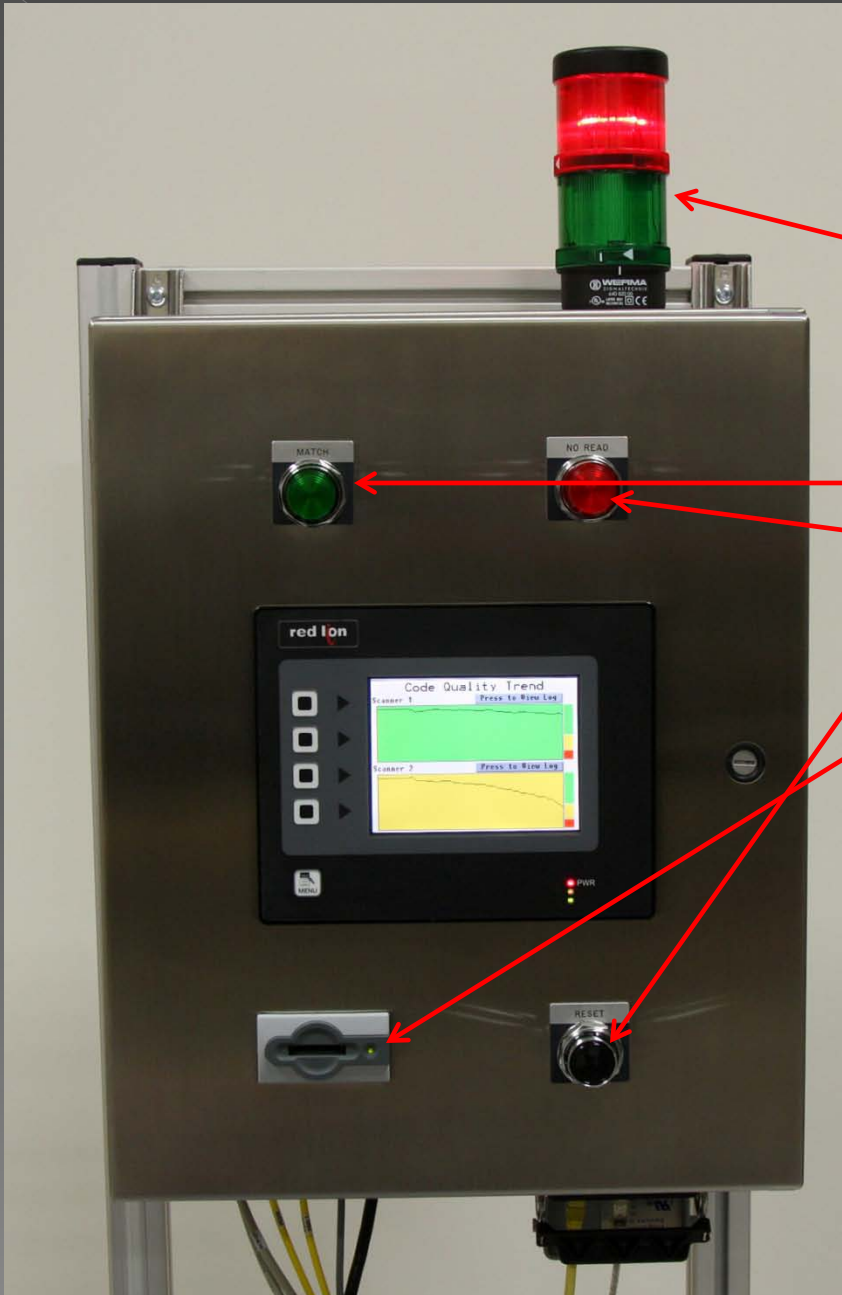




Control Reliable Inspection
System Go / No-Go
CRIS 20/20

The CRIS 20/20 operator interface is very simple.

- The green stack light means it is on line and the red calls out a problem that is described in detail on the touch screen.
- The green match indicator or the red no read indicator fires on every case that is passed in front of the system
- The black error reset button is used by the operator to reset low level errors
- The electronic key system is used to identify users and access level, authenticate code changes and reset high level errors. Highest access level can allow system bypass in case of a catastrophic system fault.





This is one of four operator view screens that can be displayed while running. The colors in the trend bars change from green to yellow to red as the print heads begin to clog. When the system performance gets into the red zone, a print head purge command is sent to the printers. If the print quality doesn't improve the line will stop for maintenance.



