



# WEB-TECH

## Logic Magnetic Pick Up Installation Notes.

### Features Include.

Provides for sensing sensitivities several orders of magnitude greater than a standard magnetic pick up.

Built-in pulse shaping amplifier provides for ultra low speed operation.

Wide operating temperature range.

Epoxy encapsulated.

Mechanically rugged.

Impervious to dirt, oil and water.

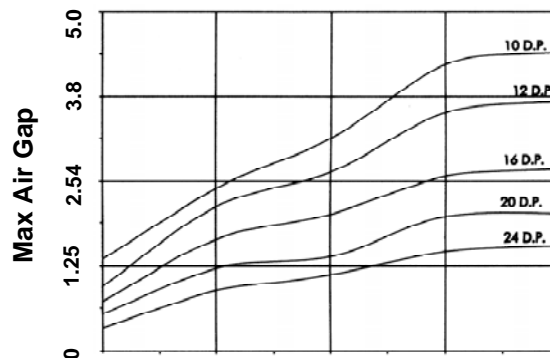
No maintenance required.



Conveyor belt scale electronic controllers (integrators) require two inputs from the field. The load cell signal, which is representative of the weight of product on the belt and the signal from the magnetic pick up device. The two signals are integrated by the controller to produce the instantaneous mass rate and accumulated total. If either is missing then the result will be zero mass rate and no total. If either is inaccurate the resulting mass rate and accumulated total will be inaccurate.

It is important that the magnetic pick up be installed correctly to avoid erroneous signal problems. The air gap must be set as shown in the chart below.

**Max Air Gap vs Surface Speed.**



Gaps greater than those shown, can cause loss of signal or poor peak to peak voltages resulting in inaccurate product weighing. Poor sprocket alignment will result in a varying air gap, this could in turn will result in a varying output frequency and hence a varying calculated belt speed. Low sprocket speed will also result in either the device not working or vary in calculated belt speed.

The Logic Magnet Pick Up (LMPU) should be installed as shown in the belt scale manual. The LMPU is only suitable for use with Web-Tech, Masterweigh integrator owing to the higher voltage required for correct operation of this device as compared with a regular Magnetic Pick Up (MPU) or Web-Tech supplied electronic encoder. Masterweigh has to be configured to operate with an LMPU. Configuration comprises increasing the voltage output from tachometer/encoder circuit. Generally the factory will have set up this voltage prior to shipping.

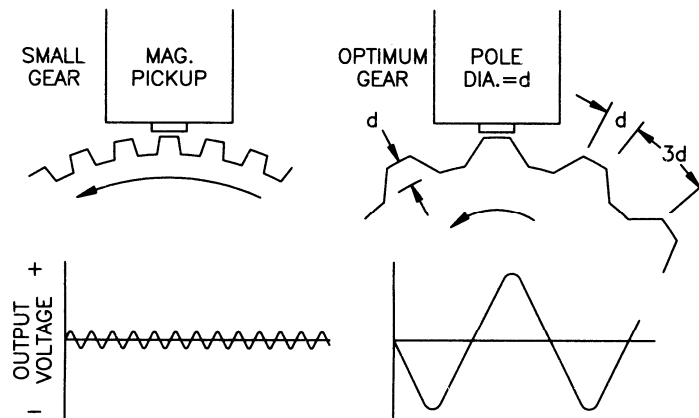
However if the LMPU is to be retrofitted then the following configuration procedure must be performed.

The voltage is increased by adjusting RV2 which is located on the lower PCB from 5VDC to 10VDC.



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. To retro fit the voltage to the LMPU must be increased from +5VDC to +9VDC. This accomplished by first placing the probes of a digital volt meter (DVM) across pins TG & TE of J3, the DVM should be set DC volt scale. The voltage is increased by adjusting RV2 which is located on the lower PCB.

When the work has been completed the system should be tested. The best method of testing the installation is to look at the resulting output wave form with an oscilloscope. If an oscilloscope is not available then looking at the tachometer frequency displayed in the controller, can provide an indication of correct magnetic pick up installation. A steady frequency display (note controllers show the signal to a precision of 3 decimal places, a variation of +/- 3Hz is acceptable.) over one whole belt revolution is normally indicative of a satisfactory magnetic pick up installation.