Wi-Fi

INSTALLATION GUIDE

MITSUBISHI ELECTRIC

Setting information

MAC-558IF address(MAC)	
MAC-558IF serial number(ID)	
MAC-558IF code(PIN)	
Indoor unit model name	
Indoor unit serial number	
Outdoor unit model name	
Outdoor unit serial number	
System commissioning date	
MAC-558IF installation date	

Installer contact details

Name	
Telephone number	

Wi-Fi Control minimum requirements for operation.

- Compatible WPS capable wireless network with coverage including the heat pump installation location
- A PC/Tablet/Smartphone that is iOS/Android/Windows compatible
- A compatible Mitsubishi Electric Heat Pump with a MAC-558IF-E Adaptor

Mitsubishi Electric Wi-Fi Heat Pump Control

Register Your Heat Pump(s)

Thank you for choosing a Mitsubishi Electric Designer Series Heat Pump with Wi-Fi Control. Once your adaptor is installed either download the app (search term: Mitsubishi Control) or visit our website to register your heat pump(s).

Once registered you will be able to control your heat pump with your smartphone, tablet or online using an internet connection (for a list of compatible devices please visit our website).

User Manual

A copy of the user manual, terms & conditions and our privacy policy can be downloaded at any time from:

www.mitsubishi-electric.co.nz/wifi

Need more help?

If you have any questions please contact us on:
0800 639 434 – Our customer support team is available 8.30am - 5.00pm Monday to Friday.

✉ wifi@bdt.co.nz

f www.facebook.com/MitsubishiElectricNZ

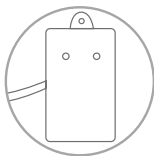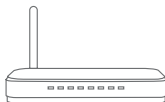## Wi-Fi Control: Installation Instructions

Information for installers

The following steps explain how to connect the MAC-558IF-E Adaptor to a Mitsubishi Electric Designer Series Heat Pump.

EQUIPMENT REQUIRED FOR INSTALL:

MAC-558IF-E
Adaptor

WPS Enabled
Router

Wi-Fi
Installation
Guide

Tools to remove
cover of indoor
unit

Important Note: Before going to the users home ensure they have a WPS enabled router and understand how to activate WPS mode, otherwise this install will not work.
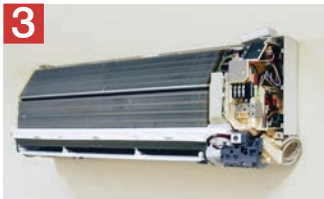
Record the adaptor's MAC, ID number and serial number on page 2 of the Wi-Fi Installation Guide.

Isolate the outdoor unit and verify power has been disconnected to the complete air conditioning system.

3

Remove the cover of the indoor unit, the cable terminal, and the cover to the control unit board.

4

Locate the CN105 port on the main control board and connect MAC-558IF.

5

Run the cables down the back of the unit with the other cables. Tuck cabling away and secure.

6

Reassemble the air conditioning unit and restore power to the system.

7

Check that the MAC-558IF is flashing. The install has now been completed.

8

The adaptor is now able to be connected to the user's router. Steps for this are shown on the following pages.

Wi-Fi Control: Installation Instructions

Information for users

The following steps explain how to connect the MAC-558IF-E Adaptor to a router.

KEY (LED LIGHTS):

● ON   ○ OFF   ☀ FLASHING

Check Wi-Fi and WPS are enabled on your router. Connection procedure varies depending on your router – refer to router manual for more information.
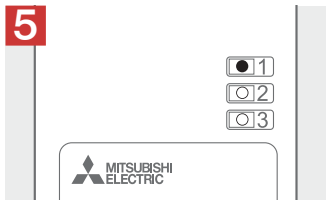

Activate WPS on your router. This will be enabled for a set period allowing approximately two minutes to complete Step 3.
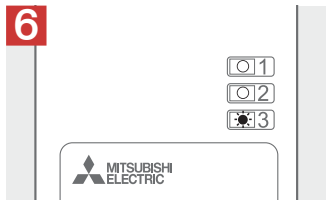

