

**KSAIF0401AAA**

**Wi-Fi Interface Kit for Ductless Systems**

## **INSTALLATION INSTRUCTIONS**

**NOTE:** Read and become familiar with these instructions before beginning installation.

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## 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. All other operations should be performed by trained service personnel.

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 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 literature and attached to the unit. Consult 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 installing, modifying, or servicing system, main electrical disconnect switch must be in the OFF position. There may be more than 1 disconnect switch. Lock out and tag switch with a suitable warning label.



## **WARNING**



### **EXPLOSION HAZARD**

Failure to follow this warning could result in death, serious personal injury, and/or property damage.



## **CAUTION**

### **EQUIPMENT DAMAGE HAZARD**

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

## **OVERVIEW**

The Wi-Fi Interface kit KSAIF0401AAA for Cassette, Ducted, Console Heat Pump and downloadable APP are used to allow a mobile device to become the controller for a ductless system.

## **WIRING SPECIFICATIONS**

All wiring required to install and commission the Wi-Fi kits are provided with the kit or are already present inside the fan coils.

**NOTE:** Not compatible with console sizes 09 and 12.

# PARTS LIST

Kit Contents: Confirm that all the following parts are included.

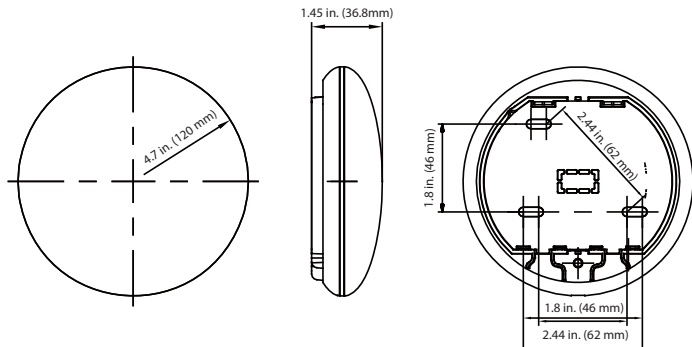
**Table 1—Parts List**

<b>No.</b>	<b>Name</b>	<b>Qty</b>	<b>Remarks</b>
1	Wi-Fi Interface kit KSAIF0401AAA	1	N/A
2	Installation and owner's manual	1	N/A
3	Screws	3	M4X20 (to mount on the wall)
4	Wall plugs	3	To mount on the wall
5	USB Wi-Fi dongle	1	N/A
6	Extension Cord 19 ft (6m)	1	See Fig. 4
7	Wireless Remote control	1	N/A

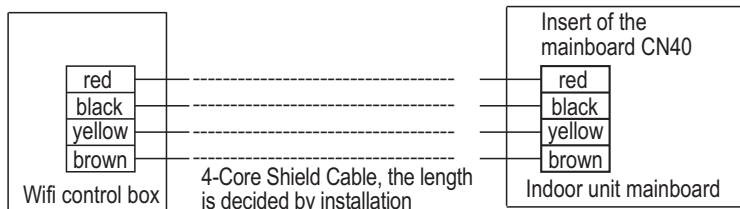
**Table 2—Field Supplied Components:  
Prepare the following assemblies on site**

<b>No.</b>	<b>Name</b>	<b>Qty.</b> (Embedded into wall)	<b>Specification</b> (for reference only)	<b>Remarks</b>
1	Wiring Tube (Insulating Sleeve and Tightening Screw)	1	N/A	N/A

# CONTROLLER DIMENSIONS AND WIRING DIAGRAM



**Fig. 1 – Wi-Fi Controller Dimensions**



**Fig. 2 – Wiring Connection Diagram**

## INSTALLATION LOCATION

**DO NOT** install the Wi-Fi kit inside a metal enclosure. The Wi-Fi kit does not need to be installed in the occupied space. For wood stud buildings, it is acceptable to install the Wi-Fi kit in an unconditioned attic or an air conditioned closet. In the event of a metal stud building, install the Wi-Fi kit inside the conditioned space in a discrete location as agreed to with the home owner or property manager.