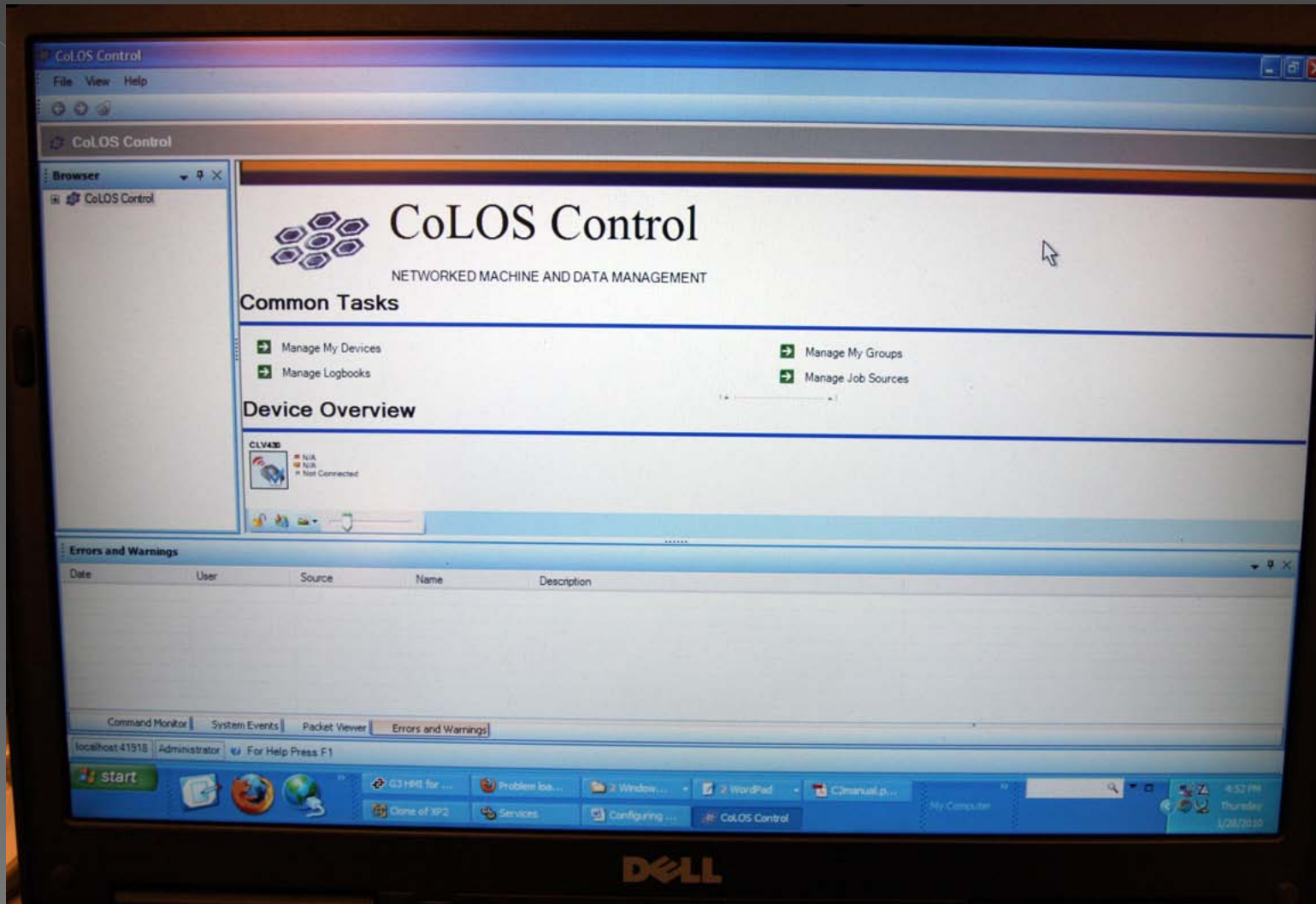
This is one of four operator view screens that can be displayed while running. It shows a short view of the log file with Date, Time and Barcode Quality



