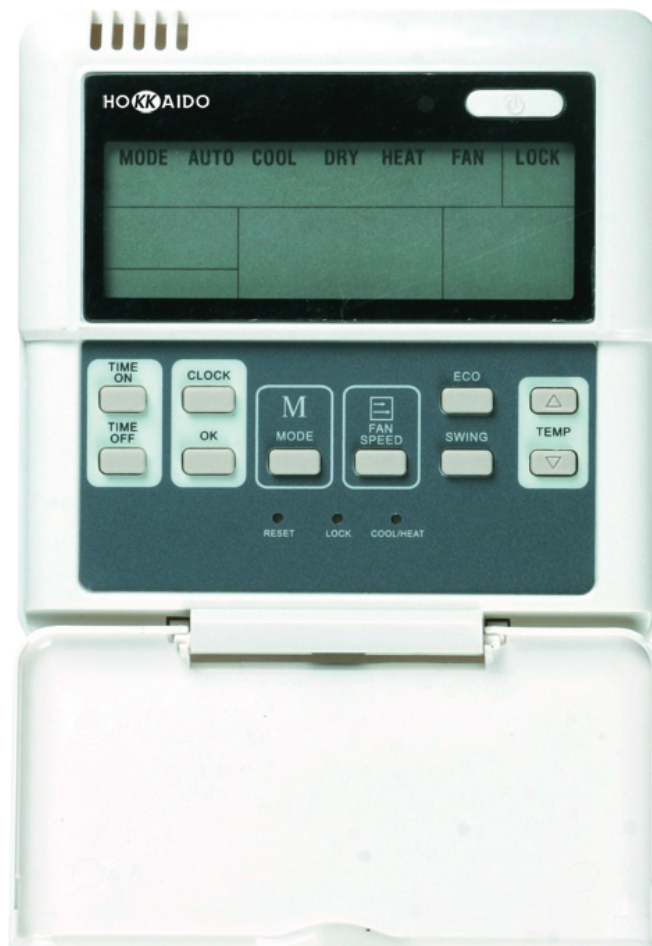


WIRED CONTROLLER

USER'S MANUAL

DTW - IHXR Model



HOKKAIDO

WARNING!

PLEASE READ CAREFULLY THIS MANUAL BEFORE USING YOUR NEW WIRED CONTROLLER.

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SAFETY PRECAUTIONS



Please read the Safety Precautions carefully before using DTW - IHXR Wired Controller. Do observe the following Safety Precautions, for they are very important.

Before reading the text, please be familiar with the following markers and icons, and comply with the Precautions.

■ Markers


Markers	Indication
 WARNING	The sign shows the risk of death or serious injury will be caused due to the wrong operation.
 CAUTION	The sign shows the risk of injury or the damage to the property will be caused due to the wrong operation.


■ Icons


Icons	Indication
	FORBID. Action or procedure not allowed, with serious effects on objects and people.
	ENFORCE. Compulsory action or procedure. The missed observance could bring serious effects on objects and people.

- A strict observance of the following instructions will prevent personal hurt and incidents to the User. Moreover, correct operation and long life of the appliance will be ensured.
- **The User must never attempt to install or repair the Wired Controller by himself.**

