MONARCH INSTRUMENT
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DC-1250
SPEED AND SPEED SCALING SET-UP

This application note explains how to configure the speed (RPM) function in the DC-1250 paperless recorder. It also explains how to scale the readings if you have multiple pulses per revolution at the input of the recorder. In the following examples the "MENU" button is depicted as $\boxed{M}$ **.**

Select $\boxed{M}$ – ▲▲ to ADV. SETUP. $\boxed{M}$. Select CHAN A SETUP or ▼ CHAN B SETUP to choose which channel you wish to record RPM.

Select $\boxed{M}$ – INPUT TYPE… - $\boxed{M}$ ▼▼▼▼▼ to SPEED – $\boxed{M}$. ▼ to the maximum pulses per minute that the recorder will see. The choices are 100, 1K, 10K, 100K, 600K. When you have ▼ to the correct range, press $\boxed{M}$. ◄ ◄ . At this point you can set your tag and units or continue to ◄ ◄ ◄ out of the menu. You are now ready to record RPM if the rest of the recorder is set up as required.

SPEED SCALING

This procedure applies if you are transmitting multiple pulses per revolution to the recorder and you want it to read in RPM. For example, you may be using a magnetic sensor with a 60 tooth gear which will generate 60 TTL pulses per revolution.

1. Find the maximum number of pulses per minute that will be detected at the input of the recorder. ie. 2000 RPM max x 60 tooth gear (pulses per revolution) = 120,000.
2. As above, set the input range to 600K since that is the next range that is higher than 120,000.
3. Divide the input range number 600K by 60 (number of pulses per Revolution) = 10,000. Therefore 10,000 is your scaling number.
4. Go back into CHAN A SETUP or CHAN B SETUP as above. ▼ to LO SCALE.., $\boxed{M}$. Use ▲ ▼ to set the low scale to 0. $\boxed{M}$.▼ to HI SCALE.. $\boxed{M}$. ▼ and /or ▲ to set 10,000. The ► and ◄ will move the decimal point in the window. $\boxed{M}$. ◄ ◄ ◄ will take you out of the menu and back to viewing mode. Step 4 programs the low scale for 0 and the high scale for 10,000.