### CAUTION

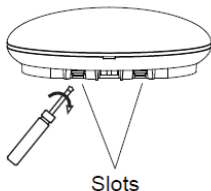
The Wi-Fi kit is designed for indoor use only.

Use caution in locating the Wi-Fi kit to keep from water entering the device.

**IMPORTANT:** The Wi-Fi translator PCB must remain outside of the fan coil cabinet to avoid an intermittent loss of communication.

# INSTALLATION

1. Remove power from the indoor unit.
2. Obtain access to the PCB control board of the indoor unit removing the control box cover.
3. Remove the mounting plate from the Wi-Fi translator PCB by inserting a standard flat screwdriver into the slots in the lower part of the translator.

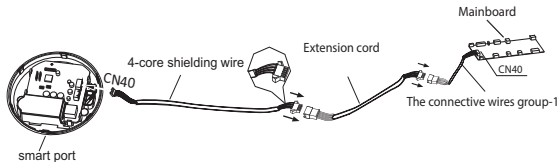


**Fig. 3 – Removing upper part of Wi-Fi Translator**

4. Connect the provided 4 core shielded wire. One side is connected to the port CN40 on the indoor's main PCB board and the another side is plugged into the port terminal CN40 on the WI-Fi translator. A 19 ft (6m) extension cord is supplied with the kit to provide flexibility on the installation of the Wi-Fi Translator.

**NOTE: The Wi-Fi translator does not need to be installed in the occupied space (see Fig. 4).**

Route the wires out of the unit through the low voltage conduit hole.



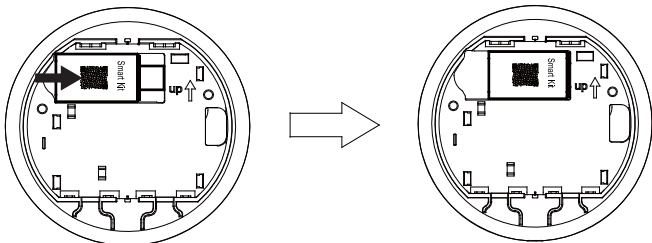
**Fig. 4 – Wire Installation**



5. Insert the Wi-Fi dongle into the female USB port with the QR code visible (see Fig. 5).

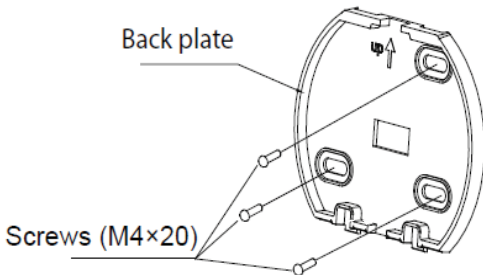


**Fig. 5 — Insert Wi-Fi Dongle on USB Port**



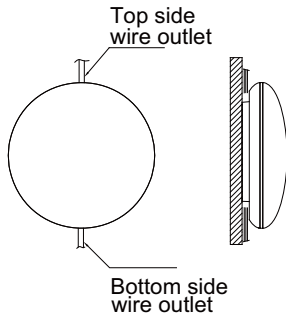
**Fig. 6 — Insert Wi-Fi Dongle on USB Port**

6. Mount the back plate to a wall or stable stationary surface using the field supplied screws.



**Fig. 7 – Mount the back plate to a wall**

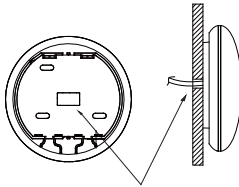
7. Install the wiring to the indoor unit following one of the options listed below:
- For exposed mounting, there are two outlet positions.



