



TRANE®



**mitsubishi
ELECTRIC**

Air-Conditioners

NTXDKS09,12,15,18A112AA

OPERATION MANUAL

FOR USER

For safe and correct use, please read this operation manual thoroughly before operating the air-conditioner unit.

English

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1. Safety Precautions

- ▶ Before installing the unit, make sure you read all the “Safety Precautions”.
- ▶ The “Safety Precautions” provide very important points regarding safety. Make sure you follow them.
- ▶ Please report to or take consent by the supply authority before connection to the system.

Symbols used in the text

- ⚠ **Warning:**
Describes precautions that should be observed to prevent danger of injury or death to the user.
- ⚠ **Caution:**
Describes precautions that should be observed to prevent damage to the unit.

Symbols used in the illustrations

- ⚡ : Indicates a part which must be grounded.

⚠ Warning:

- The unit must not be installed by the user. Ask the dealer or an authorized company to install the unit. If the unit is installed improperly, water leakage, electric shock or fire may result.
- Do not stand on, or place any items on the unit.
- Do not splash water over the unit and do not touch the unit with wet hands. An electric shock may result.
- Do not spray combustible gas close to the unit. Fire may result.
- Do not place a gas heater or any other open-flame appliance where it will be exposed to the air discharged from the unit. Incomplete combustion may result.
- Do not remove the front panel or the fan guard from the outdoor unit when it is running.

⚠ Caution:

- Do not use any sharp object to push the buttons, as this may damage the remote controller.
- Never block or cover the indoor or outdoor unit’s intakes or outlets.

- When you notice exceptionally abnormal noise or vibration, stop operation, turn off the power switch, and contact your dealer.
- Never insert fingers, sticks etc. into the intakes or outlets.
- If you detect odd smells, stop using the unit, turn off the power switch and consult your dealer. Otherwise, a breakdown, electric shock or fire may result.
- This air conditioner is NOT intended for use by children or infirm persons without supervision.
- Young children must be supervised to ensure that they do not play with the air conditioner.
- If the refrigeration gas blows out or leaks, stop the operation of the air conditioner, thoroughly ventilate the room, and contact your dealer.

Disposing of the unit

When you need to dispose of the unit, consult your dealer.

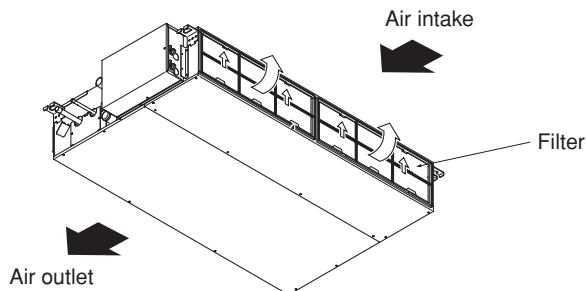
2. Parts Names

■ Indoor Unit

	NTXDKS-A112AA
Fan steps	3 steps
Vane	—
Louver	—
Filter	Normal
Filter cleaning indication	—

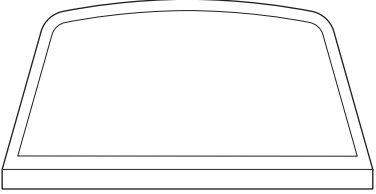
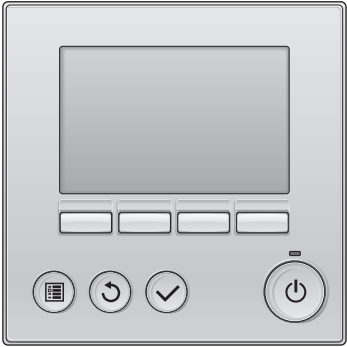
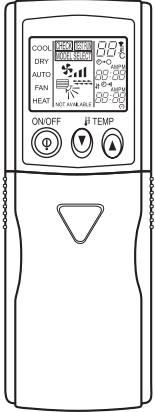
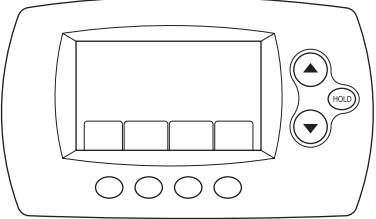
■ NTXDKS-A112AA

