GlueLogix Nip Driven Rewind
Quick Start
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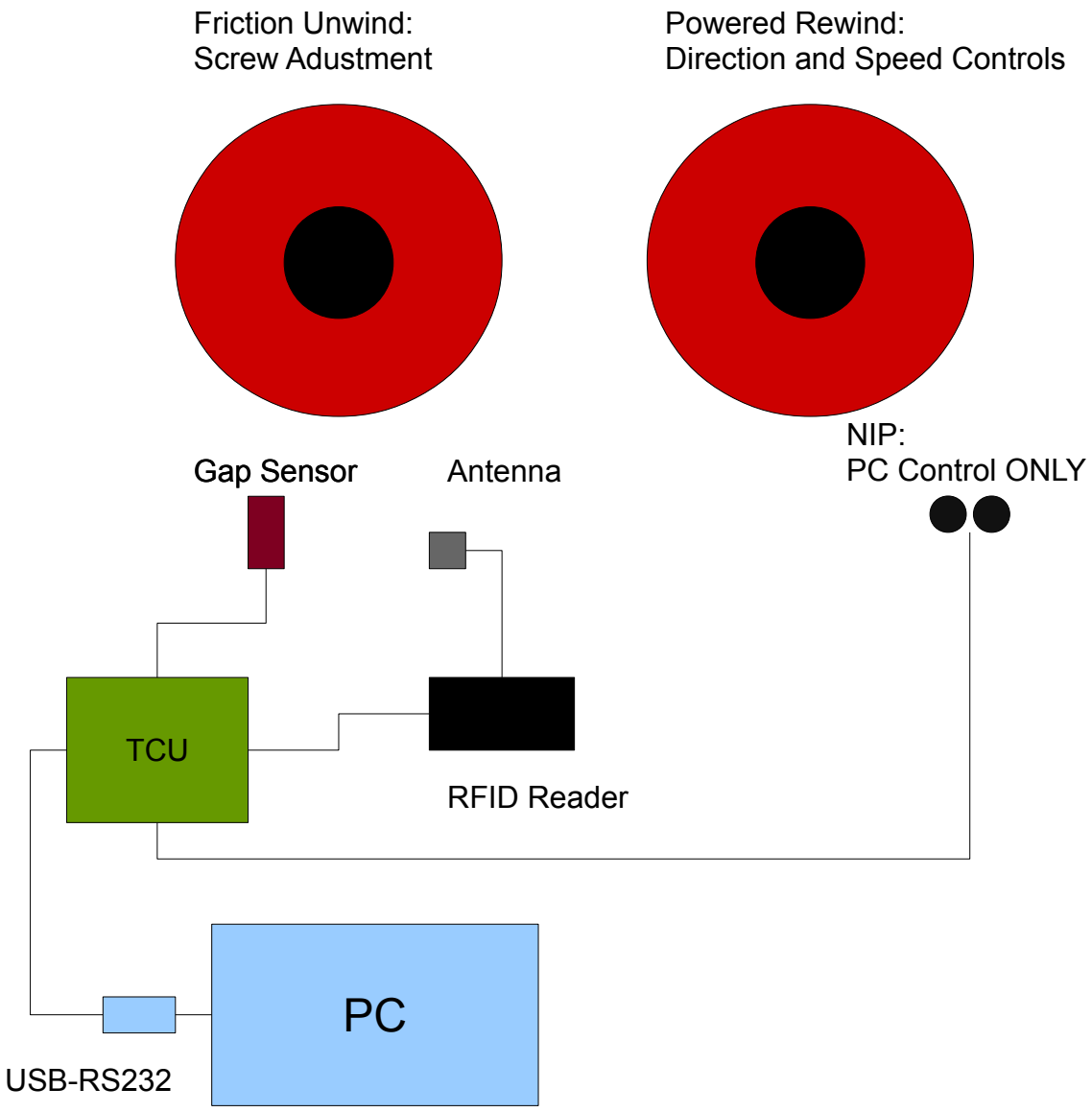
1. Introduction

The GlueLogix nip driven rewinder is general purpose hardware, controlled by PC software. It will not run unless the PC is connected and software is running.

