Application Note: 3048

How to turn off the indoor unit fan when set point is met

Specifications are subject to change without notice.
© 2020 Mitsubishi Electric Trane HVAC US LLC. All rights reserved.

Table of Contents

1) MHK1
2) MHK2
3) Simple MA
4) Deluxe MA
5) Touch MA
6) kumo cloud®
7) Thermostat Interface
8) Indoor Unit Jumpers
9) Indoor Unit Dipswitches

Introduction

The purpose of this Application Note is to illustrate the steps required to have the indoor unit fan turn off when set point has been met. The methods for achieving this include: configuring the Function Settings through the local controller, cutting jumpers on the indoor unit control board, and configuring dipswitches on the indoor unit control board.

Locate your model in the chart below to determine the correct method for your system.

Method 1

Function Settings

Can be configured on the following models:

- SEZ
- SLZ
- SVZ
- MVZ
- PCA
- PKA
- PLA
- PEAD
- PVA

Method 2

Jumpers

Can be cut on the following models:

- MFZ
- MLZ
- MSZ

Method 3

Dipswitches

Can be configured on all City-Multi models *excluding the following:*

- PEFY-NLMU
- PEFY-NHMU
- PWFY-AU
- PWFY-BU

Method 4

Thermostat Interface

Can be configured on all compatible City-Multi and M- & P-Series models.

- M-Series Compatibility Chart
- P-Series Compatibility Chart
- City-Multi Compatibility Chart

Specifications are subject to change without notice.
© 2020 Mitsubishi Electric Trane HVAC US LLC. All rights reserved.

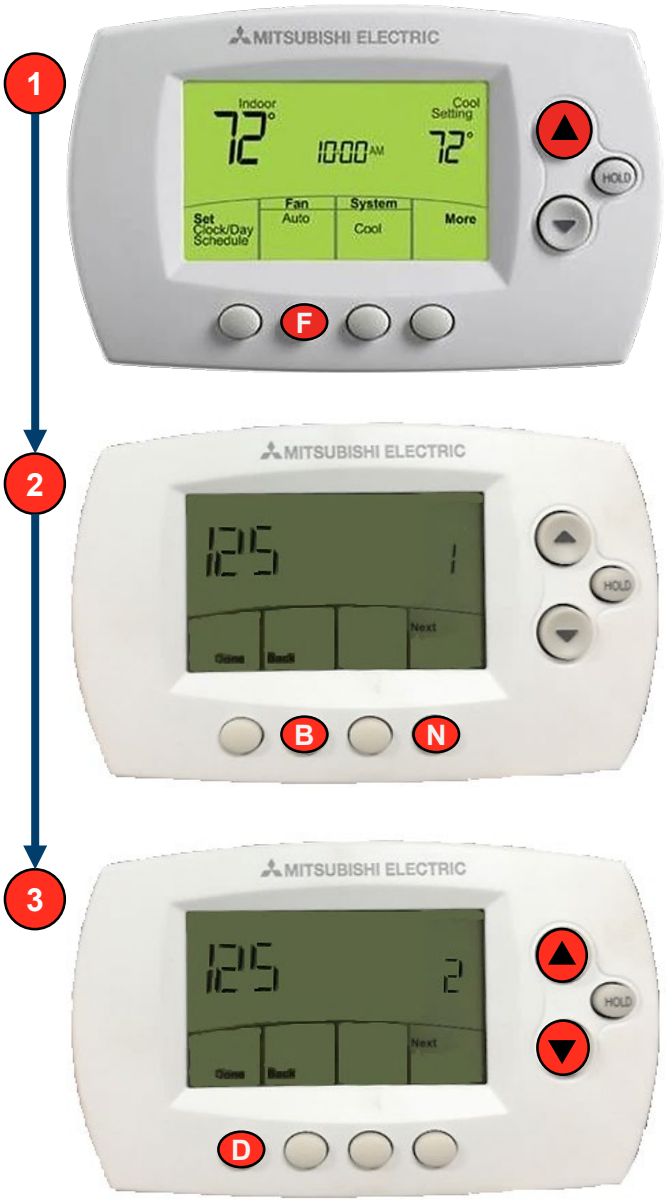
MHK1

Instructions

Use the pictures to complete the steps listed below.

