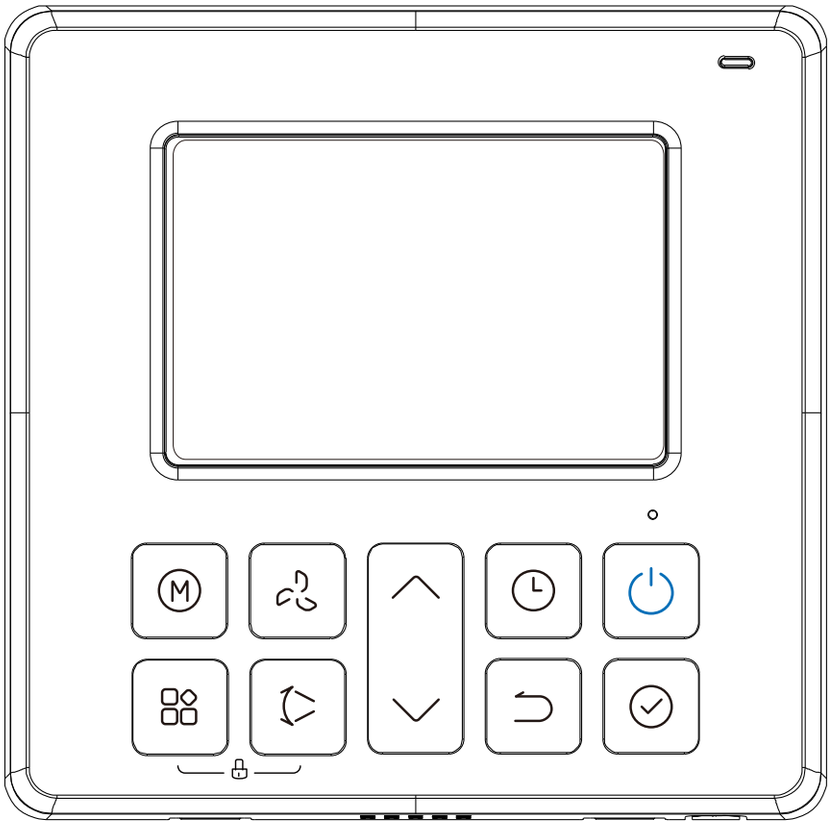
**Wired Remote Controller**

**KSACN1201AAA**

**For Use With Ductless Systems**

# Installation Manual

**NOTE: In order to properly service the wired controller, read this manual carefully prior to operating the unit. Keep this manual after reading for future reference.**



**NOTE: Images are for illustration purposes only. Actual models may differ slightly.**

TABLE OF CONTENTS

PAGE

COMPATIBILITY .....3
SAFETY CONSIDERATIONS.....4
BATTERY INSTALLATION.....6
WALL MOUNTED WIRED CONTROLLER WIRING.....9
WIRING DIAGRAM .....11
INSTALLATION DIAGRAM .....12
WALL MOUNTED CONTROLLER INSTALLATION .....15
WIRED CONTROLLER DIMENSIONS .....16
INSTALLATION .....19

# COMPATIBILITY

This wired controller is compatible with the following Ductless Systems:

| Indoor | Tier |
|---|---|
| High Wall | High |
| High Wall | Mid |
| 1- Way Cassette | Mid |
| 4 – Way Cassette | Mid |
| Floor Console | Mid |
| High Wall | Entry |
| High Wall | Value |
| High Wall - Cooling Only | Entry |
| Low Static Ducted | Mid |
| High Static Ducted | Mid |
| Celling and Floor Console | Mid |

# SAFETY CONSIDERATIONS

Installing, starting up, and servicing air-conditioning equipment can be hazardous due to system pressures, electrical components, and equipment location (roofs, elevated structures, etc.). Only trained, qualified installers and service mechanics should install, start-up, and service this equipment. Untrained personnel can perform basic maintenance functions such as cleaning coils.

When working on the equipment, observe precautions in the literature and on tags, stickers, and labels attached to the equipment.

Follow all safety codes. Wear safety glasses and work gloves. Keep a quenching cloth and fire extinguisher nearby when brazing. Use care in handling, rigging, and setting bulky equipment.

Read these instructions thoroughly and follow all warnings or cautions included in the literature and attached to the unit. Consult the local building codes and National Electrical Code (NEC) for special requirements. Recognize safety information.

This is the safety-alert symbol . When you see this symbol on the unit and in instructions or manuals, be alert to the potential for personal injury. Understand these signal words: **DANGER**, **WARNING**, and **CAUTION**. These words are used with the safety-alert symbol.

**DANGER** identifies the most serious hazards which will result in severe personal injury or death.

**WARNING** signifies hazards which could result in personal injury or death. **CAUTION** is used to identify unsafe practices which may result in minor personal injury or product and property damage.

**NOTE** is used to highlight suggestions which will result in enhanced installation, reliability, or operation.

# WARNING

**ELECTRICAL SHOCK HAZARD**

Failure to follow this warning could result in personal injury or death.

Before beginning any modification or installation of this kit, ensure the main electrical disconnect is in the **OFF** position. Ensure power is disconnected to the fan coil unit.

# CAUTION

**EQUIPMENT DAMAGE HAZARD**

Failure to follow this caution may result in equipment damage or improper operation.

Do not install the wired controller in an area subjected to excessive steam, oil or sulfide gas. Doing so may damage the controller and/or cause it to fail.

# BATTERY INSTALLATION

**BATTERY WARNING**

**KEEP OUT OF REACH OF CHILDREN.**
Swallowing can lead to chemical burns, perforation of soft tissue, and death. Severe burns can occur within 2 hours of ingestion. Seek medical attention immediately.



**⚠ WARNING**

- **INGESTION HAZARD:** This product contains a button cell or coin battery.
- **DEATH** or serious injury can occur if ingested.
- A swallowed button cell or coin battery can cause **Internal Chemical Burns** in as little as **2 hours.**
- **KEEP** new and used batteries **OUT OF REACH of CHILDREN.**
- **Seek immediate medical attention if a battery** is suspected to be swallowed or inserted inside any part of the body.





