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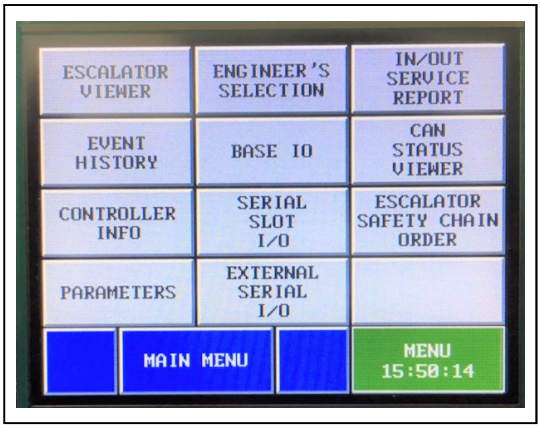
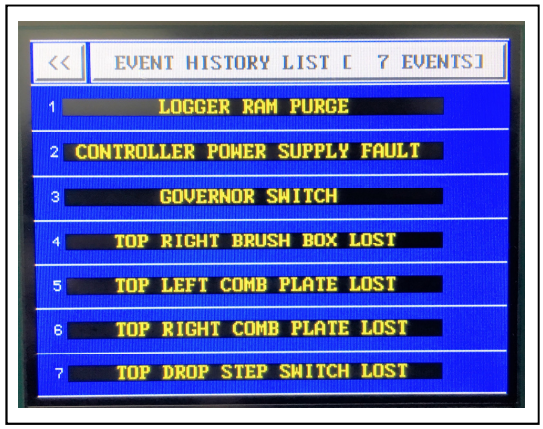
ALMEGA 2 Escalator Controller Quick Guide
ISSUE:1 Date: 28/06/2017

1. Escalator MAIN MENU.
   To Select press the MAIN MENU (BLUE) button. A list of further buttons will be displayed as below.

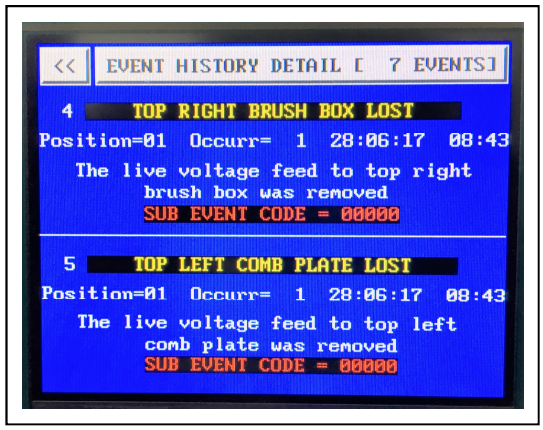


2. Escalator CONTROLLER INFO.
   Press the CONTROLLER INFO button. Details of the Controller info and software versions will be displayed as below.

3. Event History
   Press the EVENT HISTORY button and the event log will be displayed in list format as below. The most recent event is at the end of the list.

