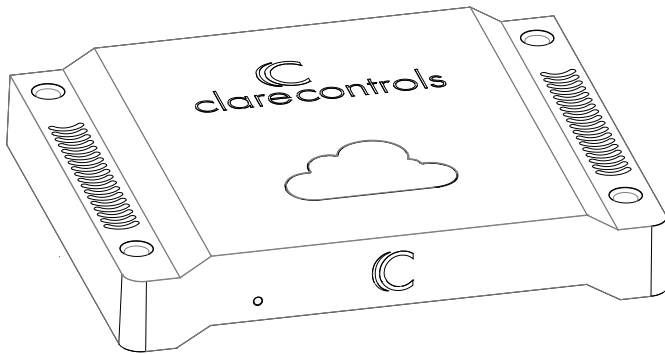# CLIQ.express Controller Installation Sheet

Last modified: 09/29/16

Description

The CLIQ.express is Clare Controls' entry-level controller for home automation that integrates a broad range of common interface elements into a single unit. It provides device management services to AppModules, supports Clare user interface services, and acts as the gateway to the ClareCloud for system updates. The controller comes complete with the ClareOS and all AppModules preloaded.

Note: Models, and their appearance, are subject to change without prior notice.

WARNING: Any changes or modifications made to this product not expressly authorized by the manufacturer could void the user's right to operate this device.

Unpacking the CLIQ.express

Remove all contents from the CLIQ.express packaging and ensure you have the following items.

- 1 × CLIQ.express device
- 1 × power supply
- 1 × RJ12 to DB-9 cable (null modem)
- 1 × antenna and extender cable
- 4 × rubber foot covers

Record the device's UUID number (labeled on the bottom of the device) on the line below, or scan the QR code (also on the label) with a scanning app, and then email the number to your system programmer. Your system programmer will need this UUID information to configure the CLIQ.express device.

UUID: _____

Do not use this UUID for more than one account.

WARNING: Do not apply power to the CLIQ.express until installation is complete. Failure to do so may result in bodily injury and/or damage to the equipment.

Installation

The CLIQ.express can be mounted in a structured enclosure, set on a rack shelf, or placed in any room near your devices.

Note: The CLIQ.express contains a 908.4 MHz transceiver. To prevent radio frequency (RF) interference from external sources, we recommend that you place the CLIQ.express away from devices that may cause interference and away from conductive metals.

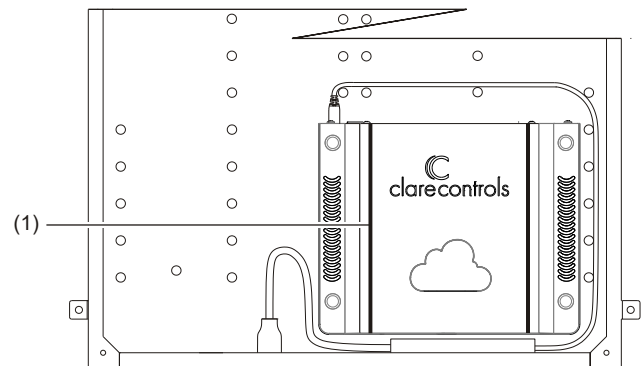### Mounting the CLIQ.express in a structured enclosure

When mounting the CLIQ.express in a structured enclosure, we recommend using the Leviton Structured Media Enclosure or the Suttle SOHO Access Enclosure panels fitted with the ClareHome Structured Enclosure Extender (P/N CH-EXT-28 and CH-EXT-42) for added protection against heat build-up. (Panels and extenders are sold separately.)

To mount the CLIQ.express in a structured enclosure:

1. Place the CLIQ.express inside the structured enclosure with the rear of the device facing up. See Figure 1.

2. Using cable ties, secure the CLIQ.express to the enclosure.

Note: Be sure to leave at least 1U of spacing (1.75 in. (4.45 cm)) above and below the CLIQ.express when mounting.

Figure 1: CLIQ.express mounted in a structured enclosure

(1) Mount CLIQ.express with cable ties

Connecting devices to the CLIQ.express

After placing your CLIQ.express, make the connections to your other devices. Figures 2 and 3 identify the LEDs and ports on the front and rear of the CLIQ.express. Refer to the documentation that came with each of your other devices for detailed information about connecting those devices to the CLIQ.express.

To connect the CLIQ.express:

1. Connect your serial devices (optional) to the RS-232 port using an RJ12 to RS-232 adapter cable, or an RJ12 to DB-9 null modem cable (included). See Figure 3, item 1. For RJ12 pinouts, see Figure 6.