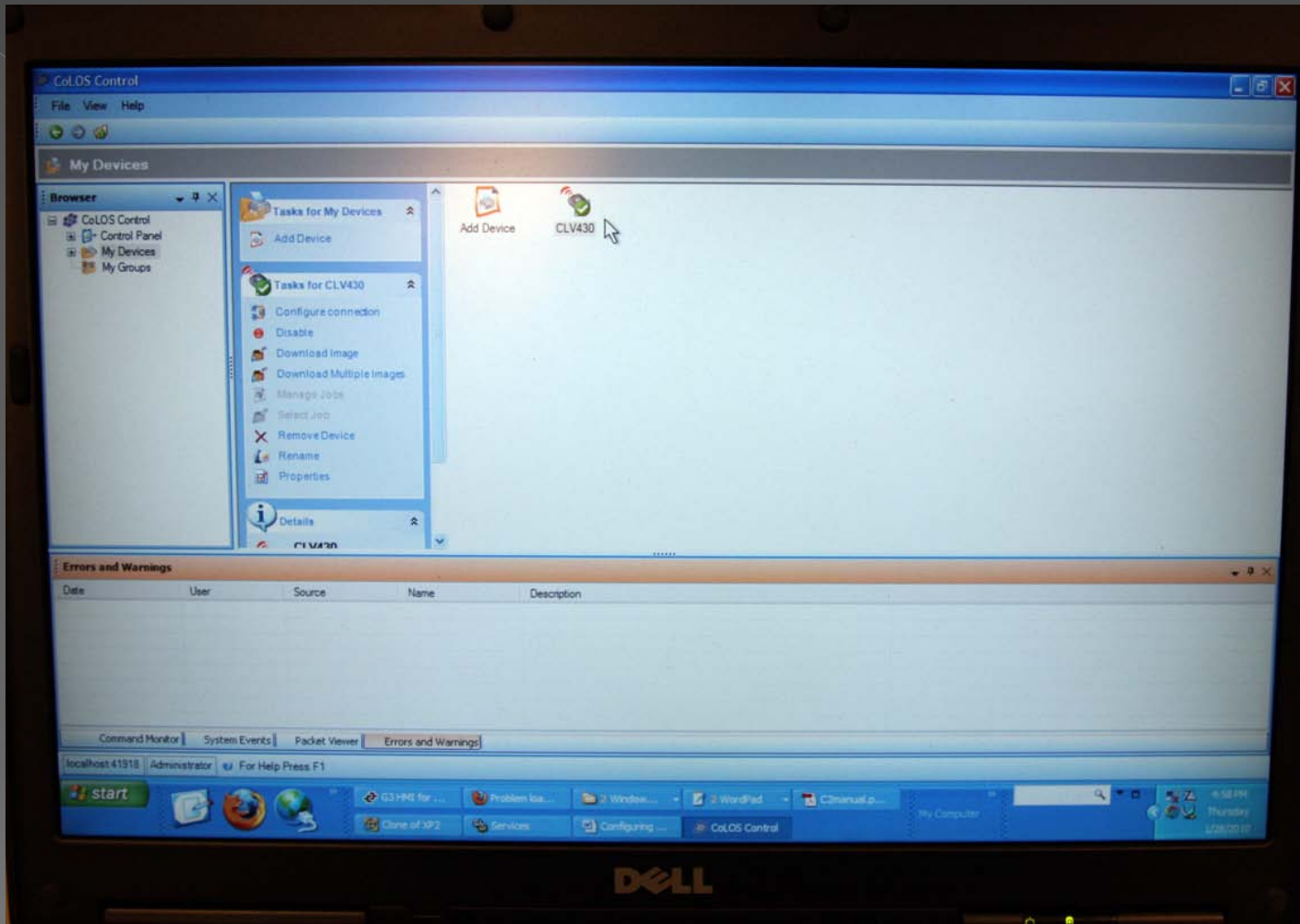
In this screen the verifier tells the line operator which side's printer has the mismatch error



This is one of four operator view screens that can be displayed while running. On this system the product code can either be changed over via screen selection or remotely via the Markem CoLOS Control Software



This is a shot of the CoLOS software that Markem uses to interface and send barcodes to the CRIS Verification System



Here you can see CoLOS correctly identifying the scan head in our CRIS system as the SICK CLV 430. The barcode is sent to our touch screen for confirmation by an operator that the correct product is to be run.

red ion

Remote Changeover Initiated

Please insert key to confirm change from:

Cheerios 10016000119601

To this Product:

Cinnamon Toast Crunch 10016000116532



PWR





The operator inserts their key fob into the wash down rated EKS slot in the front of the panel, this identifies who made the change and when it was made.

A photograph of a computer monitor with a black bezel. The screen is white and displays the text "Reading Key, Please Wait..." in a black, monospaced font. The text is centered horizontally and vertically on the screen.

Reading Key, Please Wait...

The encrypted key is read logging the operators name, time, date and what information was changed in the system.



The operator now confirms what the computer server told the system was in fact the product being run on the line.

2nd Person Needed to Confirm a Product Change

Insert a Supervisor or Manager Key
to confirm the product change
or Press Cancel

Cancel

If a major change is requested such as matching to a new barcode, a second person must log in their electronic key and confirm the product is correct.



The operator inserts their key fob into the wash down rated EKS slot in the front of the panel, this identifies who made the change and when it was made.