1) Press and hold F + ▲ simultaneously until the display changes
   - **"Wait"** will be displayed for up to 40 seconds
2) Press B or N until you reach function setting **125** (Heat) or **127** (Cool)
3) Press ▲ or ▼ to choose the desired fan speed setting
   - Press B or N to configure additional function settings if desired

Press D when you're ready to save and exit



Function Settings

FS 125 – Heating
1) Extra Low (default)
2) Stop
3) The current controller setting

FS 127 – Cooling
1) The current controller setting (default)
   - Auto fan reverts to Low speed
2) Stop
3) Extra Low
   - Only available on SLZ & PLA models

Specifications are subject to change without notice.

© 2020 Mitsubishi Electric Trane HVAC US LLC. All rights reserved.

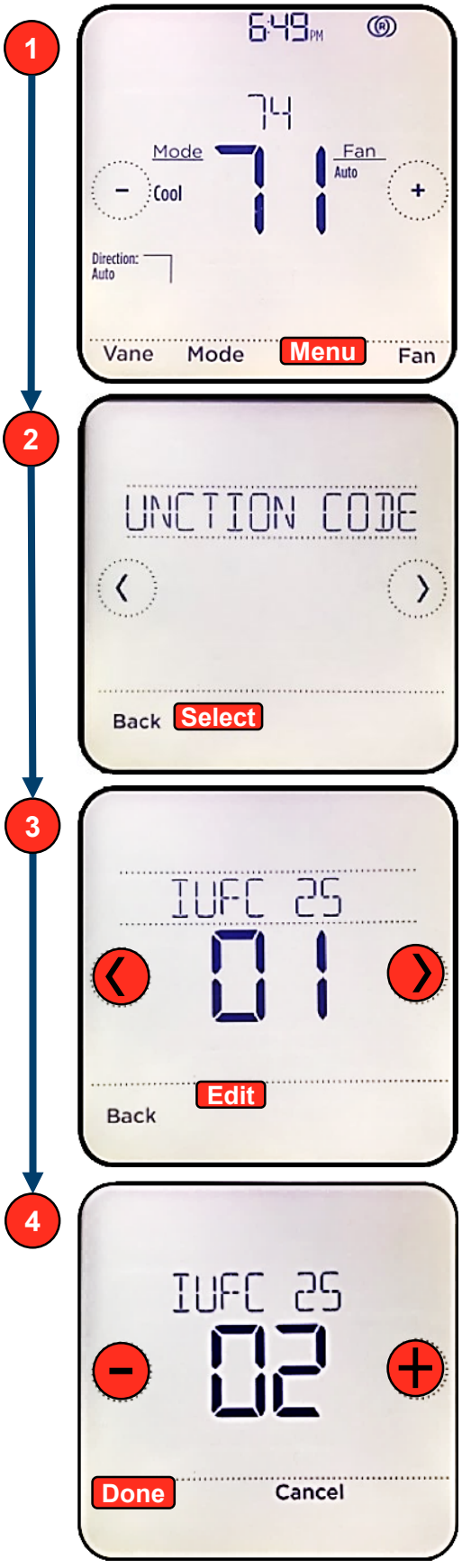
MHK2

Instructions

Use the pictures to complete the steps listed below.

1) Press and hold **Menu** until the display changes, and then enter the **PIN** number
   - Obtain the PIN by adding **1234** to the four digit number on the back of the MHK2 (see below)
2) Select **"Function Codes"**
3) Press ❮ or ❯ until you reach **25** (Heat) or **27** (Cool) and press **Edit**
4) Press − or + to select the desired fan speed
   - Press **Done** then ❮ or ❯ to configure additional function settings if desired

Press **Done** again when you're ready to save and exit



Function Settings

IUFC 25 – Heating fan speed

1) Extra Low (default)
2) Stop
3) The current controller setting

IUFC 27 – Cooling fan speed

1) The current controller setting (default)
   - Auto fan reverts to Low speed
2) Stop
3) Extra Low
   - Only available on SLZ & PLA models

Specifications are subject to change without notice.

© 2020 Mitsubishi Electric Trane HVAC US LLC. All rights reserved.

