Setting for All Outside Air Unit Connection

For SMMS-e

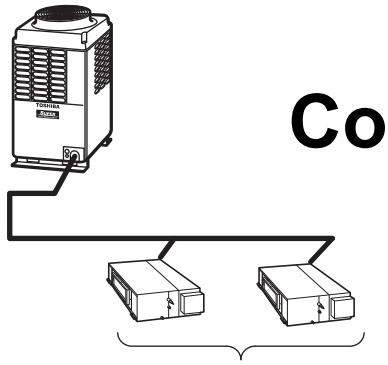
This booklet describes the connection settings for Outside Air Units based on the information contained in the manuals on the Outside Air Unit and the outdoor unit.

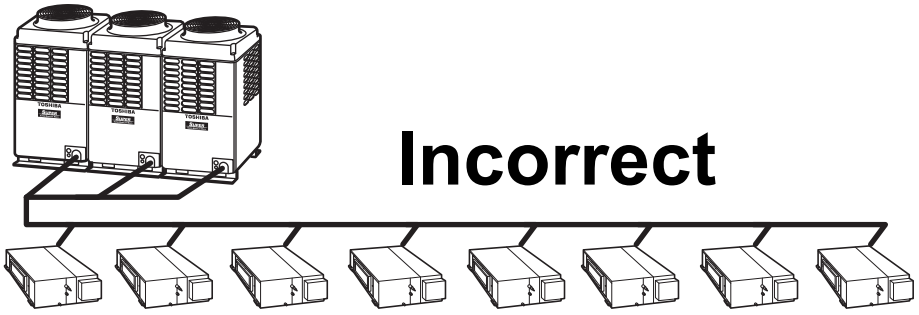
Title numbers like “3” refer to the same numbers in original installation manual on the Outside Air Unit.

3 System control of Outside Air Unit

■ System able to be combined

- System that connected to Outside Air Unit only can be used with only single Outdoor unit on one line of the multi system.
  The combination of indoor units is only available specified in following Table 2.





■ The combination of Indoor units

1. The capacity code of Indoor unit is decided for each capacity type.

Indoor unit model name MMD-	AP0481HF2UL	AP0721HF2UL	AP0961HF2UL
Indoor unit capacity type	048	072	096
Indoor unit capacity code	48	72	96

2. Combination of Indoor units is decided for Outdoor unit capacity type.
It allows only the combinations of Indoor units below.

Outdoor unit capacity type	Outdoor unit capacity code	Combination of Indoor unit capacity type		
		Number of Indoor units		
		1	2	3
MMY-MAP0726*	72	072	-	-
MMY-MAP0966*	96	096	048 + 048	-
MMY-MAP1206*	120	-	072 + 048	-
MMY-MAP1446*	144	-	072 + 072	048 + 048 + 048
		-	096 + 048	-
MMY-MAP1686*	168	-	096 + 072	072 + 048 + 048

◆ Please refer to “Outside Air Unit’s Installation Manual” except the above contents.