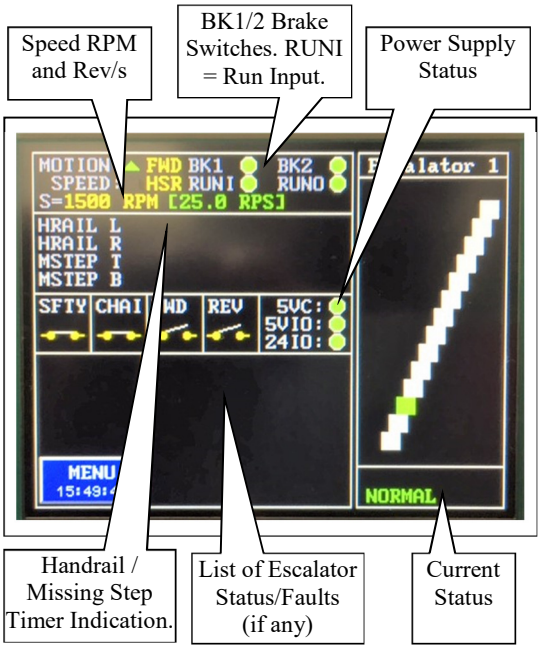


4. Event History Detail
   Press on an individual event to obtain a full description of the Event.



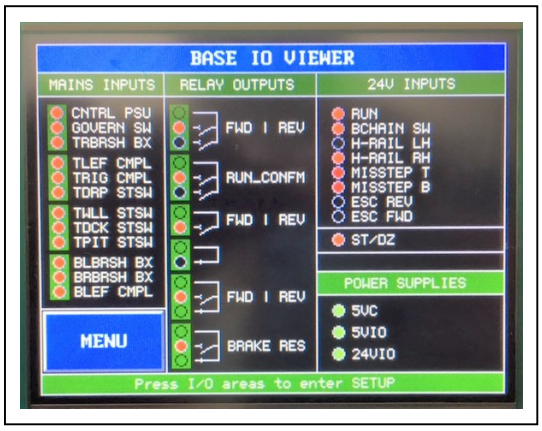
5. ESCALATOR VIEWER

To Select press the ESCALATOR VIEWER button and the screen will be displayed as below.



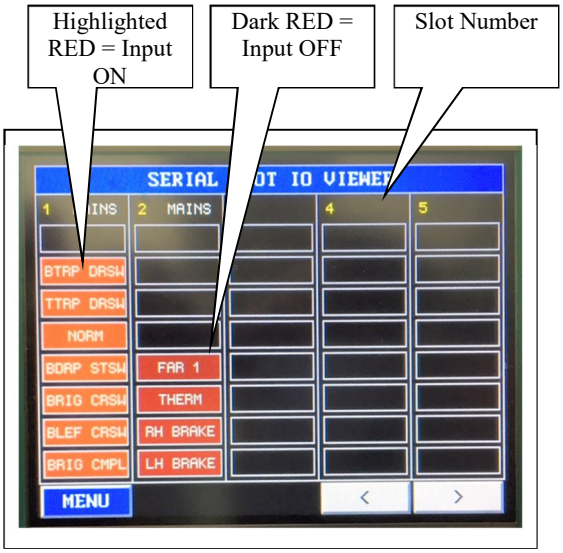
6. BASE IO VIEWER

To Select press the BASE IO button. This will display the input / output status of all the Base IO as below. RED indicates the input is ON, otherwise BLACK indicates the input is OFF. Also, the power supply status is GREEN when healthy and BLACK when not healthy.



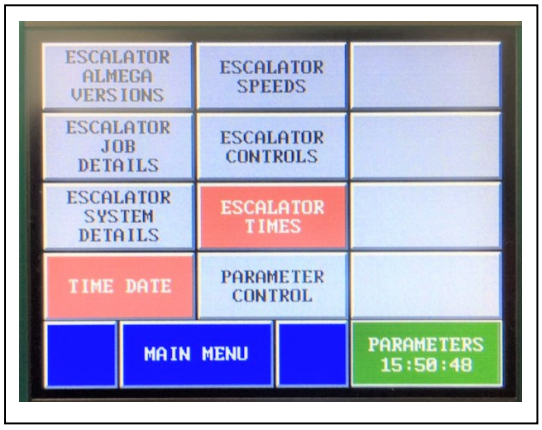
7. SERIAL SLOT IO VIEWER

To Select press the SERIAL SLOT IO button. This will display the input / output status of all the Serial Slot IO (IO modules) as below. RED indicates an input and GREEN indicates an output. When the input / output is ON the colour changes to HIGHLIGHTED RED / GREEN.



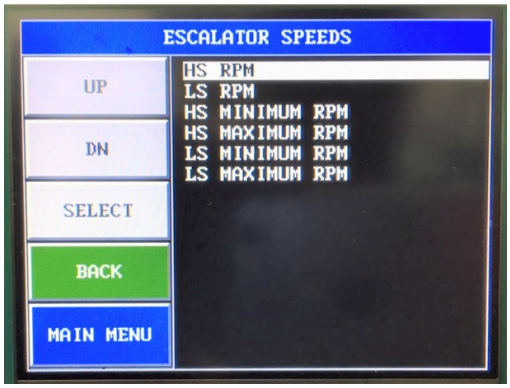
8. PARAMETERS

To Select press the MAIN MENU (BLUE) button and then the PARAMETERS button. A list of further buttons will be displayed as below.



