User Guide

Variable Refrigerant Flow (VRF) System
Simple Wired Remote Control

Model Number: TVCTRLTWR001T, TVCTRLTWR001A

⚠ SAFETY WARNING

Only qualified personnel should install and service the equipment. The installation, starting up, and servicing of heating, ventilating, and air-conditioning equipment can be hazardous and requires specific knowledge and training. Improperly installed, adjusted or altered equipment by an unqualified person could result in death or serious injury. When working on the equipment, observe all precautions in the literature and on the tags, stickers, and labels that are attached to the equipment.

⚠ WARNING Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

⚠ CAUTION Indicates a potentially hazardous situation which, if not avoided, could result in minor or moderate injury. It could also be used to alert against unsafe practices.

NOTICE: Indicates a situation that could result in equipment or property-damage only accidents.

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Important: Environmental Concerns! *Scientific research has shown that certain man-made chemicals can affect the earth's naturally occurring stratospheric ozone layer when released to the atmosphere. In particular, several of the identified chemicals that may affect the ozone layer are refrigerants that contain Chlorine, Fluorine and Carbon (CFCs) and those containing Hydrogen, Chlorine, Fluorine and Carbon (HCFCs). Not all refrigerants containing these compounds have the same potential impact to the environment. Trane advocates the responsible handling of all refrigerants-including industry replacements for CFCs such as HCFCs and HFCs.*

Important: Responsible Refrigerant Practices! *Trane believes that responsible refrigerant practices are important to the environment, our customers, and the air conditioning industry. All technicians who handle refrigerants must be certified. The Federal Clean Air Act (Section 608) sets forth the requirements for handling, reclaiming, recovering and recycling of certain refrigerants and the equipment that is used in these service procedures. In addition, some states or municipalities may have additional requirements that must also be adhered to for responsible management of refrigerants. Know the applicable laws and follow them.*

⚠ WARNING

Personal Protective Equipment Required!

Installing/servicing this unit could result in exposure to electrical, mechanical and chemical hazards. Before installing/servicing this unit, technicians MUST put on all Personal Protective Equipment (PPE) recommended for the work being undertaken. ALWAYS refer to appropriate MSDS sheets and OSHA guidelines for proper PPE. When working with or around hazardous chemicals, ALWAYS refer to the appropriate MSDS sheets and OSHA guidelines for information on allowable personal exposure levels, proper respiratory protection and handling recommendations. If there is a risk of arc or flash, technicians MUST put on all necessary Personal Protective Equipment (PPE) in accordance with NFPA70E for arc/flash protection PRIOR to servicing the unit. Failure to follow recommendations could result in death or serious injury.

⚠ WARNING

Proper Field Wiring and Grounding Required!

All field wiring MUST be performed by qualified personnel. Improperly installed and grounded field wiring poses FIRE and ELECTROCUTION hazards. To avoid these hazards, you MUST follow requirements for field wiring installation and grounding as described in NEC and your local/state electrical codes. Failure to follow code could result in death or serious injury.

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Wired Remote Control Display

Use Figure 1 and Table 1 to identify the icons on the wired remote control display.

Figure 1. Display icons

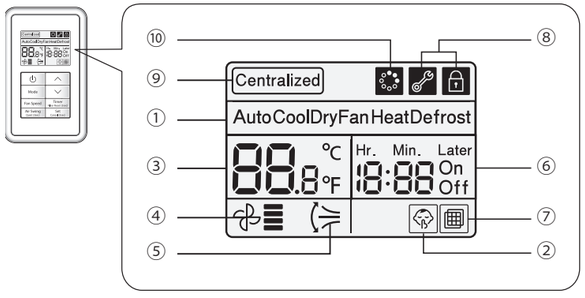

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Table 1. Explanation of display icons

Item number	Icon	Explanation
1	AutoCoolDryFanHeatDefrost	Unit operation
2		Quiet operation
3	88.8 °C °F	Temperature setpoint
4		Fan speed
5		Air swing (up/down)
6	Hr. Min. Later 18:88 On Off	On/Off timer (scheduled time)
7		Filter cleaning
8		Locked functions/invalid operation
9	Centralized	Centralized control
10		Purifier mode

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Buttons

Use Figure 2 and Table 2 to identify the buttons on the wired remote control.

