It is ESSENTIAL that you read ‘NOTES ON SAFETY’ carefully before use and follow them at all times.

We have a policy of continual improving on our products. The contents (features and specifications) in this manual are therefore subject to change without notice.

Thank you for purchasing the HEAT PUMP/AIR CONDITIONER+HEATER. Before operation please read this user’s manual carefully. Keep this manual on hand for reference. This HEAT PUMP/AIR CONDITIONER+HEATER is specified for use on the rated voltage power supply. For use outside the local electricity supply should be checked by a qualified electrician.

It is ESSENTIAL that you read ‘NOTES ON SAFETY’ carefully before use and follow them at all times.

The Warranty form is on Page 20. Please complete it now and keep it in a safe place.

We have a policy of continual improving on our products. The contents (features and specifications) in this manual are therefore subject to change without notice.
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</tr>
</tbody>
</table>
The following instructions are to ensure user’s safety and to prevent any physical injury or material damage. Please read carefully and follow all instructions.
There are two sections to these instructions: WARNING and CAUTION.

The following symbols are for your guidance:

❌ = You must NOT. ✔️ = You MUST.

**WARNING**

✔️ Use a circuit breaker for the capacity.
   (It may cause fire and electric shock)

❌ Do not use a damaged power cable.
   (Short, fire or shock hazard)

✔️ Before cleaning, disconnect the unit.
   (Otherwise risk of electric shock)

❌ Do not place anything on top of the machine.
   (This could cause electric shock, malfunction or injury)

❌ Do not use an extension cable.
   (Risk of fire and / or electric shock)

❌ Do not ‘kink’ or sharply bend the power cable nor put any weight on it.
   (The insulation may be damaged causing fire and / or electric shock)

✔️ Always turn off control panel first and turn off with circuit breaker.
   (Risk of electric shock and / or malfunction)

❌ Do not use this HEAT PUMP/AIR CONDITIONER+HEATER on unstable or inclined surfaces.
   Always use on solid flat floor. (Risk of falling causing injury, fire or malfunction)

Keep this manual in a visible location near the Heat pump for easy reference.
SAFETY INSTRUCTIONS

CAUTION

Do not place HEAT PUMP/AIR CONDITIONER+HEATER on uneven, unstable or inclined surface. (This could cause malfunction)

When storing the HEAT PUMP or AIR CONDITIONER+HEATER, keep it in a dry, cool place. (To prevent corrosion and malfunction)

If not being used for some time or if lightening is present, always disconnect from power. (To prevent risk of electric shock, short circuit or fire)

Do not spray water onto the HEAT PUMP or AIR CONDITIONER+HEATER nor use solvents such as benzene, thinner or alcohol for cleaning. (There is a risk of electric shock and / or short circuit)

Designed for indoor usage.

GENERAL ADVICE BEFORE USE

FOR MAXIMUM EFFICIENCY

- Exhaust ducting should be no longer than maximum efficiency.
- Ensure correct electricity supply.

* You have to connect supply cord at least standard.
    If the supply cable is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified person in order to avoid a hazard.

- Ensure the safety of the location in which HEAT PUMP/AIR CONDITIONER+HEATER is to be used.
- Ensure the floor or ground is smooth and sound.
- Ensure you allow at least 20" (50cm) air space all around the HEAT PUMP.
- When in position LOCK the casters to prevent rolling.

Waste electrical and electronic products must be disposed separately from normal household waste. When you dispose of such products, please recycle where facilities exist. Follow the guidance of your local authority and/or ask the shop where you purchased the product.
EXTERIOR DESCRIPTION

※ AHSC-42/60

FRONT VIEW

① Condenser Outlet
② Air Outlet
③ Handle
④ Air Inlet
⑤ Casters
⑥ Condensate Water Outlet

BACK&SIDE VIEW

① Digital Controller
② Condenser Inlet
③ Electric Panel
④ Power Connect
(Cabinet inside)
EXTERIOR DESCRIPTION

※ AHSC-140

FRONT VIEW

- HEATER INSIDE
- FLEXIBLE DUCT OUTLET (COLD / HOT AIR)
- FLEXIBLE DUCT INLET (RETURN AIR)
- CONDENSER INLET
- CASTERS (FRONT LOCKABLE)

