



**1. INSTALLER CHECKLIST**

INSTALLER NAME: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 ELECTRICIAN NAME: \_\_\_\_\_  
 SOFTWARE VERSION: \_\_\_\_\_  
 WIN OPERATING SYSTEM: \_\_\_\_\_

		COMPLETED
<b>PHASE I – CONDUIT/WIRE INSTALLATION</b>		
<i>Hardware</i>		
1.	Install a 4” tubing mounting frame under chain runs as shown in the installation drawings. <b>Top of tubing should be installed 8” below lumber. If there is doubt over the beam height, please contact Finna Group.</b>	
2.	Mount sensor base plates as shown in Sensor Location Drawing. (This drawing is not included in this manual as it has to be customized for each installation based on line measurements and chain spacing.)	
3.	Weld in sensor base plates along the mounting frame using distance indicated in Sensor location Diagram. <b>Ensure that the zero end of the plate faces the right way. See Sensor Location Diagram and Beam and Baseplate Drawing.</b>	
4.	Mount the MCU on a wall near the 0 end of the system within 25’ of the first sensor.	
5.	Mount Junction boxes to sensor base plates using the provided hardware.	
6.	Mount the temperature sensor on the leading face of the beam with the lenses looking up at the lumber. The sensor should be mounted within 8’ of the lumber line, or mounted in a position it sees every length of lumber run at the site.	
7.	Mount the Board Present Photocell using the provided bracket <b>two lugs</b> before the center of the sensors. <b>If a full lug bit from the PLC can be provided, this step is unnecessary.</b>	



8.	Run suitable conduit (flex or rigid) from the MCU to the first junction box, then conduit between each junction box and pull provided cat5e cables from the MCU to each sensor, running cables through each junction box. Pull an additional cat5e cable for the Temperature sensor and Board Present Photocell enclosure.	
9.	Mount sensors onto sensor base plates using supplied 1" adjustment bolts and hardware. Sensor face should run parallel to, and 1" below the lumber line, with the photocells positioned so that they are opposite of the lumber line (zero end).	
<b>PHASE II – ELECTRICAL INSTALLATION</b>		
<i>WIRING / TERMINATIONS</i>		
10.	Run 120VAC power to MCU cabinet.	
11.	Run Ethernet cable from MCU to the computer (Or Network) that the 2400 or 1500NC software will be installed	
12.	Run a 12-20 conductor cable between MCU and user PLC (Not supplied). The number of conductors will depend on each individual installation see serial and IO spec for more details. <b>Work with a Finna Group installation technician to determine the number of conductors required.</b>	
13.	Terminate all Cat5e cables at both ends using a standard 568B pinout. This includes cables to the sensors, temperature sensor, and connection to the computer/ network switch. This is the same as a standard Ethernet patch cable and is a 1:1 pinout.	
14.	An internet connection should be supplied to the computer for remote support.	
<b>PHASE III - SOFTWARE</b>		
<i>SOFTWARE AND NETWORK SETUP</i>		
15.	A fixed IP address should be assigned to the SCS controller (MCU).	



16.	<p>The computer that will run the MC Pro 2400 software must meet the following requirements (normally supplied by Finna Group):</p> <ul style="list-style-type: none"> <li>a. Windows 10 (recommended) or</li> <li>b. Windows 7 (windows XP is not compatible)</li> <li>c. 4GB RAM</li> <li>d. Network capability</li> </ul>	
17.	<p>Provide a DC lug pulse input to the MCU box via 12-20 Conductor. This Lug Pulse should come 1" past the center of the 2400 sensors and should have duration of approximately 1/8 of the lug. The duration is flexible and it should be noted that the MC output will be delayed until the next lug pulse occurs.</p>	
18.	<p>Program a board present bit that will send a high pulse if there is a board present 2 lugs preceding the sensors.</p>	
19.	<p>Program PLC to receive moisture content as specified in the IO specification guide or serial moisture content to the specifications shown in the serial communication specification guide.</p>	
<b>PHASE IV – Finna Group Install Technician Checklist</b>		
20.	<p>A Finna Group Technician will verify all wire terminations inclusive to the MC Pro 1500NC or 2400 system.</p>	
21.	<p>A Finna Group Technician will perform testing of all the photocell, distance sensor, and moisture sensor connections within the system.</p>	
22.	<p>All system devices and wiring will be tested and confirmed.</p>	
23.	<p>Sensor calibrations performed.</p>	
24.	<p>System lug pulse and board present timed.</p>	
25.	<p>Stock codes verified (if applicable).</p>	
26.	<p>Moisture handoff</p>	