

USER MANUAL

For AC-TXM and AC-RCVR



For instructions on programming a controller with the wireless system, see attached.

- Address bar on the AC-TXM and AC-RCVR provides for 1,204 unique address possibilities. This allows for multiple zones and no interference between classrooms located in close proximity with each other.
- Each module is powered by using a 24V power supply.
- 418 MHZ AC-TXM sends 4 separate commands: on, off, up, down. This prevents the system from getting out of sync.

- The AC-TXM and AC-RCVR address bar dip switches must match. Use a pen or screwdriver to gently move switches.
- AC-TXM power supply is 24V 1.67 A, 40W with power cord
- Connects to major brand controller or NOVA's Independent Switching Interface (ISI) with standard RJ45 CAT6 patch cables
- Mounting bracket included for AC-TXM and AC-RCVR



Address Bar

Control Modules



-  **RF Transmitter**, typically located on lectern (Qty 1)
Has a unique frequency.
AC-TXM



-  **Receiver**
1 per row (Qty 4)
AC-RCVR



-  **Independent Switching Interface**, typically located on lectern (Qty 1)
AC-ISI



-  **Linking Control Interface**
1 per Trolley, except in Lectern when using a CSIM or Transmitter
If Lectern utilizes a Trolley with CSIM or Transmitter, then no need for an LCI.
(Qty 20)
AC-LCI

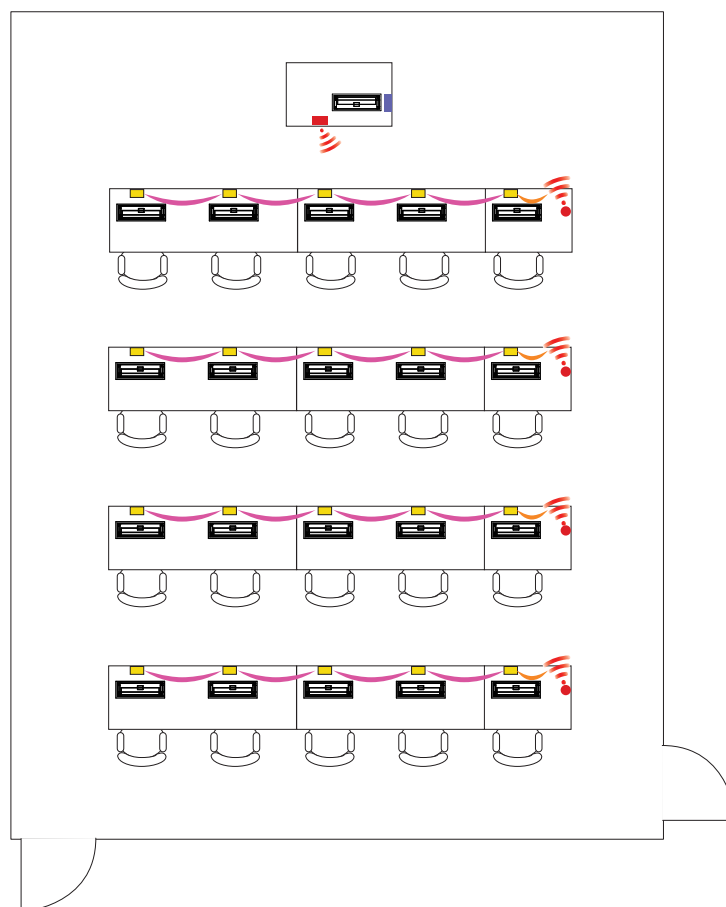


-  **CAT6 Patch Cable**
1ft or 2ft cable needed to run from RCVR to the 1st LCI in each row
(Qty 4)
AC-CAT6-2



-  5ft or 7ft cables needed to run from LCI to LCI in each row
(Qty 16)
AC-CAT6-5

Configuration for Wireless NOVALinked™



This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- * *Reorient or relocate the receiving antenna.*
- * *Increase the separation between the equipment and receiver.*
- * *Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.*
- * *Consult the dealer or an experienced radio/TV technician for help.*

Operation with non-approved equipment is likely to result in interference to radio and TV reception. The user is cautioned that changes and modifications made to the equipment without the approval of manufacturer could void the user's authority to operate this equipment.



Integration requirements for control systems

NOVA Solutions, Inc.

421 W. Industrial Avenue
Effingham, IL 62401
800-730-6682 • 800-940-6682 (Fax)
www.novadesk.com • info@novasolutionsinc.com



Relay Information

Three (3) additional relays are required for the NOVALinked™ option to work properly with a control system.

- #1 relay would be programmed as a momentary switch to perform ON and OFF functionality using the RF transmitter and receivers.
- #2 relay would be configured 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 “NOVALinked™”, “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 page 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 enabled 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:

Note: Perform the steps below with the power disconnected from the CSIM.

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 the [Blue] (Common) wire to port 2 on relay #1.

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

Step 4: Relay # 3 –
Slightly strip and connect the [Orange/White] (Up wire) wire to port 1 on relay # 2.
Slightly strip and connect the [Orange] (Common ground) to port 2 on relay # 2.
(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 # 3.
On port 2, connect a jumper wire from the [Orange] (Common ground) on relay # 2
(Down Command).

Note: The program needs to be configured with a 3 second delay for this momentary switch.