

Updating Reelex G3 Machine Software & Firmware

Overview

This document outlines the procedure for updating any Reelex G3 machine with the most up to date software & firmware. The entire process takes approximately 30 minutes to complete. There are 2 pieces of equipment involved with updating the Winding Module Board and HMI. To update the Winding Module, Reelex will send a new pre-programmed Winding Module that has the most updated software, which will be a swap with the current Winding Module in the machine and re-connecting all plugs and wires (return old Winding Module to Reelex). To Update the HMI, two (2) USB flash drives will be sent to plug into the HMI labeled USB1 and USB2, indicating the sequence. USB1 will plug in first, then USB2. Ensure to record current parameters before updating in the event they revert to default and will need to be re-entered.

Before Updating: Parameters to Record

Some parameters may need to be re-entered depending on what software machine was updated from. Record the following settings before updating:

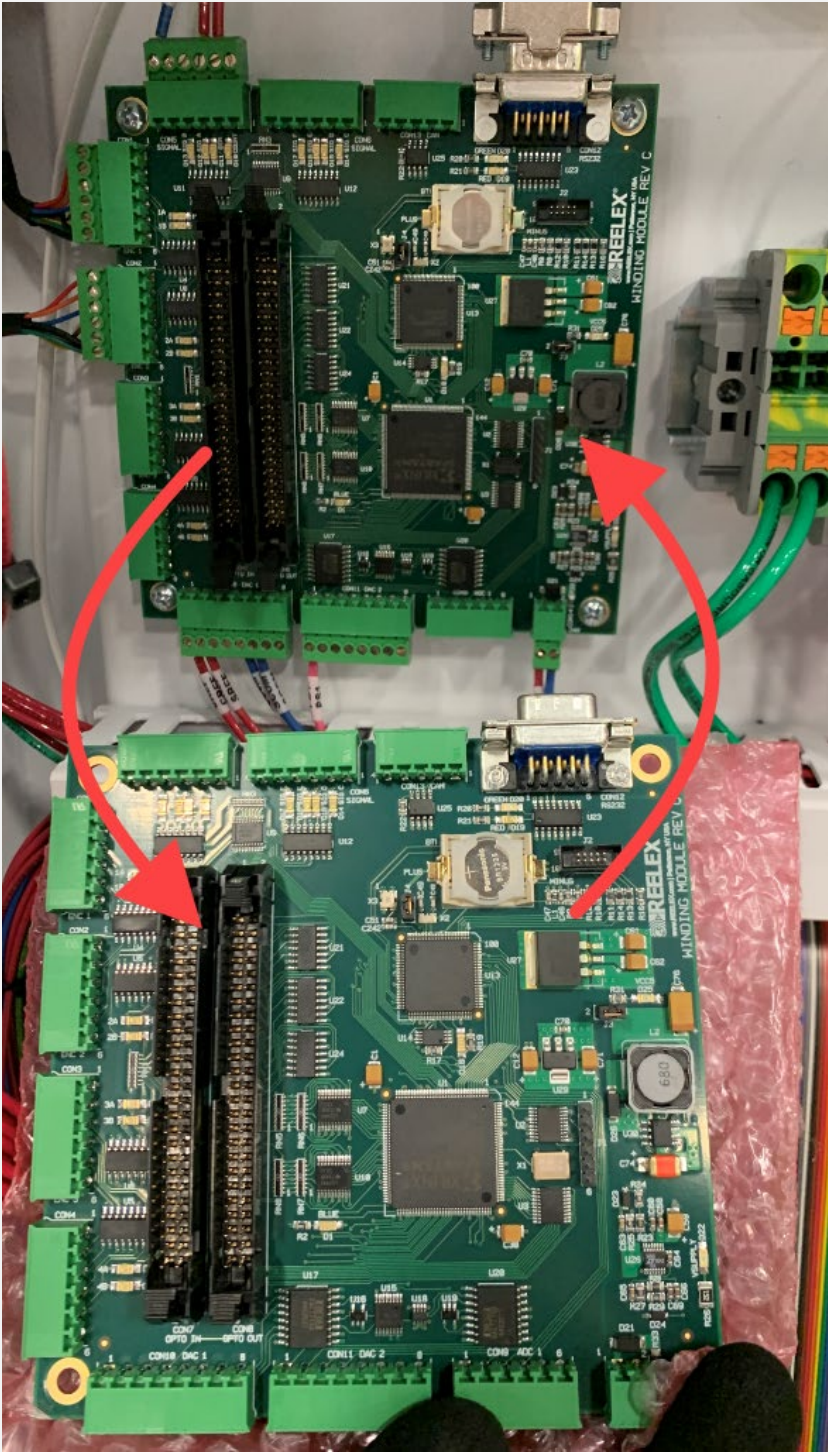
- Current HMI Code (License).
- Universal settings. These setting will apply to all products, and will only need to be entered once:
 - Footage scalar.
 - Low and jog speed.
 - Sequential print window.
 - Lump and spark fault settings.
 - UDA stop height.
- Product Specific Settings. These settings will need to be re-entered for each product:
 - Printer distance (if sequential printing).
- Current Winding Module software (D1500 **without** guarding only). Current software is shown under Help / System Settings & Info / "Firmware Version". If upgrading D1500 G3 from software prior to 4.05 **without** guarding, jumpers will need to be installed to indicate no guarding is present on the machine. NODE 3B will need 24V (X1.0 or X3.0 on node) to be jumped to inputs:
 - INPUT 6 "BOTH GUARD DOORS CLOSED" (X4.0, Wire 241, LED6, Ix6).
 - INPUT 7 "D1500 COMMAND COMPLETE" (X4.1, Wire 242, LED7, Ix7).