Figure 2. Buttons

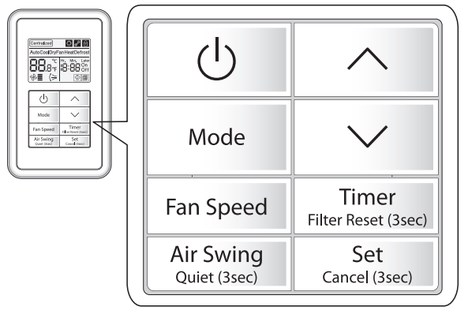

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Table 2. Buttons descriptions

Button	Description
	Power button Press to turn the indoor unit On or Off.
Mode	**Mode button** Press to select an operating mode.
	Up/down arrow buttons Press to select an indoor temperature setpoint and to change the time when setting the timer On/Off feature.
Fan Speed	**Fan Speed button** Press to select a fan speed: Auto, Low, Medium, High.
Air Swing Quiet (3sec)	**Air Swing/Quiet button** Press to select air flow direction or quiet operation.
Timer Filter Reset (3sec)	**Timer/Filter Reset button** Press and hold 3 seconds to turn the filter cleaning icon off.
Set Cancel (3sec)	**Set/Cancel button** Saves/cancels (if held 3 seconds) an On/Off timer setting.

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Basic Operation

Turning On/Off the Indoor Unit

To turn On or Off the indoor unit, press the **Power** button.

Selecting the Operating Mode

To select an operating mode, press the **Mode** button until the desired operating mode appears on the display. Each time the **Mode** button is pressed, the screen displays a different mode, in the order shown in Figure 3.

Figure 3. Operating mode sequence

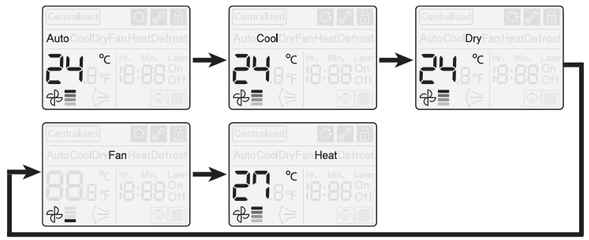

Table 3 describes each of the operating modes.

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Table 3. Operating mode descriptions

Mode	Description
Auto	In Auto mode, the indoor unit automatically sets the temperature and fan speed to maintain the selected temperature. If the indoor temperature is too high, a cooling breeze is generated until the room returns to a comfortable level. As the room cools, the fan slows down and maintains a gentle airflow.
Cool	In Cool mode, the temperature setpoint, fan speed, and air flow direction on the indoor unit can be controlled.
Dry	In Dry mode, the unit dehumidifies the indoor air.
Fan	In Fan mode, the unit ventilates the area to maintain a comfortable indoor environment.
Heat	In Heat mode, the temperature setpoint, fan speed, and air flow direction on the indoor unit can be controlled. ***Notes:*** • There may be a delay before the fan begins running to avoid generating a cold breeze. • The defrost indicator (**Defrost**) appears when frost is being removed from the outdoor unit. When the defrost function is completed, the defrost indicator disappears. • After heating operation is stopped, the fan continues running for a period of time to cool the unit.

Selecting the Fan Speed

To select a fan speed, press the **Fan Speed** button repeatedly until the desired fan speed appears on the display. Fan speed availability is dependent on the current indoor unit operating mode, as shown in Table 4.

Table 4. Fan speed availability according to operating mode

Operating mode	Available fan speeds
Auto	(Auto)
Cool	(Auto) (Low) (Med) (High)
Dry	(Auto)
Fan	(Auto) (Low) (Med) (High)
Heat	(Auto) (Low) (Med) (High)

Setting the Temperature

To set the desired temperature, press the **up/down arrow** buttons repeatedly until the desired temperature appears on the display. See Table 4.

Table 5. Temperature setting ranges and increments

Operating mode	Temperature range	Temperature setting increments
Auto	65°F–86°F (18°C–30°C)	You can adjust the temperature setting by increments of 1°F (1°C).
Cool		
Dry		
Fan		
Heat	61°F–86°F (16°C–30°C)	

Selecting the Air Flow Direction

The air flow can be directed by tilting the blade upward or downward. To select the air flow direction:

1. Press the **Air Swing/Quiet** button to tilt the blade up or down.
2. Press and hold the **Air Swing/Quiet** button again until the desired tilt is achieved. When the button is released, the blade will stop in place.

   Note: *If you press the* **Air Swing/Quiet** *button on a duct-type indoor unit, the feature will not function and the lock icon ( ) light will blink on the display.*

Selecting Quiet Operation

Quiet operation reduces the noise of the indoor unit. To activate this feature, press and hold the **Air Swing/Quiet** button for 3 seconds. To cancel quiet operation, press the button again.