Ceiling Concealed

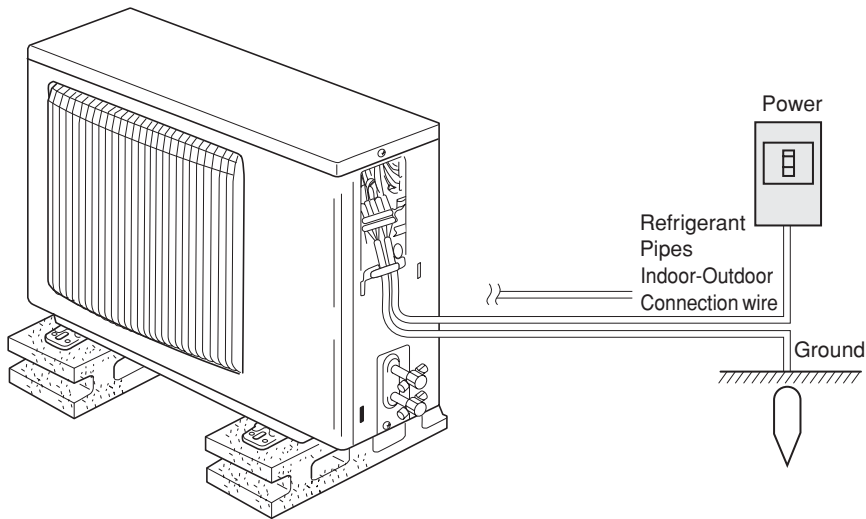


2. Parts Names

■ Remote controller (Optional parts)

Radio frequency interface	Wired remote controller	IR wireless remote controller
		
<p data-bbox="272 501 395 524">RF thermostat</p> 		

■ Outdoor unit



3. Operation

■ About the operation method, refer to the operation manual that comes with each remote controller.

3.1. Operation mode select

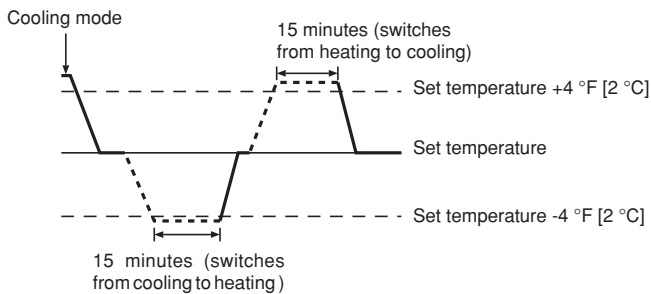
Cool/Dry/Fan/Heat/Automatic (cool/heat)/Ventilation modes are available.

Note:

- Heat and Automatic modes can not be available for cooling only units.
- Ventilation mode: only indicated on the following condition.
Wired remote controller is used and LOSSNAY is connected.

- Automatic mode

- According to a set temperature, cooling operation starts if the room temperature is too hot and heating operation starts if the room temperature is too cold.
- During automatic operation, if the room temperature changes and remains 4 °F [2 °C] or more above the set temperature for 15 minutes, the air conditioner switches to cooling mode. If the room temperature remains 4 °F [2 °C] or more below the set temperature for 15 minutes, the air conditioner switches to heating mode.



3.2. Fan speed setting

Note:

- The number of available fan speeds depends on the type of unit connected.
- In the following cases, the actual fan speed generated by the unit will differ from the speed shown the remote controller display.
 1. When the unit is in STAND BY or DEFROST states.
 2. When the temperature of the heat exchanger is low in the heating mode. (e.g. immediately after heating operation starts)
 3. In HEAT mode, when room temperature is higher than the temperature setting.
 4. When the unit is in DRY mode.

3.3. Ventilation

► For LOSSNAY combination

- The following 2 patterns of operation are available.
 - Run the ventilator together with the indoor unit.
 - Run the ventilator independently.

Note:

- With some model configurations, the fan on the indoor unit may come on even when you set the ventilator to run independently.