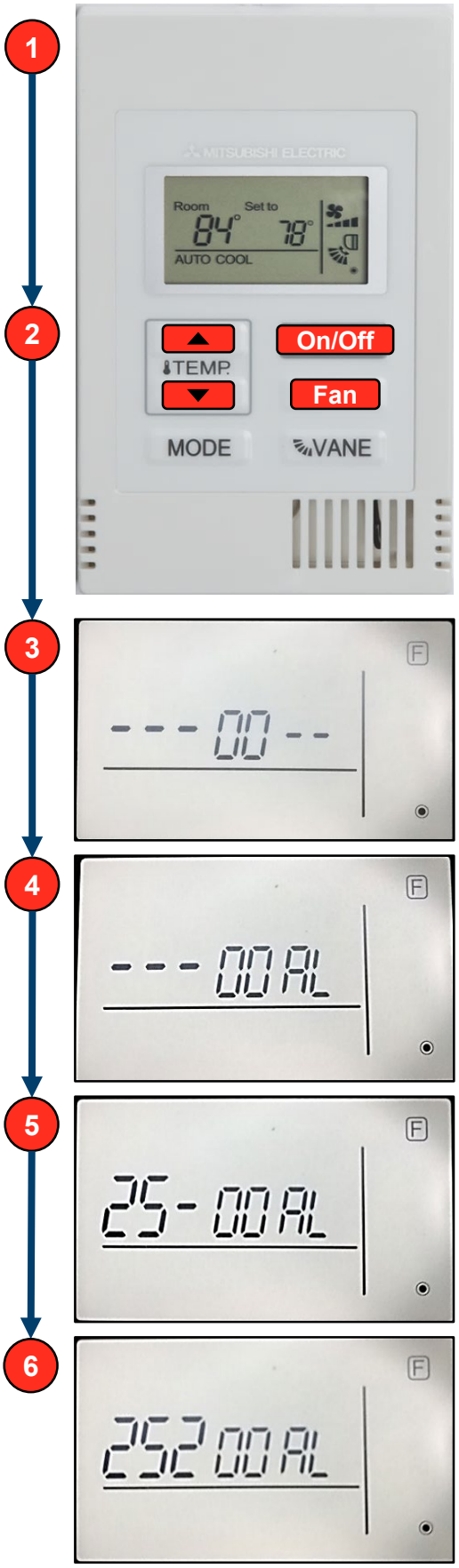
Simple MA

Instructions

Use the pictures to complete the steps listed below.

1) Press On/Off to turn the controller **off**
2) Press and hold ▲ + ▼ + Fan simultaneously until the display changes
3) Press ▲ once and then press Fan
   - The screen should display **"00"**
4) Press ▲ until you see **"AL"** and then press On/Off
5) Press ▲ until you reach 25 (Heat) or 27 (Cool) and then press Fan
6) Press ▲ or ▼ to select the desired fan speed and then press On/Off to save the settings
   - Press Fan and repeat **Step 4)** to configure additional function settings if desired

Press and hold ▲ + ▼ + Fan to exit the settings



Function Settings

IUFC 25 – Heating fan speed

1) Extra Low (default)
2) Stop
3) The current controller setting

IUFC 27 – Cooling fan speed

1) The current controller setting (default)
   - Auto fan reverts to Low speed
2) Stop
3) Extra Low
   - Only available on SLZ & PLA models

Specifications are subject to change without notice.

© 2020 Mitsubishi Electric Trane HVAC US LLC. All rights reserved.