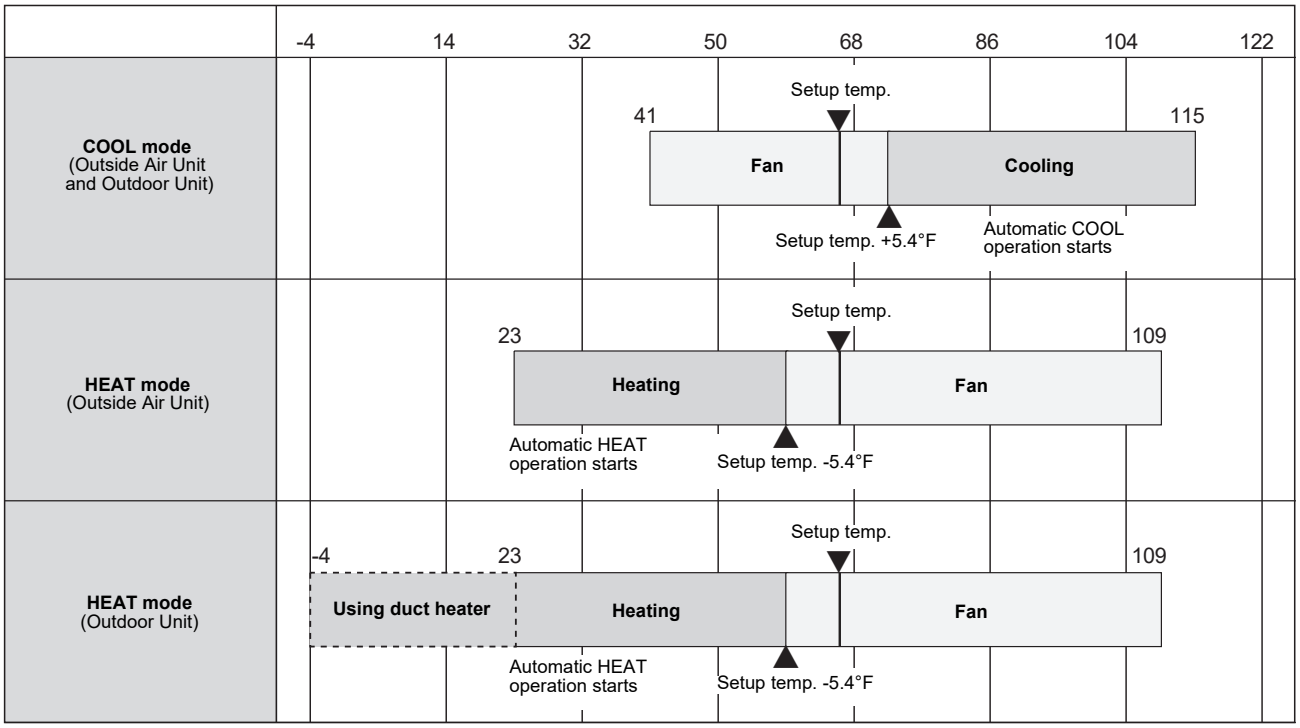
4 Basic operation

■ Use conditions

- In “COOL” mode, if temperature of the outside air is under the setup temp. +5.4°F, FAN status is automatically made. When temperature of the outside air is under 66°F, FAN status is also made regardless of the setup temperature.
- In “HEAT” mode, if temperature of the outside air is over the setup temp. -5.4°F, FAN status is automatically made. When temperature of the outside air is over 59°F, FAN status is also made regardless of the setup temperature.

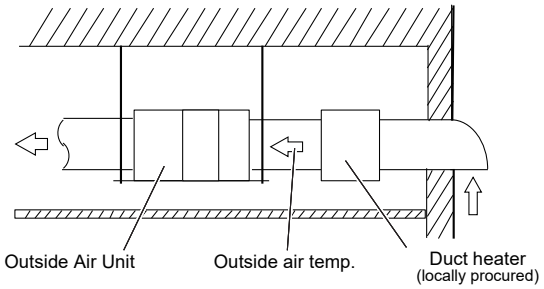
●Case to use in SMMS-e

Outdoor Air Temperature °F

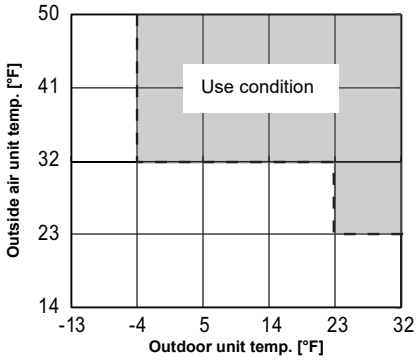


REQUIREMENT

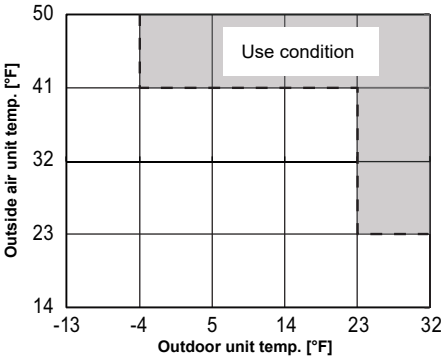
- In “COOL” or “FAN” mode, if temperature of the outside air is under 41°F, the operation stop automatically in order to protect the equipment.
  In this case, continue the operation by selecting “HEAT” mode.
- In “HEAT” mode, if temperature of the outside air is under 23°F, the operation stops automatically in order to protect the equipment.
  When operating the air conditioner with the outside air temp. under 23°F (minimum -4°F),
  set temp. of the outside air to be taken in to 32 (*1)°F or upper using a duct heater (locally procured).
  For details, consult the dealer which you purchased the air conditioner.
  (*1) When 096type system with 1 indoor unit, be taken in to 41°F or upper using a duct heater.