Note (for IR wireless remote controller and RF thermostat):

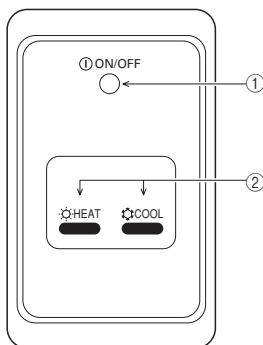
- Running the ventilator independently is not available.
- No indication on the remote controller.

4. Timer

■ Timer functions are different by each remote controller.

■ Refer to the operation manual that comes with each remote controller for the details included an operation method.

5. Emergency Operation for IR Wireless Remote Controller



① **ON/OFF lamp** (lit when unit is operating; unlit when unit is not operating)

② **Emergency operation**

In cases where the remote control unit does not operate properly, use either the HEAT or COOL button on the wireless remote control signal receiver to toggle the unit on or off. On cooler only units, pushing the HEAT button toggles the fan on and off.

Pressing the COOL or HEAT button selects the following settings.

Operation mode	COOL	HEAT
Preset temperature	24 °C/75 °F	24 °C/75 °F
Fan speed	High	High

6. Care and Cleaning

► Cleaning the filters

- Clean the filters using a vacuum cleaner. If you do not have a vacuum cleaner, tap the filters against a solid object to knock off dirt and dust.
- If the filters are especially dirty, wash them in lukewarm water. Take care to rinse off any detergent thoroughly and allow the filters to dry completely before putting them back into the unit.

⚠ Caution:

- Do not dry the filters in direct sunlight or by using a heat source, such as an electric heater: this may warp them.
- Do not wash the filters in hot water (above 122 °F [50 °C]), as this may warp them.
- Make sure that the air filters are always installed. Operating the unit without air filters can cause malfunction.

⚠ Caution:

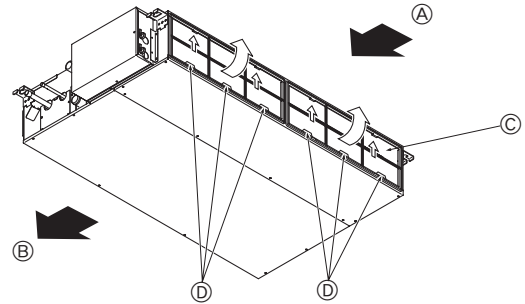
- Before you start cleaning, stop operation and turn OFF the power supply.
- Indoor units are equipped with filters to remove the dust of sucked-in air. Clean the filters using the methods shown in the following sketches.

► Filter removal

⚠ Caution:

- In removing the filter, precautions must be taken to protect your eyes from dust. Also, if you have to climb up on a stool to do the job, be careful not to fall.
- When the filter is removed, do not touch the metallic parts inside the indoor unit, otherwise injury may result.








■ NTXDKS-A112AA



- While lifting the filter knob, pull it.