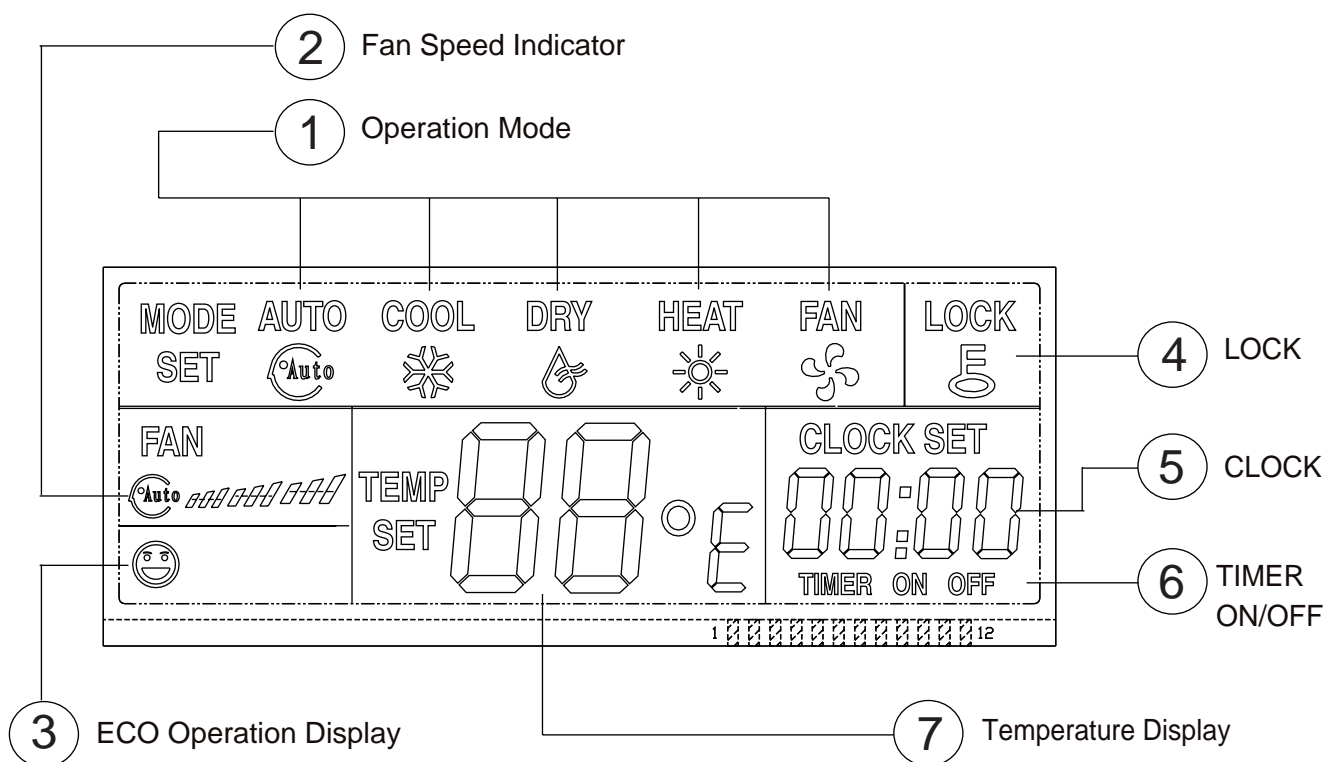
WARNING

INSTALLATION WARNING	 Installation commitment	<ul style="list-style-type: none"> • Please always contact the Retailer or the Authorized Technical Service for installation of the Wired Controller. <p>Users must not install the Wired Controller by themselves. A wrong installation may cause electric shocks, injuries or fire.</p>
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OPERATION CAUTION	 FORBID	<p>Do not spray inflammable liquid on the Wired Controller, or fire may be caused.</p> <hr/> <p>Do not operate with wet hands. Do not let water go into the Wired Controller, to avoid the danger of electric shocks.</p>
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MOVE AND REPAIR CAUTION	 FORBID	<p>If you want to move or re-install your Wired Controller, please always contact the Authorized Technical Service.</p> <hr/> <p>Do not disassemble your Wired Controller. If you need to disassemble the Wired Controller, please contact the Authorized Technical Service. A wrong disassembly may cause abnormal operation or overheating, which may result in fire.</p>
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NAME & FUNCTION OF INDICATORS ON WIRED CONTROLLER



1. OPERATION MODE INDICATOR:

If you press “MODE” button, Operation Mode changes according to the following sequence:
Auto → Cool → Dry → Heat → Fan only → Auto.

2. FAN SPEED INDICATOR:

There are 4 fan speeds: Low, Middle, High, Auto.

Some Models of air conditioner do not have Middle fan speed: if you select Middle speed on Wired Controller, indoor fan will run at High speed.

3. ECO OPERATION DISPLAY:

Press ECO button: the Air Conditioner will start operating in Energy Saving Mode and Wired Controller will display the corresponding icon.

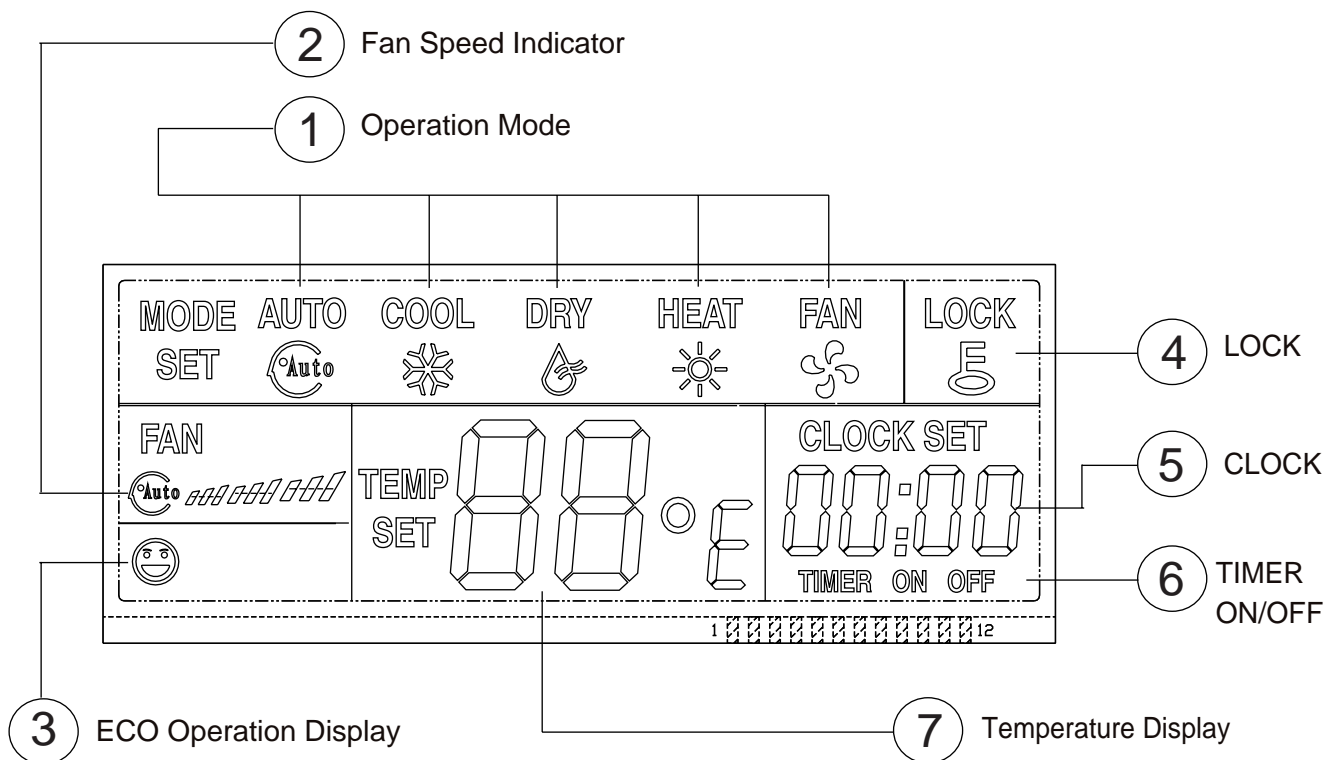
Press ECO button again to exit Energy Saving Mode.

4. LOCK:

If you press “LOCK” button, the corresponding icon lights up, and indicates that all buttons of Wired Controller are unable.

Press again “LOCK” button: the icon will disappear and the Wired Controller’s buttons will be enabled again.

NAME & FUNCTION OF INDICATORS ON WIRED CONTROLLER



5. CLOCK DISPLAY:

Usually displays the clock set currently.

Press CLOCK button for 4 seconds, the HOUR part will flash: press TEMP buttons ▲▼ to adjust HOUR.

