Residential and Light Commercial Controls

Compatible with M-Series and P-Series Products

MITSUBISHI ELECTRIC
HEATING & AIR CONDITIONING

Manage your comfort from anywhere with kumo cloud®

kumo cloud

Download on the App Store | available at amazon appstore | GET IT ON Google play

WORKS WITH alexa | works with the Google Assistant | Works with IFTTT

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Manage your comfort from anywhere with kumo cloud®

- Easy to configure zoning
- Fahrenheit or Celsius
- Program & Control
  - On/Off
  - Mode & Set Temperature
  - Fan Speed & Vane Control
- Error push notifications
- Filter push notifications
- High and low push
- Auto changeover: System mode is determined using a patent pending algorithm calculating the difference between the room temperature and set point plus weighted consideration for zone priority.
  - Adjustable Minimum Run Time after a change over event
- Adjustable Maximum Wait Time before a changeover event temperature alarms
- Compatible with Google Home and Amazon Alexa smart assistants
- Compatible software platforms:
  - iOS 9.0 or later
  - Android 4.4 or later
  - Fire OS 4.4 or later

Wireless Interface 2

Specifications

- Allows for Mitsubishi Electric indoor units to communicate with kumo cloud app and web service
- Wireless connection via Wi-Fi network
- Connected to indoor unit via CN105
- One Wireless Interface required per connected indoor unit
- Dimensions: 1.82" H x 0.69" W x 2.92" D
- Radio protocol: IEEE 802.11 b/g/n - via Wi-Fi network
- Internet access required for initial setup and scheduling
- Contains a CN105 connection to allow for kumo cloud and MHK2 RedLINK™ Wireless Remote Controller to be used on the same indoor unit

PAC-USWHS002-WF-2

kumo station®

Specifications

- 4 outputs to control auxiliary heat, humidifier**, dehumidifier**, ERV or HRV*
- Controls 1 or 2 stages of supplemental heat*
- Wireless Interface 2 required to connect to kumo cloud®
- 24 VAC power supply required. Supplied by others
- Compatible with kumo cloud 2.6 or later

*Ducted indoor unit fan interlock may be required. Check Install Manual for details.
**Requires Wireless Temperature and Humidity Sensor

PAC-WHS01HC-E

Wireless Temperature and Humidity Sensor for kumo cloud®

Specifications

- One wireless remote sensor per Wireless Interface 2
- Connects via Bluetooth Low Energy with Wireless Interface 2
- Specified open range 33 feet (10 m)
- Battery powered (1 year battery life)
- Push notifications when battery is low through kumo cloud app

PAC-USWHS003-TH-1

Outdoor Air Temperature Sensor

Specifications

- Used with kumo station to control backup heat and heat pump staging
- Wire length 60 ft (18.3 m) in the box
- Wire length can be a maximum of 200 ft (60.9 m) with field supplied 18/2AWG wire
- Operating Ambient Temperature Range: -40° F to 120° F (-40° C to 49° C)

C7089U1006/U

IT Extender

Specifications

- Extends CN105 connection an additional 50 feet
- For use with kumo station, Wireless Interface 2, and USNAP Interface

PAC-WHS01IE-E

Wireless Controllers

kumo touch™

Features

- Wireless RedLINK remote controller and receiver
- Large, backlit, easy-to-read touchscreen display
- Fahrenheit or Celsius
- Dual set point control with system change over
- Both controller and receiver enabled with RedLINK™ 3.0 reliability
- Works with Wireless Interface 2 on all CITY MULTI®, P-Series and M-Series indoor units

Specifications

User functions allow user to set:

