

APPLICATION NOTES



Application Note 3006: Emergency Shutdown

Emergency shutdown inputs, such as those for fire alarms or other life safety equipment, permit the indoor unit(s) to immediately stop operation.

There are a couple of methods for emergency shutdown using the CITY MULTI® system.

Note: Local codes take precedence over recommendations contained in this document.

Emergency Shutdown Input through Centralized Controllers

Centralized Controllers include emergency shutdown input point that will stop the operation of all indoor units.

The external input/output adapter PAC-YG10HA is required for:

- External input/output with CN5 on Centralized Controllers AG-150, GB-50ADA
- External input/output with CN2 on Centralized Controller GB-24. Figure 1 displays the wiring diagram for both the CN5 and CN2.

The external input/output adapter PAC-YT41HAA is required for:

- External input/output with CN2 on Centralized Controller TC-24 (see Figure 2)

Indoor units require a manual ON command from the remote controller or the Centralized Controller to restart after the emergency shutdown signal is cleared.

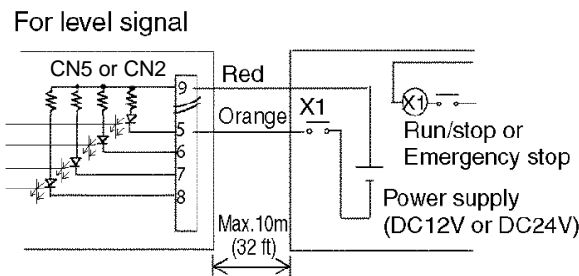


Figure 1. CN5 and CN2 Wiring Diagram for the Centralized Controllers AG-150, GB-50ADA, and GB-24

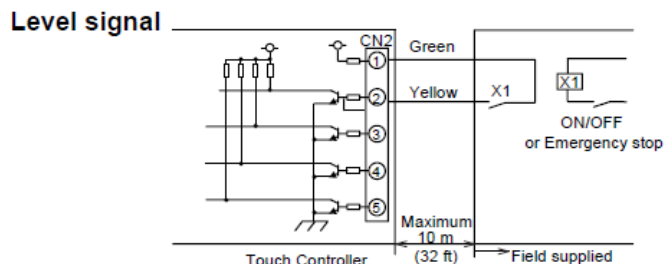


Figure 2. CN2 Wiring Diagram for the Centralized Controller TC-24

Selecting and Setting the External Input/Output Emergency Stop Function on Centralized Controllers

Set external input (CN5 for the AG-150/GB-50ADA and CN2 for the GB-24) function for emergency shutdown through the “Initial Settings” page of the Centralized Controllers

1. Select the “Emergency Stop (Level Signal)” on the “Initial Setting Browser Basic System” page for the Centralized Controller as shown in Figure 3.

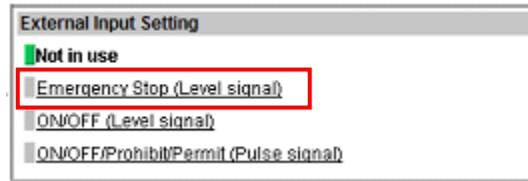


Figure 3. Initial Setting Browser

2. If an AG-150 is installed, go to the “Initial Settings” of the touch screen and make your selection on the “Network” page as shown in Figure 4.

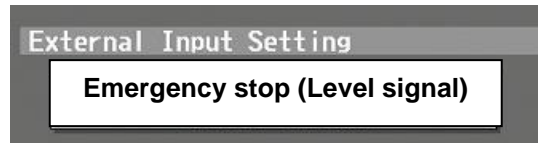


Figure 4. Initial Settings on an AG-150 touch screen

3. If a TC-24 is installed, go to the “Initial Settings” of the touch screen and make your selection on the “Basic System” page as shown in Figure 5.

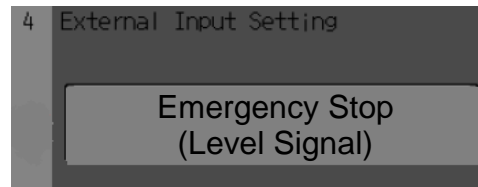


Figure 5. Initial Settings on a TC-24 touch screen

During emergency shutdown, functions usually accessible through the Centralized and remote controllers such as ON/OFF are prohibited.

Emergency Shutdown without Centralized Controllers

If a Centralized Controller is not available or if individual indoor unit emergency shutdown is required, all legs of incoming power to the indoor unit must be interrupted directly by the emergency shutdown signal.

- S1 and S2 on single-phase indoor units.
- L1, L2, and L3 on three-phase indoor units.

Interrupting the incoming power will turn the indoor unit OFF, but M-NET communication will still function.

Note: The CN32 and CN52 connectors are capable of receiving remote start/stop signals. These connectors are intended to start/stop the indoor unit via occupancy sensing or other similar application where these signals are not associated with an emergency condition. CN32 functionality can be prohibited by the AG-150, GB-50ADA, GB-24 or TC-24. CN32 and CN52 are NOT rated as an emergency stop input.