Press CLOCK button again, the MINUTE part flash: press TEMP buttons ▲▼ to adjust MINUTE.

After setting current time, please press CONFIRM button to complete the set.

6. TIMER:

If TIMER ON is selected, "ON" Indicator lights up.

If TIMER OFF is selected, "OFF" Indicator lights up.

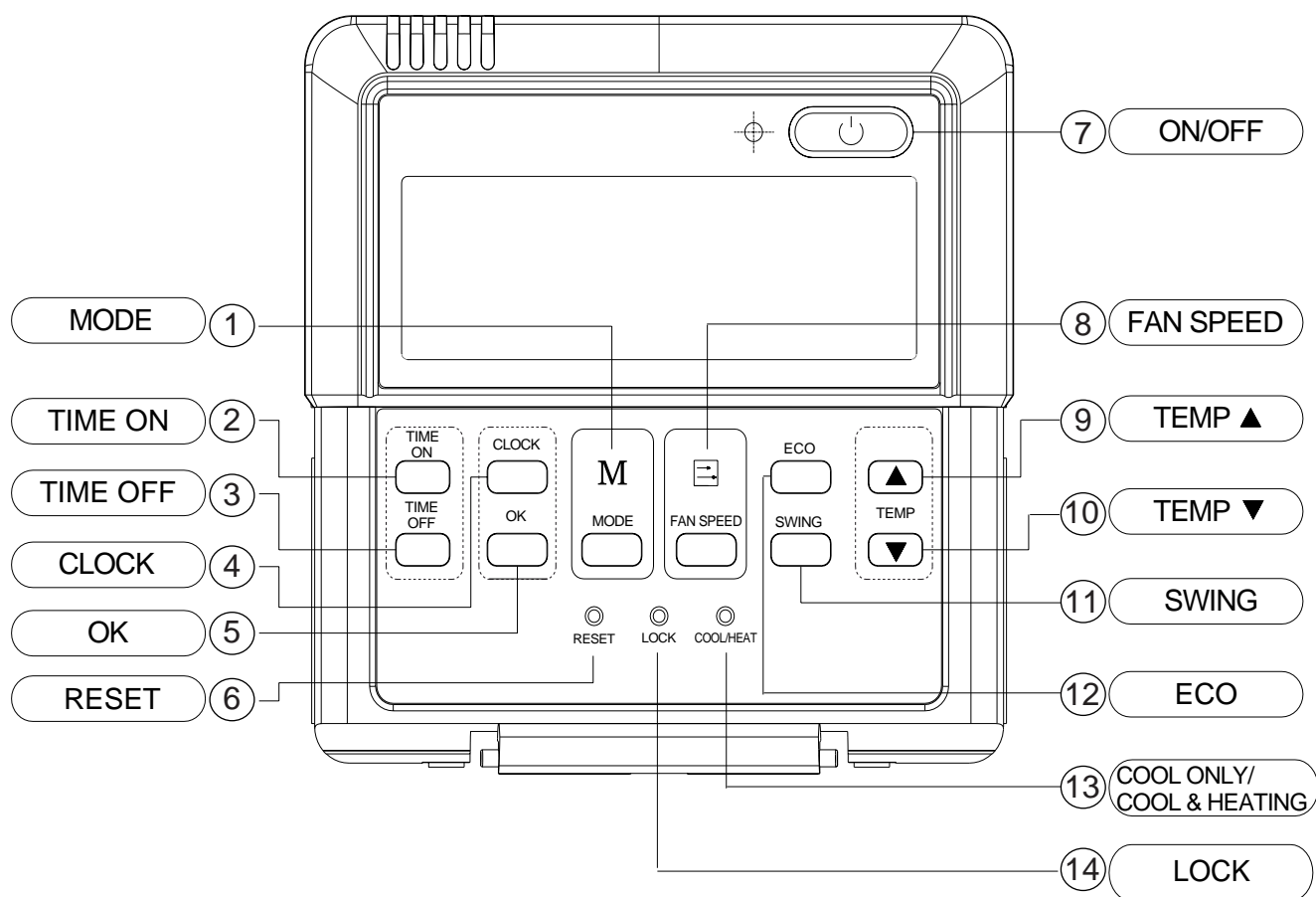
If both TIMER ON & TIMER OFF are selected, both "ON" & "OFF" Indicators light up.

7. TEMPERATURE DISPLAY ZONE:

Generally, it displays set temperature, that may be modified by pressing TEMP buttons ▲ and ▼. Temperature range: 17°C ~ 30°C.

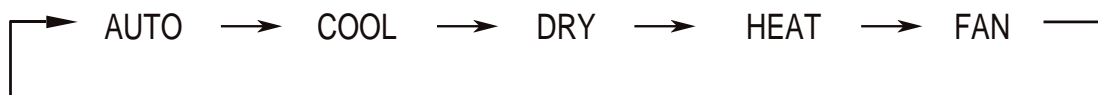
In "Fan" mode, temperature is not displayed.

NAME & FUNCTION OF BUTTONS ON WIRED CONTROLLER



1. MODE BUTTON:

If you press this button, Operation Mode changes according to the following sequence:



2. TIME ON BUTTON:

Press this button once: TIMER ON function (Programmed Start) will be enabled.

The Wired Controller's TIMER is not a clock, so it is necessary to set the time period - not the exact time - at the end of which you would like the Air Conditioner to start automatically. At each press of the button, setting time interval will increase by half an hour till 10 hours, and by an hour from 10 to 24 hours.

To cancel TIMER ON function, set time to "0.0".

3. TIME OFF BUTTON:

Press this button once: TIMER OFF function (Programmed Stop) will be enabled.

The Wired Controller's TIMER is not a clock, so it is necessary to set the time period - not the exact time - at the end of which you would like the Air Conditioner to stop automatically. At each press of the button, setting time interval will increase by half an hour till 10 hours, and by an hour from 10 to 24 hours.

To cancel TIMER ON function, set time to "0.0".