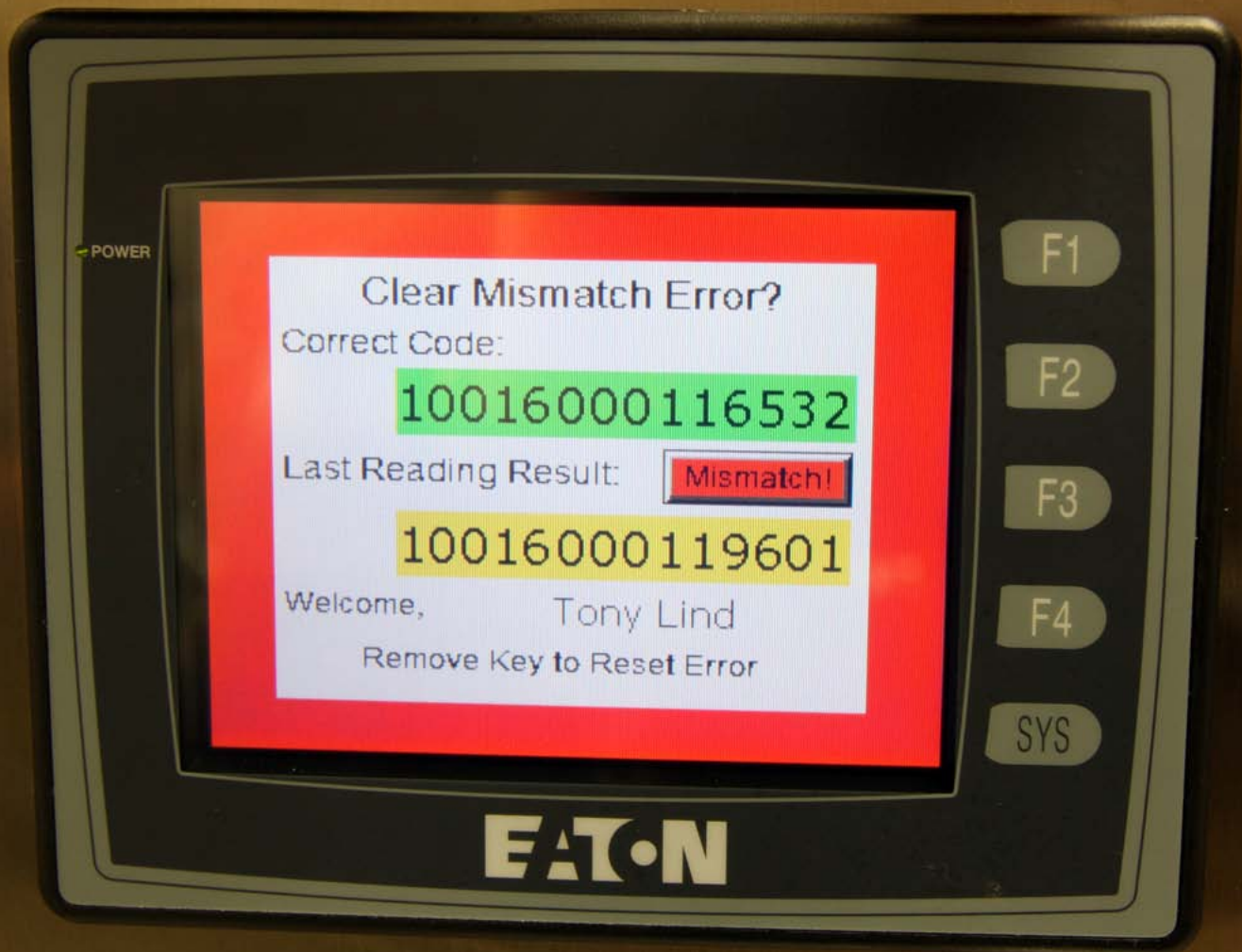
This system also has the option of using the key fob to override an error in the code sent from the corporate server or if they need to do an unscheduled changeover, the operator can access the standard product list to choose from.



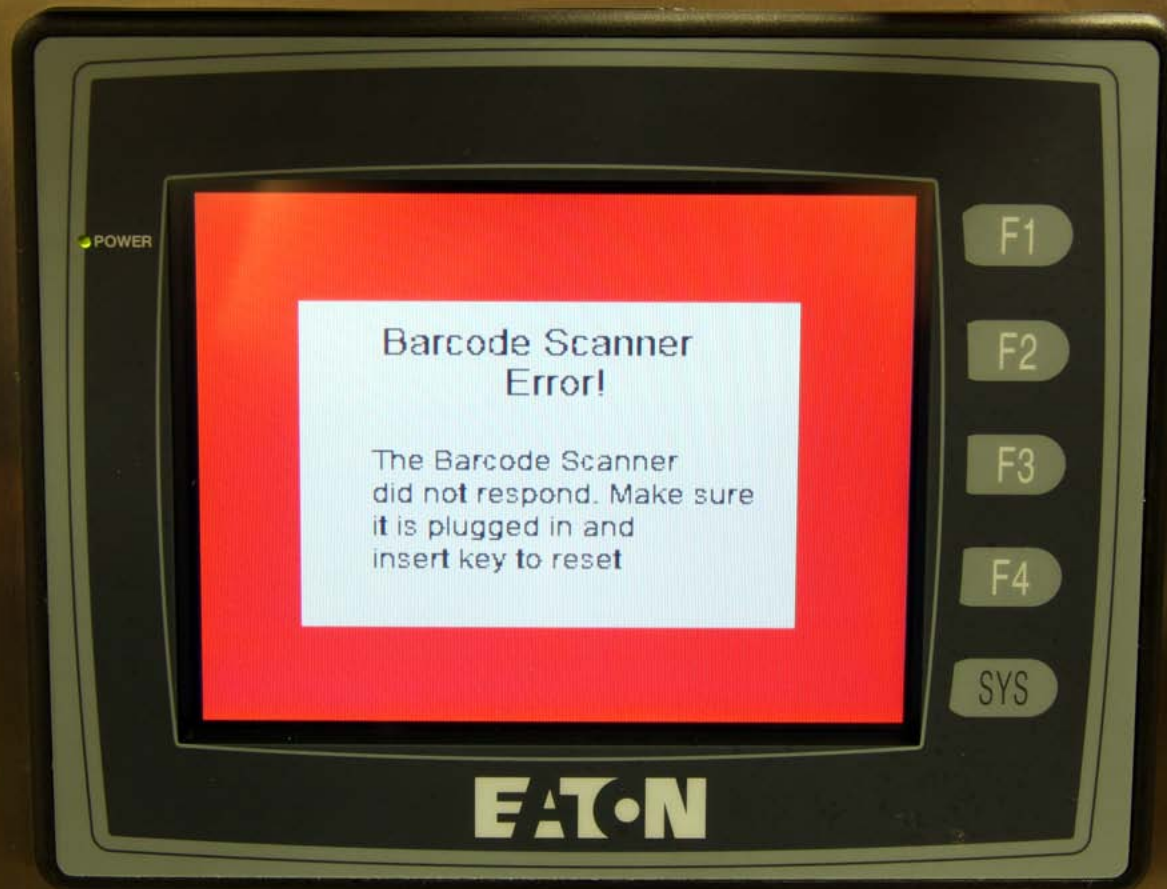
- Once the key is removed, the system light changes from red to green and the system is back online verifying the new barcodes to continue operation.
- If the system detects a problem, the following error screens may be displayed:
 - Mismatch Barcode
 - Barcode Scanner Fault
 - Photoeye Trigger Error
 - Consecutive No Read Fault
 - Inkjet Printer Not Ready
 - Safety Relay Fault
 - Bypass Mode Lockout



