



Integration requirements for control systems

NOVA Solutions, Inc.
421 Industrial Ave
Effingham, IL 62401
800-730-6682 • 800-940-6682 (Fax)
www.novadesk.com • sales@novasolutionsinc.com



© 2019, NOVA Solutions, Inc. NLS_INT 5/19

Nova Linked integration requirements for controls systems

Four (4) additional relays are required for the Nova Linked option to work properly with a control system.

#1 relay would be programmed as a momentary switch to perform ON functionality using the RF transmitter and receivers.

#2 relay would be programmed as a momentary switch to perform OFF functionality using the RF transmitter and receivers.

#3 relay would be configured as a momentary switch that can be utilized for the UP command.

#4 relay would be configured as a momentary switch that can be utilized for the DOWN command.

Control System Programming Menu/Pages:

You would need an area or preferably a separate page/menu that would be labeled Nova Linked, Monitors, or whatever you would prefer to label it. The page would contain the programming which utilizes the 4 additional relays as discussed above.

The page/menu would contain two buttons one as ON or Networked and the second as OFF or Local Control. These buttons would activate and deactivate relay # 1 "ON" and relay 2 "OFF". In addition, it would also contain one UP button (relay # 3) and one DOWN button (relay # 4).

If the ON/Networked button is selected it should change colors to indicated that it is active. When it is active the local UP and DOWN buttons on the trolleys "user workstations" will be disabled and the Control system menu/page UP and Down buttons will be active so the Trolleys can only be controlled using the control system menu. As a best practice when OFF or Manual button is selected then UP and DOWN buttons on this pages should be disabled however, if they are still active in the programming and the user would send an UP or DOWN command to the trolleys, they will not respond nor will the local buttons be disabled at the "user workstations".

ON – enables the RF Transmitter/CSIM which establishes communications with the LCI(s) for each trolley. This locks out the local UP and Down buttons on each of the trolleys and only allows for control by using the UP and DOWN buttons located on the dedicated page/menu within the control system menu, as discussed above.

OFF – Disables the RF Transmitter/CSIM which tells the LCI(s) to release the control back to the local UP and DOWN buttons on each of the Trolleys.

Sample Page/Menu

Off or Local Control (Mode): The Up and Down functions will no longer work from the control system page/menu and should be disabled in the programming. The Up and Down functions for each trolley can only be controlled at the local workstation.



On or Networked (Mode): The Up and Down functions are enable in the programming when in the ON/Networked state. Users will now be able to control the trolleys on the control system page/menu and local UP and DOWN buttons will be disabled on all trolleys connected to the Nova Linked System (NLS).



Control System Wiring Configuration:

Step 1: Cut the end off of the cat5 or cat6 cable that will be connected to the control system's relays. Strip the wires then separate each of them. Cut the [Green], and [Green/White] completely off.

Step 2: Relay # 1 – Slightly strip and connect the [Brown] (3.50V) wire to port 1 on relay #1 then add a jumper wire from relay # 1 port 2 to relay # 4 port 2.

Step 3: Relay # 2 – Slightly strip and connect the [Brown/White] wire to port 1 on relay #2 then add a jumper wire from relay # 2 port 2 to relay # 4 port 2.

Step 4: Relay # 3 – Slightly strip and connect the [Orange/White] (Up wire) wire to port 1 on relay # 3 then slightly strip and connect the [Orange] (Common ground) to port 2 on relay # 3 along with a jumper wire to port 2 on Relay # 4. (UP Command) Note:-The program needs to be configured with a 3 second delay for this momentary switch.

Step 5: Relay # 4 – Slightly strip and connect the [Blue/White] (Down wire) wire to port 1 on relay # 4 then on port 2 you should have already added 3 jumper wires from the previous steps. Note: The program needs to be configured with a 3 second delay for this momentary switch.

Note: Perform the above with the power disconnected from the RF Transmitter/ CSIM.