BACK & SIDE VIEW

- 'POWER' LAMP
- 'ERROR' LAMP
- ELECTRIC PANEL (ACCESS BY AUTHORIZED SERVICE PERSONNEL ONLY)
- PAPER PRE FILTER (INSIDE)
- DIGITAL CONTROLLER
- CONDENSER INLET
- CONDENSER OUTLET (HOT AIR)
- CONDENSATE WATER OUTLET ※ ASSEMBLE HOSE NIPPLE 1/2"x19
- POWER PLUG SOCKET
**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>MODEL</th>
<th>AHSC-42</th>
<th>AHSC-60</th>
<th>AHSC-140</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Capacity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooling</td>
<td>Btu/h (kW)</td>
<td>42,000(12.3)</td>
<td>60,000(17.6)</td>
</tr>
<tr>
<td>Heating</td>
<td>Btu/h (kW)</td>
<td>47,000(13.8)</td>
<td>60,000(17.6)</td>
</tr>
<tr>
<td><strong>Power supply</strong></td>
<td>-</td>
<td>220Vac 60Hz 1Ph</td>
<td>460Vac 60Hz 3Ph</td>
</tr>
<tr>
<td><strong>Dimensions (WxDxH)</strong></td>
<td>inch</td>
<td>29.1x57.1x47.7</td>
<td>33.9x72.8x66.2</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>lb</td>
<td>450</td>
<td>550</td>
</tr>
<tr>
<td><strong>Power Consumption</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooling</td>
<td>kW</td>
<td>4.5</td>
<td>6.9</td>
</tr>
<tr>
<td>Heating</td>
<td>kW</td>
<td>4.5</td>
<td>6.2</td>
</tr>
<tr>
<td><strong>Current Consumption</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooling</td>
<td>A</td>
<td>21</td>
<td>10.6</td>
</tr>
<tr>
<td>Heating</td>
<td>A</td>
<td>21</td>
<td>9.7</td>
</tr>
<tr>
<td><strong>Moisture Removal</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAX</td>
<td>gal/day</td>
<td>59</td>
<td>76.7</td>
</tr>
<tr>
<td>AHAM</td>
<td>gal/day</td>
<td>40.6</td>
<td>52.6</td>
</tr>
<tr>
<td><strong>Refrigerant (R-410A)</strong></td>
<td>lb</td>
<td>6.62</td>
<td></td>
</tr>
<tr>
<td><strong>Operating Range</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooling</td>
<td>°F DB</td>
<td>77°F DB 60%RH ~113°F DB 40%RH</td>
<td>77°F DB 60%RH ~113°F DB 40%RH</td>
</tr>
<tr>
<td>Heating</td>
<td>°F DB</td>
<td>50°F DB 70%RH ~80.6°F DB 50%RH</td>
<td>80.6°F DB 50%RH</td>
</tr>
<tr>
<td>Dehumidifier</td>
<td>°F DB</td>
<td>59°F DB 60%RH ~113°F DB 40%RH</td>
<td></td>
</tr>
<tr>
<td><strong>Power cord</strong></td>
<td></td>
<td>STANDARD</td>
<td></td>
</tr>
</tbody>
</table>
**CONTROL PANEL FUNCTIONS**

① **Power**
Use to power on / off.

② **∨ ∧ Button**
 Raises or lowers temperature and/ or sleep (off) time.

③ **Mode**
Use to select cooling mode or Dehumidifier mode or FAN mode.

④ **Heat**
Use to select heating mode.

⑤ **Off Timer**
To set the length of time, once turned on, that you wish the cooler to run for. You can set 0~24 hours. Time intervals are 30mins. up to 10 hours and then 1 hour between 10 and 24 hours.

⑥ **Room**
If the LED is on, the displayed temperature is for room temp.

⑦ **Comp.**
When the compressor is operating, the LED is on.

⑧ **Error**
Error signal
E1 : High Pressure
E2 : Low Pressure,
E3 : Sensor problem
rP : Reverse Phase

⑨ **Display**
Display Room temperature, and also the setting temp and sleep time if they had been set.
(Display of 'LO' : under the 32°, Display of 'HI' : over the 99°)
### MODE CHANGING METHOD

**COOLING MODE**
If you press 'Mode' button, 'COOL' is displayed. then LED is on. MODE

**DEHUMIDIFIER MODE**
When the cooling is operating, If you press the 'Mode' button. 'dEHU' is displayed. then LED is on.MODE

**FAN MODE**
When the Dehumidifier is operating. If you press the 'Mode' button, 'FAn' is displayed. then LED is off. MODE

**HEAT MODE**
If you press 'HEAT' button. 'HEAt' is displayed. then LED is on.
HOW TO SET THE ‘OFF’ TIMER.

This function enables you to set the length of time you want the HEAT PUMP to operate. You can set the time period from 30min. to 24 hours in 30min. and 1 hour increments.