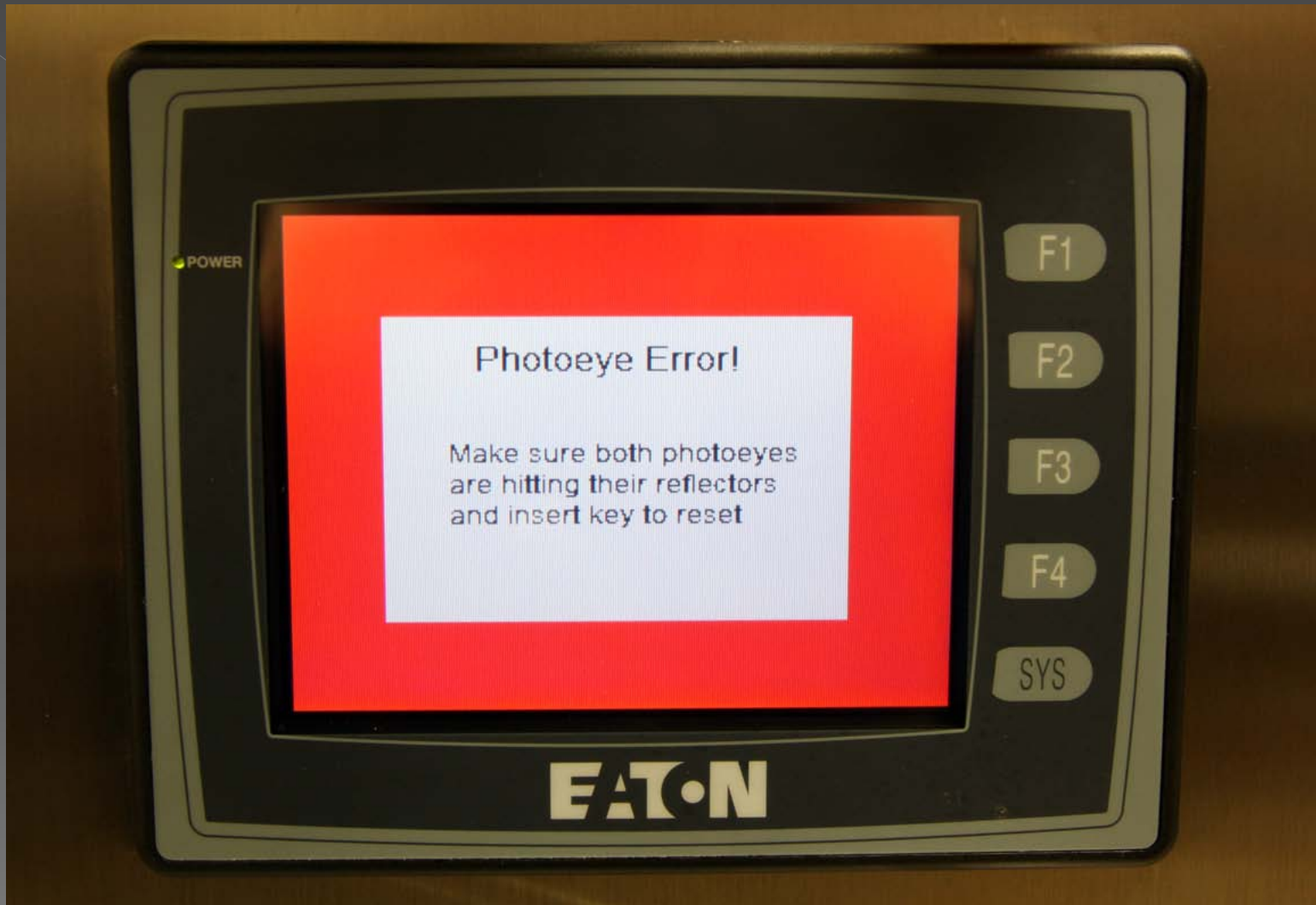
Mismatch Error Screen



Note the logging of the operators name.