NAME & FUNCTION OF BUTTONS ON WIRED CONTROLLER

4. CLOCK BUTTON:

To set current time.

When the air conditioner is electrified for the first time, or a reset of settings is carried out, the Wired Controller displays "12:00".

Press CLOCK button for 4 seconds. The HOUR part on the clock display flashes, push TEMP buttons ▲ ▼ to adjust hour.

Press CLOCK button again. The MINUTE part on the clock display flashes, push TEMP buttons ▲ ▼ to adjust minutes.

After clock setting, press OK button to complete the setting.

5. OK BUTTON:

To confirm current time setting.

After clock setting, press OK button and the setting will be memorized. The clock will show current time.

6. RESET BUTTON:

Hidden button. Please use the point of a pencil or a pointed article to press this button: all current settings will be cancelled and default settings will be restored.

7. ON/OFF BUTTON:

When the Wired Controller is off, press this button to switch it on and send setting information to indoor PCB.

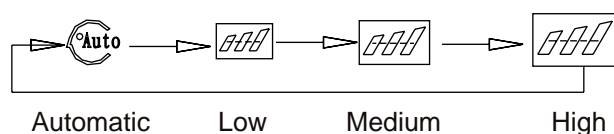
When the Wired Controller is on, press ON/OFF button to switch it off.

Warning! If TIMER ON (Programmed Automatic Start) or TIMER OFF (Programmed Automatic Stop) has been set, these settings will be cancelled. Therefore, never switch off the Wired Controller (do not press ON/OFF button) after setting TIMER ON/OFF.

8. FAN SPEED BUTTON:

By pressing this button, it is possible to select fan speed: you can choose among "AUTO", "LOW", "MED" and "HIGH".

At each press of FAN SPEED button, fan speed changes according to the following sequence:



Note: Some Models of air conditioner do not have Middle fan speed: if you select Middle speed on Wired Controller, indoor fan will run at High speed.

NAME & FUNCTION OF BUTTONS ON WIRED CONTROLLER

9. TEMP BUTTON ▲ :

- If you press this button, setting temperature will increase. If the button is kept pressed, temperature value will increase rapidly (1°C per 0.5 seconds).
- This button is used also for adjusting clock (current time).

10. TEMP BUTTON ▼ :

- If you press this button, setting temperature will decrease. If the button is kept pressed, temperature value will decrease rapidly (1°C per 0.5 seconds).
- This button is used also for adjusting clock (current time).

11. SWING BUTTON:

This button is enabled according to the Model of air conditioner.

If you press this button, the automatic swinging of the motorized louver will be enabled.

Press this button again to stop the automatic swinging of the louver.

12. ECONOMY BUTTON:

Press this button to start the air conditioner's operation in Economy (Energy Saving) mode.

Press this button again to exit Economy mode.

This operation mode is suitable for sleeping time.

13. COOL ONLY/COOLING & HEATING SELECTION BUTTON:

Hidden button. Please use the point of a pencil or a pointed article to press this button.

For COOLING ONLY type, it will be no heating mode when pressing MODE button.

Factory default setting is COOLING & HEATING.

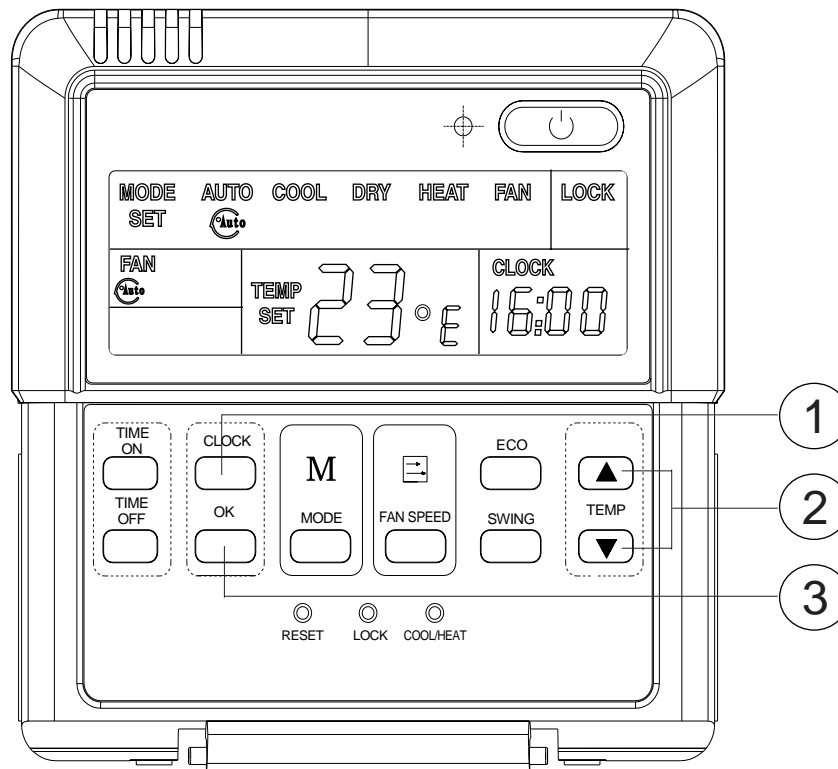
14. LOCK BUTTON:

Hidden button. Please use the point of a pencil or a pointed article to press this button: all current settings are blocked and all buttons on Wired Controller are disabled.

Use this button to prevent accidental change of settings.

Press LOCK button again to exit lock mode.