Deluxe MA

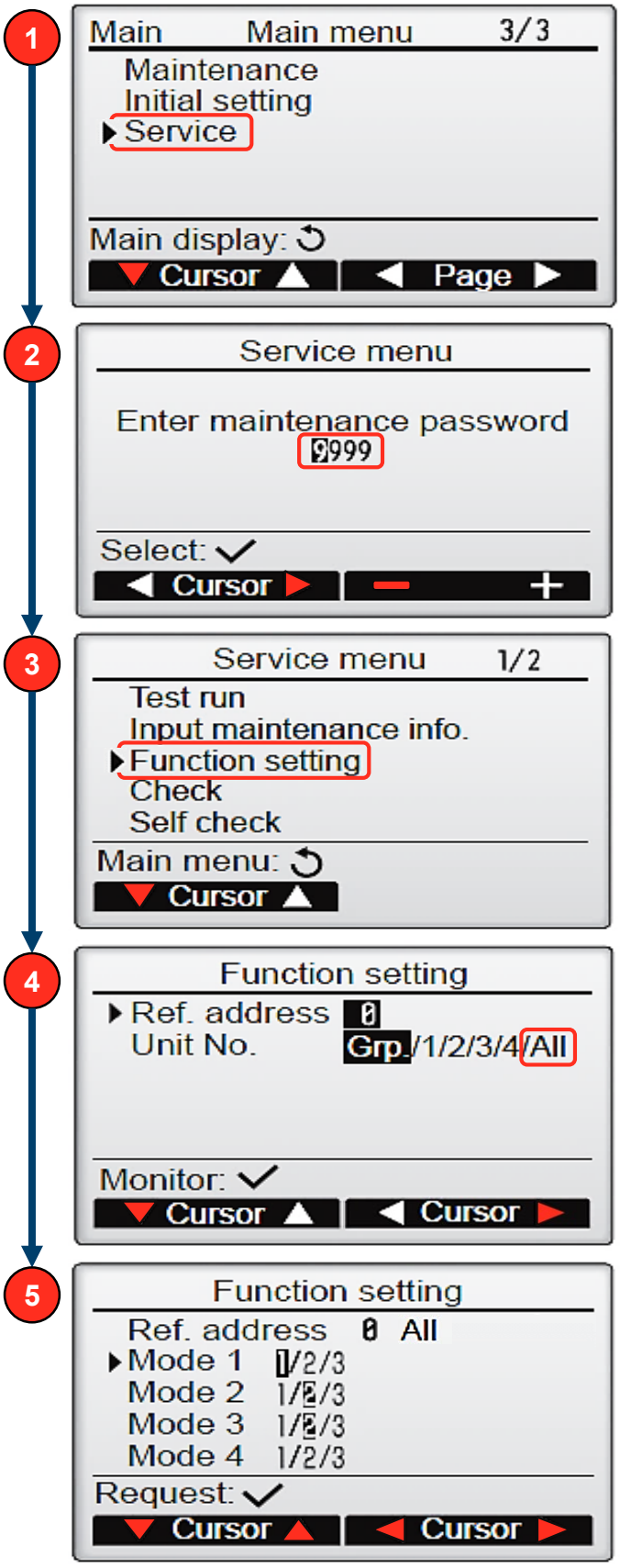
Instructions

Use the pictures to complete the steps listed below.

Begin by turning the controller **OFF** and opening the main menu by selecting the icon.

1) Scroll down and select **Service**
2) Enter the password **9999** and press Select
3) Select **Function Setting**
4) Leave “Ref. Address” at **0**, scroll down to “Unit No.”, then scroll to the right and select **All**
5) Scroll down to **Mode 25** (Heat) or **Mode 27** (Cool) and select **2** for thermal off in either mode

Press when you’re ready to save & exit.



Function Settings

Mode 25 – Heating

1) Extra Low (default)
2) Stop
3) The current controller setting

Mode 27 – Cooling

1) The current controller setting (default)
   - Auto fan reverts to Low speed
2) Stop
3) Extra Low
   - Only available on SLZ & PLA models

Specifications are subject to change without notice.

© 2020 Mitsubishi Electric Trane HVAC US LLC. All rights reserved.