Ⓐ Air intake Ⓑ Air outlet Ⓒ Filter Ⓓ Knob

7. Troubleshooting

Troubleshooting	Solution
Air conditioner does not heat or cool well.	<ul style="list-style-type: none"> ■ Clean the filter. (Airflow is reduced when the filter is dirty or clogged.) ■ Check the temperature adjustment and adjust the set temperature. ■ Make sure that there is plenty of space around the outdoor unit. Is the indoor unit air intake or outlet blocked? ■ Has a door or window been left open?
When heating operation starts, warm air does not blow from the indoor unit immediately.	<ul style="list-style-type: none"> ■ Warm air does not blow until the indoor unit has sufficiently warmed up.
During heating mode, the air conditioner stops before the set room temperature is reached.	<ul style="list-style-type: none"> ■ When the outdoor temperature is low and the humidity is high, frost may form on the outdoor unit. If this occurs, the outdoor unit performs a defrosting operation. Normal operation should begin after approximately 10 minutes.
When the airflow direction is changed, the vanes always move up and down past the set position before finally stopping at the position.	<ul style="list-style-type: none"> ■ When the airflow direction is changed, the vanes move to the set position after detecting the base position.
A flowing water sound or occasional hissing sound is heard.	<ul style="list-style-type: none"> ■ These sounds can be heard when refrigerant is flowing in the air conditioner or when the refrigerant flow is changing.
A cracking or creaking sound is heard.	<ul style="list-style-type: none"> ■ These sounds can be heard when parts rub against each due to expansion and contraction from temperature changes.
The room has an unpleasant odor.	<ul style="list-style-type: none"> ■ The indoor unit draws in air that contains gases produced from the walls, carpeting, and furniture as well as odors trapped in clothing, and then blows this air back into the room.
A white mist or vapor is emitted from the indoor unit.	<ul style="list-style-type: none"> ■ If the indoor temperature and the humidity are high, this condition may occur when operation starts. ■ During defrosting mode, cool airflow may blow down and appear like a mist.
Water or vapor is emitted from the outdoor unit.	<ul style="list-style-type: none"> ■ During cooling mode, water may form and drip from the cool pipes and joints. ■ During heating mode, water may form and drip from the heat exchanger. ■ During defrosting mode, water on the heat exchanger evaporates and water vapor may be emitted.
The operation indicator does not appear in the wired remote controller display. (*1)	<ul style="list-style-type: none"> ■ Turn on the power switch. “” will appear in the wired remote controller display.
“  ” appears in the wired remote controller display. (*1)	<ul style="list-style-type: none"> ■ During central control, “” appears in the wired remote controller display and air conditioner operation cannot be started or stopped using the wired remote controller.
When restarting the air conditioner soon after stopping it, it does not operate even though the ON/OFF button is pressed.	<ul style="list-style-type: none"> ■ Wait approximately three minutes. (Operation has stopped to protect the air conditioner.)
Air conditioner operates without the ON/OFF button being pressed. (*1)	<ul style="list-style-type: none"> ■ Is the on timer set? Press the ON/OFF button to stop operation. ■ Is the air conditioner connected to a central wired remote controller? Consult the concerned people who control the air conditioner. ■ Does “” appear in the wired remote controller display? Consult the concerned people who control the air conditioner. ■ Has the auto recovery feature from power failures been set? Press the ON/OFF button to stop operation.
Air conditioner stops without the ON/OFF button being pressed. (*1)	<ul style="list-style-type: none"> ■ Is the off timer set? Press the ON/OFF button to restart operation. ■ Is the air conditioner connected to a central wired remote controller? Consult the concerned people who control the air conditioner. ■ Does “” appear in the wired remote controller display? Consult the concerned people who control the air conditioner.
Wired remote controller timer operation cannot be set. (*1)	<ul style="list-style-type: none"> ■ Are timer settings invalid? If the timer can be set,  or  appears in the remote controller display.
“PLEASE WAIT” appears in the wired remote controller display. (*1)	<ul style="list-style-type: none"> ■ The initial settings are being performed. Wait approximately 3 minutes.
An error code appears in the remote controller display.	<ul style="list-style-type: none"> ■ The protection devices have been operated to protect the air conditioner. ■ Do not attempt to repair this equipment by yourself. Turn off the power switch immediately and consult your dealer. Be sure to provide the dealer with the model name and information that appeared in the remote controller display.
Draining water or motor rotation sound is heard.	<ul style="list-style-type: none"> ■ When cooling operation stops, the drain pump operates and then stops. Wait approximately 3 minutes.