CLOCK SETTING



Connecting the Air Conditioner

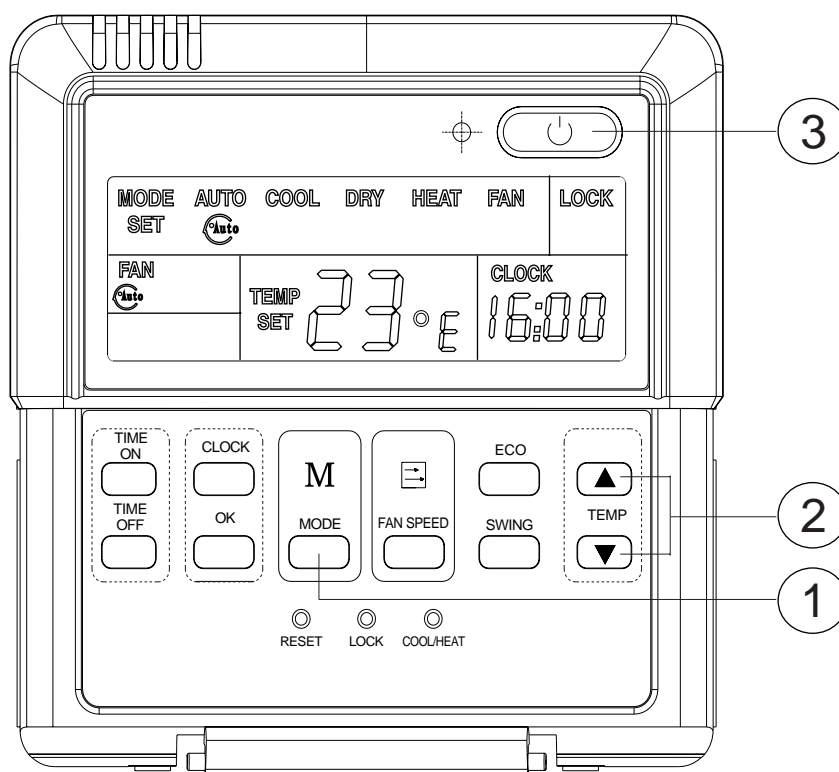
As the Air Conditioner is electrified for the first time, or a reset of setting is carried out, the Wired Controller displays "12:00".

1. Press CLOCK button for 4 seconds.
The HOUR part on the clock display flashes.
2. Press TEMP buttons ▲ ▼ to adjust hour.
Press CLOCK button again: now the MINUTE part on the clock display flashes.
Press TEMP buttons ▲ ▼ to adjust minutes.
3. Press OK button to confirm current time setting.

Note

- Before setting TIMER, set current time. TIMER setting is relative to the standard time of operating Wired Controller.
After setting TIMER, it is not possible to modify current time.

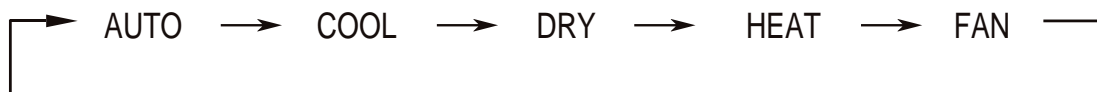
AUTO MODE



Connecting the Air Conditioner

Connect the Air Conditioner to the power source: “OPERATION” LED on Indoor Unit’s panel will start flashing

1. Press MODE button: the Air Conditioner’s operation mode changes according to the following sequence:



Select “AUTO” mode.

2. Press TEMP buttons ▲ ▼ to select your desired temperature.

3. Press ON/OFF button to start the Air Conditioner’s operation: “OPERATION” LED on Indoor Unit will light up.

The Air Conditioner runs in “AUTO” mode; fan speed is Auto and it cannot be changed. The Wired Controller displays “Auto”.

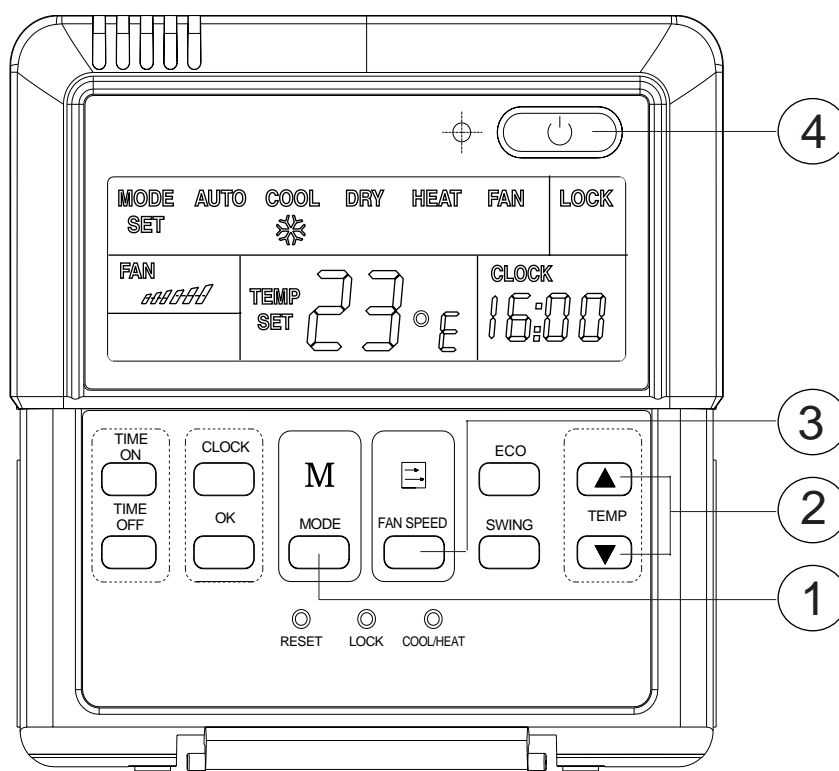
Stop operation

Press again ON/OFF button to stop operation.

Notes

- In “AUTO” mode, it is not possible to select your desired fan speed, as it is automatically selected by the inner electronics.
- In “AUTO” mode, it is possible to select the ECONOMY (Energy Saving) function (on the Models of Air Conditioner which are provided of this function).

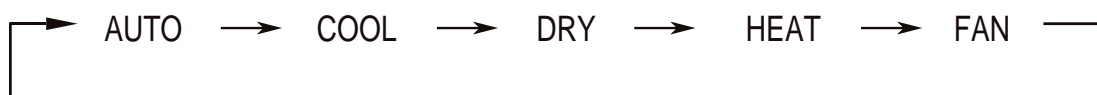
COOL, HEAT, FAN MODES



Connecting the Air Conditioner

Connect the Air Conditioner to the power source: “OPERATION” LED on Indoor Unit’s panel will start flashing.