**BATTERY WARNING**



**WARNING**: Contains coin battery.

**⚠ WARNING** | **INGESTION HAZARD:** This product contains a button cell or coin battery.

- **BATTERY WARNING: KEEP OUT OF REACH OF CHILDREN;**
- If the battery compartment (if applicable) does not close securely, stop using the product and keep it away from children;
- If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.

# Battery Installation Method

## ⚠ WARNING

Remove and immediately recycle or dispose of used batteries according to local regulations and keep away from children. **DO NOT** dispose of batteries in the household trash or incinerate. Even used batteries may cause severe injury or death. Call a local poison control center for treatment information. Non-rechargeable batteries are not to be recharged. **DO NOT** force discharge, recharge, disassemble, heat above 125°F (52°C) or incinerate. Doing so may result in injury due to venting, leakage or explosion resulting in chemical burns. Ensure the batteries are installed correctly according to polarity (+ and -). **DO NOT** mix old and new batteries, different brands or types of batteries such as alkaline, carbon-zinc, or rechargeable batteries. Remove and immediately recycle or dispose of batteries from equipment not used for an extended period of time according to local regulations.

- Completely secure the battery compartment. If the compartment does not close securely, stop using the product, remove the batteries and keep them away from children.

  Battery type: CR2032
  Battery Power Supply: 3.0V

  a. Put the battery in the installation site. Ensure the positive side of the battery is in accordance with the positive side of installation site (see Fig. 1).

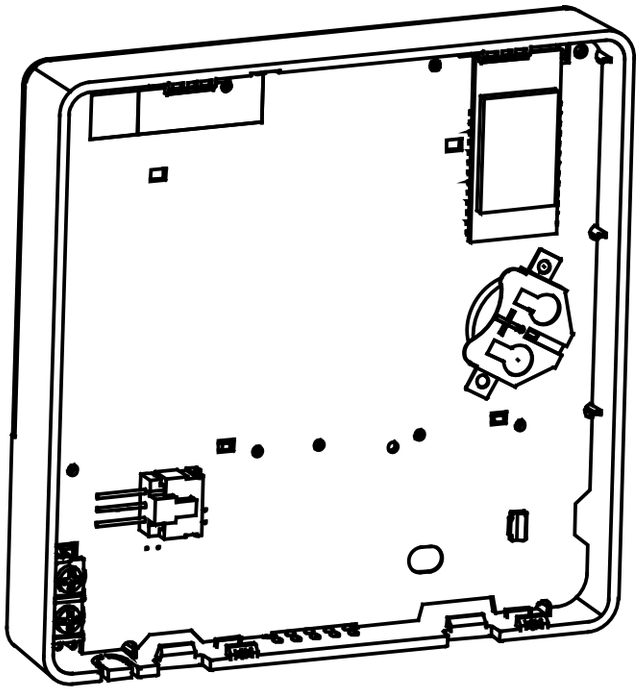


**Fig. 1 —Battery Location**

  b. Set the time corrected on the first time operation. Batteries in the wired controller can timeout during a power failure which ensures the time is accurate. When the power restores, if the time displayed is not accurate, the battery is dead and must be replaced.

# WALL MOUNTED WIRED CONTROLLER WIRING

## ⚠ WARNING

**FIRE HAZARD**

Failure to follow this warning could result in fire.

The wiring should adapt to the wire control current. Otherwise, electric leakage or overheating may occur and result in fire.

The specified cables shall be used in the wiring. No external force may be applied to the terminal. Otherwise, wire may be damaged and heating may occur and result in fire.

## ⚠ CAUTION

**EQUPMENT DAMAGE OR OPERATION HAZARD**

Failure to follow this caution may result in equipment damage or improper operation

- The shielded wire must be grounded.
- The connecting cable should not be longer than 65.5 ft (20 m).
- The controller operates on low voltage circuit loops. **DO NOT** connect a 220V or 380V cable to the circuit loop.

# CAUTION

**EQUPMENT DAMAGE OR OPERATION HAZARD**

Failure to follow this caution may result in equipment damage or improper operation

- Make sure that configured tubes are 12-20 inches (30-50 cm) or more apart.
- **DO NOT** employ an ohmmeter to detect the insulation after wiring the controller.