After Updating:

- Configure machine. Under Help / System Settings and Info / Configure Machine. Select machine type (Single or Dual Spindle) and any applicable settings (G3 Retrofit, Safety Guarding, Spooler, Default Units, Language).
- Security settings. "Maint" and "Super" users will default to password "reelex". Screen lockouts will default to OFF and need to be re-enabled if desired.

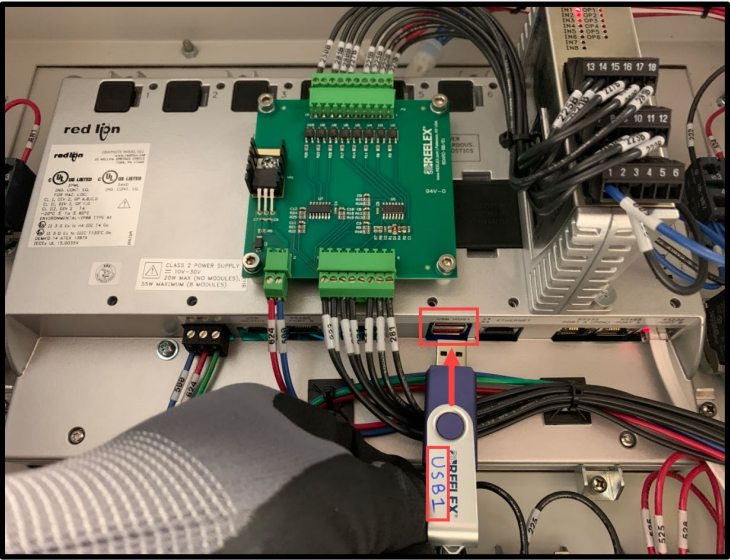
Updating Winding Module Board

WARNING: Disconnect power to machine before swapping Winding Modules!

Step	Photo
1. With Power OFF, swap the current Winding Module Board in the machine with the updated Winding Module Board received from Reelex, connecting all plugs/connectors to the same location. Return old Winding Module back to Reelex.	 The photograph shows two identical green printed circuit boards (PCBs) for the Reelex Winding Module, REV C. The boards are populated with various electronic components, including integrated circuits, capacitors, and resistors. On the left side of each board, there are several green multi-pin connectors labeled CON1 through CON8. On the right side, there is a grey terminal block and a green multi-pin connector. Two large red curved arrows are drawn over the boards to indicate the mapping of connectors: one arrow points from the top board's CON1 to the bottom board's CON1, and another arrow points from the top board's CON8 to the bottom board's CON8. The boards are resting on a surface covered with pink bubble wrap.

Updating HMI

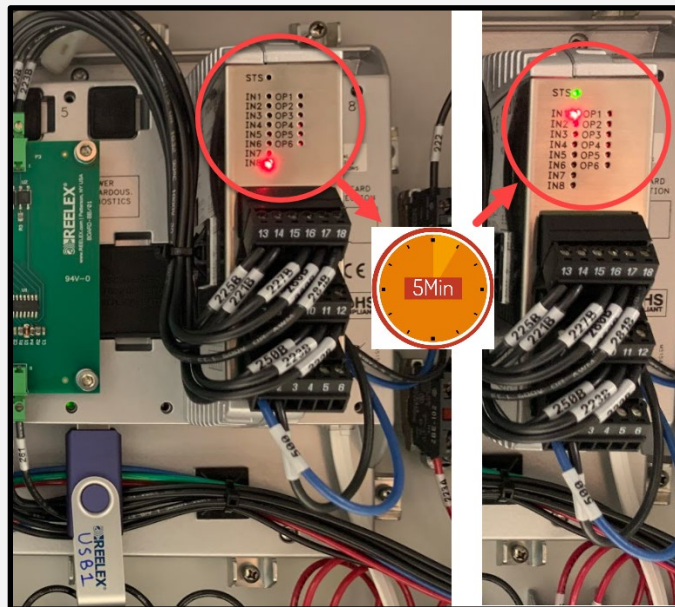
WARNING: DO NOT DISCONNECT POWER OR ESTOP THE MACHINE WHILE THE HMI IS UPDATING. It is also recommended to not touch or operate the HMI during updating to avoid interfering with the update.