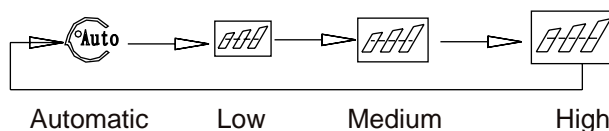
1. Press MODE button: the Air Conditioner’s operation mode changes according to the following sequence:



Select “COOL”, “HEAT” or “FAN” mode.

2. Press TEMP buttons ▲ ▼ to select your desired temperature (except in “FAN” mode).

3. Press FAN SPEED button to select your desired fan speed:



Warning! Some Models of air conditioner do not have Middle fan speed: if you select Middle speed on Wired Controller, indoor fan will run at High speed.

4. Press ON/OFF button to start the Air Conditioner’s operation: “OPERATION” LED on Indoor Unit will light up.

The Air Conditioner will run in “COOL”, “HEAT” or “FAN” mode.

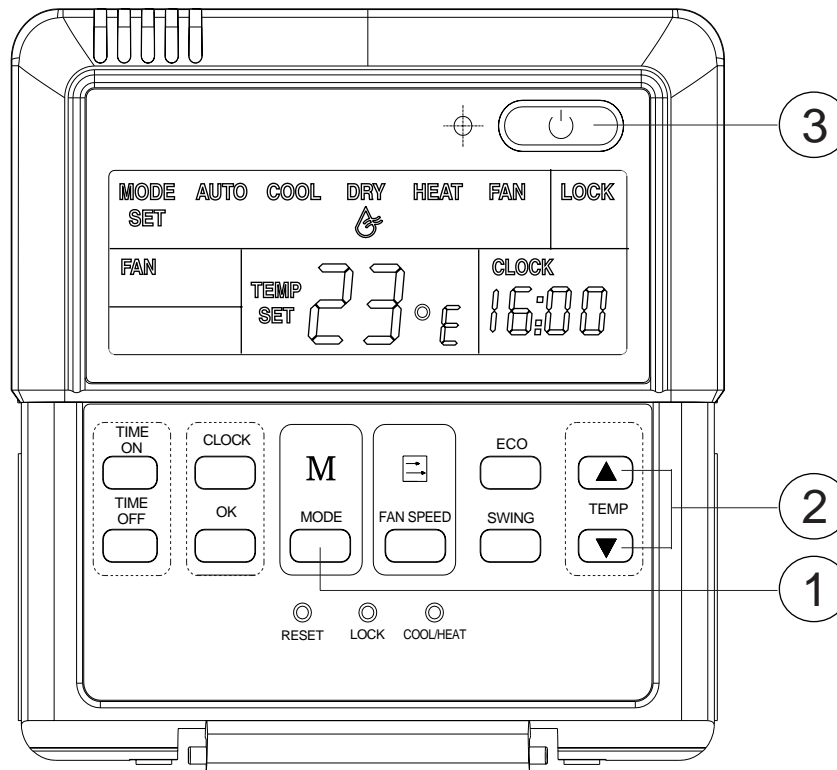
Stop operation

Press again ON/OFF button to stop operation.

Note

- In “FAN” mode, it is not possible to select your desired temperature.

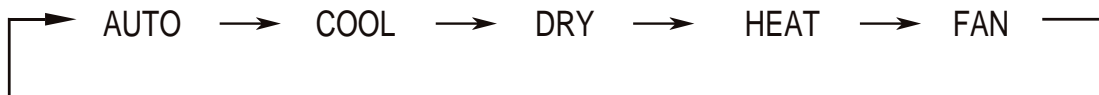
DRY MODE



Connecting the Air Conditioner

Connect the Air Conditioner to the power source: “OPERATION” LED on the Indoor Unit’s panel will start flashing.

1. Press MODE button: the Air Conditioner’s operation mode will change according to the following sequence:



Select “DRY” mode.

2. Press TEMP buttons ▲ ▼ to select your desired temperature.

3. Press ON/OFF button to start the Air Conditioner’s operation: “OPERATION” LED on the Indoor Unit will light up.

The Air Conditioner will run in “DRY” mode.

Stop operation

Press again ON/OFF button to stop operation.

Notes

- In “DRY” mode, FAN SPEED button is not enabled, therefore it is not possible to select your desired fan speed.
- In “DRY” mode, it is not possible to select the ECONOMY (Energy Saving) function (on the Models of Air Conditioner which are provided of this function).

TIMER ON

TIMER ON function allows to program the automatic start of the Air Conditioner, according to your comfort needs. In this way, the Air Conditioner will start running at your desired time.

Programmed Start - TIMER ON

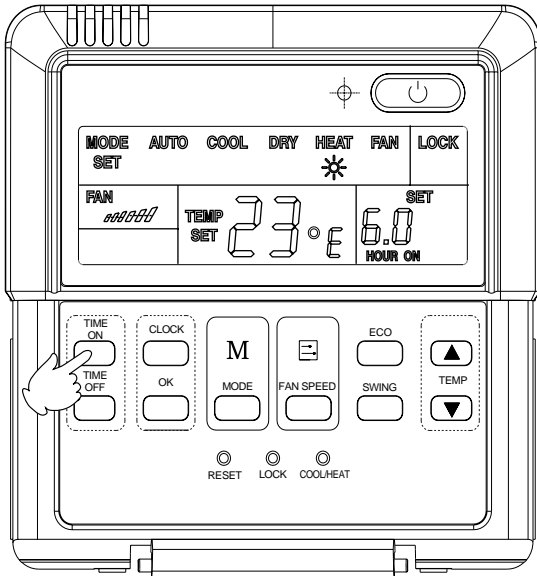
Warning!

The Wired Controller's TIMER is not a clock, so it is necessary to set the time period - not the exact time - at the end of which you would like the Air Conditioner to start automatically.