*1: Only for wired remote controller

7. Troubleshooting

Troubleshooting	Solution												
Operating sound is louder than specifications.	<ul style="list-style-type: none"> The indoor operation sound level is affected by the acoustics of the particular room as shown in the following table and will be higher than the sound specification, which was measured in an echo-free room. <table border="1"> <thead> <tr> <th></th> <th>High sound-absorbing rooms</th> <th>Normal rooms</th> <th>Low sound-absorbing rooms</th> </tr> </thead> <tbody> <tr> <td>Location examples</td> <td>Broadcasting studio, music room, etc.</td> <td>Reception room, hotel lobby, etc.</td> <td>Office, hotel room</td> </tr> <tr> <td>Noise levels</td> <td>3 to 7 dB</td> <td>6 to 10 dB</td> <td>9 to 13 dB</td> </tr> </tbody> </table>		High sound-absorbing rooms	Normal rooms	Low sound-absorbing rooms	Location examples	Broadcasting studio, music room, etc.	Reception room, hotel lobby, etc.	Office, hotel room	Noise levels	3 to 7 dB	6 to 10 dB	9 to 13 dB
	High sound-absorbing rooms	Normal rooms	Low sound-absorbing rooms										
Location examples	Broadcasting studio, music room, etc.	Reception room, hotel lobby, etc.	Office, hotel room										
Noise levels	3 to 7 dB	6 to 10 dB	9 to 13 dB										
Nothing appears in the IR wireless remote controller display, the display is faint, or signals are not received by the indoor unit unless the IR remote controller is close. (*2)	<ul style="list-style-type: none"> The batteries are low. Replace the batteries and press the Reset button. If nothing appears even after the batteries are replaced, make sure that the batteries are installed in the correct directions (+, -). 												
The operation lamp near the receiver for the IR wireless remote controller on the indoor unit is blinking. (*2)	<ul style="list-style-type: none"> The self diagnosis function has operated to protect the air conditioner. Do not attempt to repair this equipment by yourself. Turn off the power switch immediately and consult your dealer. Be sure to provide the dealer with the model name. 												

*2: Only for IR wireless remote controller

8. Specifications

Model		NTXDKS09A112AA		NTXDKS12A112AA		NTXDKS15A112AA		NTXDKS18A112AA	
Function		Cooling	Heating	Cooling	Heating	Cooling	Heating	Cooling	Heating
Power supply		~/N, 208/230V, 60Hz							
Capacity	BTU/h	9,000	10,900	12,000	13,600	15,000	18,000	22,000	23,200
Input	kW	0.06	0.04	0.07	0.05	0.09	0.07	0.09	0.07
Airflow (Lo-Mid-Hi)	CMM	5.5-7-9		7-9-11		10-12.5-15		12-15-18	
	CFM	194-247-317		247-317-388		353-441-529		423-529-635	
	L/S	91-116-150		116-150-183		167-208-250		200-250-300	
Ext. static pressure	in. WG	0.02-0.06-0.14-0.20		0.02-0.06-0.14-0.20		0.02-0.06-0.14-0.20		0.02-0.06-0.14-0.20	
	[Pa]	[5/15/35/50]		[5/15/35/50]		[5/15/35/50]		[5/15/35/50]	
Noise level (Lo-Mid-Hi)	dB	23-26-30		23-28-33		30-34-37		30-34-38	
Weight	kg [lb]	19 [42]		22 [49]		23 [51]		26.5 [59]	

- Notes: 1. Rating conditions (cooling) Indoor : 80 °F [26.7 °C] D.B., 67 °F [19.4 °C] W.B. Outdoor : 95 °F [35 °C] D.B.
 2. Rating conditions (heating) Indoor : 70 °F [21.1 °C] D.B. Outdoor : 47 °F [8.3 °C] D.B., 43 °F [6.1 °C] W.B.
 3. The capacity is indicated the value when one indoor unit is connected to the outdoor unit.
 4. Specifications subject to change without notice.
 5. The external static pressure is set to 15 Pa at factory shipment.

Guaranteed operating range

		Indoor
Cooling	Upper limit	95 °F [35 °C] D.B. 71 °F [21.7 °C] W.B.
	Lower limit	67 °F [19.4 °C] D.B. 57 °F [13.9 °C] W.B.
Heating	Upper limit	80 °F [26.7 °C] D.B. -
	Lower limit	70 °F [21.1 °C] D.B. -

- Notes: 1. Units should be installed by licensed electric contractor accordingly to local code requirement.
 2. For outdoor units to be connected, refer to the Installation Manual that comes with the units.

This product is designed and intended for use in the residential,
commercial and light-industrial environment.

Please be sure to put the contact address/telephone number on
this manual before handing it to the customer.

MITSUBISHI ELECTRIC TRANE HVAC US LLC

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