Touch MA

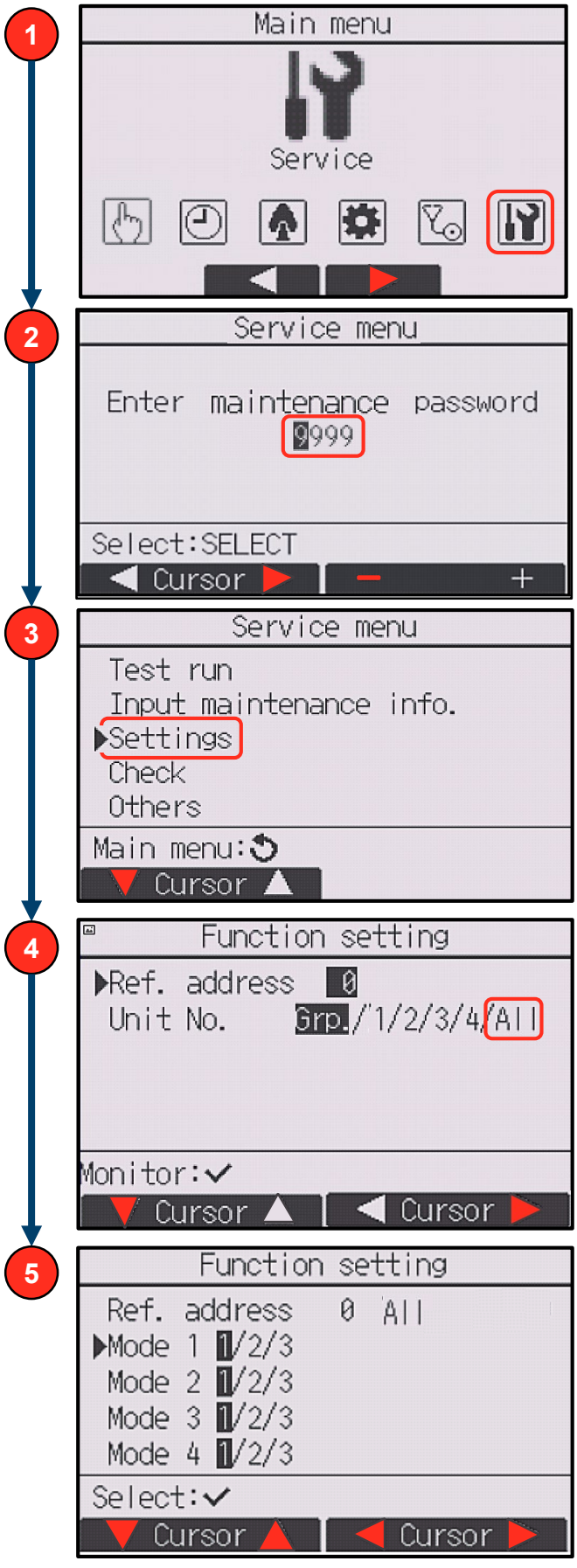
Instructions

Use the pictures to complete the steps below.

Begin by turning the controller **OFF** and opening the main menu by selecting the icon

1) Scroll to the right and select **Service**
2) Enter the password **9999** and press Select
3) Select **Settings**, then select **Function settings**
4) Leave “Ref. Address” at **0**, scroll down to “Unit No.”, then scroll to the right and select **All**
5) Scroll down to **Mode 25** (Heat) or **Mode 27** (Cool) and select **2** for thermal off in either mode

Press when you’re ready to save & exit.



Function Settings

Mode 25 – Heating

1) Extra Low (default)
2) Stop
3) The current controller setting

Mode 27 – Cooling

1) The current controller setting (default)
   - Auto fan reverts to Low speed
2) Stop
3) Extra Low
   - Only available on SLZ & PLA models

Specifications are subject to change without notice.

© 2020 Mitsubishi Electric Trane HVAC US LLC. All rights reserved.