1. When Heat Pump/Air conditioner+Heater is operating, press the ‘Off Timer’ button and set the length of time you want by pressing ∧ or ∨. Each time you press the button you will increase the ‘time to off’ period by 30mins. up to 10 hours, and 1 hour up to 24 hours. The display will show .5 for 30min and 1 for an hour. e.g. One and a half hours will show 1.5.

2. When you have finished setting the time period, the ‘Off Timer’ lamp will be on which indicates the Heat Pump/Air conditioner+Heater is in sleep (Off Timer) mode.

3. If you press the ‘Off Timer’ button during its operation, the remaining time will be shown.

4. To CANCEL timing, press and hold ‘Off Timer’ button for ONE second. It will then switch the timer off automatically.
TEMPERATURE CONTROL OPERATION

COOL OR HEAT MODE

- When turn ON, the setting temperature is displayed.
- You can change setting temperature.
- The display showing the set temperature will blink 3 times.

COOLING & DEHUMIDIFIER MODE

<table>
<thead>
<tr>
<th>Mode</th>
<th>Display range</th>
<th>Setting range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Room Temp</td>
<td>32 ~99°F</td>
<td>64 ~86°F</td>
</tr>
</tbody>
</table>

HEATING MODE

<table>
<thead>
<tr>
<th>Mode</th>
<th>Display range</th>
<th>Setting range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Room Temp</td>
<td>32 ~99°F</td>
<td>68 ~99°F</td>
</tr>
</tbody>
</table>

Display Room Temperature range & Setting range.

Cooling or Dehumidifier operates when Room temperature is more than set temperature.

Cooling or Dehumidifier stop when Room temperature is less than set temperature.

Heating operates when Room temperature is less than set temperature.

Heating stops when Room temperature is More than set temperature.
SELECTION OF LOCK OR UNLOCK

1. When turn OFF If press '∨' for 5 seconds, you can control 'LOCK, UNLOCK' mode.
2. You can set 'UNLOCK' or 'LOCK' after pressing '∧' button.
3. When You set 'LOCK' there will be '.' below the number in the screen.

SELECTION OF °F OR °C

1. If you want to change temperature unit °F ↔ °C, when Heat Pump is stopped, push ∨ and ∧ button simultaneously for three seconds.
The machine’s safety devices will automatically signal any problems via the display window on the control panel. The information below shows how to read these signals.

1. **HIGH PRESSURE**

   'E1' is displayed and the 'Error' LED will be on when the pressure of the compressor is too high and the high pressure switch is open.

2. **LOW PRESSURE**

   'E2' is displayed and the 'Error' LED will be on when the pressure of the compressor is too low.

3. **ROOM, AF, TEMPERATURE SENSOR PROBLEM**

   If the thermistor is short circuited or cut, 'E3' is displayed and the 'Error' LED will be on.

4. **COMPRESSOR PROBLEM**

   When the over current from compressor is detected, 'E4' is displayed and the 'Error' LED will be on. ※ Only AHSC-140

5. **COND FAN MOTOR PROBLEM**

   When the over current from cond fan motor is detected, 'E5' is displayed and the 'Error' LED will be on. ※ Only AHSC-140

6. **EVA FAN MOTOR PROBLEM**

   When the over current from eva fan motor is detected, 'E6' is displayed, the 'Error' LED will be On. ※ Only AHSC-140

7. **HEATER PROBLEM**

   When the over current from heater is detected, 'E7' is displayed and the 'Error' LED will be on. ※ Only AHSC-140

8. **REVERSE PHASE**

   When the three phase circuit is not correctly connected, 'rP' is displayed and 'Error' LED will be on. ※ Only AHSC-140