(i) Case of standard system



(ii) Case of 096type system with 1 indoor unit



- In “HEAT” mode, if temperature is out of range in the Use condition, the fan of the Outside Air Unit intermittently operate. So take care not to overheat a duct heater, when use a duct heater.

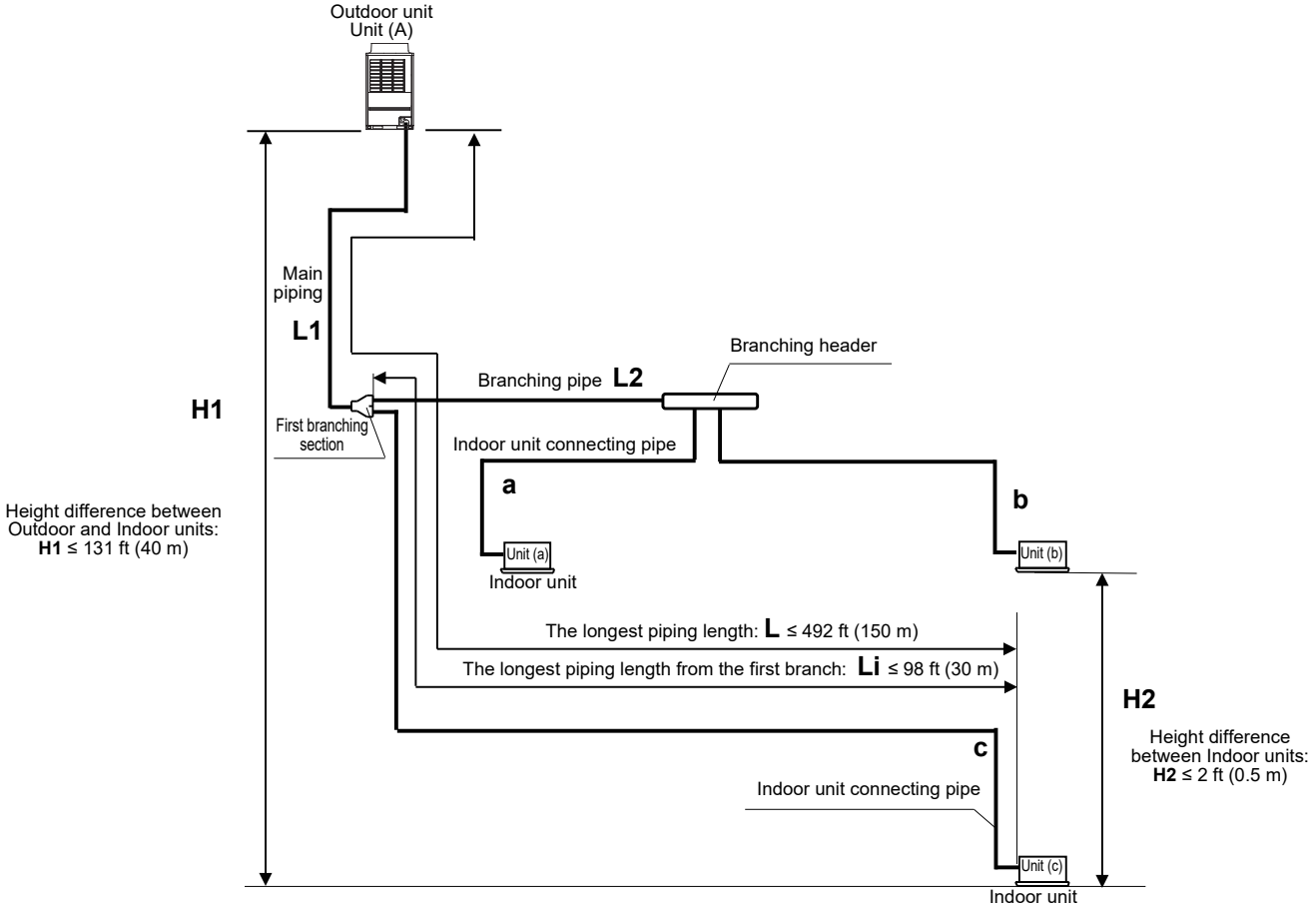
◆ Please refer to “Outside Air Unit’s Owner’s Manual” except the above contents.

