



# ClareOne: Remote Power

**Last modified:** 10/22/20

## Introduction

The ClareOne Wireless Security and Smart Home Panel has 2 power options: localized (using provided power supply with micro USB within 6 ft of the installation location) and remote (using CAT5/6 or 24AWG or thicker shielded security wire to extend the reach up to 250 ft from the installation location).

This product bulletin details the remote power option.

## Remote power

### Installation

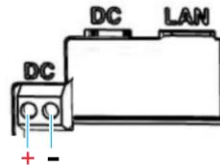
For installation locations that are further than 6 ft from the nearest non switch-controlled outlet, the power supply cable can be removed and replaced with a CAT5/6 cable or a 24AWG or thicker shielded security wire. This allows the power supply to be located up to 250 ft away from the panel. Distance is dependent on type of wire used and number of conductors. See Table 1: Maximum distance chart, on page 3.

### Notes

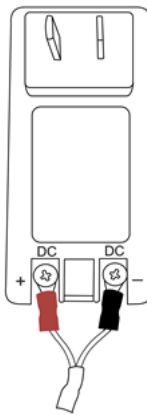
- When using CAT5/6 cable the single wires must have a minimum gauge of 24AWG. In addition, a twisted pair of the wires must be used to connect to each of the positive and negative terminals in order to reach 100 ft.
- At no time should the power supply be plugged into an outlet controlled by a switch.
- Do not use other power supplies, only the provided power supply is suited for the ClareOne panel. This power supply may be used with different wiring as listed in this document.

**To power a panel more than 6 ft away from an outlet:**

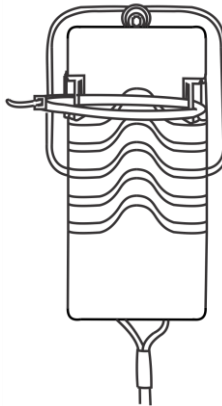
1. Remove the panel's back plate by pressing down on the 2 tabs and pulling the plate outward, exposing the rear interior.
2. Carefully insert the positive end of the wire into the positive terminal of the DC power terminal. Screw down until the wire is secured in place.
3. Carefully insert the negative end of the wire into the negative terminal of the DC power terminal. Screw down until the wire is secured in place.



4. Replace the panel's back plate.
5. Connect the wires to the positive and negative terminals on the power supply.



6. Secure the power supply mounting bracket to the closest wall outlet using the provided screws, and then plug the power supply into the outlet.  
**Note:** Do not connect the power supply to a receptacle controlled by a switch.
7. Use the provided zip tie to loop through the mounting bracket, securing the power supply.



## Wire gauge and distance

The maximum wire distance achievable is dependent on cable material, wire gauge, and the number of conductor wires used. Wiring should always be insulated and not bare. The notes and table below provide a quick reference for determining wire gauge for the desired distance.

- Cat5 and Cat5E wiring is typically 24 AWG and Cat6 is typically 23 AWG. However, that is not always the case. If the gauge of the Cat5/6 being used is unclear, assume it is 24 AWG.
- The table below uses copper wire. It is recommended to only use copper wiring; other materials impact the maximum distance.
- The use of 2 conductors means that there are 2 wires connected to the “+” terminals and 2 wires connected to the “-“ terminals, for a total of 4 wires between the panel and power supply.

**Table 1: Maximum distance chart**

Wire Gauge	Number of Conductors	Maximum distance
24 AWG	1	60 ft
24 AWG	2	125 ft
23 AWG	1	80 ft
23 AWG	2	160 ft
22 AWG	1	100 ft
22 AWG	2	200 ft
20 AWG	1	160 ft
18 AWG	1	250 ft

**Note:** For proper operation, the voltage measured on the ClareOne DC input terminals when connected to power should be greater than 5vDC.

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