



Intertek  
3073615

# AIRREX<sup>®</sup>

## AIR CONDITIONER

USER'S MANUAL

MODEL: HSC-12L/HSC(O)-14  
HSC(O)-18/HSC(O)-24A



LOUVER TYPE

NOZZLE TYPE

HSC-12L



HSC-14/18/24A



HSCO-14/18/24A

- ▶ Thank you for purchasing the AIR CONDITIONER. Before operation please read this user's manual carefully.
- ▶ Keep this manual on hand for reference.
- ▶ This AIR CONDITIONER 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.

## TABLE OF CONTENTS

■ SAFETY INSTRUCTIONS .....	3
■ GENERAL ADVICE BEFORE USE .....	4
■ EXTERIOR DESCRIPTION .....	5~6
■ SPECIFICATIONS .....	7
■ CONTROL PANEL FUNCTIONS .....	8~9
■ MODE CHANGING METHOD .....	10
■ HOW TO SET THE 'OFF'TIMER.....	11
■ TEMPERATURE CONTROL OPERATION .....	12
■ SELECTION OF LOCK OR UNLOCK .....	13
■ 'ERROR'and WARNING INDICATORS .....	14~15
■ FIREALARM&ERROR SIGNAL CONNECTION.....	16
■ TROUBLE SHOOTING .....	17
■ MAINTENANCE .....	18
■ ACCESSORY .....	19
■ WARRANTY .....	20

## SAFETY INSTRUCTIONS

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 AIR CONDITIONER 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 AIR CONDITIONER on uneven, unstable or inclined surface.  
(This could cause malfunction)
- When storing the AIR CONDITIONER, 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 AIR CONDITIONER 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 Air conditioner 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 AIR CONDITIONER.
- When in position LOCK the casters to prevent rolling.

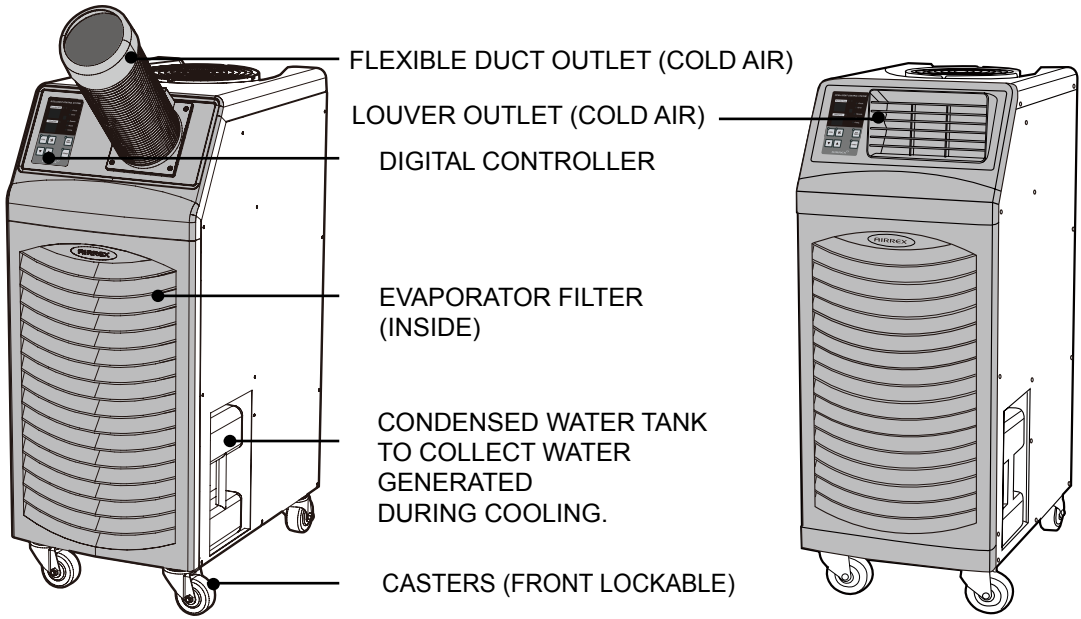


Waste electrical and electronic products must be disposed separately from normal household waste. When you dispose of such products, please recycle where facilities exist. Follow the guidance of your local authority and/or ask the shop where you purchased the product.