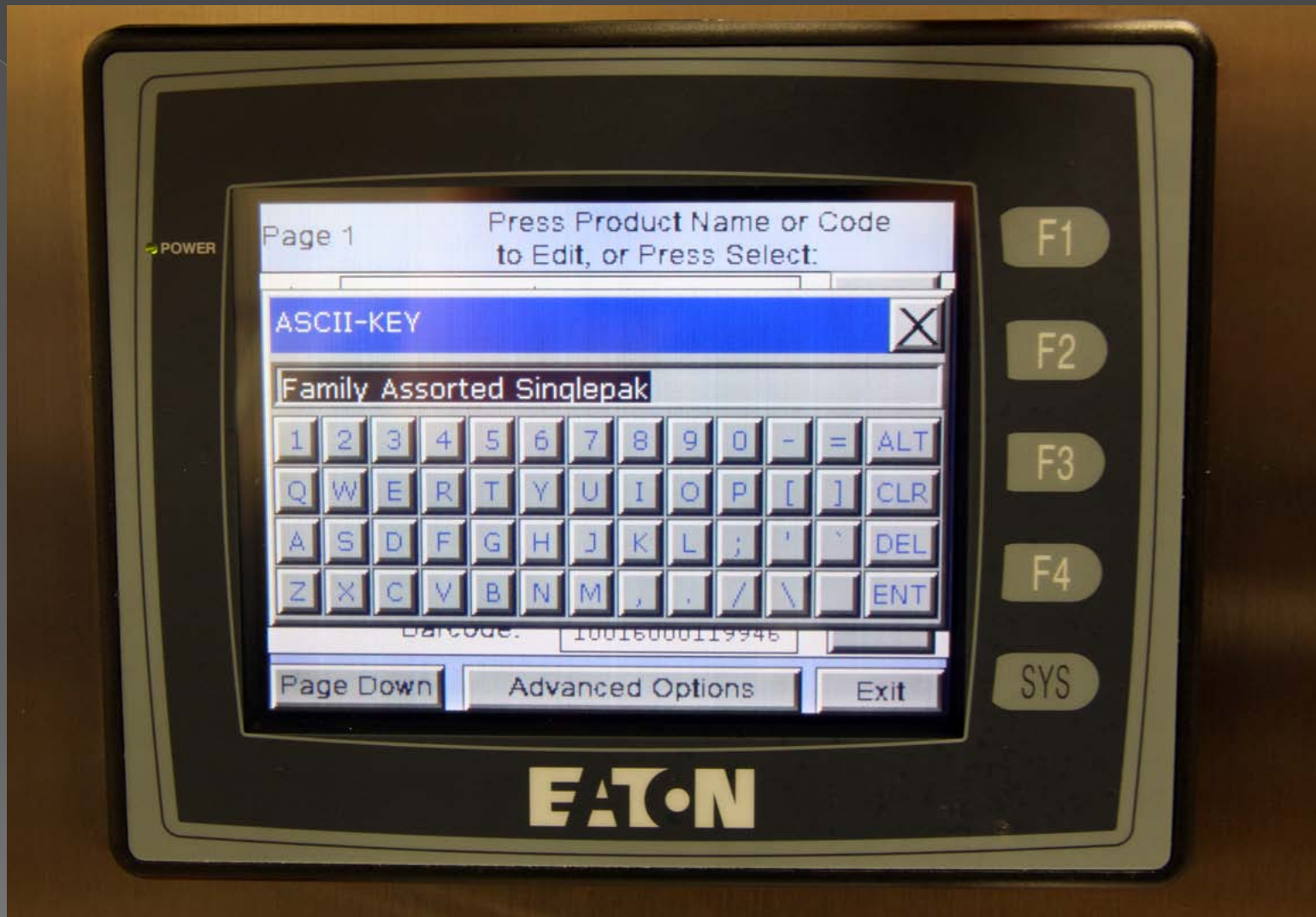
We have the ability to detect if the scanner, its outputs, or its wiring fail during each case scanned.