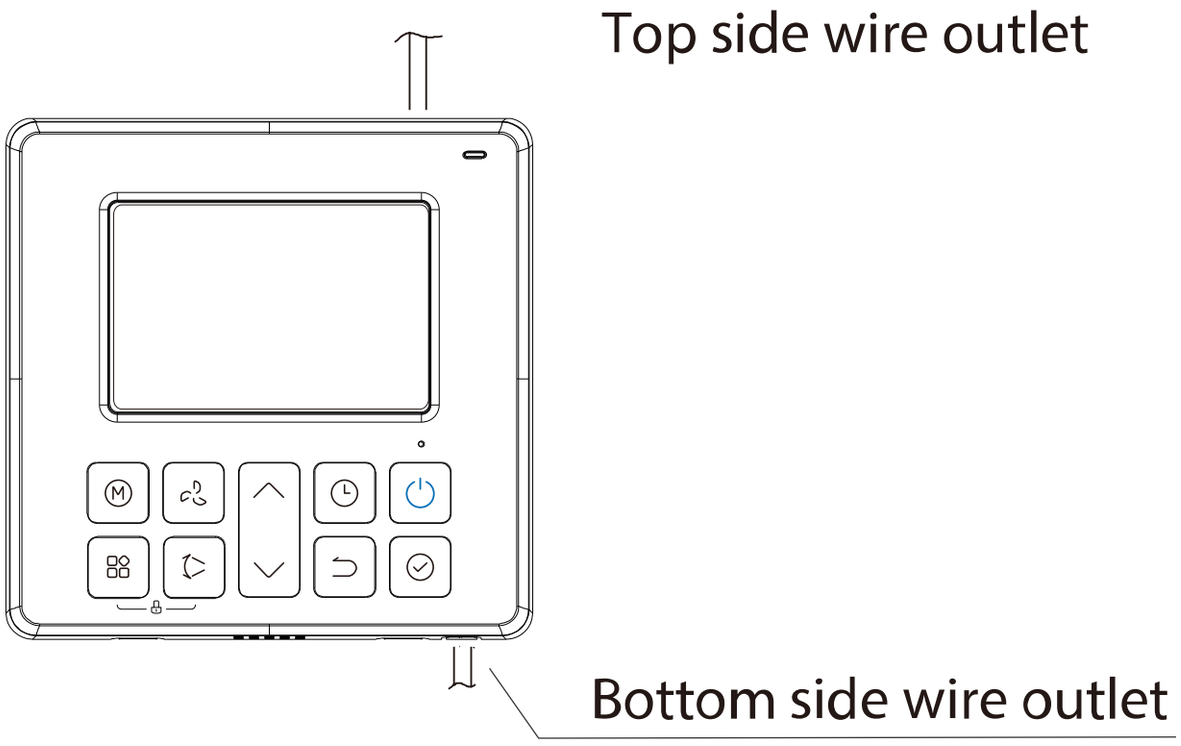



**Fig. 2 – Overview of Wall-Mounted Wired Controller**

# WIRING DIAGRAM

Refer to the following diagram to wire the wall-mounted wired controller to the indoor unit.

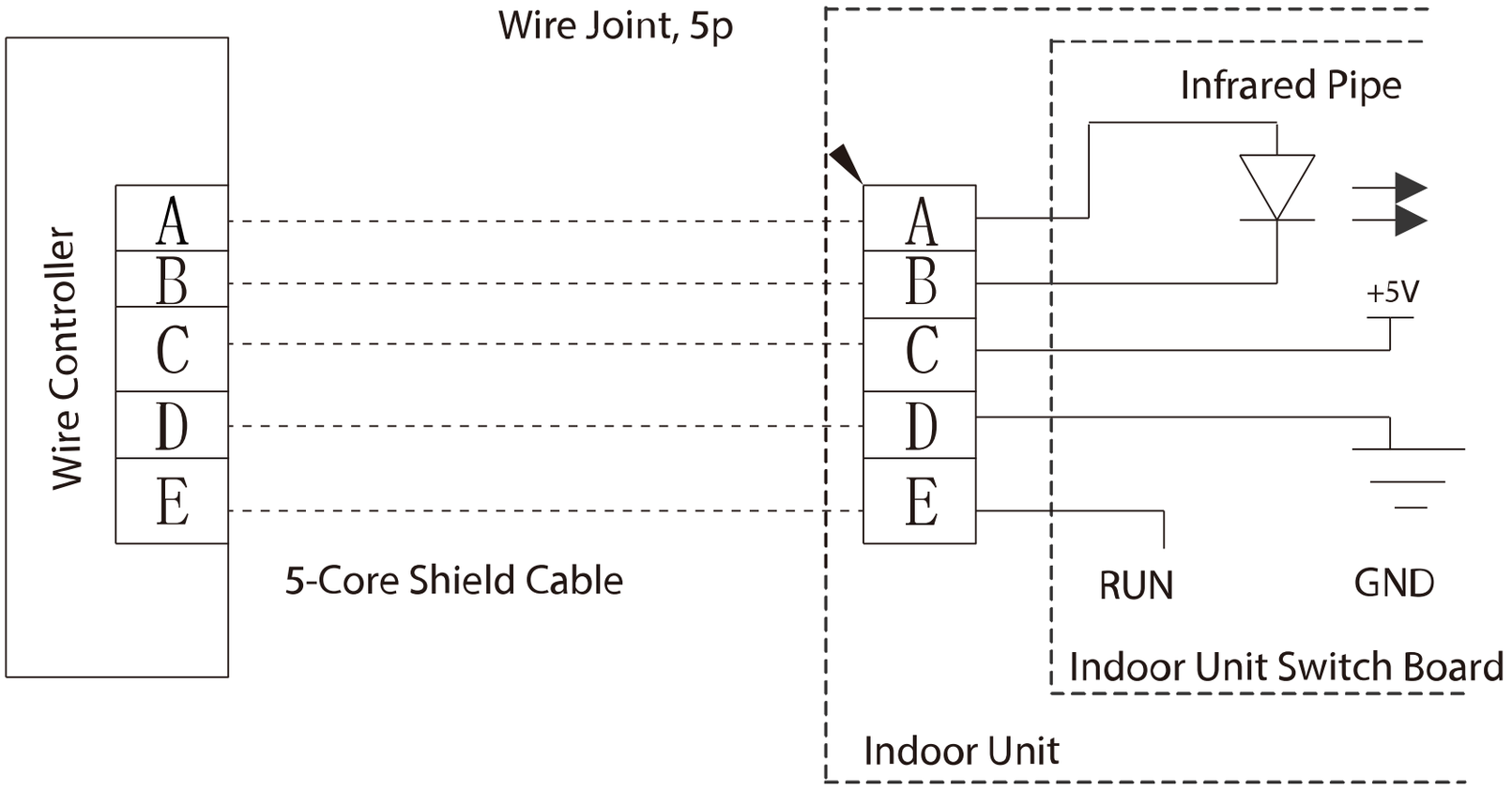



**Fig. 3 – Wiring Diagram**

# INSTALLATION DIAGRAM

Connect the wire from the display panel of the indoor unit to a connecting cable. Then connect the other side of the connecting cable to the controller (see Fig. 4).