1.1. System Block Diagram



2. Controls

2.1. Front Panel Controls

- Rewind Direction – controls the direction of the rewind hub, which is on the right as you look at the machine.
- Rewind Speed – controls the tension on the web between the nip and the rewind hub.
- Emergency Stop – cuts power to all motors and controls, including the builtin control board, known as the LineLogix Timing Control Unit (TCU). If the E-Stop is used, the TCU will lose its settings.

Note that the nip is not controlled by the front panel so paper will not move without PC involvement.

2.2. Rear Panel Connections

The rewind machine requires one or more power connections:

- The one built into the rear panel is for the machine itself. When this connection is made, the back panel switch is ON and the front panel E-Stop is ON, the PC software should be able to talk to the TCU inside the machine. If not, neither the machine nor the RFID reader will be acessible. As can be seen in the wiring diagram, the TCU is powered from the machine's internal 24Volt supply, which is cut off when the e-stop is operated. If the e-stop is operated, the TCU Settings must be loaded again, either by using the LineLogixPC TCU menu, or by End Roll and Start Roll operations in LineLogixPC.
- An additional power supply may be mounted to the rear panel for use by RFID readers that cannot be powered by the Rewind Machine's internal 24VDC supply.

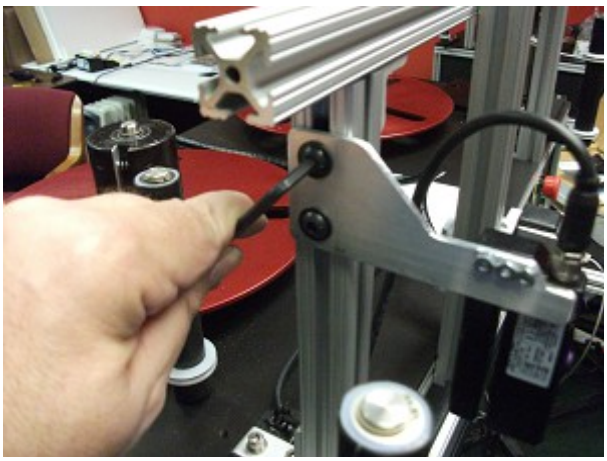
- An additional power supply may be mounted to the rear panel for use by the marking system.

3. Sensor

The Sensor can be adjusted for height and distance from the machine's front panel.. The sensor can also be trained for different stock:

http://gluelogix.com/Downloads/45LptTraining.mp4

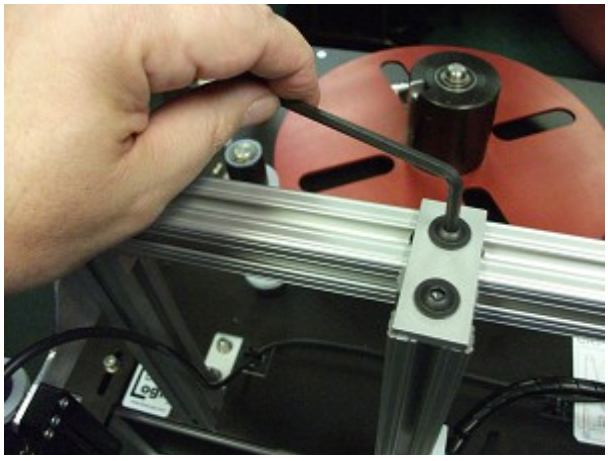
http://gluelogix.com/Downloads/45lpt-in001_-en-p.pdf