TIMER setting is relative to the standard time of operating Wired Controller.

Set current time before setting TIMER.

After setting TIMER, it is not possible to change current time.



1. Press TIME ON button: the display shows “SET” and HOUR ON digits.

2. Press TIME ON button several times, till reaching the time interval at the end of which you would like to start the Air Conditioner's operation.

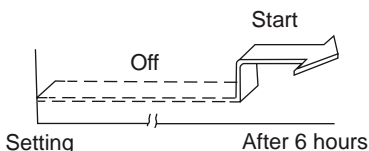
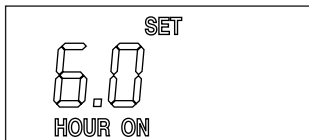
At each press of the button, time interval increases by 30 minutes till 10 hours, and by 60 minutes from 10 to 24 hours.

3. The Wired Controller will send the signal to the Indoor Unit 0.5 seconds after TIMER ON setting has been completed.

To change/cancel TIMER ON setting

- To change TIMER ON setting, press TIME ON button again and repeat the setting procedure.
- To cancel TIMER ON setting, set time to “0.0”.

Exemple of setting for TIMER ON



If you would like the Air Conditioner to start operation 6 hours after the setting:

- 1.** Press TIME ON button: the display shows “SET” and HOUR ON digits.
- 2.** Press TIME ON button till the display shows “6:0”.
- 3.** Wait for 0.5 seconds, and TIMER ON will be set.

NOTES

1. Unlike operation modes, TIMER settings are not kept in memory by the microcomputer, therefore if a power failure occurs, TIMER settings will be cancelled and need to be set again.
2. Before selecting TIMER settings, it is possible to choose your desired operation mode.
3. TIMER max. range is 24 hours, i.e. it is not possible to operate weekly settings.
4. To modify TIMER settings, press TIME ON button again and repeat the above procedure for TIMER ON setting.

TIMER OFF

TIMER OFF function allows to program the automatic stop of the Air Conditioner, according to your comfort needs. In this way, the Air Conditioner will stop operation at your desired time.

Programmed Stop - TIMER OFF

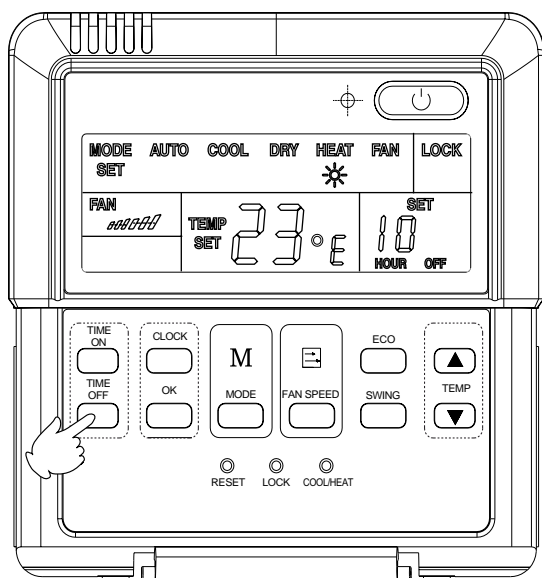
Warning!

The Wired Controller's TIMER is not a clock, so it is necessary to set the time period - not the exact time - at the end of which you would like the Air Conditioner to stop automatically.

TIMER setting is relative to the standard time of operating Wired Controller.

Set current time before setting TIMER.

After setting TIMER, it is not possible to change current time.



1. Press TIME OFF button: the display shows “SET” and HOUR OFF digits.

2. Press TIME OFF button several times, till reaching the time interval at the end of which you would like to stop the Air Conditioner’s operation.

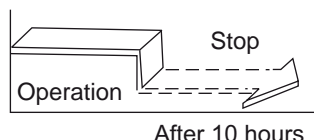
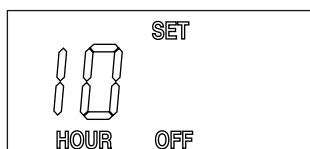
At each press of the button, time interval increases by 30 minutes till 10 hours, and by 60 minutes from 10 to 24 hours.

3. The Wired Controller will send the signal to the Indoor Unit 0.5 seconds after TIMER OFF setting has been completed.

To change/cancel TIMER OFF setting

- To change TIMER OFF setting, press TIME OFF button again and repeat the setting procedure.
- To cancel TIMER OFF setting, set time to “0.0”.

Example of setting for TIMER OFF



If you would like the Air Conditioner to stop operation 10 hours after the setting:

1. Press TIME OFF button: the display shows “SET” and HOUR OFF digits.
2. Press TIME OFF button till “10” is displayed.
3. Wait for 0.5 seconds, and TIMER OFF will be set.

NOTES

1. Unlike operation modes, TIMER settings are not kept in memory by the microcomputer, therefore if a power failure occurs, TIMER settings will be cancelled and need to be set again.
2. Before selecting TIMER settings, it is possible to choose your desired operation mode.
3. TIMER max. range is 24 hours, i.e. it is not possible to operate weekly settings.
4. To modify TIMER settings, press TIME OFF button again and repeat the above procedure for TIMER OFF setting.

TIMER ON/OFF

TIMER ON/OFF function allows you to program the automatic start of the Air Conditioner in combination with the automatic stop, according to your comfort needs.

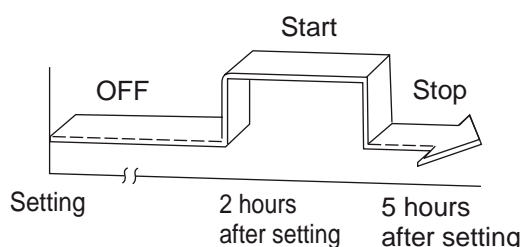
The Wired Controller's TIMER is not a clock, so it is necessary to set the time period - not the exact time - at the end of which you would like the Air Conditioner to start/stop automatically.

TIMER ON → TIMER OFF (Automatic Start followed by the Automatic Stop)

This function is useful if you would like the Air Conditioner to start operation before you wake up in the morning and stop after you leave home.

