

### 1. Introduction

The On-Q/Legrand Enclosure with Knockouts is available in four sizes, 14" (P/N EN1485), 20" (P/N EN2085), 28" (P/N EN2885) and 42" (P/N EN4285). Hinged doors, including lock assembly (P/N ENxx60), or screw-on covers (P/N ENxx20) are sold as separate products for each size enclosure.

### 2. Enclosure Installation

Locate the enclosure centrally in the house to minimize the length of cable runs and in a climate controlled area. Temperature must be from 0°C (32°F) to 50°C (122°F). Humidity is to be controlled to not condense in the enclosures. The enclosure must be located to assure that the electrical outlet, if installed in the enclosure, is installed in compliance to all NEC wiring requirements. This is particularly important if the enclosure is located in a basement and may be subject to flooding.

**CAUTION: For any limitations on enclosure locations, consult local electrical and building codes before installing enclosures.**

**NOTE: The enclosure is not weather proof and should not be located outside or where temperature changes and humidity may allow condensation in the enclosure.**

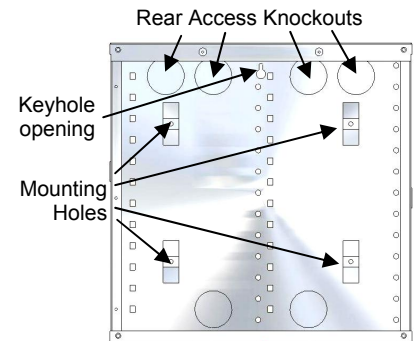
**NOTE: The enclosure is not fire rated and should not be mounted in fire rated walls.**

The enclosure may be either surface mounted or recess mounted between studs installed on 16 inch centers.

#### Surface Mounting-

Typical surface mounting is on a 3/4 inch plywood back board.

- Securely mount plywood with rear access knockouts accessible, if needed.
- If cable access is to be through the back of enclosure, remove wire access knockouts from rear of enclosure. (See **Figure 1**).
- Position enclosure in desired location and mark top of center keyhole opening located on the top center of enclosure (See **Figure 1**).
- Install mounting wood screw at mark. Head must be 1/2" clearance from the back.
- Hang enclosure on screw and mark four (4) mounting holes and wire access holes on plywood. (See **Figure 1**). Also mark top and bottom of enclosure.
- If cable access is from the rear, remove enclosure and cut access holes in plywood for cables.

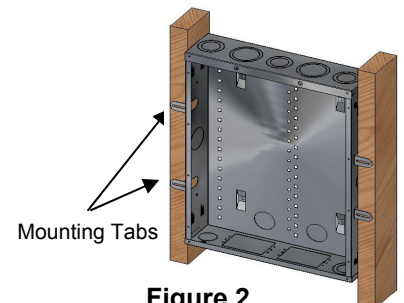


**Figure 1**

**Note - Access hole may be a large slot, provided it does not extend beyond the enclosure. Remove all rough edges to prevent cable damage.**

- Attach enclosure to wall using wood screws. Remove the top centering screw to avoid interference with modules.

**Note - It may be easier to rough-in cable and feed cables through plywood prior to attaching the enclosure.**



**Figure 2**

#### Recessed mounting-

There are two methods for recess mounting the enclosure. In half inch drywall installations the enclosure may be mounted to the front of the studs. Bend out the side tabs on each side to 90 degrees (see **Figure 2**). Position the enclosure to the desired height and fasten using standard screws into the slots in the tabs.

Alternatively you may position the enclosure to the desired height and fasten to the sides of the studs using the slots in the tabs. Do not fully tighten until enclosure is positioned for the desired depth. Drywall depth marks are embossed on the sides of the enclosure (see **Figure 3**). Enclosure should be snug prior to drywall installation, however it may be adjusted to assure it is flush with the wall after trim out.

Enclosure Ground Cable – (see **Figure 3**)

The ground cable is to be routed from the enclosure to the house electrical ground. The ground screw is located inside the bottom of the enclosure.

### 3. Running Power To Enclosure

AC power needs to be run to the Enclosure when installing any module that requires AC or DC power to operate. A low-voltage UL listed, Class 2, plug-in power supply is required when using these modules. Low voltage power options are available from your On-Q distributor.

Remove knock-out in the bottom of the Enclosure. Install a single-gang metal outlet box (see **Figure 3**).

Run a length of nonmetallic power cable to the Enclosure for connection of a standard 15 amp, 120 volt power receptacle (Available as a kit from On-Q as P/N F7526).

**Note: Separation of circuits must be maintained and electrical wiring must comply with the National Electric Code (NFPA 70), Canadian Electric Code, and all applicable state or local codes.**

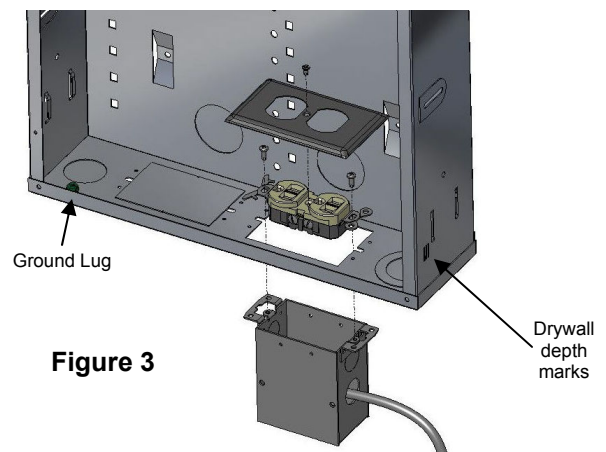


Figure 3

### 4. Cable Rough-In

All applications and cabling to and from the enclosure are low voltage class 2 or communication cables. All code and good wiring practices should be maintained, such as maintaining separation from power and using proper cable retention. The next section describes rough-in at the enclosure.