9. ESCALATOR SPEEDS

To Select press the ESCALATOR SPEEDS button. A list of parameters will be displayed as below.



HS RPM = High Speed RPM Value
LS RPM = Low Speed RPM Value (if applicable, e.g. VF Drive)

HS MINIMUM RPM = Minimum RPM (HS) that will be accepted before the Escalator Trips when SPEED MONITORING is enabled.

HS MAXIMUM RPM = Maximum RPM (HS) that will be accepted before the Escalator Trips when SPEED MONITORING is enabled.

LS MINIMUM RPM (as above but for LS)
LS MAXIMUM RPM (as above but for LS)

9.1. HS RPM SETTING

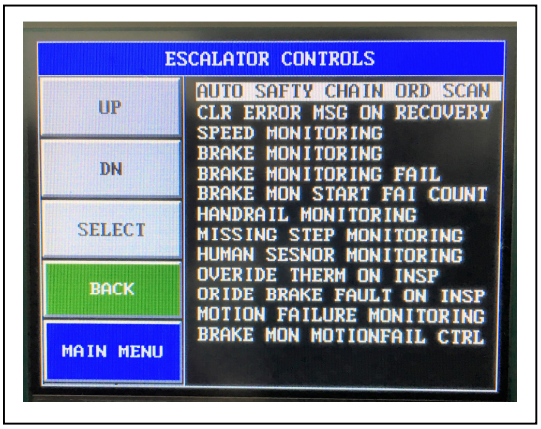
Use the UP/DN buttons (or swipe the screen) to highlight the desired parameter. Press SELECT to view/adjust the parameter setting. The screen will be displayed as below.

Use the selection wheels to set the parameter value, then press OK to update and store the parameter.

To restore to default, press DEFAULT and then OK.

10. ESCALATOR CONTROLS

To Select press the ESCALATOR CONTROLS button. A list of parameters will be displayed as below.



AUTO SAFTY CHAIN ORD SCAN = YES/NO. This parameter should be set to YES. The parameter allows the escalator processor to automatically detect the scan order of the Safety Chain Inputs. This is to ensure the safety chain events are reported in the correct order. The scan order is detected from the order of the inputs wired to the Base IO and Slot IO.

CLR ERROR MSG ON RECOVERY = YES/NO. YES for ON, NO for OFF.
If set to YES, the message on the Remote Display will be cleared when the fault is cleared, otherwise it will remain until the Escalator is re-started.

SPEED MONITORING = YES/NO. YES for ON, NO for OFF.
If set to YES, sped monitoring of the Escalator will be detected via the ST/DZ input measuring RPM. **It is recommended that the sensor actuator be at least 10mm (i.e. a 10mm Bolt) to achieve reliable RPM monitoring (600-3000 RPM).**

BRAKE MONITORING = YES/NO. YES for ON, NO for OFF.
If set to YES, monitoring of the Brake Switches will be enabled.

BRAKE MONITORING FAIL = YES/NO. YES for ON, NO for OFF.
The processor sets this to YES, when monitoring of the Brake Switches has failed. This can only be reset by setting it to NO within this menu or by pressing MAIN MENU then ENGINEERS SELECTION and selecting BRAKE MONITORING FAIL. Note: *Cycling the Escalator Power will not reset the fault!*

BRAKE MON START FAI COUNT = 1-4. This parameter determines the number of consecutive failures allowed when starting, before a Brake Fault is latched.

HANDRAIL MONITORING = YES/NO. YES for ON, NO for OFF.

MISSING STEP MONITORING = YES/NO. YES for ON, NO for OFF.

HUMAN SENSOR MONITRING (PHOTO CELL DECTECTION) = YES/NO. YES for ON, NO for OFF.

OVERRIDE THERM ON INSP = Override Thermistor Input when on Inspection, YES/NO. YES for ON, NO for OFF.