Example

Setting automatic start after 2 hours and automatic stop after 5 hours.



1. Press TIME ON button.
2. Press again TIME ON button several times, till the display shows "SET 2.0 HOUR ON".
Wait for 0.5 seconds, and the setting is completed.
3. Press TIME OFF button.
4. Press again TIME OFF button several times, till the display shows "SET 5.0 HOUR OFF".

Warning! *Time interval for TIMER OFF setting must be longer than time interval for TIMER ON.*

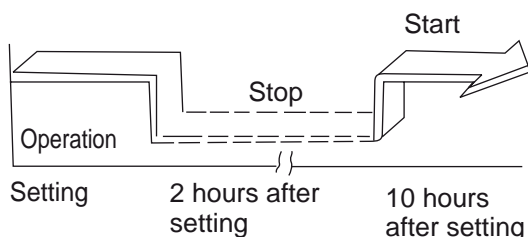
Wait for 0.5 seconds, and the setting is completed.

TIMER OFF → TIMER ON (Automatic Stop followed by Automatic Start)

This function is useful if you would like the Air Conditioner to stop operation after you go to bed and start operation before you wake up in the morning or before you go home in the evening.

Example

Setting automatic stop after 2 hours and automatic start after 10 hours.



1. Press TIME OFF button.
2. Press again TIMER OFF button several times, till the display shows "SET 2.0 HOUR OFF".
Wait for 0.5 seconds, and the setting is completed.
3. Press TIME ON button.
4. Press again TIME ON button several times, till the display shows "SET 10 HOUR ON".

Warning! *Time interval for TIMER ON setting must be longer than time interval for TIMER OFF.*

Wait for 0.5 seconds, and the setting is completed.

NOTES

1. To modify TIMER settings, press TIME ON/TIME OFF buttons again and repeat time interval settings.
To cancel TIMER ON/OFF settings, set time to "0.0".
2. Unlike operation modes, TIMER settings are not kept in memory by the microcomputer, therefore if a power failure occurs, TIMER settings will be cancelled and need to be set again.
3. Before selecting TIMER settings, it is possible to choose your desired operation mode.
4. TIMER max. range is 24 hours, i.e. it is not possible to operate weekly settings.

WIRED CONTROLLER'S USAGE CONDITIONS & CONNECTION

USAGE CONDITIONS OF DTW - IHXR WIRED CONTROLLER:

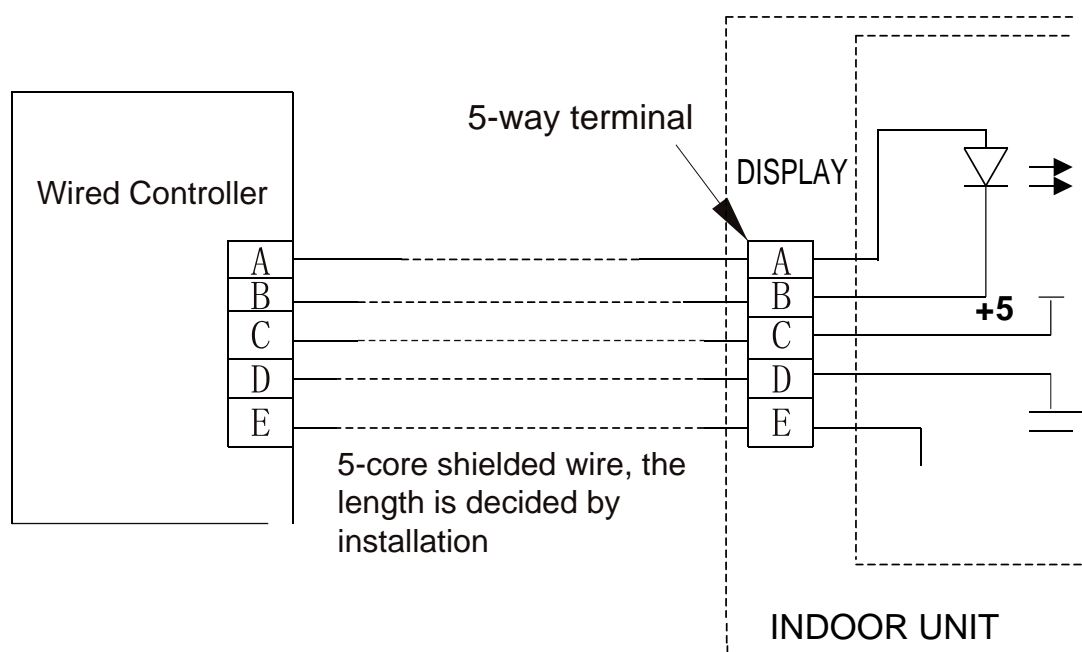
1. Power Supply: 5V DC.
2. Operation Temperature: $-15^{\circ}\text{C} \sim +43^{\circ}\text{C}$.
3. Operation Humidity: 45% - 90% RH.

FUNCTIONS' SUMMARIZE:

Main Functions:

1. Connecting to Indoor Unit by A, B, C, D, E terminals.
2. Buttons for setting action modes.
3. LCD Display.
4. TIMER setting for the Air Conditioner's automatic Start/Stop.

CONNECTING METHOD:



Connect the Wired Controller's cable to the cable of Indoor Unit's Display..

EC DECLARATION OF CONFORMITY

We **TERMAL Srl** - 14, Via della Salute - 40132 Bologna - Italy

DECLARE

under our sole responsibility that **HOKKAIDO** Product

Wired Controller

• **DTW - IHR**

conforms with the following directives:

- *EMC Directive 89/336/EEC and its following 92/31 EEC by L.D. No. 476 dated Decdmbber 4th, 1992.*
- *LV Directive 73/23 EEC and applied Standards EN 60335-2-40.*

President
Giorgio Giatti



NOTES

Dotted lines for writing notes.



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Due to on-going technological development of the products by the Manufacturer, we reserve the right to vary the technical specifications at any time without notice.