from the data handler. If different than actual, then enter it as it is formatted above (i.e., HH:MM:SS, example: 01:03:01). Please note this is a 24 hour clock so 11:59:59 minus gmt is 23:59:59. Hit <CR> to continue.

Calibrating: The default test is 'N'. If carriage return is pressed, the configuration will continue with the next line allowing change of the engineering units without physically putting in the 0% and 100% analog signal levels. If a 'Y' is entered, the actual relationship between the physical input and engineering units will be changed. This requires applying the raw input signal to the analog input if you do not have a means to enter the raw signal at this time do not reply 'Y'.

Zero/Cal(%) This message will be displayed to prompt you to set the zero scale on engineering units.

Apply zero analog input signal at the input and enter the zero units. Press enter when done.

Full/Cal(%) Type the desired value for data logging when the input is at full scale. Apply full scale analog input at the input and enter full scale units. Press enter when done, this will complete the calibration process.

ZeroOut(555): Enter a number between 0 and 4096. This is used by the analog to digital converter to generate the analog output (i.e., 4/20 ma). Example an entry of 600 will produce an analog output of approximately 4.0 ma.

FullOut(3285): Enter a number between 0 and 4096. This is used by the analog to digital converter to generate the analog output (i.e., 4/20 ma). Example an entry of 3200 will produce an analog output of approximately 20.0 ma.

Cont? (N): This message verifies files that you want to continue. TO CONTINUE PAST THIS POINT WILL ERASE ALL STORED RECORDS IN MEMORY, so you can quit now by hitting <CR> or type 'Y' <CR> to proceed. The SCADA terminal program has a menu item for logging data to a computer file and converting to specific data forms.

Date Fmt (): This entry defines the amount of data information stored with each data point.

Enter a number, 0-3. From the table below to set the date format. Memory allocation is also listed, the input reading uses 2 bytes per record.

0 No date information recorded.
1 Day of month only recorded (add 2 bytes memory used per record).
2 Month/Day recorded (add 4 bytes memory used per record).
3 Month/Day/Year recorded (add 6 bytes memory per record).

Time Fmt (): This entry is used to configure what time information will be stored.

Enter a number 0-3 from the listing below.

0 No time information recorded.
1 Minutes only recorded (add 2 bytes memory per record).
2 Hour:Minute recorded (add 4 bytes memory per record).
3 Hour:Minute:Second recorded (add 6 bytes memory per record).

Prec. (62): This entry is used to set display precision (see SETUP). To disable this function enter '0'. This will reset the display to the default values, i.e., 62. The most significant byte is the maximum field width and the least significant byte is the number of digits displayed to the right of the decimal.