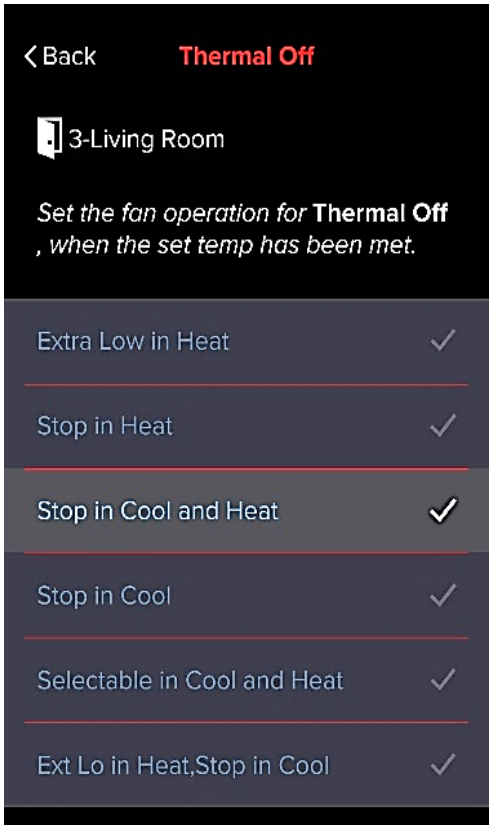
kumo cloud®

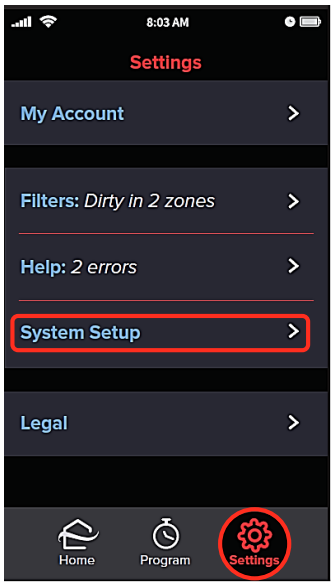
Instructions

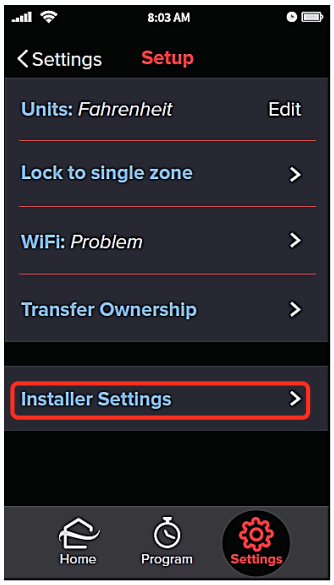
Use the pictures to complete the steps listed below.

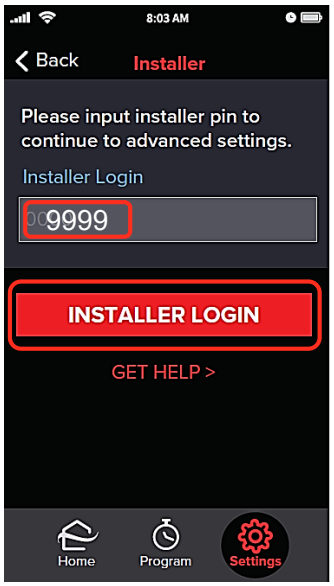
1) Tap **Settings**
2) Tap **System Setup**
3) Tap **Installer Settings**
4) Enter PIN – **9999**
5) Tap **Installer Login**
6) Tap the name of the Site and then tap the name of the Zone
7) Tap **Advanced**
8) Tap **Thermal Off Fan** and choose one of the fan speeds shown below

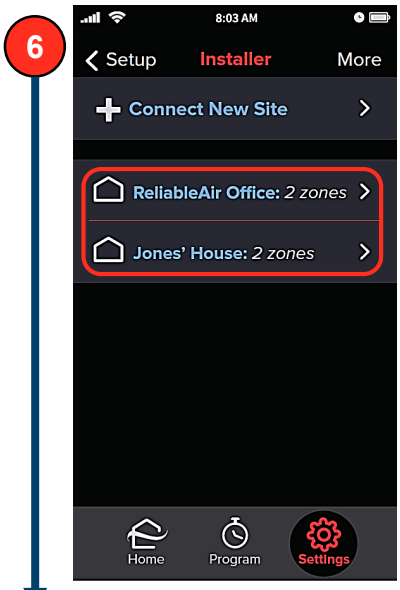
Tap **Back** when you're ready to save & exit

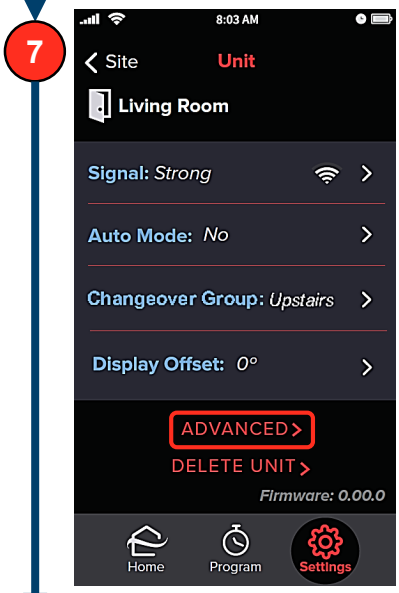


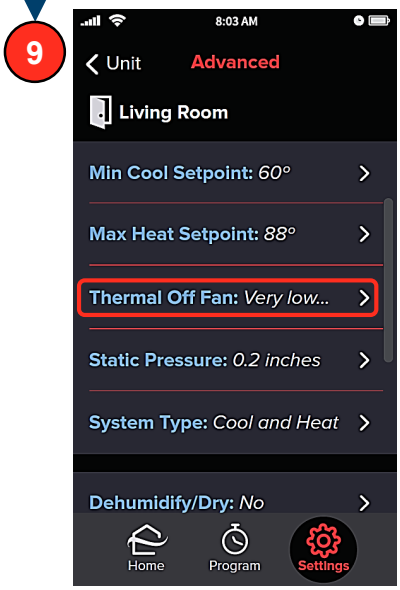












Specifications are subject to change without notice.