9. **OVER HEAT**

   If eva fan is stop 'OH' is displayed and 'Error' LED will be on. ※ Only AHSC-140

10. **ANTI FREEZING**

    When the temperature of the evaporator is below 28°F, 'AF' is displayed.
<table>
<thead>
<tr>
<th>TROUBLE</th>
<th>CHECK</th>
<th>REMEDY</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOT WORKING</td>
<td>Power cable correctly connected</td>
<td>Connect cable correctly</td>
</tr>
<tr>
<td></td>
<td>Power button &quot;OFF&quot;</td>
<td>Press POWER button to &quot;ON&quot;</td>
</tr>
<tr>
<td></td>
<td>Blown fuse in electric panel</td>
<td>Replace fuse</td>
</tr>
<tr>
<td></td>
<td>Fuse (supply) blown</td>
<td>Exchange fuse in board</td>
</tr>
<tr>
<td></td>
<td>Breaker on switch board tripped</td>
<td>Check load capacity and reset</td>
</tr>
<tr>
<td></td>
<td>Ambient temp. too high (Cooling &amp; Dehumidifier: over 113°F Heating: over 81°F)</td>
<td>Use only below Cooling &amp; Dehumidifier 113°F Heating 81°F</td>
</tr>
<tr>
<td>POOR COOLING</td>
<td>Filter blocked with dust</td>
<td>Clean Filter</td>
</tr>
<tr>
<td></td>
<td>Dust in heat exchanger</td>
<td>Clean heat exchanger</td>
</tr>
<tr>
<td></td>
<td>Obstacle against inlet side</td>
<td>Remove and allow 20&quot;(50cm), clearance</td>
</tr>
<tr>
<td></td>
<td>Ambient temp. too high (Cooling &amp; Dehumidifier: over 113°F Heating: over 81°F)</td>
<td>Use only below Cooling &amp; Dehumidifier 113°F Heating 81°F</td>
</tr>
</tbody>
</table>
After cleaning, completely dry the inside of the unit by operating it on ‘Fan only’ mode for 3 to 4 hours.

※ CLEANING FILTER
1. After removing bolt, Detach CABI FRONT LOWER
2. Pull the filter up to detach.
3. Clean the filter.
4. Reassemble in reverse order of disassembly.

1. Use 5/8” hose.
2. Have to apply U-Trap for drainage.

AHSC-140
After cleaning, completely dry the inside of the unit by operating it on ‘Fan only’ mode for 3 to 4 hours.
## ACCESSORIES

### ※ AHSC-42/60

<table>
<thead>
<tr>
<th>ITEM</th>
<th>MODEL</th>
<th>DRAWING</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AHSC-42/AHSC-60</td>
<td></td>
</tr>
<tr>
<td>COLD AIR</td>
<td>ALUMINIUM FILTER for Evaporator</td>
<td>✓</td>
</tr>
<tr>
<td>HOT AIR EXHAUST</td>
<td>EXAUST CHUMBER Ø400</td>
<td>✓</td>
</tr>
<tr>
<td>COLD AIR EXHAUST</td>
<td>EXAUST CHUMBER Ø300</td>
<td>✓</td>
</tr>
</tbody>
</table>

AHSC-42/60
## ACCESSORIES

### ※ AHSC-140

<table>
<thead>
<tr>
<th>ITEM</th>
<th>MODEL</th>
<th>DRAWING</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOT AIR EXHAUST</td>
<td>EXAUST CHAMBER Ø500</td>
<td>✔️</td>
</tr>
<tr>
<td>COLD AIR EXHAUST</td>
<td>EXAUST CHAMBER Ø400</td>
<td>✔️</td>
</tr>
<tr>
<td>CONDENSATE WATER DRAIN</td>
<td>CONDENSATE WATER OUTLET CONNECT PIPE</td>
<td>✔️</td>
</tr>
<tr>
<td>HANDLE</td>
<td></td>
<td>✔️</td>
</tr>
</tbody>
</table>

![AHSC-140](image-url)
WARRANTY
(Applicable to first retail purchaser only)

AIRREX HEAT PUMP give the more reliable performance, comfort and durability the more they are used. They are built under a strict quality assurance regime which includes inspection both during and after production and exhaustive reliability testing.

In the unlikely event you have any problems, please contact your dealer or distributor. If the problem is as a result of a production fault or failure, repairs will be undertaken free of charge during the period of warranty subject to the following warranty conditions:

1. If the problem has been caused by customer error or misuse, abuse or damage, then all repairs will be charged for.

2. This warranty applies to your country.

3. Proof and date of purchase must be supplied.

4. Please complete the details below and keep this warranty in a safe place.

5. All transport charges back to the dealer are at customer's cost. Keep all original packaging to facilitate return. Return to customer will be at dealer's cost (if genuine warranty claim).

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>AIRREX HEAT PUMP</th>
</tr>
</thead>
<tbody>
<tr>
<td>MODEL</td>
<td>AHSC-42 / AHSC-60 / AHSC-140</td>
</tr>
<tr>
<td>DATE OF PURCHASE</td>
<td>PRODUCT SERIAL NO.</td>
</tr>
<tr>
<td>WARRANTY PERIOD</td>
<td>( ) Months</td>
</tr>
<tr>
<td>DISTRIBUTOR</td>
<td>Name of Company</td>
</tr>
<tr>
<td></td>
<td>Telephone No.</td>
</tr>
<tr>
<td>CUSTOMER DETAILS</td>
<td>Name :</td>
</tr>
<tr>
<td></td>
<td>Address :</td>
</tr>
<tr>
<td></td>
<td>Telephone :</td>
</tr>
</tbody>
</table>

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