

Thermostat Interface FAQ

PAC-US444CN-1

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Applications FAQ

- 1) Why is the PAC-US444CN-1 Thermostat Interface valuable?
 - a) To use a third party thermostat to control your Mitsubishi Electric indoor unit.
 - b) To use the third party thermostat features and benefits.
- 2) Does the thermostat interface require a power supply?
 - a) A 24VAC transformer is required to power most third party HVAC thermostats.
 - b) We sell a 230/115 VAC transformer, VPL24-210, approved for mounting in the multi-position indoor unit control box to provide 24 VAC.
 - c) Thermostat Interface input terminals are rated for 20-30 VAC.
- 3) Which thermostats work with Mitsubishi Electric's Thermostat Interface?
 - a) Any traditional 24 VAC powered HVAC thermostat.
 - i) Configurable as conventional system, NOT heat pump control.
 - ii) Minimum terminals: R, C, G, W1, Y1
 - iii) Preferred terminals: R, C, G, W1, W2, Y1, Y2
 - b) Line voltage thermostats do not work
- 4) Can I use the third party thermostat app or website to control, schedule, and apply advanced features to my Mitsubishi Electric indoor unit?
 - a) **Yes**
- 5) Which Mitsubishi Electric Cooling & Heating indoor units are compatible with the thermostat interface?
 - a) Almost all current indoor units offered by MEUS
 - b) Please refer to the data sheet located on www.mylinkdrive.com
 - c) USA > Controls > PAC-US444CN-1 > Applications
- 6) Can I use other remote or centralized controllers with the thermostat interface?
 - a) **No**, do not connect or assign any other remote controller (MA, ME, or Wireless) or centralized controller (AE-200, AE-50, EW-50) with the thermostat interface.
- 7) How many indoor units can I control with one thermostat interface?
 - a) **One**, Only 1 third party thermostat connected to 1 thermostat interface to control only 1 indoor unit
- 8) If I have a MXZ multi-zone system, how many thermostats and thermostat interfaces do I need?
 - a) One thermostat and one thermostat interface per indoor unit.
- 9) Can a homeowner install the thermostat interface?
 - a) **No**, high voltage is present during installation, a licensed professional is recommended.

- 10) What is the difference between 1H/1C (1 stage) and 2H/2C (2 stage) control?
- a) 1H/1C: When the third party thermostat calls for heat, the thermostat interface will change the indoor unit mode into heat and ramp the indoor unit to **full capacity**.
 - b) 2H/2C: When the third party thermostat calls for 1st stage of heat, the thermostat interface will change the indoor unit mode into heat and using a patent pending algorithm to **optimize variable capacity**.
When the third party thermostat calls for 2nd stage of heat, the thermostat interface will change the indoor unit mode into heat and ramp the indoor unit to **full capacity**.
- 12) Can I use PAC-SE41TS Remote temperature sensor with the thermostat interface?
- a) **Yes**, but not necessary, depending on the application
- 13) Can I use the MAC-333IF with the thermostat interface?
- a) **Yes**, but the M-Net and MA control are not supported and should not be wired up.
 - b) You will need 12 VDC power supply, **PS5R-A12**
- 14) Can I use my handheld, wireless remote controller with the thermostat interface?
- a) **No**

Advanced Features FAQ

- 1) What is the preferred method for setup and wiring of the third party thermostat?
 - a) Thermostat set to “Conventional System”
 - b) Preferred 2 stages of Heat & Cool operation

- 2) What is set point range?
 - a) The set point range is dependent on the indoor unit the thermostat interface is connected to.
 - b) Please refer to the indoor unit’s manuals for set point range.
 - c) It is recommended to set the third party thermostat minimum and maximum set point ranges to match the indoor unit’s set point range.

- 3) How does Delayed Off feature provide more comfort?
 - a) The indoor unit will continue run after the thermostat has reached set point. It will control the space to the last set point for up to 30 minutes. Also allowing the indoor unit to vary capacity.
 - b) The amount of time is adjustable to: 0, 5 (default), 10, or 30 minutes.

- 4) Is the fan speed adjustable?
 - a) Yes, it can be set to Auto (default), Medium, High, and Custom Auto.
 - b) Custom Auto provides more comfortable fan speed operation vs. the more efficient Auto. Custom Auto speeds up the fan quicker then Auto with temperature change.

- 5) Can I use an Input/output controller with the Thermostat Interface?
 - a) Yes, the inputs require 24 VAC signal to work (20-30 VAC).
 - b) Setup can be for 1H/1C or 2H/2C with fan speed control

- 6) How do the fan speed inputs (G1=Low, G2=Medium, G3=High) work with fan speed setting (SW1-3&4)?
 - a) The fan speed setting can be set with dip switch SW1-3&4 to: Auto (default), Medium, High, and Custom Auto.
 - b) If you apply a signal to fan input (G1, G2, or G3), it will override the fan speed setting.
 - c) If only G is energized, the indoor unit will go into FAN mode with High fan speed overwriting fan speed inputs and fan speed setting.

Service FAQ

- 1) How do I wire the Thermostat Interface?
 - a) Please refer to the installation manual for wiring schematics.
 - b) 1H/1C: Match terminals R, C, G, W1, Y1
 - c) 2H/2C: Match terminals R, C, G, W2, W1, Y2, Y1 with SW2-6 to ON.
 - d) INNCOM: match terminals R, C, W1, Y1, G1, G3
 - i) INNCOM 2H/1C is not supported
- 2) Where do I mount the thermostat interface?
 - a) The MVZ, PVA, and PVFY have been approved to install the interface inside their Control Box.
 - b) Contractor should use professional judgment to meet local electrical codes.
- 3) Where do I mount the VPL24-210 transformer?
 - a) The MVZ, PVA, and PVFY have been approved to install the transformer inside their Control Box.
 - b) Contractor should use professional judgment to meet local electrical codes.
- 4) What size wire is recommended?
 - a) 18 AWG
- 5) Can Mitsubishi Electric indoor unit be secondary heat with this interface?
 - a) Yes, wire HVAC thermostat W2 output to Thermostat Interface W1 input and set SW2-6 to OFF position. Wire thermostat W1 to primary heating source.
- 6) Can I lock in HIGH fan speed while in heating stage 1?
 - a) Yes, Jumper W1 and G3 together on the thermostat interface terminals.
- 7) Static pressure, do I need to set the indoor unit dips switches or thermostat interface?
 - a) It is recommended to set only one, and not both