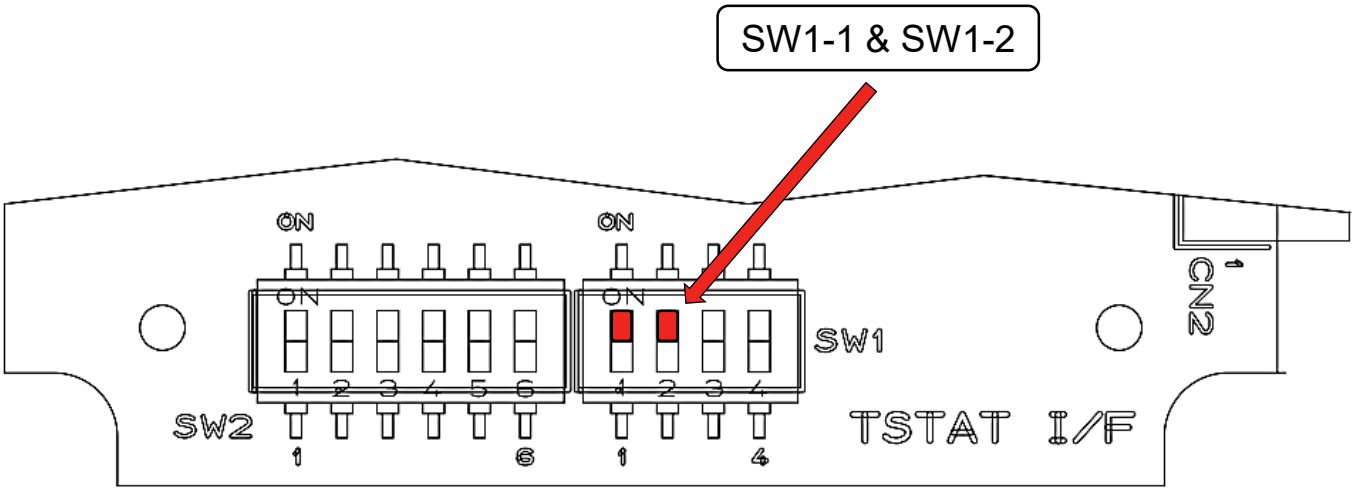
© 2020 Mitsubishi Electric Trane HVAC US LLC. All rights reserved.

Thermostat Interface

Overview

By default, the Thermostat Interface will turn the indoor unit fan off five minutes after meeting set point. This automatic delay can be adjusted to 0, (5), 10, or 30 minutes, by configuring the dipswitches on SW1 to match the positions in the diagram and chart below.

Click here for more information on the Thermostat Interface.



Delayed Off

SW1-1/2: After reaching thermostat set point, the unit will continue to run for a set period of time in order to improve efficiency. The period of time is set by adjusting SW1-1 and SW1-2 according to the following table:

SW1-1	SW1-2	Result
OFF	OFF	5 minutes (Default)
ON	OFF	10 minutes
OFF	ON	30 minutes
ON	ON	0 minutes

Specifications are subject to change without notice.
© 2020 Mitsubishi Electric Trane HVAC US LLC. All rights reserved.

