Application Note 3006

Emergency Shutdown

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

Life Safety shutdown is accomplished by breaking incoming line voltage to the indoor and outdoor units. This should be managed by the life safety contractor.

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

For emergency shutdown that is not life safety related, there are a couple of methods for emergency shutdown using the CITY MULTI® system.

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 AE-200A, AE-50A, & EW-50A. 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.

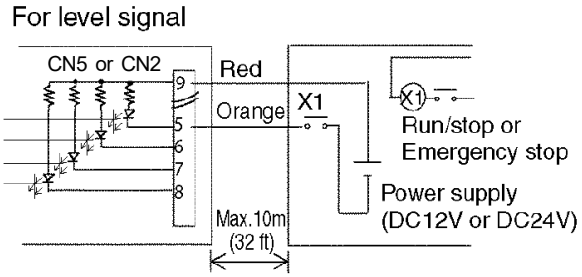

Figure 1. CN5 Wiring Diagram for the Centralized Controllers AE-200A, AE-50A, and EW-50A

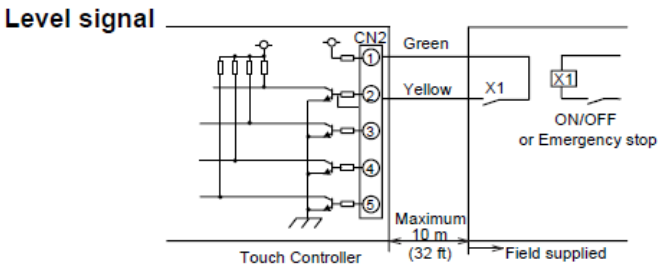

Figure 2. CN2 Wiring Diagram for the Centralized Controller TC-24

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

Set external input (CN5 for the AE-200A/AE-50A) 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.

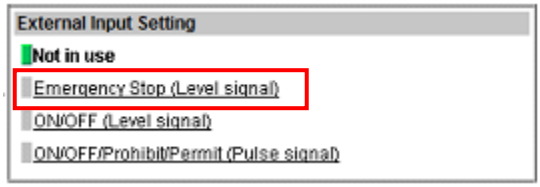

Figure 3. Initial Setting Browser

2. If an AE-200A 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 AE-200A 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.

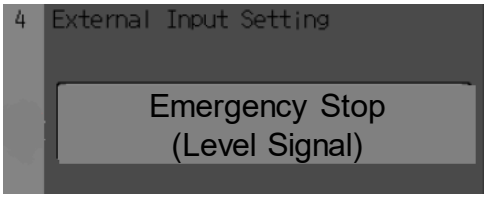

Figure 5. Initial Settings on a TC-24 touch screen

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 AE-200A, AE-50A, EW-50A or TC-24. CN32 and CN52 are NOT rated as emergency contacts.