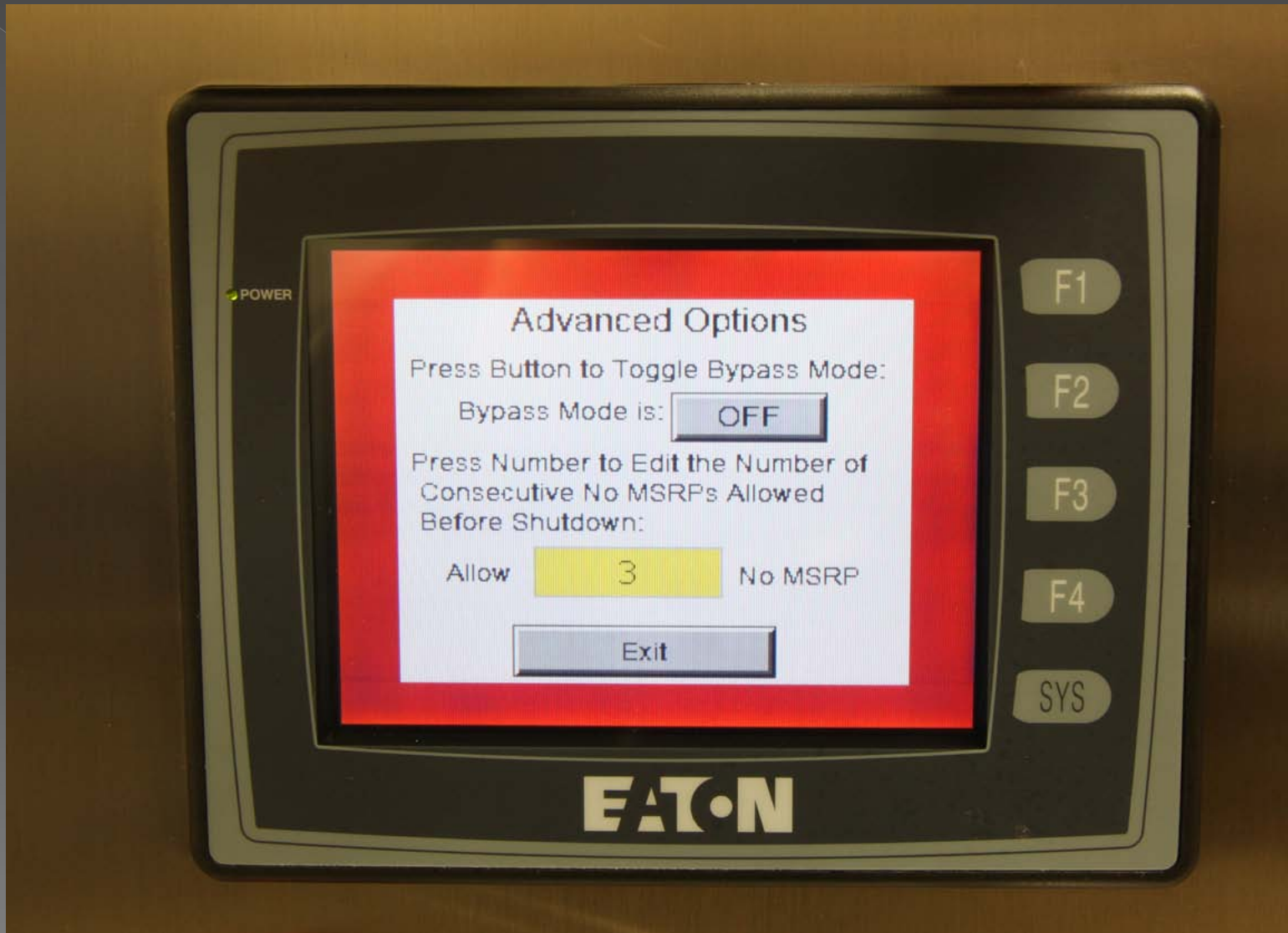
The system can detect if a trigger eye faults during every scan.



The number of consecutive NO READ codes is configurable before a shutdown is called for.