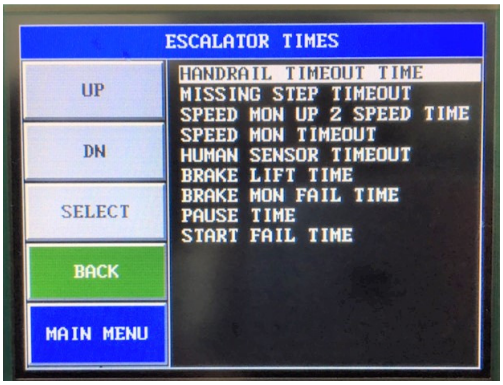
ORIDE BRAKE FAULT ON INSP = Override Brake Fault when on Inspection, YES/NO. YES for ON, NO for OFF.

MOTION FAILURE MONITORING = Detects Motion Failure via the RUN input. Loss of the RUN input = lost Motion. YES/NO. YES for ON, NO for OFF.

BRAKE MONITORING FALIURE CONTROL = Monitors the Brake Switches at start, stop and when moving. NONE / WARNING / FAULT. NONE = off, WARNING generates warning events in the fault logger, FAULT generates events and will stop the escalator once tripped. Once tripped the fault will need to be reset as BRAKE MONITORING FAIL (previous).

11. ESCALATOR TIMES

To Select press the ESCALATOR TIMES button. A list of parameters will be displayed as below.



HANDRAIL TIMEOUT TME = 1-10s, set as required.

MISSING STEP TIMEOUT TME = 0-3000ms, set as required.

SPEED MON UP 2 SPEED TME = Time allowed for the escalator to reach its target speed, i.e. when starting up to high speed or when changing speed from high speed to low speed. 1-10s, set as required.

SPEED MON TIMEOUT = Time delay before tripping a fault due to speed being out of range of min/max. 0-3000ms, set as required.

HUMAN SENSOR TIMEOUT = Time delay before reducing the speed to a lower speed in the event no human has been detected. 0-1200s, set as required.

BRAKE LIFT TIME = Time delay before Brake Resistor Output (economy Brake Resistor) is energised. 0-3000ms, set as required.

BRAKE MON FAIL TIME = Time delay before a Brake Switch Fault is asserted when the escalator has stopped and checking the status of the Brake Switches. 1-10s, set as required.

PAUSE TIME = Time delay before the Escalator can start again after just stopping. 0-10s, set as required.

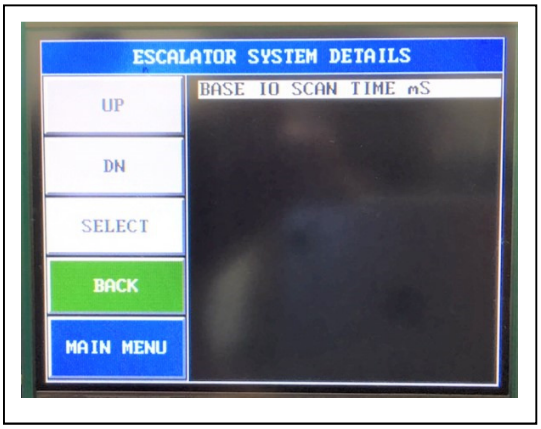
START FAIL TIME = Time delay before reporting a Start Failure fault when the Escalator is starting. This is monitored via the RUN input. If the RUN input is not asserted within this time a Start failure is reported. 4 consecutive failures will lead to a start abort / failure. 0-10s, set as required.

12. ESCALATOR SYSTEM DETAILS

To Select press the ESCALATOR SYSTEM DETAILS button. A list of parameters will be displayed. Many of the parameters are not accessible to change.

The most important parameter is the BASE IO SCAN TIME as below. Monitoring functions such as Missing Steps are monitored via inputs on the base IO. Setting this parameter affects the scan time of the input hence the size of the missing step actuator (metal object). The lower the scan time the more sensitive the input will be and hence the smaller the actuator.

Note the scan time of the Serial Slot IO is fixed at 20milliseonds and is not adjustable.



12.1. BASE IO SCAN TIME ms

The setting is in milliseconds, 1-20, default =10.

Use the UP/DN buttons (or swipe the screen) to highlight the desired parameter. Press SELECT to view/adjust the parameter setting. The screen will be displayed as below.

Use the selection wheels to set the parameter value, then press OK to update and store the parameter.

To restore to default, press DEFAULT and then OK.