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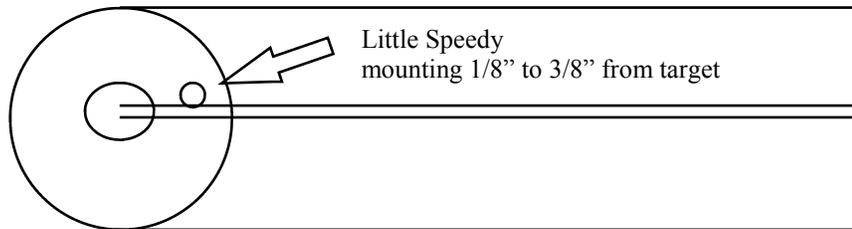
MODELS LS-3030
BELT SLIP/SEQUENCE AND CONTROL

INSTALLATION AND SETUP
INSTRUCTIONS

P/N 180-0361

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LS - 3030 “ Little Speedy “



INSTALLATION

Step 1

Select a suitable mounting location for the module. The primary location is the tail pulley and the secondary location is the take-up pulley.

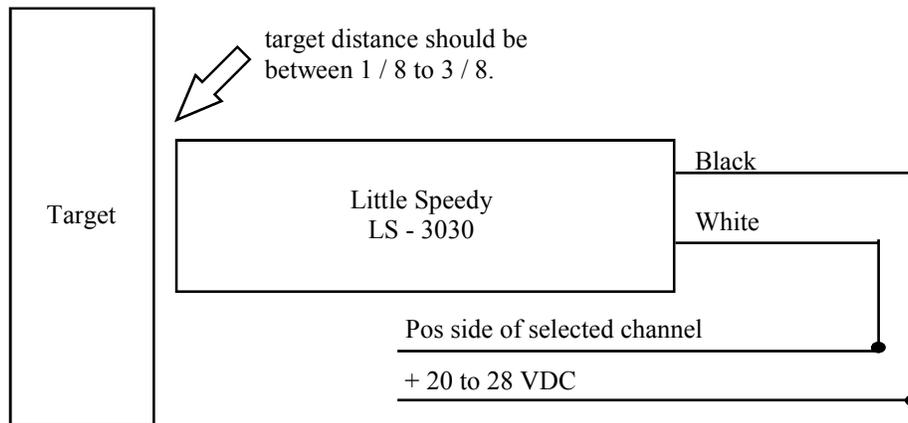
Step 2

Weld or otherwise attach a piece of 1/2" keystick or a large nut to the roller edge as shown in figure 1.

Step 3

Using the clamp and bracket provided, position the module so that the pick-up-face is as close to the keystick as possible without touching to prevent damage and wear. This distance should not exceed 3/8" or nuisance tripping may result. Optimum distance is 1/4". An indication light is built into the rear of the module in order to check proper positioning and operation.

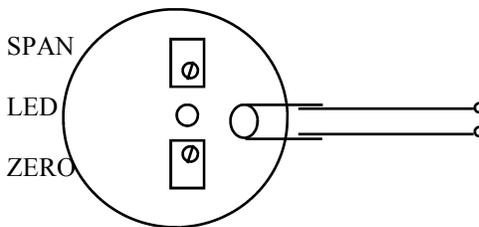
Note: Little Speedy should be mounted between 1/8 and 3/8 from a moving target. The movement of the target across the magnetic field of the sensor will reflect the speed of the target you are monitoring. For example, if mounted on the tail pulley of a conveyor belt, as the spokes or even a welded bolt rotate past the speedy's sensor it will monitor the rate at which it passes. This makes it possible to monitor for low belt speed (meaning excessive amount of material) or high belt speed (meaning little to no material on the belt).



Step 4

Make electrical connections as follows:

*** Input Power (28 VDC):** The LS-3030 is an ANALOG OUTPUT device with a 28 VDC power input on the BLACK wire and producing a 4-20 mA current on the white wire. This output can be used in conjunction with a computer monitoring system to indicate belt speed in FPM. The output is a standard 0-3 VDC analog output: OFFSET = 0, GAIN is dependent on roller size and the number of targets. Contact factory for further assistance in using this feature.



Step 5

Now that the LS -3030 has been mounted, it can be calibrated. Connect the Multimeter in line with the neutral and set the meter to read mA.

With the belt off the multimeter should read 4 mA on the output. If not, locate the zero potentiometer. Using screwdriver, rotate the pot. counterclockwise till the multimeter reads 4 mA.

Now that the Zero Calibration has been set it is time to turn the belt on and adjust the span. With the belt operating under normal conditions, the multimeter should read 12 mA. If not, locate the span pot, and rotate the adjustment until the multimeter read 12 mA.

The LED, located between the two pots. will illuminate only when the target moves across the sensor head of the Little Speedy.

NOTES:

- * When mounting a speedy, ensure that it is not positioned in an area where the belt will rub while running, or in start up, or shut down.
- * The Little Speedy should be located between 1/8" and 3/8" from the target on the tail pulley of the belt.
- * For adjustment use only 1/2" wrench, screwdriver, and a Multimeter. Never force the Little Speedy into a location.
- * Little Speedy's Output should be set to 4 mA in the Off Condition.
- * If the Little Speedy's Output in the off condition is not 4 mA, it can be adjusted to 4 mA by rotating the **Zero Adjustment**
- * Little Speedy's Output should be set to 12 mA at Normal Operation.
- * Little Speedy's Output is adjusted by rotating the **Span Adjustment**.

ADDITIONAL NOTES:

For Mac Software:

1. In the MAC software press return till the Main Menu appears, then select "Configuration" and press Enter.
2. Select "Remotes" and press Enter. Then select the Remote addressed to the "Little Speedy" to be calibrated. Select "Analog" and press Enter.
3. Ensure the desired channel is enabled so that it can read the "Little Speedy". Then type in the device to be monitored for "Analog Label".
4. Type in FPT "Feet per Minute" for "Unit"
5. Select "Cal" and press Enter. This is the Calibration Section for this analog channel.
6. With the Belt or Device "off", type in "0" for "Calibrate Gain to Obtain". Select "Calibrate Zero" and press Enter to calibrate the "Little Speedy" for the 'off' condition.
7. Now, measure the movement the Belt or Device move per minute in it's normal **running condition**. Type that value in "Calibrate Gain to Obtain" and Select 'Calibrate Span' and press "Enter" with the Belt or Device operating under the same condition as the measurement was taken.
8. Now that the "Little Speedy" has been calibrated, the limits can be set. Select "Return" and press Enter. Select "Lim" and press Enter.
9. In the Dual Setpoints the "Low Limit" represents a warning condition. The "High Limit" is the alarm condition.
10. The Dual Setpoint can be changed by Selecting it and pressing Enter. When "window" appears, it means, that if the "Little Speedy" value is within the "Low" and "High" Limit it is working properly. If the "Little Speedy" reads below the "Low Limit" or above the "High Limit" an alarm condition will exist.

For Quarry Software:

1. Press "R" till the Main Menu Appears, Then select Configuration.
2. Select "Slave / Remote".
3. Move the asterisk to the Address associated with the "Little Speedy" and press "E".
4. If the Address is not configured properly press "1" to toggle the Address between Remote or Slave.
5. Select Analog, move the asterisk to the correct channel, and press "E".
6. Change the "Gain Value" till the Channel Value is equal to the measured feet per minute value the "Little Speedy" is monitoring. Values can be changed in tenths.
7. Move the asterisk to the "Upper Trip" and press "E" to erase the old value, type in the new value and press "R" to set that value. Repeat this process for the "Lower Trip".
8. Press "R" till the Main Menu Appears then Save Configuration.