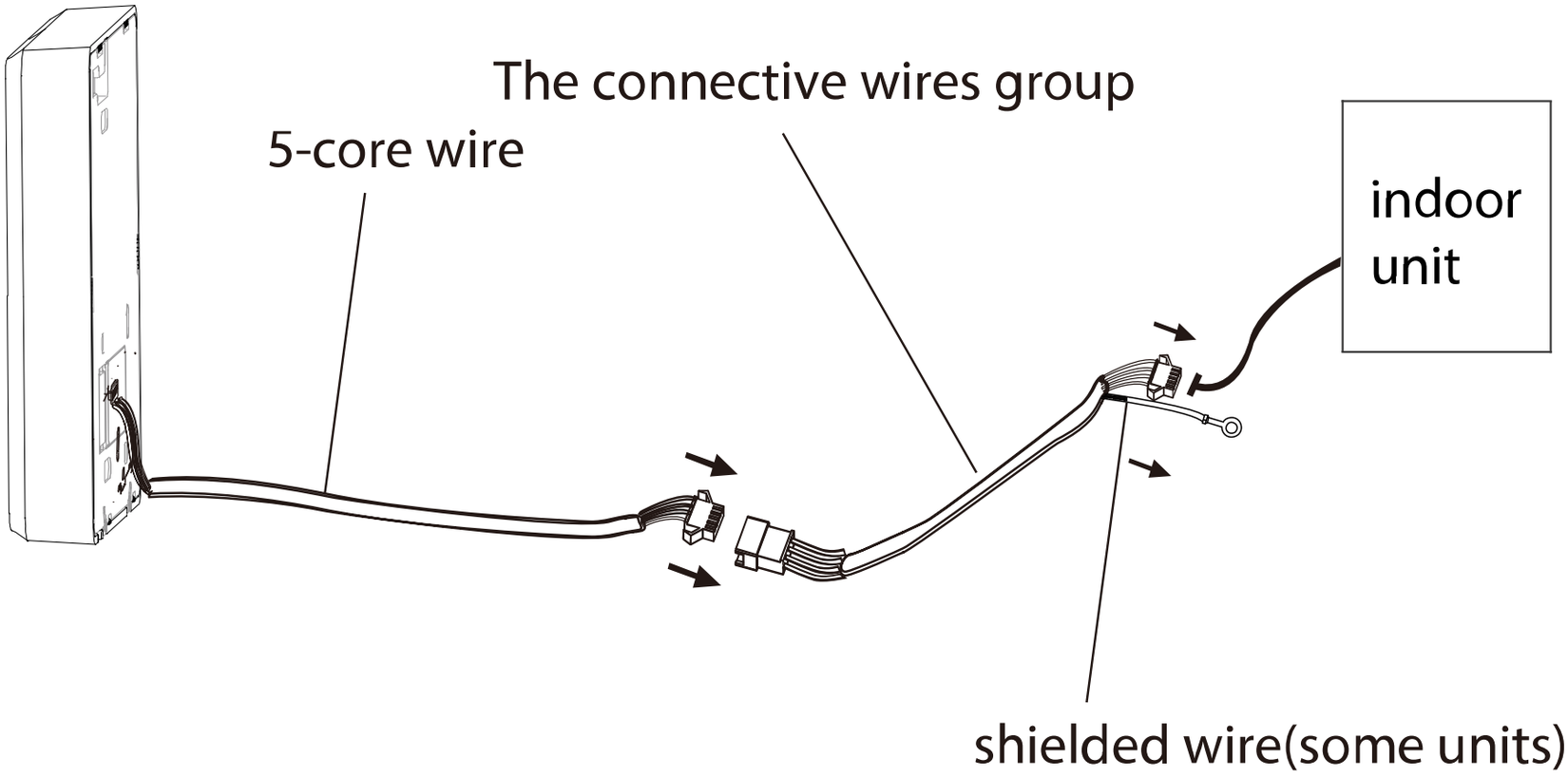



**Fig. 4 – Installation Diagram**

NOTE: Be sure to reserve a length of the connecting wire for periodic maintenance. If there is a connection lug at the end of the shielded wire, the connection lug should be properly grounded.

NOTE: **DO NOT** allow water to enter the control. Use trap and putty to seal the wires (see Fig. 5).