**NOTE: The enclosure must be grounded. Use a minimum of 14 AWG copper wire to connect the ground lug to earth ground. Electric ground shall be considered at the same potential as earth ground.**

#### A. Telephone Rough-In

- 1) Install Category cable (depending on application) from the enclosure to the telephone company network interface device (NID). Label cable near entry to the enclosure and at outlet location.
- 2) Install Category cable (depending on application) from the enclosure to each of the outlet locations. Label cable near entry to the enclosure and at outlet location.
- 3) Position and secure cables to comply with codes and good wiring practices to ensure cables are not damaged during construction.

**NOTE: It is recommended that a second Cat 5e cable be run from the telephone network interface to the Enclosure for future data applications.**

#### B. Coax Rough-In

- 1) Install Quad Shield RG6 cable from the enclosure to the outlet locations. Route the cable through the appropriate upper access hole with approximately three feet of excess. Label cable near entry to the enclosure and at outlet location.
- 2) Install 2-5 Quad Shield solid copper center conductor RG6 cables from the enclosure to any planned dish antenna location. Route the cables through one of the upper access hole with approximately three feet of excess. Label cables near entry to the enclosure and antenna location.
- 3) Install Quad Shield RG6 cable from the enclosure to any media center input and video outlets. Route the cable through one of the upper access hole with approximately three feet of excess. Label cable near entry to the enclosure and outlet location.
- 4) Position and secure cables to comply with codes and good wiring practices to ensure cables are not damaged during construction.

C. Other Cable Rough-In

- 1) For local area network (LAN) and other data connections, install Category 5e cable from the enclosure to the desired outlets.
- 2) For Audio and other low voltage applications, install appropriate cable per the application instructions.

D. Security and Control Wiring (Control Wiring is low voltage wiring which controls lighting and other household systems):

- 1) Install security and control cabling from the enclosure to the sensors and devices being controlled. Route the cable through the enclosure access holes with approximately three feet of excess. Label cables near the entry into enclosure and at outlet location.

**Note: Refer to Security System installation guide for cable requirements and marking.**

**5. Screw-on Cover Installation**

**NOTE: Only use On-Q/Legrand Covers with the enclosure. Covers must be matched to the proper size enclosure.**

- A. Partially install the top two (2) screws in the enclosure.
- B. Hang the screw-on cover on the two partially installed screws using the keyhole openings in the cover. The cover should hang freely and fit up against the enclosure; if not, check to see if cables are outside the enclosure or check to see if cables are being pinched.
- C. Install the remaining two screws with lock washers, and tighten.
- D. Remove the top two screws and reinstall with lock washers. Tighten the screws.

**NOTE: Screws must be installed with lock washers to ensure proper cover grounding. The screws and lock washers must be installed to ensure the cover is electrically grounded to the enclosure. (See Figure 4)**



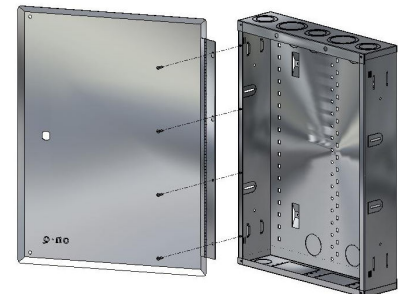
Figure 4

**NOTE: READ AND UNDERSTAND ALL INSTRUCTIONS**

**Follow all warnings and instructions marked on product. For use only with compatible products. Follow manufacturers installation instructions for all modules and support products**

**6. Hinged Cover Installation**

- A. Partially install two (2) hinged cover mounting screws in the top two holes on the enclosure (see **Figure 5**).
- B. Hang the hinged cover on the two partially installed screws using the keyhole openings on the hinge. The cover should fit up against the enclosure (surface mount) or the wall(recessed mount). If the cover does not fit properly, check that the cables are not being pinched, or that the lock is not in the locked position.
- C. Install the remaining hinge screws with lock washers.
- D. Remove the top two screws and reinstall with lock washers. Tighten the screws.
- E. Lock hinged cover if desired.



Hinged Cover Assembly

Figure 5

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**IMPORTANT SAFETY INSTRUCTIONS**

When using your enclosure and installed low voltage products such as telephone equipment, basic precautions should always be followed to reduce the risk of fire, electric shock and injury to persons, including the following:

1. Read and understand all instructions.
2. Follow all warnings and instructions marked on the product.
3. Do not use this product near water, for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool.
4. Never push objects of any kind in to this product through cabinet slots as they may touch dangerous voltages.
5. Never touch un-insulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.
6. Separation must be maintained between power-limited, non-power-limited, telco, and coax circuits, as well as between any current-carrying and dead-metal parts, by a minimum spacing of 1/4" inch.
7. Use caution when installing or modifying telephone lines, and never install them during a lightning storm.
8. Never install telephone jacks in wet locations unless they are specifically designed for such installations.
9. Receptacle box employed must be UL Listed and appropriate per the enclosure installation, i.e. flush-mount vs. surface mount.
10. Enclosure covers must be installed prior to the application of energized services.
11. Low-voltage modules must be supplied power via the use of a UL Listed, Class 2 plug-in power supply.
12. Unused cable entry holes require a knock-out seal to reduce the risk of electric shock.
14. Any unused 110VAC receptacles must be covered.

**NOTE:** These enclosures are only compatible with UL Listed Household Fire and Burglary Alarm System Unit Sub-assemblies as indicated in the control unit's installation instructions.