   Note: The Console port is a service port used by Clare Controls and not used with normal applications.

2. Connect a device, such as the optional CS-BR-1 Streams Audio Bridge to a USB port on the CLIQ.express, See Figure 3, item 3.

3. Use an Ethernet cable (not included) to connect your CobraNet switch to the port labeled "CobraNet." See Figure 3, item 4.
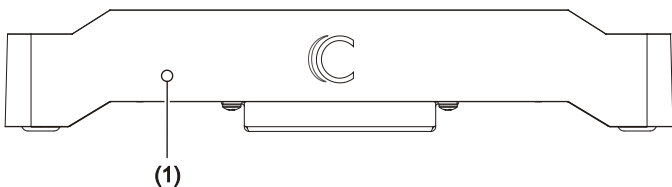
   Note: The CobraNet port is preset with the static IP address 172.30.100.1. All CobraNet devices used on the same subnet must use an address from 172.30.100.2 to 172.30.100.254.

4. Use an Ethernet cable (not included) to connect to your data network switch to the port labeled "Ethernet." See Figure 3, item 5.
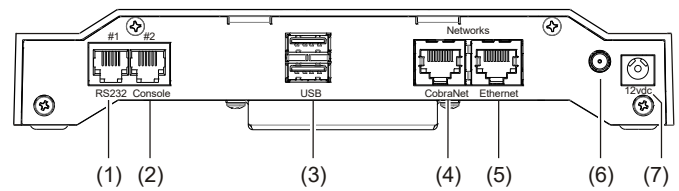
   Notes

   - The Network port is preset to DHCP. If you are using the Streaming Media server in your project, a fixed IP address is not required and should be configured as "localhost."

   - If you are using a device, such as an RTI remote that requires the controller to have a fixed IP, you must set the fixed IP using a MAC/DHCP reservation on the local router.

5. Attach the 908.4 MHz antenna or optional antenna extender to the antenna port. See "Attaching the antenna" below.

Figure 2: CLIQ.express front

(1) LED – It illuminates purple when booting and blue when running normally.

Figure 3: CLIQ.express rear connections

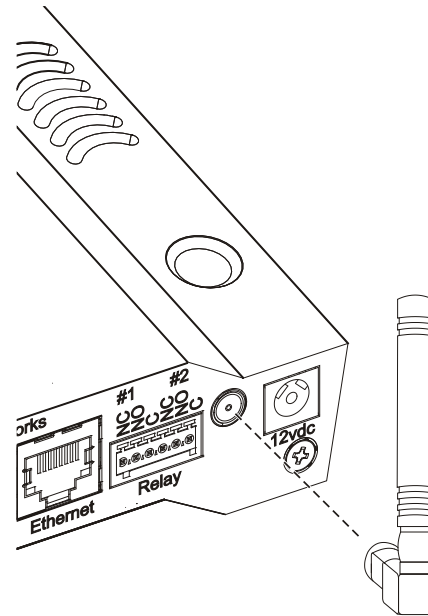|	
(1) RS232 (1 port)	(5) Ethernet
(2) Console (factory use, only)	(6) Antenna
(3) USB ports	(7) Power – 12 VDC
(4) CobraNet	

Attaching the antenna

The 908.4 MHz antenna can be mounted to the CLIQ.express controller, or further away using an extender cable (included) to enhance radio performance. When mounting the CLIQ.express inside a structured enclosure, always mount the antenna outside the enclosure using the extender cable.

To attach the antenna directly to the CLIQ.express:

1. Remove the antenna from its packaging.

2. Screw antenna to the antenna port on the rear of the CLIQ.express until the antenna is snug. Do not over-tighten the antenna. See Figure 4.