7 Refrigerant piping

■ Allowable length/height difference of refrigerant piping

⚠ CAUTION

- **Length and height of refrigerant piping keep the limitation blow.**
  If installed in out of the limitation, there is a possibility that heat-exchanger in Outdoor unit will burst and leak a refrigerant gas, for freezing heat-exchanger by shortage of defrosting capacity.



◆ System restrictions

Max. No. of combined Outdoor units	**1 unit**
Max. capacity of combined Outdoor units	**14 ton**
Max. No. of combined Indoor units	**3 units**
Max. capacity of combined Indoor units	Refer to "■ The combination of Indoor units"

◆ Cautions for installation

- Y-shaped branching joint must be installed horizontally.

◆ Allowable length and height difference of refrigerant piping

			Allowable value		Pipes
			ft	m	
Pipe length	Total extension of pipe (Liquid pipe)	Actual length	**984**	**300**	**L1 + L2 + a + b + c**
	Farthest piping length **L** (*1)	Equivalent length	**492**	**150**	**L1 + c**
		Actual length	**427**	**130**	
	Main piping length	Equivalent length	**Max. 394 (Min. -)**	**Max. 120 (Min. -)**	**L1**
		Actual length	**Max. 328 (Min. 164)**	**Max. 100 (Min. 50)**	
	Farthest equivalent piping length from the first branching section **Li** (*1)	Equivalent length	**98**	**30**	**c**
	Farthest equivalent piping length between Outdoor units **LO**	Equivalent length	**—**	**—**	**—**
	Maximum equivalent piping length of Outdoor unit connecting pipe	Equivalent length	**—**	**—**	**—**
	Maximum actual length of pipes connected to Indoor units	Actual length	**98**	**30**	**a, b, c**
	Maximum equivalent length between branching sections	Equivalent length	**98**	**30**	**L2**
Height difference	Height between Outdoor and Indoor units **H1**	Upper Outdoor units	**131**	**40**	**—**
		Lower Outdoor units	**10**	**3**	**—**
	Height between Indoor units **H2**		**2**	**0.5**	**—**
	Height between Outdoor units **H3**		**—**	**—**	**—**

(*1): Farthest Indoor unit from the first branching section is the Indoor unit (c).

◆ Please refer to "Outdoor Unit's Installation Manual" except the above contents.

11 Applicable controls

REQUIREMENT

When the air conditioner is used for the first time, it will take some moments after the power has been turned on before the remote control becomes available for operations: This is normal and is not indicative of trouble.

- Concerning the automatic addresses (The automatic addresses are set up by performing operations on the outdoor interface circuit board.)
  While the automatic addresses are being set up, no remote control operations can be performed. Setup takes up to 10 minutes (usually about 5 minutes).
- When the power is turned on after automatic address setup
  It takes up to 10 minutes (usually about 3 minutes) for the Outdoor unit to start operating after the power has been turned on.

Before the air conditioner was shipped from the factory, all units are set to [STANDARD] (factory default). If necessary, change the Indoor unit settings.
The settings are changed by operating the wired remote control.