Step	Photo
2. Turn Power On and reset the Reelex machine. Wait for HMI to load to the home menu screen. Insert USB1 into the back of the HMI (or external USB port if equipped).	
3. The HMI will make a beep sound and the blue light on the front of the HMI will begin blinking, indicating the HMI is copying over the software from the USB1.	

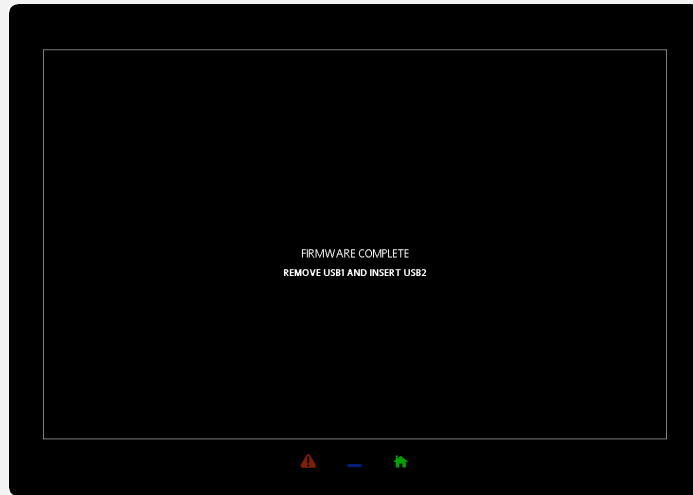
4. After approximately 10 minutes, a screen will display “FIRMWARE UPDATING, PLEASE WAIT”.



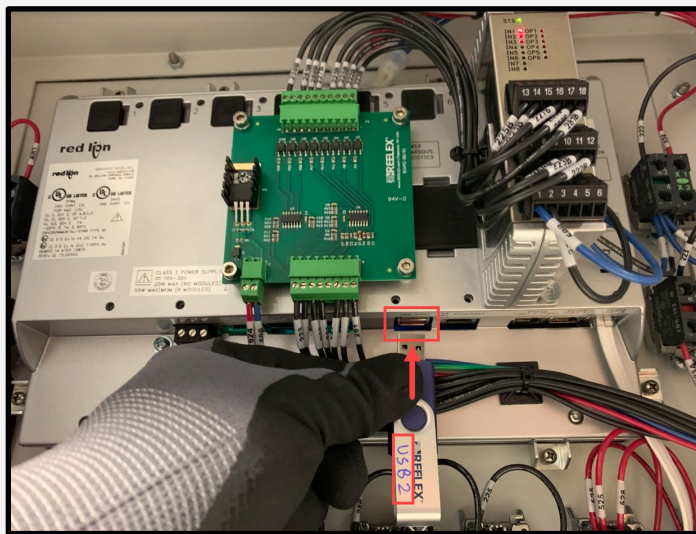
5. During firmware update, the IO Module on the back of the HMI will show INPUT8 (IN8) ON, indicating its updating. After approximately 5 minutes, IN8 will turn OFF and the green STS light will turn ON, indicating firmware update is complete.



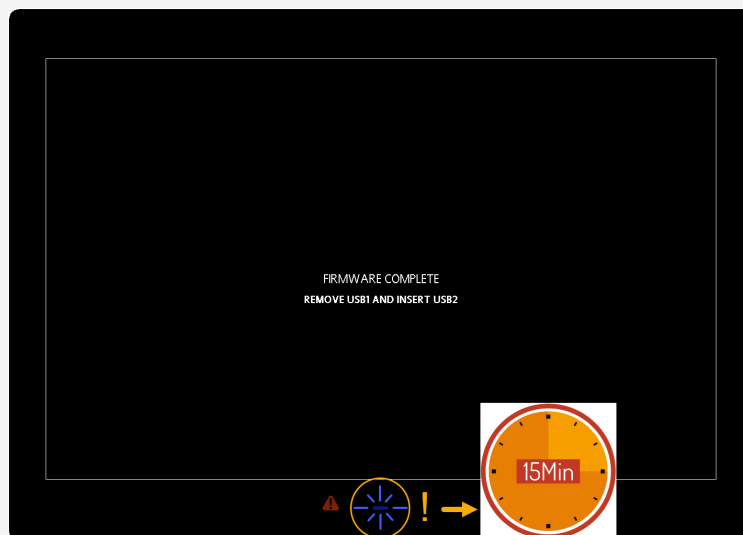
6. Once complete, the screen will indicate "FIRMWARE UPDATE COMPLETE, REMOVE USB1 AND INSERT USB2".



7. At this time, insert USB2.



8. Once again the Blue LED on the front of the HMI will begin blinking, indicating it is copying over the software from USB2. Wait approximately 15 minutes for the software to complete, or until the main HMI home screen appears.



9. Once the main HMI home screen appears, the software update is complete. Remove USB2 and verify global and product specific parameters. Add guarding jumpers (D1500 only) and resume normal operation.