**Fig. 8 – Exposed mounting**

b. For through the wall wiring:

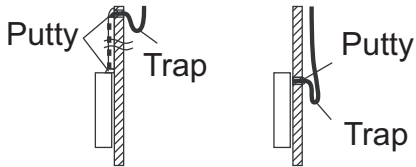
Wiring through the wall



Wiring hole and wall hole  
Diameter of wall hole: .79 in (20mm)

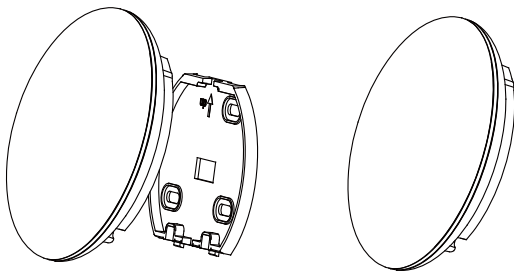
**Fig. 9 – Through the wall wiring**

**NOTE:** Avoid the water entering into the Wi-Fi Kit, using a trap and a putty to seal the connectors of wires during wiring installation



**Fig. 10 – Putty Trap**

8. Reattach the upper part of the Wi-Fi translator to the back plate. After re-attaching the upper part avoid clamping the wiring during installation.



**Fig. 11 — Reattaching the upper part of the Wi-Fi translator**

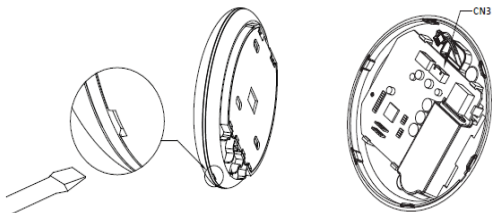
9. Re-install the control box cover on the indoor unit.
10. Power up the system
11. Using the supplied Wireless Remote controller, set the unit in AP mode pointing it out to the Infrared receiver of the indoor unit. (For the Ducted units, the infrared receiver is located inside the Control box of the indoor units.)
12. Complete the app setup instructions found in the Owner's Manual.

**NOTE:** The Wi-Fi kit comes with an additional QR sticker. It is suggested to adhere this sticker to the fan coil in a customer approved location while allowing it to be seen during the app installation.

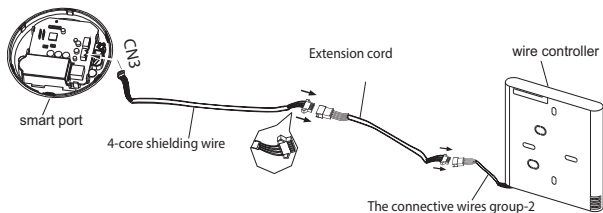
# INSTALLATION METHOD FOR THE WIRED CONTROLLER (OPTIONAL)

1. Remove the top cover from the body of the Wi-Fi Translator by inserting a small standard screw driver in the slit at the bottom of body and twisting.
2. Use the connective cable to connect the wire controller to CN3 of the Wi-Fi translator PCB.

**NOTE:** Refer to the wired controller manual for details.



**Fig. 12 – Connect the wired controller**



**Fig. 13 – Connect the wired controller**

**Table 3—Specifications**

<b>Model</b>	KSAIF0401AAA
<b>Standard</b>	IEEE802.11b/g/n
<b>Antenna Type</b>	External Omni Directional Antenna
<b>Frequency</b>	WI—FI:2.4G
<b>Maximum Transmitted Power</b>	15 dBm Max
<b>Operation Temperature</b>	32F~113F (0C~45C)
<b>Operation Humidity</b>	10%~85%
<b>Power Input</b>	DC 5V/300mA