- On/Off
- Operation modes: Cool/Heat/Drying/Fan
- Temperature (set points for heat & cool)
- Fan speed setting
- Airflow direction
- Day/Time display with 12-hour and 24-hour clock
- Filter sign display
- Adjustable auto deadband
- Space temperature offset adjustment
- Hide indoor temperature or humidity from being displayed
- Lockout function for On, Off, Mode, Fan Speed, Setpoint, and Vane Direction commands.
- Hold function
- Temporary schedule override
- Schedule for Residential or Commercial applications
- Scheduling options include: no schedule, Mon-Sun, Mon-Fri/Sat-Sun, Mon-Fri/Sat/Sun, Mon/Tues/Wed/Thu/Fri/Sat/Sun
- Diagnostics: displays and records error codes
- Uses two AA alkaline batteries (included)
- Dimensions:
  MRCH2 Controller: 4-5/64" H x 4-5/64" W x 1-1/16" D
  MIFH2 Receiver: 2-15/16" H x 1-25/32" W x 20/32" D
  MRC2 Cable: 39-23/64" (connects receiver to CN105 connection on indoor unit)

MHK2

Wireless Controller Kit and Accessories

Deluxe Hand-Held Wireless Controller with Advanced Features

Specifications

- Powerful Mode function allows the system to temporarily run at a lower or higher temperature with an increased fan speed. This helps to quickly bring the room to your optimal comfort level
- Wide Vane setting provides a wider horizontal air distribution on select models
- Indirect or Direct Airflow for personalized comfort (FS Model only)

MSZ-FS

- Wide Vane
- L-Vane
- R-Vane
- Powerful
- Indirect/Direct
- Natural Flow

MFZ-KJ

- Powerful
- 2Flow/1Flow
- Sleep

MLZ-KP

- Wide Vane
- Sleep

SLZ-KF

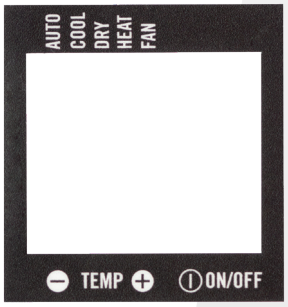
- Individual Vane Settings
- 3D i-see Sensor®
  - » Direct/Indirect Airflow
- Long
- Louver

* FS hand held

Hand-Held Stickers

Specifications

- Attached to indoor unit hand-held remote controllers display area
- Allows user to read indoor unit mode
- Two different stickers available for M-Series deluxe handheld wireless remote controllers:
  - FH Model handheld wireless remote controllers
  - EF, KJ, KP, and KF Model handheld wireless remote controllers
- Available for order on the Literature and Promo Item website



Hand-Held Wireless Controller

Specifications

- Operation Modes: Heat/Cool/Auto/Dry
- Adjustable fan speed
- 12-hour on/off timer
- Set horizontal vane position
- Power off timer and clock adjustment
- Smart Set to program multiple settings into one quick-press feature
- Econo Cool energy efficiency cooling option
- Requires 2 AAA batteries

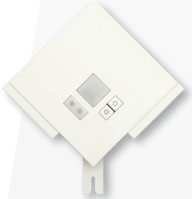
Wireless Controllers Kits and Accessories

Remote Controller and Receiver for Ceiling Cassettes

PAR-SF9FA-E (receiver) Specifications

- Signal receiver for use with PAR-SL100A-E remote controller
- Compatible with M-Series model SLZ-KF**NA(.TH)
- Compatible with CITY MULTI® model PLFY-P**NFMU-E
- Requires one receiver per indoor unit
- For use with 3D i-see Sensor®
- CN90 connection

PAR-SL100A-E (controller)



PAR-SF9FA-E (receiver)

PAR-SR4LU-E (receiver) Specifications

- For use with the PLP-41EAEU panel
- Signal receiver for use with PAR-FL32MA-E and PAR-SL100A-E handheld remote controllers
- Compatible with the P-series PLA-EA7 or CITY MULTI® Series PLFY-(E)P**NEMU-E
- CN90 connection

PAR-SL100A-E (controller)

PAR-FL32MA-E (controller)

PAR-SR4LU-E (receiver)

Hand-Held Wireless Controller and Receiver for Concealed Indoor Units

PAR-FL32MA-E (controller) Specifications

- For use with PAR-FA32MA Wireless MA Remote Controller Receiver
- Maximum signal receiving distance is approximately 22 feet
- Controls group operation for up to 16 indoor units in a single group
- On/Off timer (one setting per day)
- Dimensions: 2-1/4" x 6-1/4" x 3/4"
- User functions:
  - On/Off
  - Set temperature
  - Operation modes: Heat/Cool/Dry/Fan
  - Fan speed setting
  - Airflow direction (depending on indoor unit)