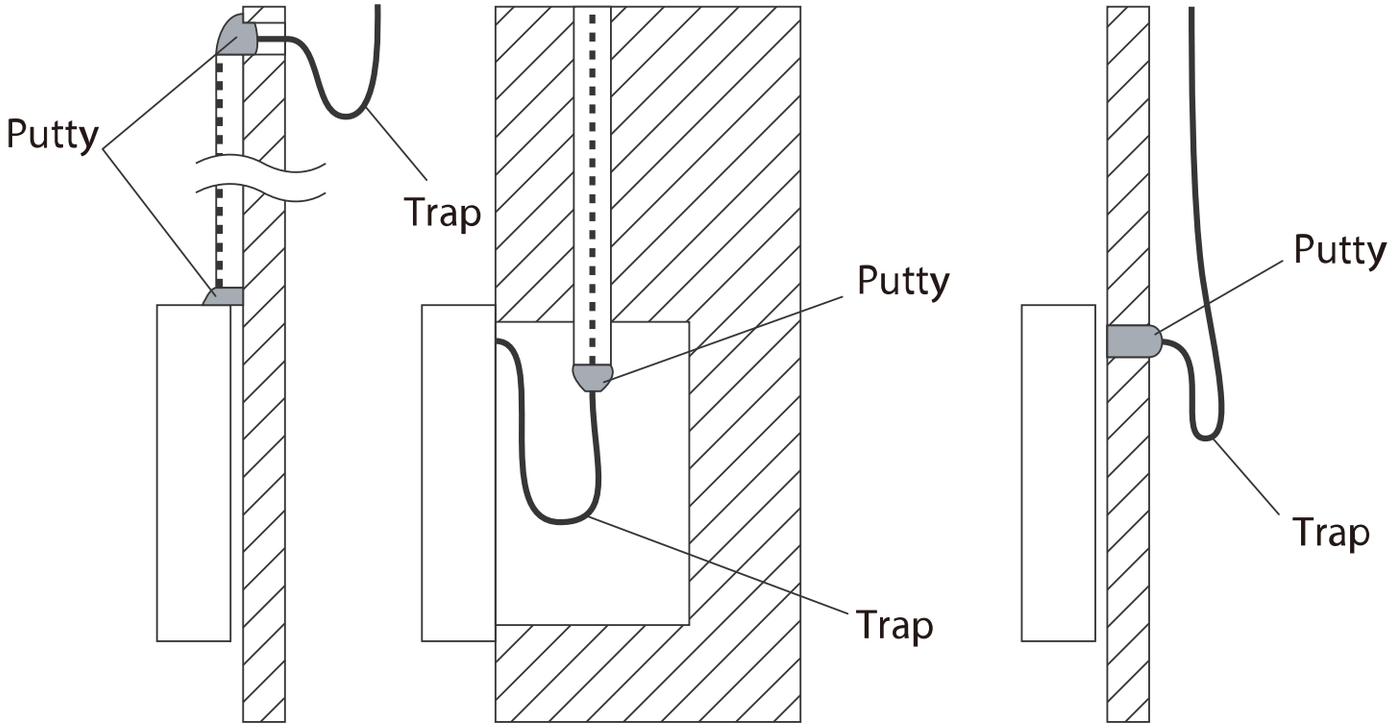



**Fig. 5 – Trap & Putty to Seal Wires**

a.) For exposed mounting, cut holes on four of the sides according to Fig. 6

b.) For shielded wiring, refer to Fig. 7.

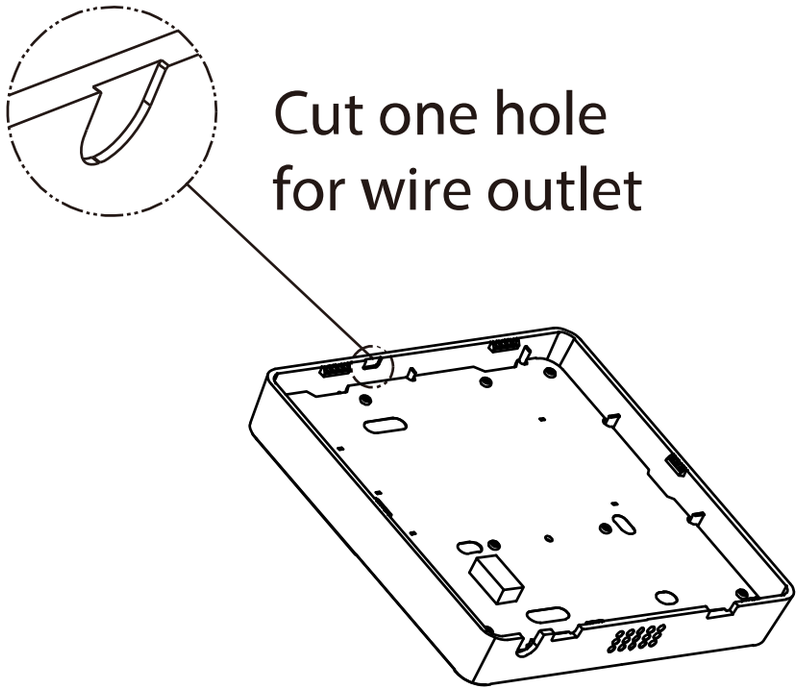



**Fig. 6 – Cut Hole for Wire Outlet**

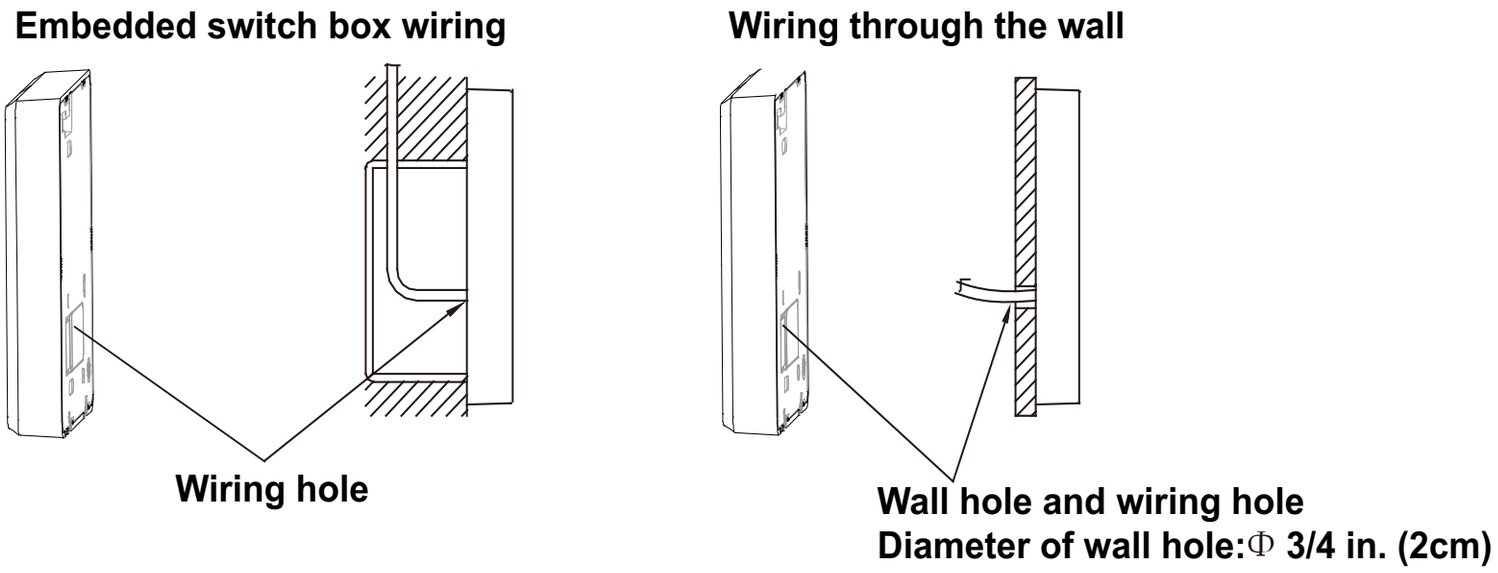



**Fig. 7 – Switch Box Wiring**

# WALL MOUNTED CONTROLLER INSTALLATION

## WARNING

**ELECTRICAL SHOCK AND/OR FIRE HAZARD**

Failure to follow this warning could result in fire, personal injury or death.

- Do not operate with wet hands or let water enter the wire controller. Otherwise, electric shock may occur.
- The wiring should adapt to the wire controller current. Otherwise, electric leakage or heating may occur and result in fire.