Activate WPS on your adaptor by using a small object to press and hold the WPS button for two seconds.
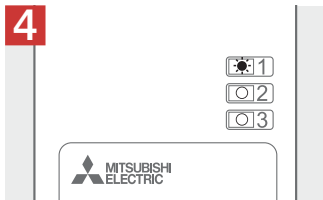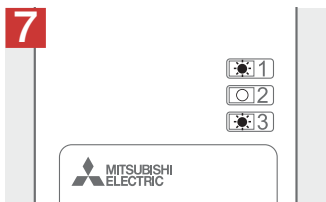

Turn the adaptor over and check LED 1 (top light) is flashing.

5

When LED 1 remains solid for 5 seconds the adaptor is connecting to your router.

6

Next, the bottom light (LED 3) will start flashing as it connects to the internet. This may continue for up to 10 minutes.

7

When LED 1 and LED 3 flash alternately the unit is successfully connected to the internet.

8
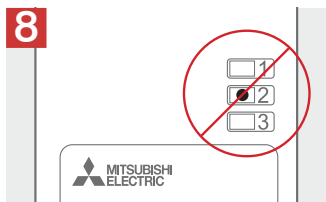
If LED 2 (orange) lights up at any stage there may be a problem. Check the troubleshooting section on page 11.

9

You can now download the Mitsubishi Control App and control your heat pump via Wi-Fi.

Contents

About the Wi-Fi Adaptor

This Wi-Fi adaptor will communicate status information and control the connected air conditioner.
The Wi-Fi Access Point or Wireless Router must have a WPS function.

• Some room air conditioners are not compatible with the Wi-Fi adaptor. Make sure that the room air conditioner is compatible with the Wi-Fi adaptor before attempting to install the Wi-Fi adaptor.

1. Safety Instructions

• Read all safety instructions before using the Wi-Fi adaptor.

• This installation manual contains important safety information. Be sure to comply with the instructions.

• After installing the Wi-Fi adaptor, provide this installation manual for the user. Instruct users to store it with their room air conditioner instruction manual in a safe location.

⚠Warning
(Improper handling may have serious consequences, including serious injury or death.)

• Users should not install the adaptor on their own.

• Improper installation may result in fire, electric shock, or damage/water leaks. Consult the dealer from whom you purchased the unit or professional installer.

• The adaptor should be securely installed in accordance with this installation manual.

• Improper installation may result in fire, electric shock, or damage.

• The unit should be mounted in a location that can support its weight.

• If the unit is installed in a location that cannot support its weight, the Wi-Fi adaptor could fall and cause damage.

• Connect and fasten the electric wires securely so external force on the wires will not apply on the terminals.

• Improper connection and mounting may result in breakdown, heat generation, smoke generation, or fire.

• Mitsubishi Electric components or other designated components must be used for installation.

• Improper component may result in fire, electric shock, or damage/water leaks.

• Electrical work must be performed by a licensed professional using the instructions detailed in the installation manual.

• Inadequate circuit capacity or improper installation may result in electric shock or fire.

• This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

• Children should be supervised to ensure that they do not play with the appliances.

• This device complies with all Australia and New Zealand requirements for EMC and electrical safety.

• Do not connect the Wi-Fi adaptor to earth inside the air conditioner.

⚠Caution
(Improper handling may have consequences, including injury or damage to house.)

- To prevent damage from static electricity, touch a nearby metal body to discharge static electricity from yourself before touching the Wi-Fi adaptor.

- Static electricity from the human body may damage the Wi-Fi adaptor unit.

- Do not install the Wi-Fi adaptor in a place with much steam, such as bathroom.

- Avoid places where water is splashed or where condensation forms on walls. Installing in such places can cause electric shock or breakdown.

- **Do not install the Wi-Fi adaptor in places with direct sunlight or where the ambient temperature is 40ºC or more or is 0ºC or less.** Direct sunlight and high or low temperature environments may cause the Wi-Fi adaptor to deform or breakdown.

- Do not use in special environments.