**KSAIF0401AAA**

**Wi-Fi Interface Kit for Ductless Systems**

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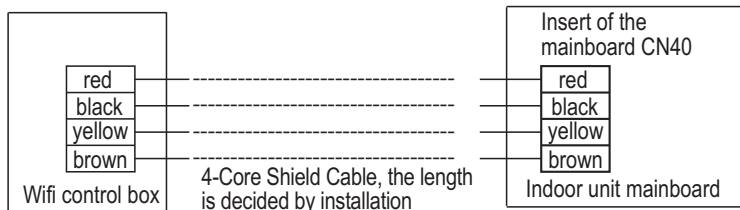
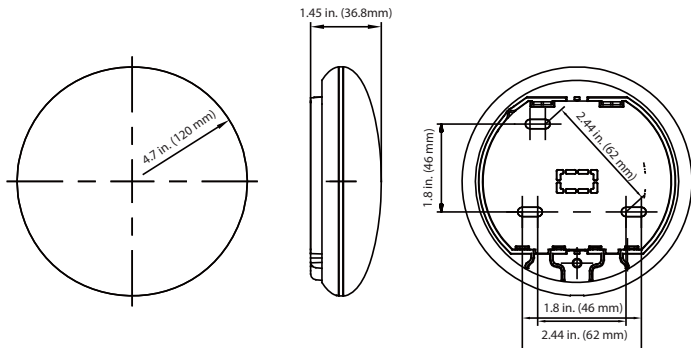
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No.	Name	Qty	Remarks
1	Wi-Fi Interface kit KSAIF0401AAA	1	N/A
2	Installation and owner's manual	1	N/A
3	Screws	3	M4X20 (to mount on the wall)
4	Wall plugs	3	To mount on the wall
5	USB Wi-Fi dongle	1	N/A
6	Extension Cord 19 ft (6m)	1	See Fig. 17
7	Wireless Remote control	1	N/A

**Table 5—Field Supplied Components:  
Prepare the following assemblies on site**

No.	Name	Qty. (Embedded into wall)	Specification (for reference only)	Remarks
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# CONTROLLER DIMENSIONS AND WIRING DIAGRAM



**Fig. 15 — Wiring Connection Diagram**

## INSTALLATION LOCATION

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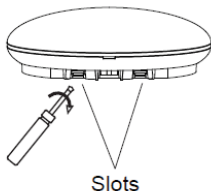
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# INSTALLATION

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5. Remove the mounting plate from the Wi-Fi translator PCB by inserting a standard flat screwdriver into the slots in the lower part of the translator.

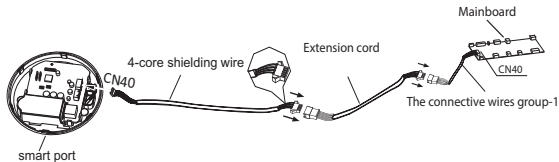


**Fig. 16 — Removing upper part of Wi-Fi Translator**

6. Connect the provided 4 core shielded wire. One side is connected to the port CN40 on the indoor's main PCB board and the another side is plugged into the port terminal CN40 on the WI-FI translator. A 19 ft (6m) extension cord is supplied with the kit to provide flexibility on the installation of the Wi-Fi Translator.

**NOTE: The Wi-Fi translator does not need to be installed in the occupied space (see Fig. 17).**

Route the wires out of the unit through the low voltage conduit hole.

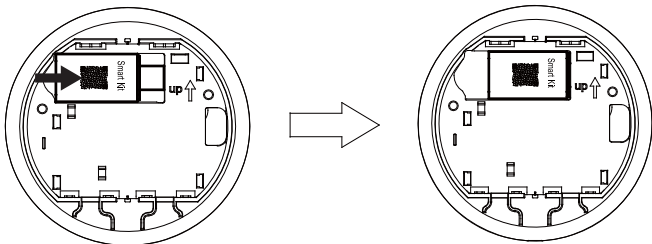


**Fig. 17 — Wire Installation**

7. Insert the Wi-Fi dongle into the female USB port with the QR code visible (see Fig. 18).

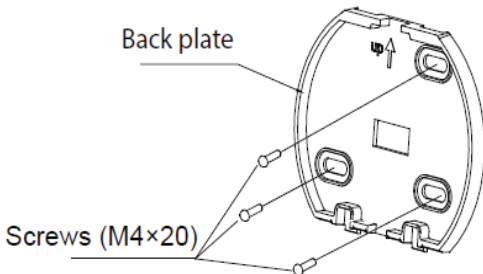


**Fig. 18 – Insert Wi-Fi Dongle on USB Port**



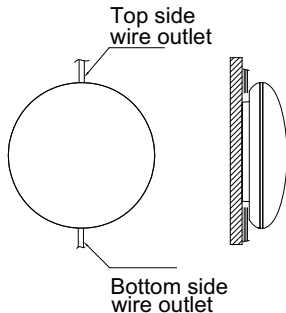
**Fig. 19 – Insert Wi-Fi Dongle on USB Port**