PAR-FL32MA-E

PAR-FA32MA Specifications

- On/Off lamp to indicate unit operation and error status
- Emergency heat and cool operation from receiver (at preset parameter) from the receiver for when the remote is not operational
- Wiring: connects using two-wire, stranded, non-polar control wire to TB-15 connection terminal on the indoor unit.
- Dimensions: 2-3/4" W x 4-3/4"H x 7/8" D

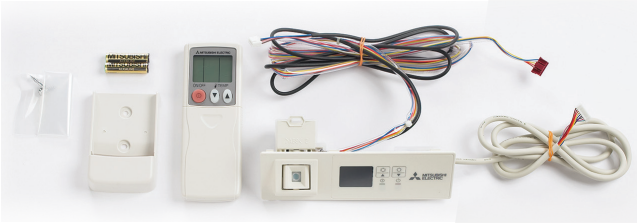
PAR-FA32MA (receiver)

Remote Controller Kit with and without i-see Sensor™

Specifications

- For use with P-Series ceiling-suspended units
- See compatibility table on page 12
- Kits contain:
  - (1) Wireless remote controller receiver (PAR-SL93B-E)
  - (1) Wireless remote controller with cradle
  - (2) AAA LR03 alkaline batteries
  - (2) 4.1 x 16 wood screws
  - (1) Wireless remote controller receiver with i-see Sensor (PAR-SA92MW-E)
  - (2) Cord retaining clips
  - (1) Connection cord fixing seal (12 x 30 size)

PAR-SL93B-E



PAR-SA92MW-E

Wired Controllers

Touch MA Remote Controller

Specifications

- User-friendly, customizable full color touch panel display
- Ability to add a custom logo on the display
- Large icons with 180 color patterns
- Daily and weekly timers
- Password protected
- Requires MAC-334IF-E for use with M-Series ductless products
- The MELRemo app and Bluetooth® Low Energy (BLE) technology supports communication with smartphones or tablets in multiple languages

PAR-CT01MAU-SB

With the **Touch MA** you have easily customizable foreground and background colors

Simple MA Controller

Specifications

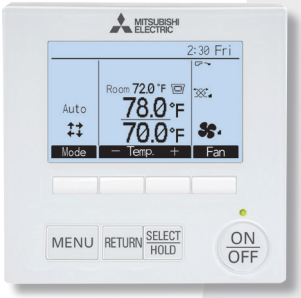
- Controls group operation for up to 16 indoor units in a single group
- Supports Fahrenheit and Celsius
- User defined functions:
  - On/Off
  - Operation modes: Heat/Cool/Auto/Dry
  - Fan speed setting Airflow direction
- Set temperature range: 40° F to 95° F depending on operation mode and indoor unit connected
- Set temperature range limit for cool and heat mode
- LOSSNAY©: Simple MA for interlocked system can set high/low/stop on LOSSNAY
- Room temperature can be sensed either at indoor unit (default) or at the remote controller
- Dimensions: 2-3/4" W x 9/16" D x 4-3/4" H
- Requires MAC-334IF-E for use with M-Series ductless products.

PAC-YT53CRAU-J

Deluxe MA Remote Controller

Specifications

- User defined functions:
  - On/Off
  - Operation modes: Heat/Cool/Auto/Dry
  - Room temperature setting & Temperature range striction
  - Manual vane angle (P-Series cassette indoor units)
  - Smooth maintenance (P-Series only)
  - Auto-off timer & Weekly timer
- Energy save functions for 3D i-see Sensor®
- B&W Inversion
- Setback Mode
- Draft reduction mode
- Daylight Saving Time (DST)
- Dimensions: 4-3/4" W x 9/16" D x 4-3/4" H
- Requires MAC-334IF-E for use with M-Series ductless products
- Room temperature displays room temperature sensed either at the indoor unit (default) or at the controller



PAR-40MAAU

Third Party Controls Interface

BACnet® & MODBUS® Interface

Specifications

- Allows for third-party home automation/building management system to control indoor unit
- One interface required per indoor unit
- Powered from indoor unit CN105 connection
- Compatible with remote controllers
- Dimensions: 3.74" x 2" x 0.75"
- Cable length: 37"