- Do not use in places with much oil (including machine oil), steam, or sulfuric gas - this may lead to severe decrease in functionality and damage to parts.

- Turn off power supply of connected equipment when performing construction or wiring work.

- Failure to turn off the power supply to the connected equipment may lead to malfunction or breakdown of the Wi-Fi adaptor or connected equipment.

- **Dismantling the indoor unit**
  Please refer to the indoor units "service manual" for detailed instructions for accessing the control adaptor connector CN105 on the indoor unit control PCB.

Note

- Please ensure that the access point supports both WPS connection and the WPA2-AES encryption setting before commencement of the installation of the MAC-558IF-E.

- The end user should read and accept the terms and conditions of the Wi-Fi service before commencement of the installation of MAC-558IF-E.

- To complete connection of the MAC-558IF-E to the Wi-Fi service physical access to the access point may be required.

- The MAC-558IF-E should not be installed and connected to any Mitsubishi Electric system which is to provide cooling or heating to critical applications.

- Details of the air conditioner and MAC-558IF-E can be recorded on page 2 'Setting Information'.

Mitsubishi Electric's Wi-Fi adaptor is designed for communication to Mitsubishi Electric's Wi-Fi service.
Third party Wi-Fi adaptor cannot connect to Mitsubishi Electric's Wi-Fi service.
Mitsubishi Electric is not responsible for any (i) under performance of a system or any product;
(ii) system or product fault; or (iii) loss or damage to any system or product; which is caused by or arises from connection to and/or use of any third party Wi-Fi adaptor or any third party Wi-Fi service with Mitsubishi Electric equipment.
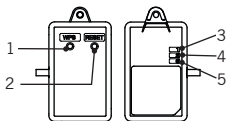
For the latest information regarding Wi-Fi control:
 New Zealand based enquiries please visit www.mitsubishi-electric.co.nz/wifi
 Australia based enquiries please visit www.mitsubishielectric.com.au/wifi

2. Product Introduction

No	Item	Description
1	WPS switch	It activates WPS
2	RESET switch	It resets the system and ALL settings
3	LED1 (Green)	It shows the wireless communication state
4	LED2 (Orange)	It shows the MAC-558IF-E state
5	LED3 (Green)	It shows the local communication state

3. Parts

①	Adaptor unit [with connecting cable (5-core)]		1	④	Mounting cord clamp		1
②	Screw for mounting 3.5×16		1	⑤	Fastener (for bundling the wires)		1
③	Screw for mounting 4×16		1				

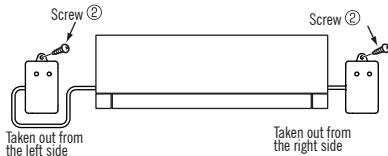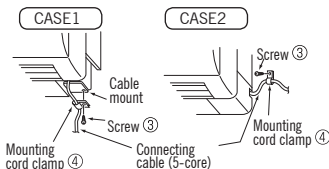## 4. Connecting the Wi-Fi Adaptor (For details on each system, see the relevant instruction manual.)

- Before dismantling the indoor unit turn off and verify the power has been disconnected to the complete air-conditioning system.
- Dismantle the indoor unit in accordance with the service manual and locate CN105 on the Main control PCB.
- The connecting cable (5-core) connected to a room air conditioner (CN105) should be mounted at the room air conditioner or its vicinity.
- Cable length outside air conditioner: less than 50cm.

Do not install the Wi-Fi adaptor inside the indoor unit.

CASE1   CASE2

Cable mount
Screw ③
Mounting cord clamp ④   Connecting cable (5-core)
Screw ③
Mounting cord clamp ④

Screw ②

Screw ②

Taken out from the left side

Taken out from the right side

Establishing Wi-Fi connection
After connecting the Wi-Fi adaptor to the air conditioner and reassembling the system, the Wi-Fi adaptor must register with the access point or Wi-Fi router (to communicate with the server). For this Wi-Fi adaptor, the use of WPS-Push is recommended. (Refer to 8.)