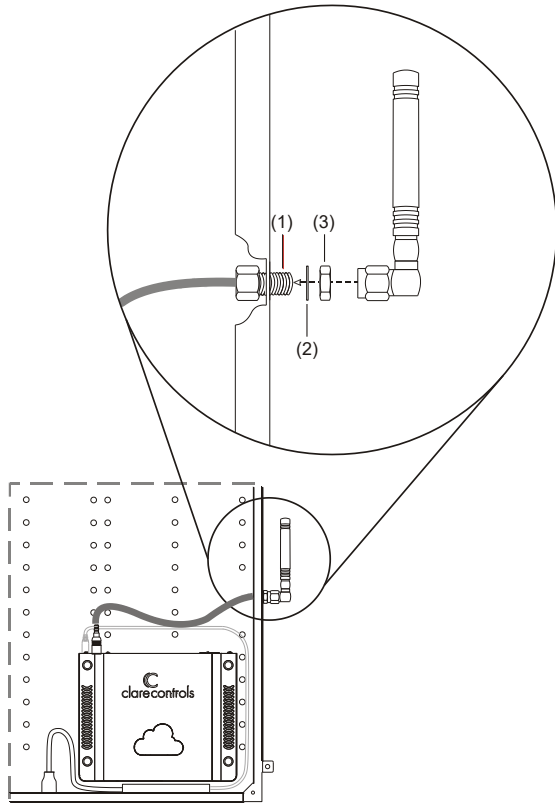**Figure 4: Attaching the antenna to the CLIQ.express**

To attach the antenna using the extender cable:

1. Using a 17/64 in. drill bit, drill a hole in the sidewall of the ClareHome Structured Enclosure Extender, near the CLIQ.express.

2. On the extender cable, remove the locknut and washer from the SMA Male connector. See Figure 5.

3. Insert the threaded end though the hole, and then replace the washer and locknut, tightening the locknut until the connector is secure and does not wobble in the hole.

4. Screw the antenna to the connector until the antenna is snug.

5. Attach the other end of the extender cable to the antenna port on the rear of the CLIQ.express. See Figure 3, item 6.

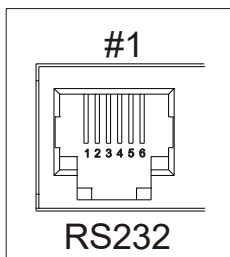Figure 5: Attaching the antenna with the extender cable

(1) SMA Male connector
(2) Washer
(3) Locknut

RS-232 port pinouts

If you are using your own RJ12 cable (rather than the one supplied), ensure your RJ12 cable connector pinouts match the pinouts on the RS232 port, as shown in Figure 6.

Figure 6: RS-232 port #1 with pinouts

Pin No.	Function
Pin 1	No connection
Pin 2	Ground
Pin 3	Transmit data (from CLIQ)
Pin 4	Receive data (to CLIQ)
Pin 5	Ground
Pin 6	No connection

Powering the CLIQ.express

Plugging in the power adapter automatically turns on the CLIQ.express and starts the boot process.

To connect power to the CLIQ.express:

1. Plug the power adapter into a power receptacle on the back of the CLIQ.express labeled "12vdc." See Figure 3, item 7.

2. Check the LED on the front of the CLIQ.express. It illuminates when the device is receiving power. See Figure 2, item 1.

Time, date, and time zone

Your CLIQ.express controller automatically detects and sets its time, date, and time zone when you connect it to your data network. CLIQ.express uses NTP and synchronizes the date and time at boot up and periodically throughout the day.

Configure, test, and deploy a project

Refer to the Clare Controls Knowledge Base Fusion Help for instructions on creating, testing, and deploying a project. When you deploy the project from Fusion, it will deploy to the CLIQ.express.

Attaching a CLIQ.connect

When attaching a CLIQ.express to a CLIQ.connect, you must attach the CLIQ.express over the CLIQ.connect.

Adding the rubber foot covers

To prevent the unit from sliding, use the four rubber foot covers included with your CLIQ.express.

- Peel each foot cover from the paper backing and place one on each foot on the bottom of the CLIQ.express.

Specifications

I/O ports	
USB 2.0	2
Ethernet LAN	1
RS232 [1]	1
CobraNet	1
General	
Processor	Freescale iMX6
Operating system	Linux
Memory	2 GB DRAM, 1 GB NAND Flash
Power	8.4 W (700 mA at 12 VDC)
Operating temperature	41 to 113°F (5 to 45°C)
Relative humidity	10 to 90%, non-condensing
Dimensions (W × H × D)	1.3 × 8 × 6 in.
	3.3 × 20.32 × 15.24 cm

[1] CLIQ.express supports RS232 speeds of 300 baud and higher.

Regulatory information

Manufacturer	Clare Controls, LLC. 7519 Pennsylvania Ave, Suite 104 Sarasota, FL 34243
FCC compliance	This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Warranty information

Clare Controls offers a three (3) year limited warranty on original Clare Controls components, from the date of shipment from Clare Controls. To view complete limited warranty details, including limitations and exclusions, www.clarecontrols.com/warranty.

Scan the code to view product warranty details.

Contact information

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