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VRF Heat Pump Priority Mode

Unlike a VRF heat recovery system, a VRF heat pump system cannot provide simultaneous cooling and heating. In a VRF heat pump system, all indoor units can operate either in cooling mode or heating mode at any given point in time.

Figure 1 – Heat Pump Functionality

By factory default, a heat pump system prioritizes the first command to determine the mode of operation for all indoor units. For example, once a system is powered on and an indoor unit is set to cooling mode, by default the heating mode will be disabled on all indoor units. To switch the operation mode to heating, you must turn off all indoor units, wait a few minutes, then turn on one indoor unit and immediately set it to heating mode, which will then become the new "first command".
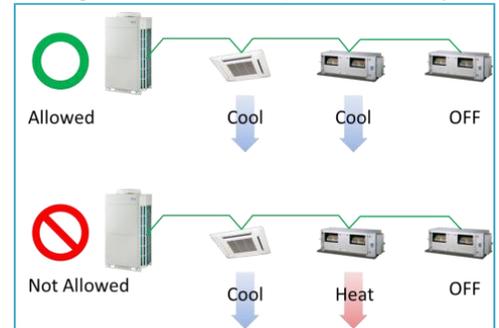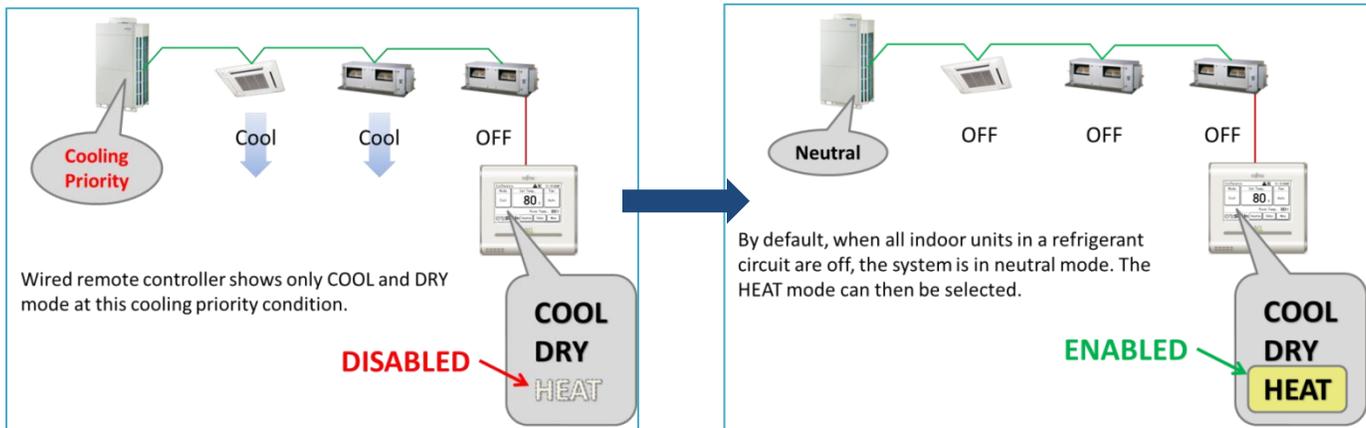

Figure 2 – Default Priority Mode: Priority Given to the First Command

This priority mode can easily be changed to one of two additional modes:

a) Priority given to external input of outdoor unit; or
b) Priority given to administrative indoor unit.