Indoor Unit – Jumpers

Notes

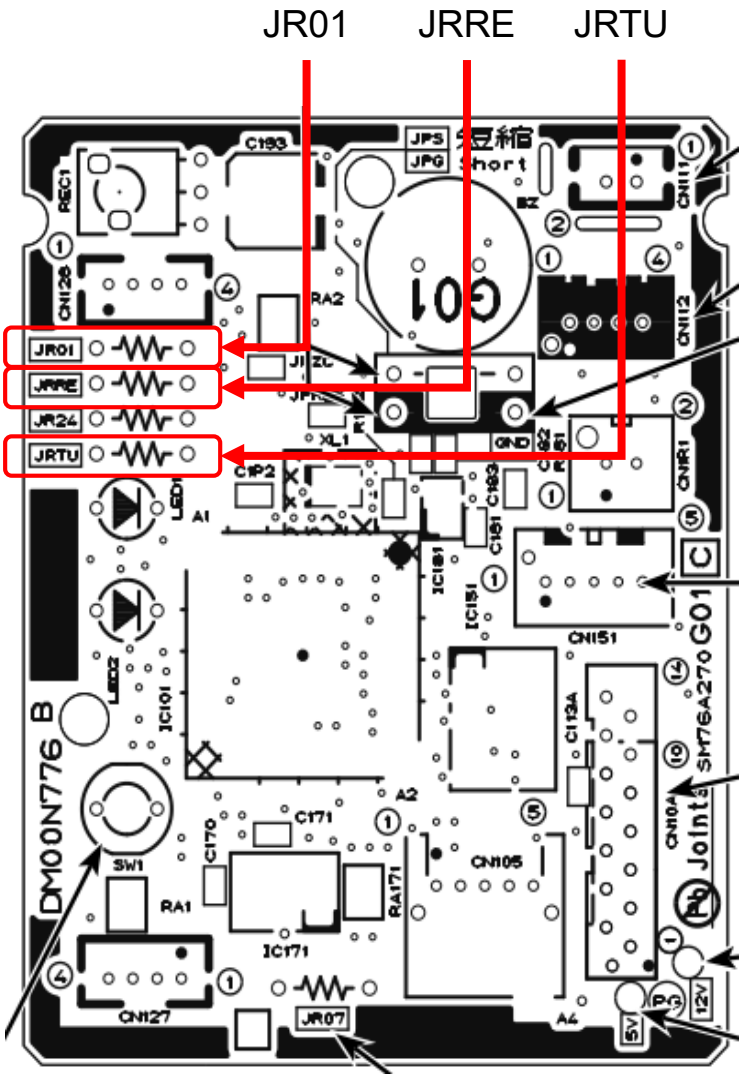
1) Since the return air sensor relies upon airflow to accurately sense the room temperature, it is recommended to install either a remote controller, or a remote temperature sensor when cutting any of these jumpers.
   - If using a remote controller, configure the settings so that the unit senses temperature at the remote controller itself.
   - The MHK1 and MHK2 controllers sense temperature at the controller by default.
2) Only cut one side of the jumper, as it allows for the jumper to be re-soldered later on.

Instructions

The following jumpers must be cut in order to stop the fan when set point has been met:

JR01 (**JRTU** for MSZ-FH models)
Heating - if this jumper is left in place, then the fan speed will revert to *Very Low*

JRRE
Cooling - if this jumper is left in place, then the fan speed will revert to the remote controller's current setting of Auto, Low, Medium, or High



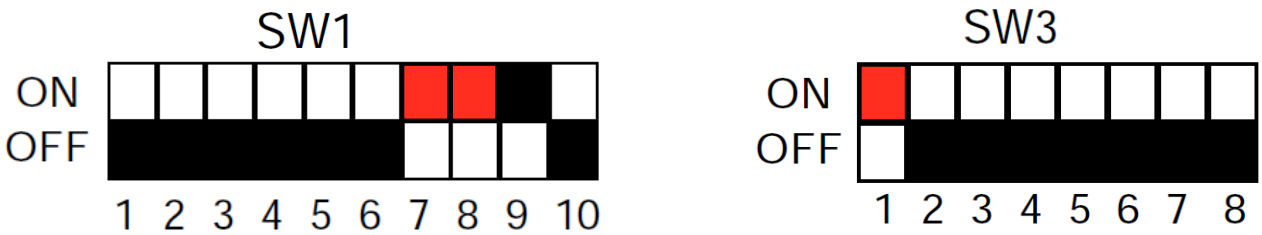
Note: The diagram to the right is for MSZ-GL models, but if you'd like to locate the diagram for your model, then you can reference the Test Point & Diagrams section in your indoor unit's Service Manual at MyLinkDrive.com.

Specifications are subject to change without notice.
© 2020 Mitsubishi Electric Trane HVAC US LLC. All rights reserved.

Indoor Unit – Dipswitches

Instructions

1. Power down the indoor unit
2. Turn on the following dipswitches:
   - SW1-7
   - SW1-8
   - SW3-1
3. Power the indoor unit back on when finished



Reference the chart below to configure other fan speed settings if desired.

SW3-1	SW1-7	SW1-8	Fan Speed	
			Heating	Cooling
OFF	OFF	OFF	Very Low	Remote Controller Setting
OFF	ON	OFF	Low	
OFF	OFF	ON	Remote Controller Setting	
ON	ON	ON	Stop	

Specifications are subject to change without notice.
© 2020 Mitsubishi Electric Trane HVAC US LLC. All rights reserved.