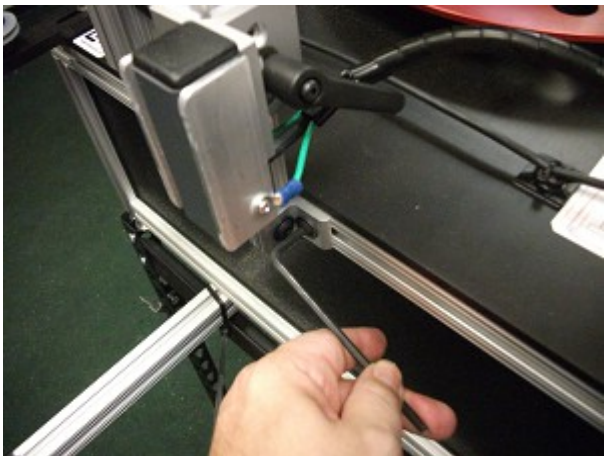


4. Antenna

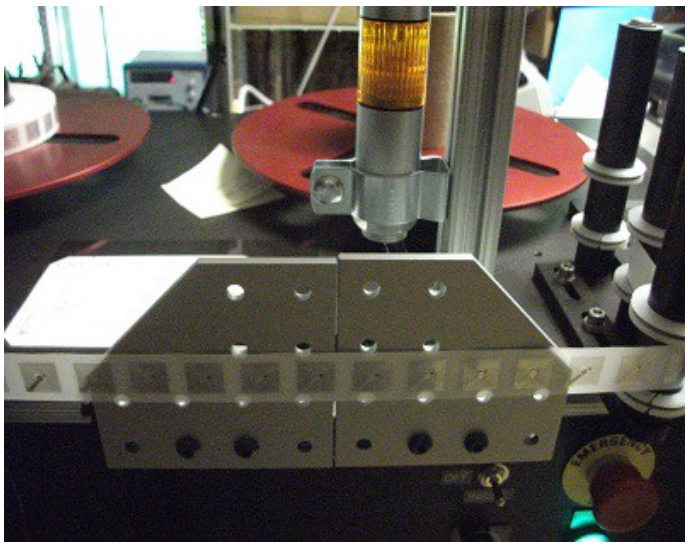
Antenna height is adjustable along a vertical piece of 80-20. Height may be adjusted by 80-20 slide or simple 80-20 screw adjustments. Antenna distance from the sensor requires screw adjustments as shown.

The distance between antenna and sensor should be such that the sensor would fire just as each inlay is entering the antenna zone. The Read Once button in PC software is useful for setting position.