# WIRED CONTROLLER DIMENSIONS

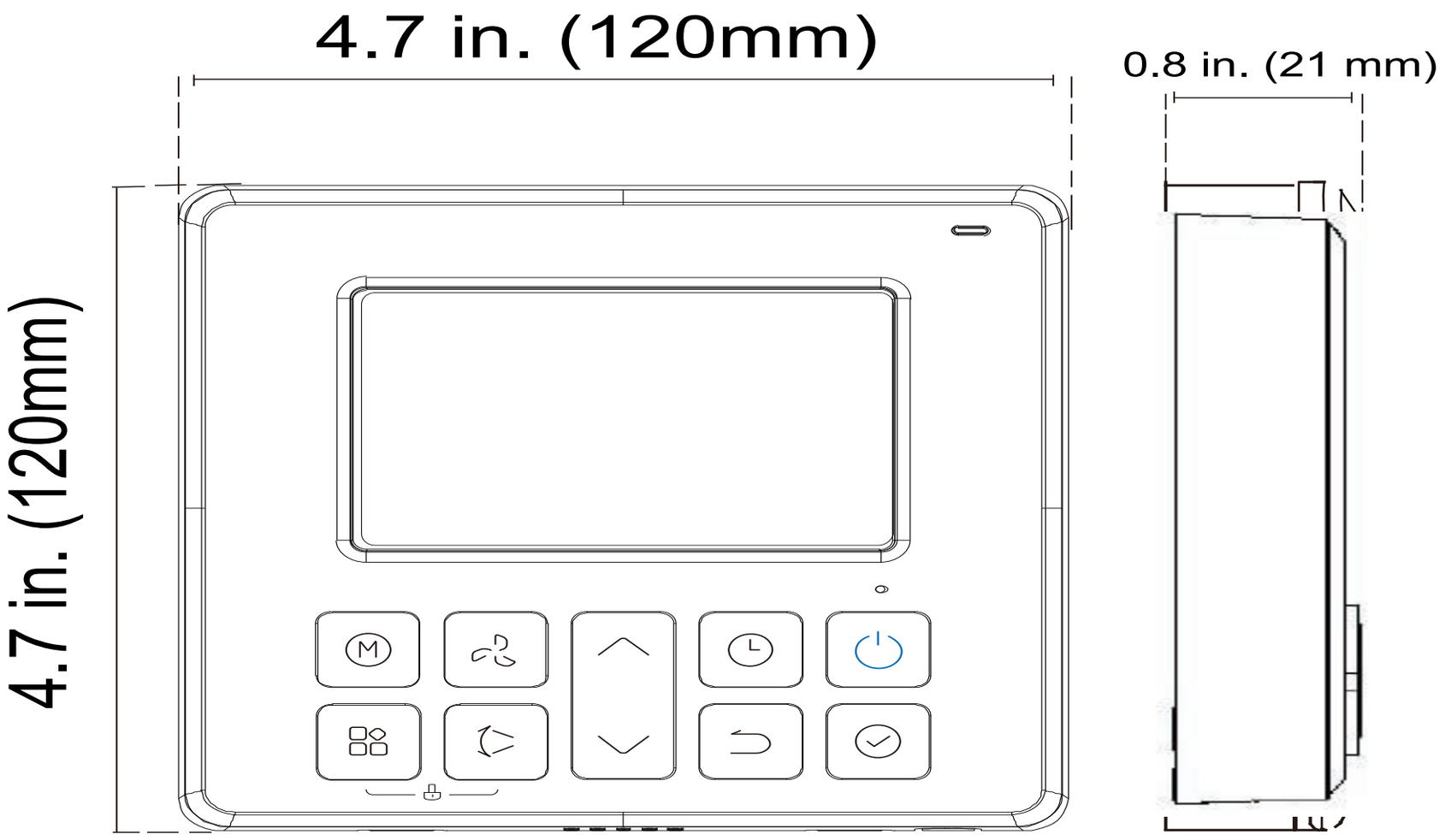
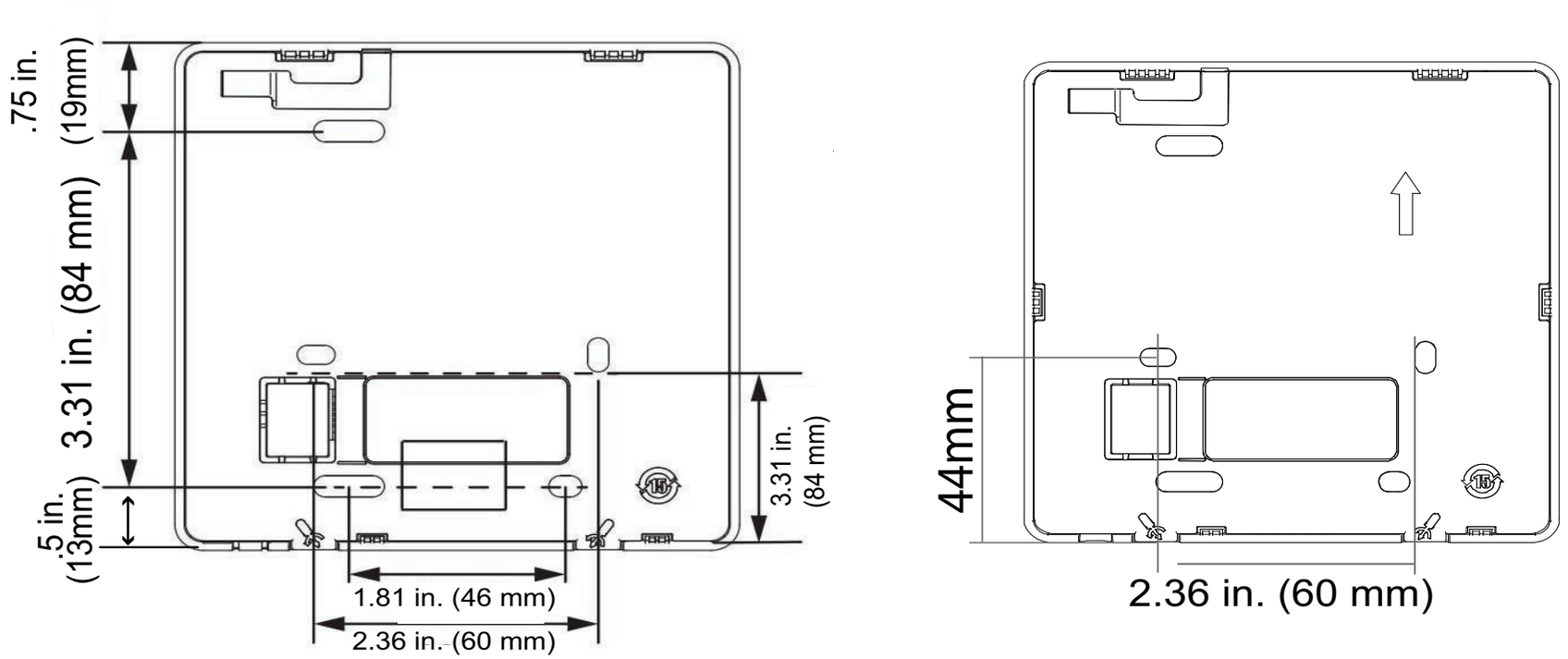