Figure 3 – Priority Mode Setting Codes and Descriptions

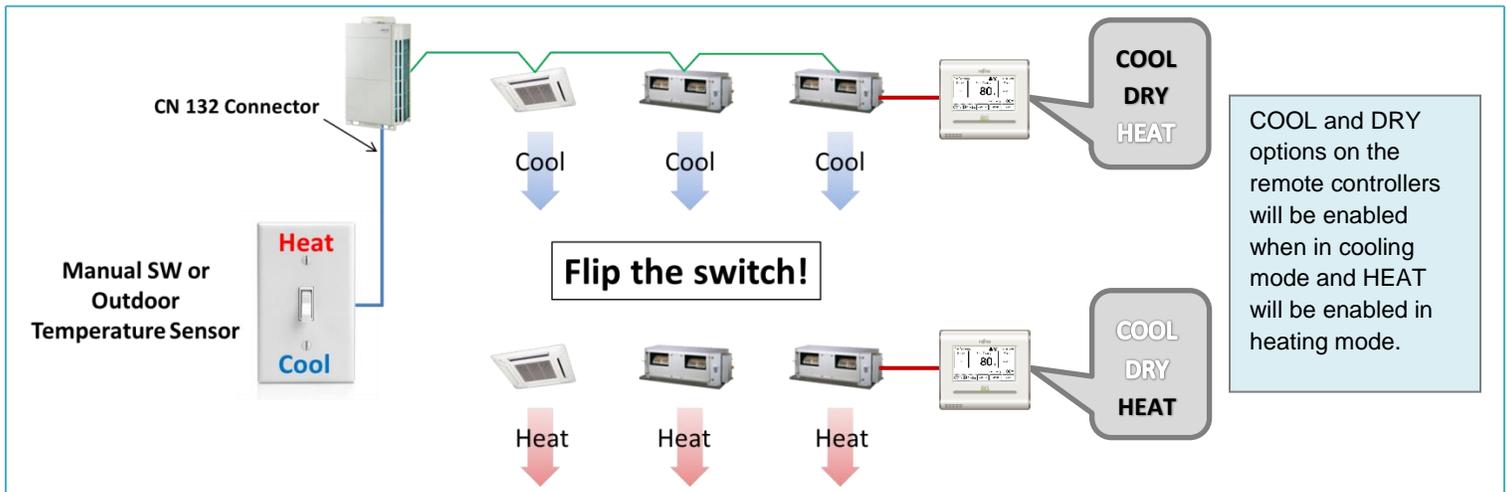| | LED105 CODE No. | Setting Mode | LED104 CODE No. | Setting Function | Factory setting | Outdoor unit | | Remarks |
						Master	Slave	
			0	0	Priority given to the first command	●			Select the priority setting of the operation mode. •Priority given to the first command: Priority is given to the operation mode which is set first. •Priority given to external input of outdoor unit: Priority is given to the operation mode which is set by the external input terminal (CN132). •Priority given to administrative indoor unit: Priority is given to the operation mode of the administrative indoor unit which is set by the wired remote controller.
	2	Operation mode selecting method	0	1	Priority given to external input of outdoor unit		○	*1	
			0	2	Priority given to administrative indoor unit				

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Priority mode (a) programs the system to switch to cooling or heating based on an external input such as a manual switch or an outdoor temperature sensor. When utilizing this switching method, set the system to priority mode (a) by simply entering the code F2, 21:01 on the outdoor unit (Figure 3).
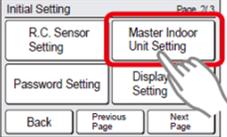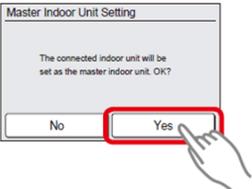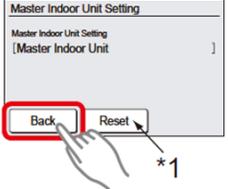
Figure 4 – Priority Mode (a) Priority given to external input of outdoor unit

COOL and DRY options on the remote controllers will be enabled when in cooling mode and HEAT will be enabled in heating mode.

Priority mode (b) programs the system to switch to cooling or heating based on the input command to the master/administrative indoor unit. Setting this mode is a two part process:

1. Enter code F2, 21:02 on the outdoor unit (Figure 3).
2. On the controller of the indoor unit you wish to designate as the master, do the following:

Figure 5 – Individual Touch Controller Setting for Priority Mode (b)

Figure 6 – Wired Remote Controller Setting for Priority Mode (b)

On a wired remote controller, press and hold the MODE button for five seconds and the remote will display one of the following:

(i)

OR

(ii)
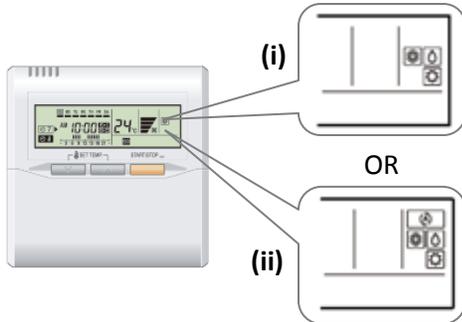
i. If the remote displays image (i)
- Press and release the MODE button once
  - Remote will now display image (ii)
- Press and hold the MODE button for five seconds
  - The remote will now be set as master/administrative

ii. If the remote displays image (ii), it is already set as master/administrative
- Press and hold the MODE button for five seconds to keep this setting

To switch from cooling to heating or vice versa, simply select the appropriate mode on the master remote controller. Note: All other remote controllers will allow selection of only the COOL and DRY options in cooling mode and only the HEAT option in heating mode.

Figure 7 – Priority Mode (b) Priority given to administrative indoor unit

COOL
DRY
HEAT

Master/Admin Indoor unit

Cool   Cool   Cool

Switch the Master IU Mode to HEAT!

COOL DRY HEAT

Heat   Heat   Heat

Master/Admin Indoor Unit

COOL
DRY
HEAT

COOL and DRY options on the slave remote controllers will be enabled when in cooling mode and HEAT will be enabled in heating mode.