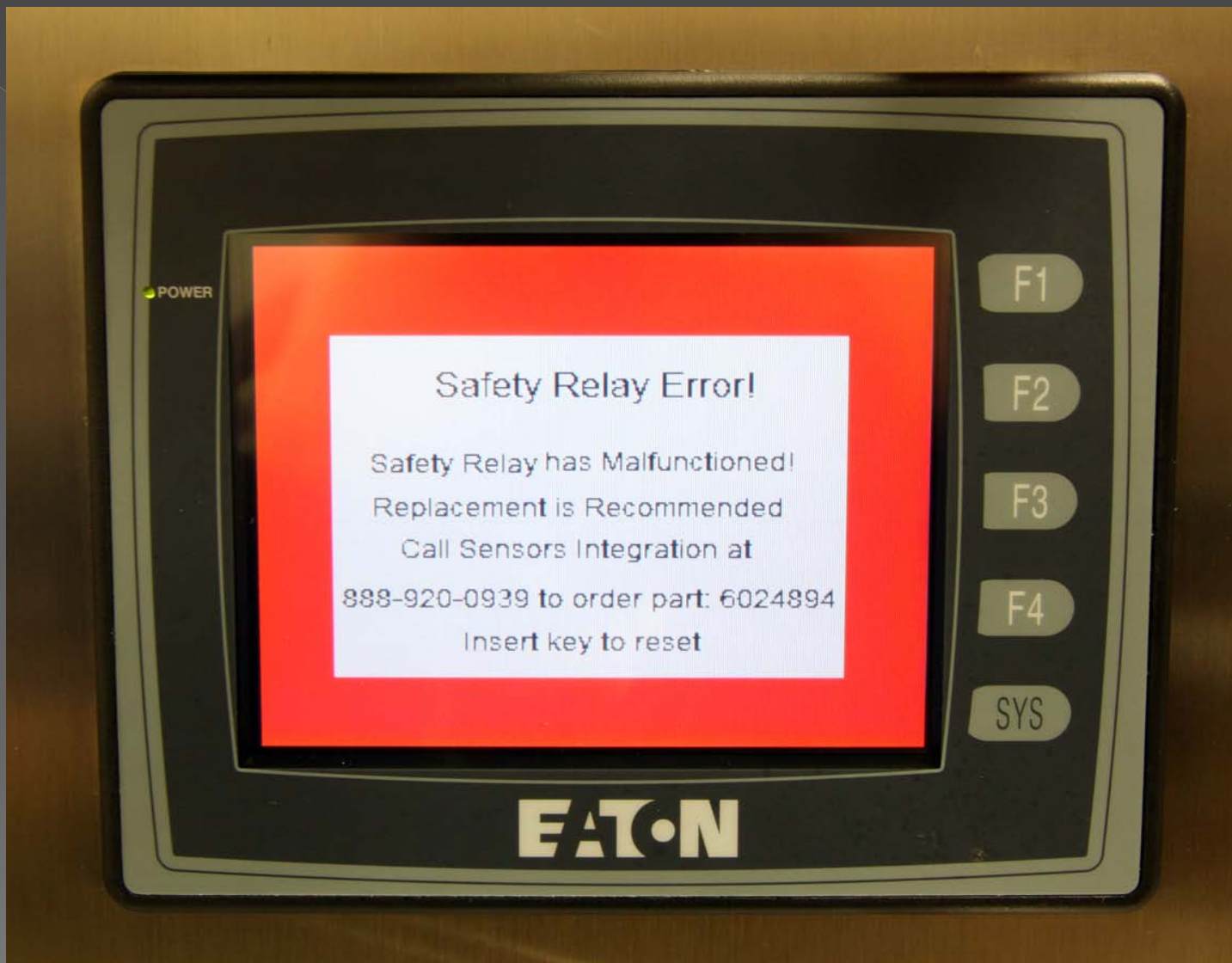
Higher level Keys have access to more advanced features such as editing product descriptions and barcodes.



This is the screen where the advanced level Key holders have access to the Bypass screen as well as the number of consecutive No READ's



Advanced level editing is easy with the touch screen, just tap the field and an interactive display opens up.



This screen would be displayed if the back checking on the safety e-stop relay detected that one side of the relay had failed. The machine would still stop as it should but it would not be allowed to restart with a faulty e-stop relay.



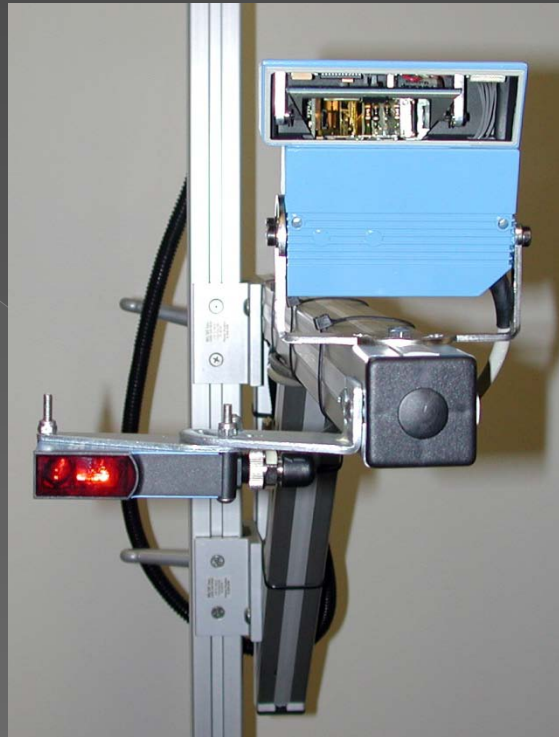
The printer ready signals are interlocked with the verifier and the line will not run if the printers are not ready to print.



This is the screen displayed when you are in Bypass mode such as if cases without barcodes need to be run. This page also displays the serial number on the key fob associated with the key holders name. It also holds the Event Log of who cleared errors.



This is the Event Log of who cleared errors with the time and date associated with each transaction. All log files are also exported via Ethernet daily as a comma separated value table.



This system uses a pair of CLV 430 SICK scanners and utilizes the correlation between number of good scans out of 100 and code readability