Note: *If you press and hold the* **Air Swing/Quiet** *button for 3 seconds on an indoor unit that does not support the quiet feature or when the indoor unit is operating in Fan mode, the lock icon ( ) light will blink on the display.*

Resetting a Filter

When it is time to clean the filter, the filter cleaning icon ( ) appears on the display. When this occurs, do the following:

1. Clean the filter.
2. Reset the filter use timer by pressing and holding the **Timer/Filter Reset** button for 3 seconds.

Setting the On Timer

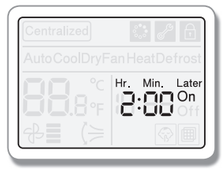
The On Timer feature is used to set the indoor unit to turn On at a specific time.

Note: *To set the On timer, the indoor unit must be turned Off.*

1. Press the **Timer/Filter Reset** button one time. The time on the display will blink.
2. Press the **up/down arrow** buttons until the display shows the time you want to unit to turn On. The time will change from 30 minutes to 3 hours in 30 minute increments, and from 3 to 18 hours in 1 hour increments.

3. To save the selected time, press the **Set** button within 3 minutes or the setting will be canceled.

Example of display with On Timer set to turn the unit on 2 hours later.



Note: *To cancel the On time, press and hold the* ***Set*** *button for 3 seconds.*

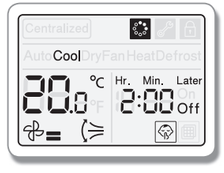
Setting the Off Timer

The Off Timer feature is used to set the indoor unit to turn off at a specific time.

Note: *To set the Off timer, the indoor unit must be turned on.*

1. Press the **Timer/Filter Reset** button one time. The time on the display will blink.
2. Press the **up/down arrow** buttons until the display shows the time you want to unit to turn Off. The time will change from 30 minutes to 3 hours in 30 minute increments, and from 3 to 18 hours in 1 hour increments.
3. To save the selected time, press the **Set** button within 3 minutes or the setting will be canceled.

Example of display with Off timer set to turn the unit off 2 hours later.



Note: *To cancel the Off time, press and hold the* ***Set*** *button for 3 seconds.*

Additional Functions

Additional functions allow the user to:

- Reset values to factory default
- Lock functions
- Apply upper and lower temperature setting limits

To set these additional user functions, follow this procedure:

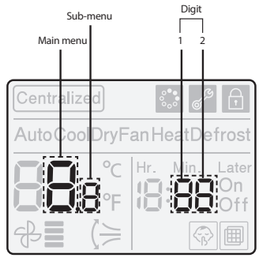
1. Refer to Table 6 to select the menu, sub-menu, digit, and option code for the function you want to set. These settings become available when the display is in the user setting mode (Figure 4).

Table 6. Option codes/values

Main menu code	Sub-menu code	Option description		Digit	Option code
0	1	Reset to default values		1	0: Not used (default) 1: Reset
1	1	All features locked		1	0: Clear 1: Lock
	2	Partial lock	On/Off operation locked	1	0: Clear 1: Lock
	3		Operating mode selection locked	1	0: Clear 1: Lock
	4		Temperature setting locked	1	0: Clear 1: Lock
	5		Fan speed selection locked	1	0: Clear 1: Lock
	6		On/Off Timer setting locked	1	0: Clear 1: Lock
2	1	Temperature limit	Upper limit	1,2	16–30[(a)]
	2		Lower limit	1,2	16–30

(a) Option code settings 16–30 refer to degrees in Celsius. Refer to Table 5 for temperature ranges and their Fahrenheit equivalents according to operating mode.

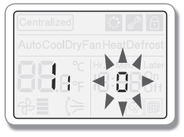
Figure 4. User setting mode and main menu



2. Press and hold the **Timer** and **Set** buttons simultaneously for ≥ 3 seconds. The display will change to the user setting mode and the main menu will flash, as in the following example.

3. Using the **up/down arrow** buttons, select the appropriate main menu code from Table 6.
4. Press the **Timer** button to access the sub-menu setting. The sub-menu will flash as in the following example.

5. Using the **up/down arrow** buttons, select the appropriate sub-menu code from Table 6.
6. Press the **Timer** button to access digit 1. Digit 1 will flash as in the following example.



7. Using the **up/down arrow** buttons, select the appropriate option code for digit 1 from Table 6.
8. Press the **Set** button to save the setting and exit to the sub-menu screen.

   Note: *To exit to the sub-menu screen without saving the setting, press the* ***Air Swing*** *button.*
9. Press the **Air Swing** button to return to the regular display mode.