Remote Controller Field Wiring

Remote controller field wiring is an important step to ensure proper system operation. The following guide lines are intended to help in ensuring proper remote controller field wiring between Remote Controllers and Indoor Units with screw terminals. It is not intended to replace product manuals or replace national, state, or local codes.
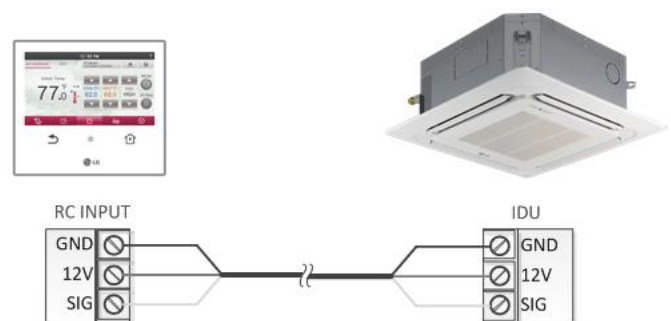
Installation Considerations:

- Follow mounting and wiring instructions and precautions in manuals
- Access requirements
- Use of Remote controller
- Mounting location for proper room temperature sensing
- Max wire length not to exceed 164 Ft

Use #18-#24 AWG, 3 conductor, twisted cable for connecting the Remote Controller to the IDU. #22 AWG, 3 conductor, twisted cable is recommended.

To Connect the Zone Controller with the Indoor Unit:

1. Connect the signal wire (SIG) on the Remote Controller's terminal block to the SIG designation on the IDU terminal block.
2. Connect the 12V wire (12V) on the Remote Controller's terminal block to the 12V designation on the IDU terminal block.
3. Connect the ground wire (GND) on the Remote Controller's terminal block to the GND on the IDU terminal block.

Installation work must be performed in accordance with national, state, and local code by an individual and/or entity that holds a current government issued license that authorizes the individual and/or entity to perform the work in the state where the System resides.

Group control wiring

When group control is required, use the following guidelines.

Installation Considerations:
- Follow mounting and wiring instructions and precautions in manuals
- Access requirements
- Use of Remote controller
- Mounting location for proper room temperature sensing
- Daisy chain wiring only (branch or star configurations are not allowed)
- Max number of Indoor Units group together can total up to 16
- Max distance for the daisy chain is 164 Ft

To Connect the Zone Controller with a Series of Indoor Unit:

From remote contoller to Master IDU:

Wiring is the same as 1:1 wiring

1. Connect the signal wire (SIG) on the Remote Controller's terminal block to the SIG designation on the IDU terminal block.
2. Connect the 12V wire (12V) on the Remote controller's terminal block to the 12V designation on the IDU terminal block.
3. Connect the ground wire (GND) on the Remote controller's terminal block to the GND on the IDU terminal block.
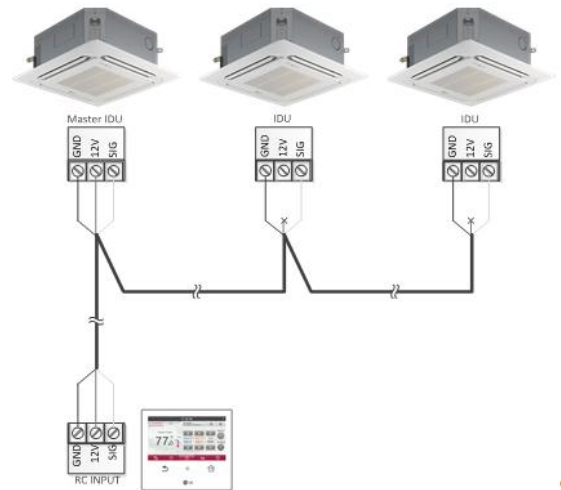
From Master IDU to Slave IDU:

1. Connect the signal wire (SIG) on the Remote Controller's terminal block to the SIG designation on the IDU terminal block.
2. Connect the ground wire (GND) on the Remote controller's terminal block to the GND on the IDU terminal block.

Note: If using 3 conductor wire, tape back or cap with a wire nut the 12V wire (wire not used in slave configuration) (Make sure no bare wire is exposed)

 2 conductor wire of the same size can be used between IDU's

Caution: Do not daisy chain the 12V terminals on the IDU's as it will cause damage to the IDU's and/or the Zone Controller.