

Tracking up to 8 Reject Reasons via Barcode Scanner

This tech note applies to firmware version 0.5.0 and later.

PROBLEM

Using a Barcode scanner, you need to accumulate a total reject count value as well as a reject count for up to 8 reasons.

SOLUTION

The XL unit can be programmed so that the operator can scan a barcode to increment the reject count as well as increment the count of up to 8 different reject reasons.

Creating the Reject Programs

1. Start Internet Explorer.
2. Type in the IP address of your XL device into the address bar and press Enter.
3. Login to the unit as the Administrator. Refer to the documentation shipped with your unit for more information.
4. Click on the Configure Device link in the upper right hand corner.
5. Click on the Programs tab.
6. Click on the New Program button.
7. Click into the Program Name field and type in the name you want for the reject program (example: Reject – 1), then click OK.
8. Click the Insert button on the far left of the page. A new window will appear. For Select Command, choose Counter > Add Constant. For the Counter, select Reject Count. For the Constant, type 1. Click OK.
9. Click the Insert button on the far left of the page. A new window will appear. For Select Command, choose Counter > Add Constant. For the Counter, select Good Count. For the Constant, type -1. Click OK.
10. Click the Insert button on the far left of the page. A new window will appear. For Select Command, choose Numeric Register > Add Constant. For the Register, select User Numbers > Numbers 1-20 > Number 1. For the Constant, type 1. Click OK.
11. Click the Insert button on the far left of the page. A new window will appear. For Select Command, choose Numeric Register > Add Constant. For the Register, select User Numbers > Numbers 1-20 > Number 11. For the Constant, type 1. Click OK.
12. Once your program is complete, click on the Accept Changes button and click OK.

Display Production Monitor I/O Communication **Programs** Program Triggers System

Programs | Program Lists

Programs are used to customize the operation of the XL device by selecting and configuring sequences of high-level commands. There are dozens of commands to choose from, including commands for working with numeric and string registers, performing mathematical operations, controlling the visual display screen, etc. Programs can be triggered by a wide range of events, including device power-up, inputs, production state changes, presets, and time schedules. Triggers are configured in the Configuration View | Program Triggers tab.

Program Information

Select Program

Program Number

Program Name

Each Program consists of a sequence of one or more commands and their parameters. Commands can be inserted, edited, deleted, and reordered (the latter by drag-and-drop) through the user interface.

Program - Reject -1

Counter > Add Constant (Counter=Reject Count, Constant=1)

Counter > Add Constant (Counter=Good Count, Constant=-1)

Numeric Register > Add Constant (Register=User Number 1, Constant=1)

Numeric Register > Add Constant (Register=User Number 11, Constant=1)

13. Once your first reject program is created, you can use the copy feature to make additional reject programs. Click on the New Program button.
14. Click into the Program Name field and type in the name you want for the product barcode (example: Reject – 2). In the Program Content section, select “Make a Copy of” and then select Reject – 1 (or the program name you previously created) from the list and click OK.
15. Change the registers used in the Numeric Register > Add constant commands to User Number 2, and User Number 12 respectively. Click OK.
16. After all of the settings have been changed, click on the Accept Changes button and click OK.
17. Repeat steps 13 to 16 for additional reject programs. Use the appropriate registers for the Numeric Register > Add Constant commands (User Numbers 3 to 8 and User Numbers 13 to 18).

Creating the programs to clear the Reject Counters

1. Click on the New Program button.
2. Click into the Program Name field and type in the name you want for the reset shift reject program (example: Reset Shift UN). Click OK.
3. Click on the Insert button on the far left of the page. A new window will appear. For Select Command, choose Numeric Register > Write. For the Register, select User Numbers > Numbers 1-20 > Number 1. For the Constant type a 0. Click OK.
4. Repeat step 3 seven more times for User Numbers 2 to 8.
5. After all of the settings have been changed, click on the Accept Changes button and click OK.
6. Click on the New Program button.
7. Click into the Program Name field and type in the name you want for the reset job reject program (example: Reset Job UN). In the Program Content section, select “Make a Copy of” and then select Reset Shift UN (or the program name you previously created) from the list and click OK.
8. Change the User Numbers for the Numeric Register > Write commands to User Numbers 11 to 18.
9. After all of the settings have been changed, click on the Accept Changes button and click OK.

Add the Reset Shift UN program to the Shift: Start program

1. In the Select Program section, click the down arrow and select the program named Shift: Start.
2. Click on the Insert button on the far left of the page. A new window will appear. For Select Command, choose Program > Execute Immediately. For the program, select Reset Shift UN. Click OK.
3. After all of the settings have been changed, click on the Accept Changes button and click OK.
4. If you have previously created product barcodes, you will have to add the Program Execute Immediately command to each of the product barcodes. For the program selection, choose Reset Job UN.

Program the Changes to the XL Device

1. To program the unit with these changes, click on the More Options button, then select Program Configuration to Device. Follow the on screen instructions to reprogram the unit.

Print the Reject Barcodes

1. While viewing the Programs page, click on the Print Barcodes button and then answer yes to the first question.
2. A list of all available programs will be displayed. Click on the None selection in the upper left corner of the window.
3. Click on the name of the Reject Reason programs that you created.
4. Click on the Generate Barcodes button.
5. Click the Print button.
6. A print preview will be displayed. Select a Printer to print the barcodes and then select Print.

Testing the Operation

After your unit has been programmed, you can test the operation of the unit. Click on the Exit Configuration button in the upper right hand corner then navigate to the Real-Time > Shift sub-tab.

Each time you trigger Input 1, the total count will increment by 1.

Each time you scan a Reject Reason barcode, the good count will decrement by 1, and the reject count will increment by 1. **Note:** The data on this page updates every 5 seconds.

Navigate to the Real-Time > User Numbers sub-tab.

Each time you scan the Reject – 1 barcode, User Numbers 1 and 11 will increment by 1.

Each time you scan the Reject – 2 barcode, User Numbers 2 and 12 will increment by 1.

Each time you scan the Reject – 3 barcode, User Numbers 3 and 13 will increment by 1.

Each time you scan the Reject – 4 barcode, User Numbers 4 and 14 will increment by 1.

Each time you scan the Reject – 5 barcode, User Numbers 5 and 15 will increment by 1.

Each time you scan the Reject – 6 barcode, User Numbers 6 and 16 will increment by 1.

Each time you scan the Reject – 7 barcode, User Numbers 7 and 17 will increment by 1.

Each time you scan the Reject – 8 barcode, User Numbers 8 and 18 will increment by 1.

When a new shift starts, User Numbers 1 to 8 will reset to 0. When a new product barcode is scanned, User Numbers 11 to 18 will be reset to 0.

User Numbers 1 to 8 will be stored in historical shift records. User Numbers 11 to 18 will be stored in historical job records. To export historical data, navigate to the Data Export tab and select the desired range and output format.

How to Rename Registers

User Numbers can be renamed so that they appear in reports in a user friendly manner.

1. Click on **Customize Production View** button in the upper right hand corner.
2. Click on **General Properties** and then select **Register Properties**.
3. Add a register (repeat as needed):
 - a. Click on **Add Register**.
 - b. Select the desired Register.
 - c. Set the name and format of the register as needed.
 - d. Click OK.
4. Click the **Save** button to save the register properties.
5. Click on **Exit Customization**.