**Fig. 8 – Wired Controller Dimensions**




NOTE: Back plate dimensions are
4 9/16" x 4 9/16" (116 x 116 mm)

**Fig. 8a - Wired Controller Dimensions**

# Preparation before installation

1. Confirm that all the following parts have been supplied:

| No. | Name | Qty. | Remarks |
|---|---|---|---|
| 1 | Wire Controller | 1 | N/A |
| 2 | Screws | 3 | N4X20 (for mounting on the wall) |
| 3 | Anchors | 3 | For mounting on the wall |
| 4 | Screws | 3 | M4X25 (for mounting on switch box) |
| 5 | Plastic screw bars | 2 | For fixing on switch box |
| 6 | Connective wires group | 1 | Optional |
| 7 | Tapping lock screw and washer | 1 | M4X8 (for sheet metal of indoor unit) |

2. Field supplied:

| No. | Name | Qty (embedded into wall) |
|---|---|---|
| 1 | Gang Box | 1 |
| 2 | Wiring tube (insulating sleeve and tightening screw) | 1 |

# WARNING

**FIRE HAZARD**

Failure to follow this warning could result in fire.

**DO NOT** install the controller near flammable liquids or gases such as gasoline or hydrogen sulfide. Doing so creates a fire hazard.

# INSTALLATION

1. **Remove top panel of controller**

Insert a screwdriver into the two slots at the bottom of the controller to pop off the top panel.

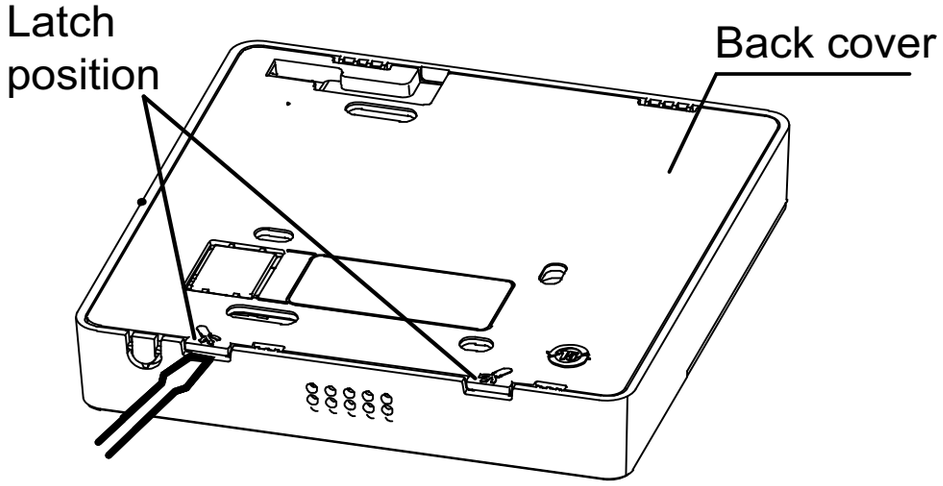



**Fig. 9 – Slot Locations on Wired Controller**

NOTE: The printed circuit board (PCB) is mounted in the upper part of the wired controller. Be careful not to damage the board with the screwdriver.

NOTE: Do not pry up and down, you can only rotate the screwdriver.

2. **Mount the back plate of the wired controller**
   – For exposed mounting, fasten the back plate on the wall with the 3 screws (M4X20) and anchors (see Fig. 10).

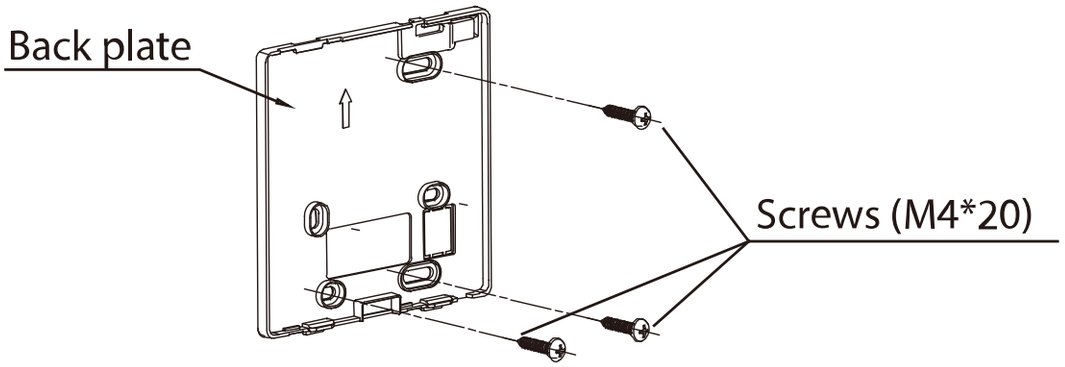



**Fig. 10 – Fasten Back Plate on Wall**

   – For flush mounting, fasten the back plate to the switch box with 2 screws (M4X25), and fasten the back plate to the wall with 1 screw (M4X25)(see Fig. 11).