5. Marker or Rework Surface and Settings



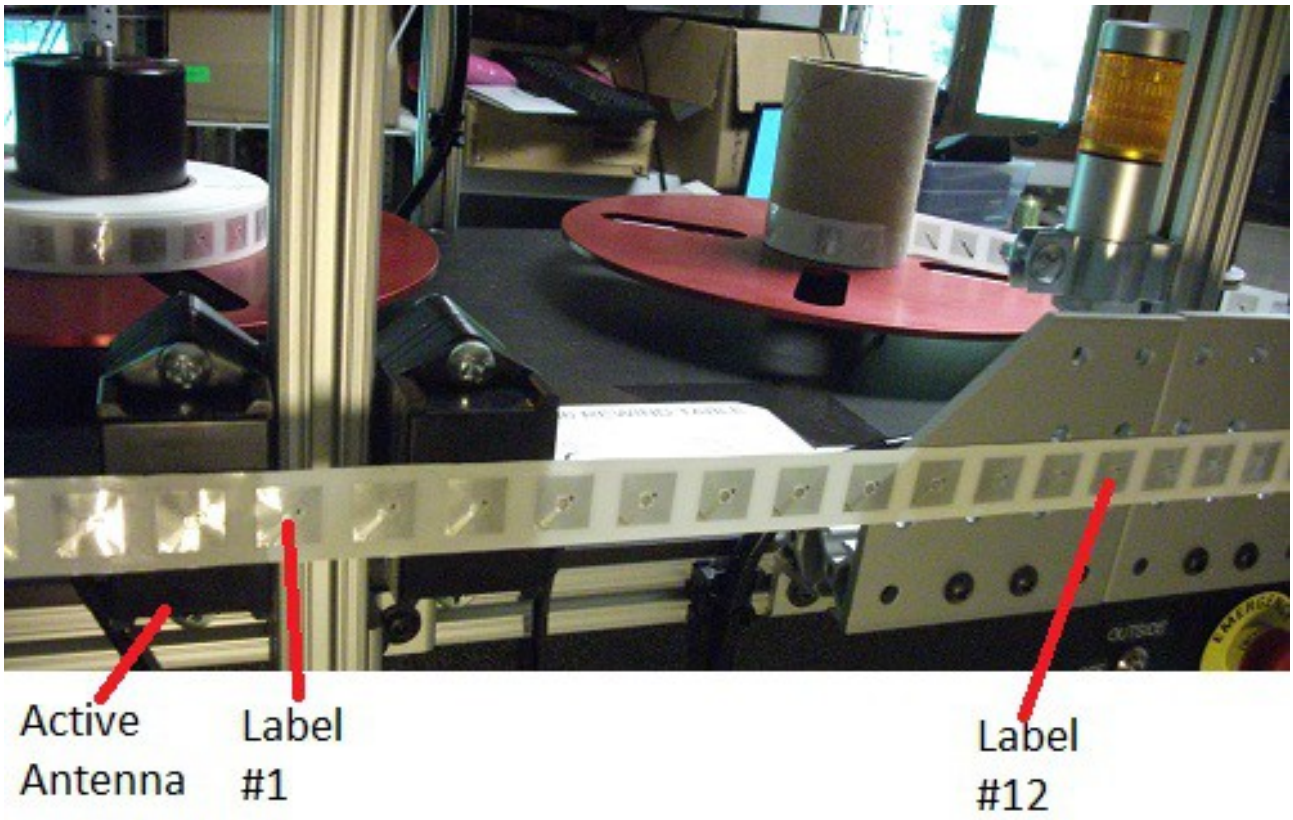
Machines with no marking device may be equipped with a rework surface. As shown here.

Proper setting of the **Number of Labels Between Antenna and Marker** in LineLogixPC will cause any bad tags to halt on the surface with the yellow light on, or to mark the correct tag on machines so equipped.

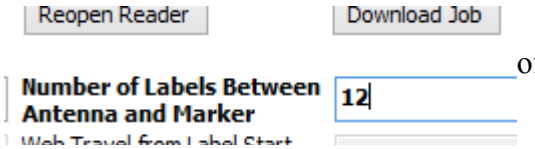
It is advised that a second reader be maintained near the machine for a double check of any tag removed from the web, especially during calibration of the **Number of Labels Between Antenna and Marker** setting.

The rework surface is split to support razor splicing.

To make the **Number of Labels Between Antenna and Marker** setting, count the number of labels and enter it into LineLogixPC. In the view below, the proper setting is 12.



The setting is entered in the Reader tab of LineLogixPC. This setting can be from 0 (stop the bad tag right on top the antenna) to 64.



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In order to use the yellow light with the rework surface, the TCU flag Mark Time must not be set.

6. Unwind Tension

A pair of hex nut screw adjustments control the friction of a strap against the unwind hub. Unwind tension should be set as tight as possible without breaking the web or bursting perforations.

7. LineLogixPC

LineLogixPC is complicated software that supports many use cases from individual hand operations to high speed testing on press. The LineLogixPC Reference manual included with your system is the right place to look for full information.

It is best to use the jobs that were provided with your rewind machine, making and testing small changes as needed. The parameters most often changed are:

Job Tab

- Label Length, used only for the Feet Per Minute display

Reader Tabs

- Power (UHF Only)
- **Number of Labels Between Antenna and Marker** setting, see above

Parameters Button

- Roll Size
- Sector File
- CSV File
- Other Encoding parameters

8. Wiring Diagram

This diagram, from the company that makes the Rewind Machine transport, shows the connections in a standard stepper driven machine. It does not show RFID, marking or variable printing connections since those are custom for each project.