8. Mount the back plate to a wall or stable stationary surface using the field supplied screws.



**Fig. 20 — Mount the back plate to a wall**

9. Install the wiring to the indoor unit following one of the options listed below:  
c. For exposed mounting, there are two outlet positions.

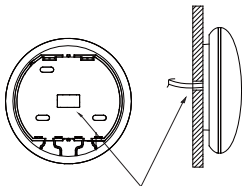


**Fig. 21 — Exposed mounting**



d. For through the wall wiring:

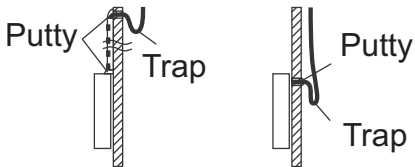
Wiring through the wall



Wiring hole and wall hole  
Diameter of wall hole: .79 in (20mm)

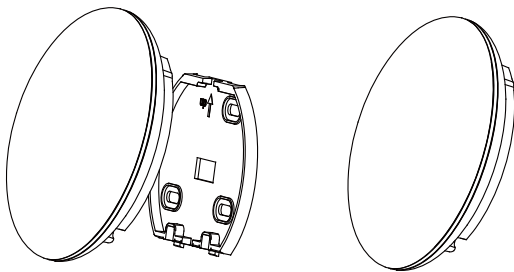
**Fig. 22 — Through the wall wiring**

**NOTE:** Avoid the water entering into the Wi-Fi Kit, using a trap and a putty to seal the connectors of wires during wiring installation



**Fig. 23 — Putty Trap**

10. Reattach the upper part of the Wi-Fi translator to the back plate. After re-attaching the upper part avoid clamping the wiring during installation.



**Fig. 24 — Reattaching the upper part of the Wi-Fi translator**

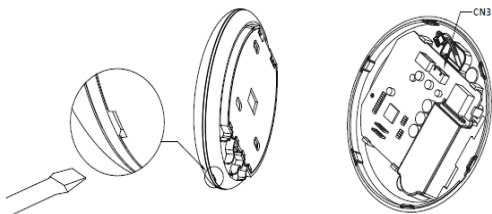
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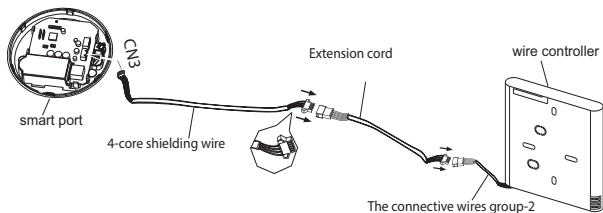
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1. Remove the top cover from the body of the Wi-Fi Translator by inserting a small standard screw driver in the slit at the bottom of body and twisting.
2. Use the connective cable to connect the wire controller to CN3 of the Wi-Fi translator PCB.

**NOTE:** Refer to the wired controller manual for details.



**Fig. 25 – Connect the wired controller**



**Fig. 26 – Connect the wired controller**

**Table 6—Specifications**

<b>Model</b>	KSAIF0401AAA
<b>Standard</b>	IEEE802.11b/g/n
<b>Antenna Type</b>	External Omni Directional Antenna
<b>Frequency</b>	WI—FI:2.4G
<b>Maximum Transmitted Power</b>	15 dBm Max
<b>Operation Temperature</b>	32F~113F (0C~45C)
<b>Operation Humidity</b>	10%~85%
<b>Power Input</b>	DC 5V/300mA