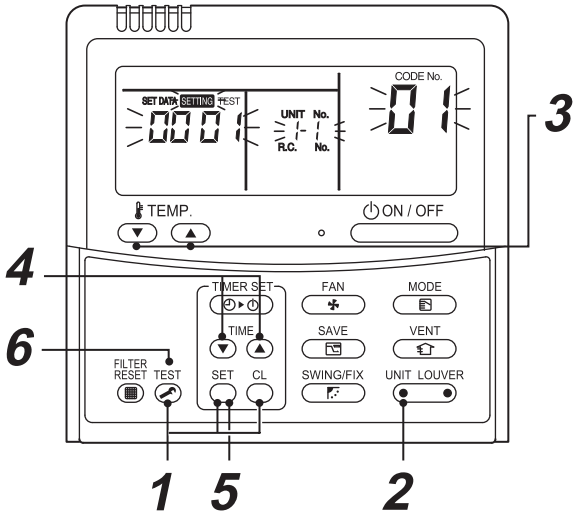
* The settings cannot be changed using only a wireless remote control, simple remote control or group control remote control by itself so install a wired remote control separately as well.

■ Basic procedure for changing settings

Change the settings while the air conditioner is not working. **(Stop the air conditioner before making settings.)**

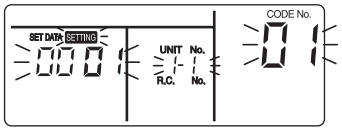
⚠ CAUTION

Set only the CODE No. shown in the following table: Do NOT set any other CODE No. If a CODE No. not listed is set, it may not be possible to operate the air conditioner or other trouble with the product may result.



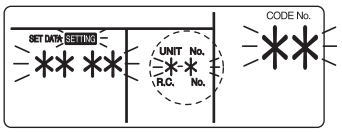
1 **Push and hold SET + CL + TEST buttons simultaneously for at least 4 seconds. After a while, the display flashes as shown in the figure. Confirm that the CODE No. is [01].**

- If the CODE No. is not [01], push TEST button to clear the display content, and repeat the procedure from the beginning. (No operation of the remote control is accepted for a while after TEST button is pushed.)
  (While air conditioners are operated under the group control, "ALL" is displayed first. When UNIT LOUVER is pushed, the Indoor unit number displayed following "ALL" is the header unit.)



(* Display content varies with the Indoor unit model.)

2 **Each time UNIT LOUVER button is pushed, Indoor unit numbers in the control group change cyclically. Select the Indoor unit to change settings for.**
The fan of the selected unit runs and the louvers start swinging. The Indoor unit for change settings can be confirmed.



3 **Specify CODE No. [✱✱] with "TEMP." ▼ / ▲ buttons.**

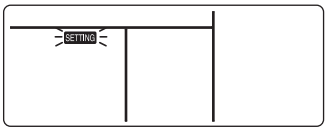
4 **Select SET DATA [✱✱✱✱] with "TIME" ▼ / ▲ buttons.**

5 **Push SET button. When the display changes from flashing to lit, the setup is completed.**

- To change settings of another Indoor unit, repeat from Procedure ***2***.
- To change other settings of the selected Indoor unit, repeat from Procedure ***3***.

Use SET button to clear the settings. To make settings after SET button was pushed, repeat from Procedure ***2***.

6 **When settings have been completed, push TEST button to determine the settings.**
When TEST button is pushed, SETTING flashes and then the display content disappears and the air conditioner enters the normal stop mode.
(While SETTING is flashing, no operation of the remote control is accepted.)



■ All Outside Air Unit connection setting

When only Outside Air Units connected to Outdoor unit, set the all Outside Air Unit connection setting at Outside Air Units.

Firstly, follow to the basic operation procedure
(1→2→3→4→5)

- The CODE No. in Procedure ***3*** is [**C8**].
- The [SET DATA] in Procedure ***4*** is [**0000**].

Secondary, follow to the basic operation procedure
(3→4→5)

- The CODE No. in Procedure ***3*** is [**AE**].
- The [SET DATA] in Procedure ***4*** is [**0016**].

Finally, follow to the basic operation procedure
(3→4→5→6)

- The CODE No. in Procedure ***3*** is [**AF**].
- The [SET DATA] in Procedure ***4*** is [**0010**].

CODE No.	Item	SET DATA
C8	All Outside Air Unit connection	0000
AE	Outside Air Unit control setting	0016
AF	Outside Air Unit control setting with Humidifier	0010

◆ Please refer to "Outside Air Unit's Installation Manual" except the above contents.