PAC-UKPRC001-CN-1

BACnet Points Table

Object Type	Object Name
Monitor Only Points	Drive ON/OFF State
	Mode State
	Fan Speed State
	Air Direction State
	Inlet Temperature
	Fault Code

Object Type	Object Name
Commandable Points	Drive ON/OFF Setup
	Set point
	Mode Setup
	Fan Speed Setup
	Air Direction Setup
	Temperature Units

Object Type	Object Name
Commandable Points	ON/OFF
	Mode
	Set point
	Fan Speed
	Air Direction
Monitor Only Points	Fault Codes
	Room Temperature

Flush Mount Sensor

Specifications

- Remote sensing of space temperature up to 100 feet
  - Requires field supplied 22-2 AWG wire for installation
- Dimensions: Sensor Head is Ø0.74" W x 0.65" L
- Mounting Requirements:
  Drywall 1/2" hole,
  Solid Walls 1/4" hole
- Paintable
- For M-Series ducted and P-Series indoor units

PAC-USSEN001-FM-1

M-Series Sensor M21EAA307

Specifications

- Remote M-Series Ductless Temperature Sensor

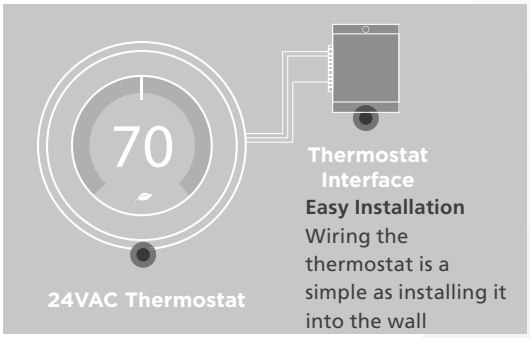
M21EAA307

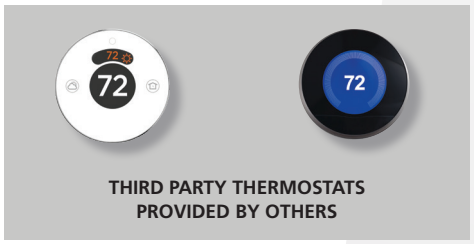
Third Party Controls Interface

Thermostat Interface

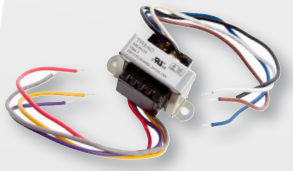
Specifications

- Connect your favorite third party 24VAC thermostat (provided by others)
- One Thermostat Interface per indoor unit and third party thermostat (supplied by others)
- Connects to indoor unit CN105 connection
- Modes of operation: cooling/heating/ventilation (fan)/off
- Fan speed control: high/medium/low
- Delayed off adjustable setting: 0, 5 (default), 10, or 30 minutes
- Indoor unit fan speed setting: auto (default), medium, high, or custom auto
- Two-stage heat and cool thermostat operation
  - Capacity is adjusted based on zone temperature rate of change measured by the return air sensor (highly recommended)
  - Full capacity (default)
- Auto recovery after power failure
- 24VAC transformer required (Sold separately or supplied by third party)
- VLP24-210 is a compact 24VAC 5VA transformer available for purchase
- Dimensions:
  1.437 x 2.375 x 1.437 inch (HxWxD)





PAC-US444CN-1



VPL24-210

Third Party Controls Interface

USNAP Interface

Specifications

- Allows indoor units to participate in Demand Response Events
- Works with CTA 2045 Universal Communication Modules (UCMs)
- 3 LEDS to display device status
  - Communication with UCM
  - Communication to indoor unit
  - Demand Response Events
- System reset