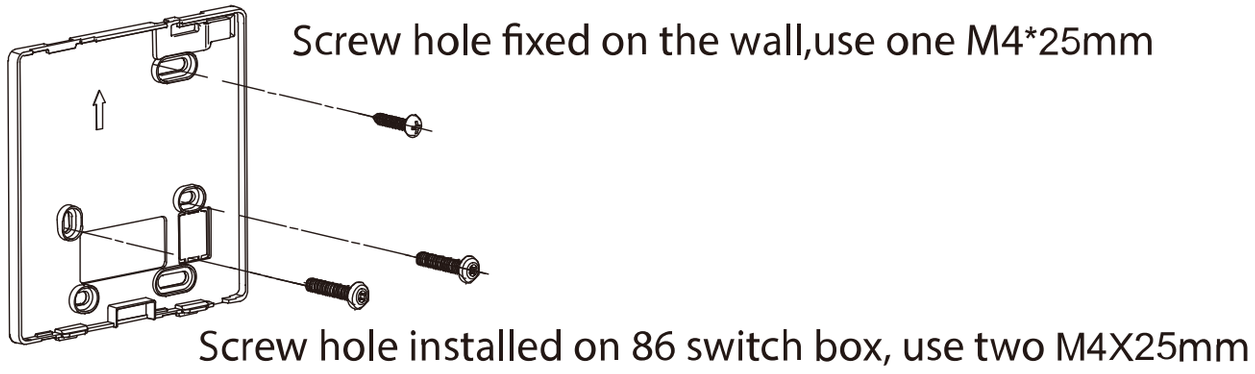



**Fig. 11 – Fasten Back Plate to Switch Box**

NOTE: Place unit on a flat surface. Be careful not to distort the back plate of the controller by over tightening the screws.

3. **Set time and date**
   – The controller has a small, built-in battery that allows the time and date to be set. This allows the controller to keep time en during a power outage. When the unit displays an incorrect time and date, the batteries need to be replaced.

**4. Reattach the top panel of the controller.**

**IMPORTANT**: DO NOT clamp wires when reattaching the top panel.

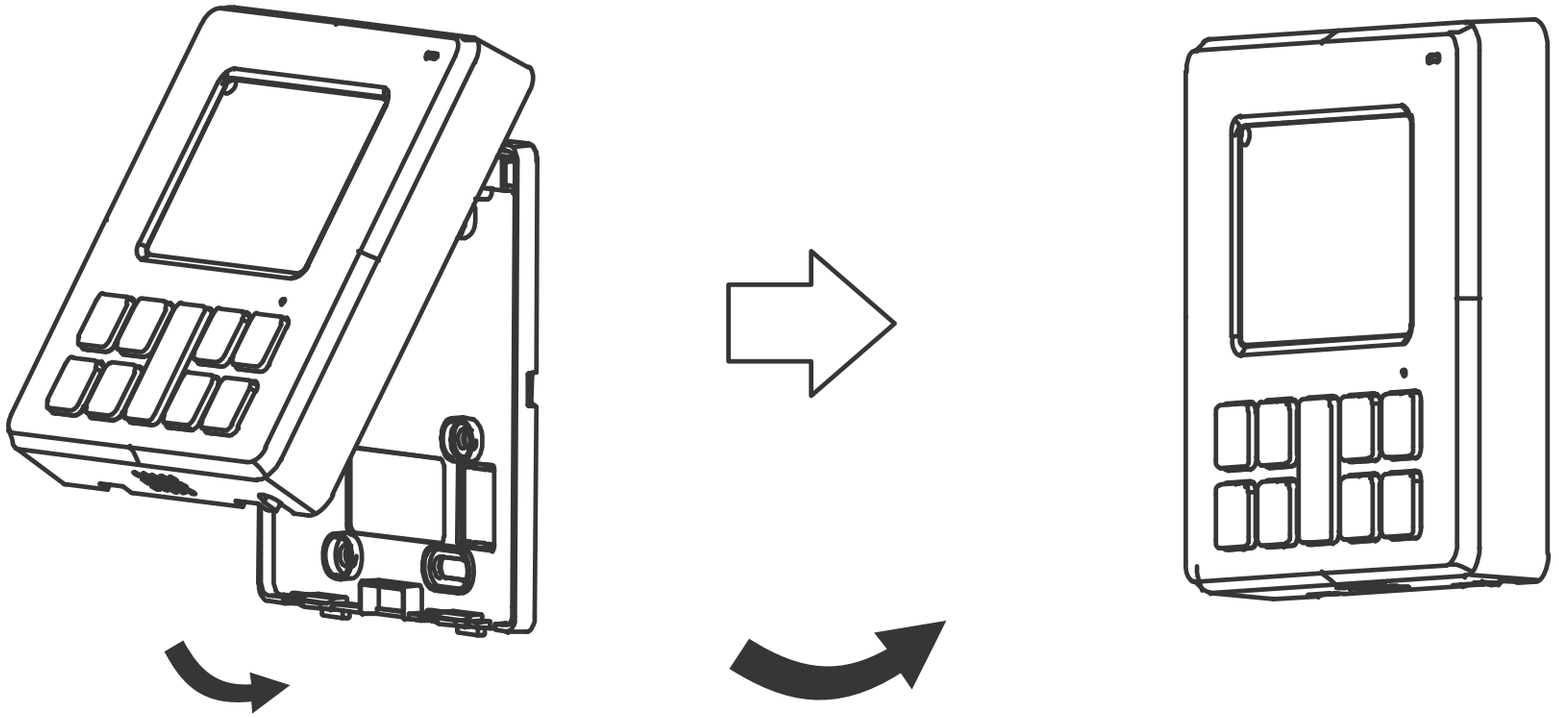


**Fig. 12 – Reattach Top Panel**

**NOTE**: All the pictures in this manual are for explanation purpose only. Your wired controller may be slightly different.

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