1) Hold down the WPS switch on the Wi-Fi adaptor for about 2 seconds to activate WPS-Push.
   When WPS-Push on the Wi-Fi adaptor is ready to communicate with the access point, LED 1 flashes at a 0.5-second interval.
2) Activate WPS-Push on the access point.
3) When WPS-Push is successfully enabled, LED 1 lights up for 5 seconds. If it failed, LED 2 lights up for 5 seconds, so try again from step 1.

Main causes that WPS failed are as follows:
Communication distance (from the Wi-Fi adaptor to access point), access point settings (encryption, authentication, limit of connections, etc.) Refer to the instruction manual for more information.

5. Specifications

Input Voltage	DC12.7V (from indoor unit)
Power consumption	MAX 2W
Size W×H×D (mm)	88×49×18.5
Weight	105g (including cable)
RF channel	1ch ~ 13ch
Radio protocol	IEEE 802.11b/g/n (20)
Encryption	AES
Authentication	PSK

6. LED pattern

● :ON ○ :OFF ☀ :Flashing

Description	LED1	LED2	LED3
Power is ON or software downloaded	☀ (0.5-sec interval)	☀ (0.5-sec interval)	☀ (0.5-sec interval)
ALL settings reset	●	●	●
WPS activated (PBC)	☀ (0.5-sec interval)	○	○
WPS activated (PIN)	☀ (0.2-sec interval)	○	○
WPS enabled	● (5-sec)	○	○
WPS failed	○	● (5 sec)	○
Server and access point communication connected, and air conditioner communication failed	☀ (once every 5 sec)	☀ (0.5-sec interval)	○
Server and access point communication connected, and air conditioner communication connected	☀ (once every 5 sec)	○	☀ (once every 5 sec)
Server and access point communication connected, and air conditioner communication starting up	☀ (once every 5 sec)	○	●
Server communication failed, and air conditioner communication connected	○	☀ (0.5-sec interval)	☀ (once every 5 sec)
Server communication or access point communication failed, and air conditioner communication starting up	○	☀ (0.5-sec interval)	●
Server communication or access point communication failed, and air conditioner communication failed	○	☀ (0.5-sec interval)	○
Access point communication failed, and air conditioner communication connected	○	○	☀ (once every 5 sec)
Access point communication failed, and air conditioner communication starting up	○	○	●

7. Troubleshooting

If at any stage you see the orange LED 2 light up, this is an indication that there is a problem with the router communicating with the adaptor.

If this occurs, you may need to check the following:
- WPS is working on your router
- Signal is reaching the adaptor
- DHCP addresses are available
- Your router is compatible with the adaptor - for a list of compatible routers, see www.mitsubishi-electric.co.nz/wifi

If you are still experiencing issues connecting your router to the Wi-Fi adaptor then please contact our helpline on 0800 639 434.

8. Switch Function

(1) WPS switch

The WPS switch is used for pairing the Wi-Fi adaptor with the access point. There are two types of WPS: push button configuration (WPS-Push) and PIN code method (WPS-PIN).
- WPS-Push
  Hold down the WPS switch for 2 seconds to start WPS-Push pairing.
  When WPS-Push is enabled on the Wi-Fi adaptor, LED1 starts flashing green (0.5-sec interval) and the pairing can be completed by enabling WPS-Push on the access point.
- WPS-PIN
  Hold down the WPS switch for 15 seconds to starts WPS-PIN pairing. When WPS-PIN is enabled on the Wi-Fi adaptor, LED1 starts flashing green (0.2-sec interval) and the pairing can be completed by enabling WPS-PIN on the access point.
  Before using WPS-PIN, the PIN code of the Wi-Fi adaptor needs to be set on the access point.

  This product is only compatible with the access point that supports WPS.

(2) RESET switch
- Hold down the RESET switch for 2 seconds to reboot the system.
- Hold down the RESET switch for 15 seconds to initialize the Wi-Fi adaptor to the factory default.

When the Wi-Fi adaptor is reset to the factory default, ALL the configuration information will be lost. Take great care in implementing this operation.

MITSUBISHI ELECTRIC

Contact Details

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