PAC-WHS01UP-E

Controls
Compatibility

		M-Series												
		Floor Mount		Wall Mount										
		MFZ -KA	MFZ -KJ	MSY/ MSZ-D	MSZ -FH	MSZ -FE	MSZ -FS	MSZ -EF	MSY/ MSZ-GE	MSY/ MSZ-GL	MSZ -HE	MSZ -HM	MSZ -WR	MSZ -JP
Wireless Interface	PAC-USWHS002-WF-1 PAC-USWHS002-WF-2	■	■	■		■	■	■	■	■		■	■	■
BACnet® & Modbus Interface	PAC-UKPRC001-CN-1			NA-8		09(12) NA-8 & 18NA			NA-8, NA-9 & GE24NA					
Thermostat Interface	PAC-US444CN-1													
USNAP Interface	PAC-WHS01UP-E													
kumo touch™ Wireless Thermostat & Receiver	MHK2	■	■	■		■	■	■	■	■		■	■	■
				NA-8		09(12) NA-8 & 18NA			NA-8, NA-9 & GE24NA					
Hand-held Wireless Controller	Deluxe SG Varies by model, see Part Manual for Part Number		■		■		■	■						
Hand-held Wireless Controller	Standard KM Varies by model, see Part Manual for Part Number	■		■		■			■	■				
Hand-held Wireless Controller	Moderate MS Varies by model, see Part Manual for Part Number										■	■	■	■
Handheld Wireless Controller & Receiver for Concealed Indoor Units	PAR-FL32MA (controller) PAR-FA32MA (receiver)													
Remote Controller Kit	PAR-SL93B-E													
Remote Controller Kit with i-see Sensor™	(PAR-SA92MW-E)													
Touch MA Remote Controller	PAR-CT01MAU-SB	○ MAC-334IF-E Required	○ MAC-334IF-E Required	○ MAC-334IF-E Required		○ MAC-334IF-E Required	○ MAC-334IF-E Required	○ MAC-334IF-E Required	○ MAC-334IF-E Required	○ MAC-334IF-E Required		○ MAC-334IF-E Required	○ MAC-334IF-E Required	○ MAC-334IF-E Required
Deluxe MA Remote Controller	PAR-40MAAU			NA-8		09(12) NA-8 & 18NA			NA-8, NA-9 & GE24NA					
Simple MA Controller	PAC-YT53CRAU-J													
Corner Panel Receiver and Remote	PAR-SL100A-E PAR-SF9FA-E													
	PAR-SL100A-E PAR-FL32MA-E PAR-SR4LU-E													

■ = CN105 Compatibility | ○ = TB15 Compatibility

	M-Series						P-Series										
	Air Handler		Horizontal Ducted		Ceiling Cassette		Ceiling Suspended		Horizontal Ducted		Wall Mount		Ceiling Cassette			Air Handler	
	MVZ -AA4 -AA7	SVZ -KP	SEZ -KD	SEZ -KD 4	SLZ-KA & KF	MLZ -KP	PCA -GA	PCA -KA	PEA -AA	PEAD -AA	PKA -HA	PKA -KA	PLA -AA	PLA -BA	PLA -EA	PVA -AA4	PVA -AA7
	■	■		■ KD4.1TH & KD4R1.TH	■	■		■ KA4, KA4.TH, KA6 & KA7	■ AA4, AAR1.TH & AA6	■ AA4, AA5, & AA7	■ HA4, HA6, & HA7	■ KA4.TH, KA6 & KA7		■ BA4 & BA6	■	■	■
	■	■		■ KD4.1TH & KD4R1.TH	■	■		■ KA4, KA4.TH, KA6 & KA7	■ AA4 & AA4R1.TH	■ AA4, AA5, & AA7	■ HA4, HA6, & HA7	■ KA4.TH, KA6 & KA7		■ BA4 & BA6	■	■	■
								■ Optional									
								■	■	■	■	■	■		■ Optional		
						■			■								
	○	○	○	○	○		○ Included In Kit	○ Included In Kit	○ Receiver Required	○ Receiver Required	○ Receiver Built In	○ Receiver Built In		○ Receiver Required	○ Receiver Required	○ Receiver Required	○ Receiver Required
							■	■									
	○	○	○	○	○	○ MAC-334IF-E Required	○	○	○	○	○	○	○	○	○	○	○
					■ SLZ-KF only												
															■		

*Features may vary by wireless controller part number.

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mitsubishicomfort.com

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