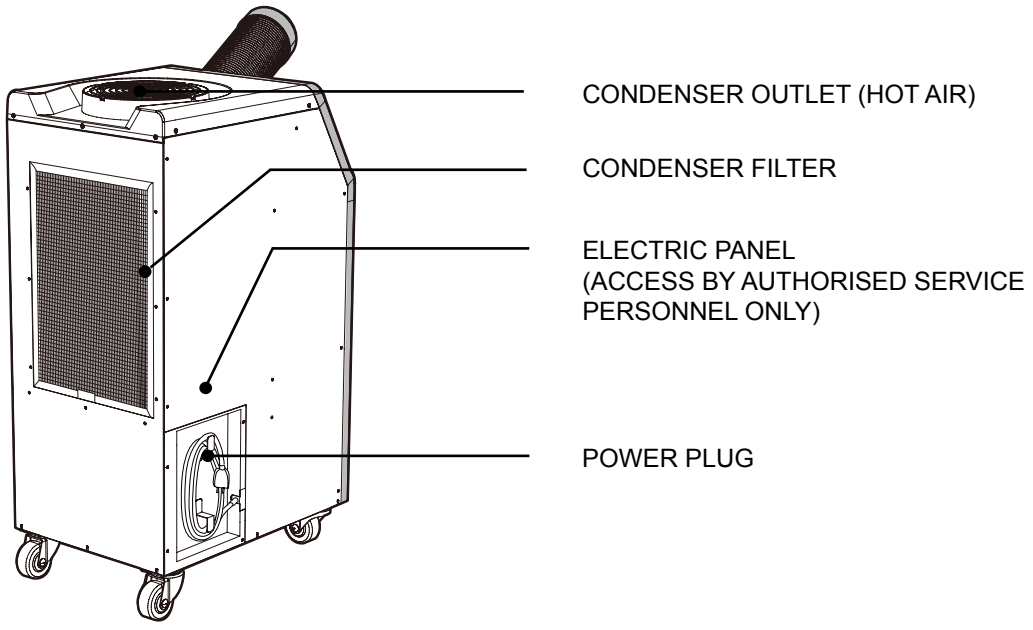
# EXTERIOR DESCRIPTION

※ HSC-12L

## FRONT VIEW



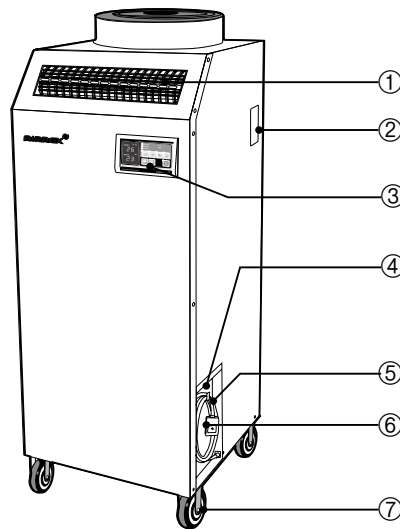
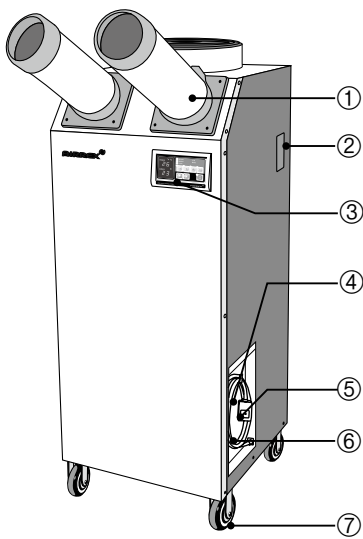
## BACK&SIDE VIEW



## EXTERIOR DESCRIPTION

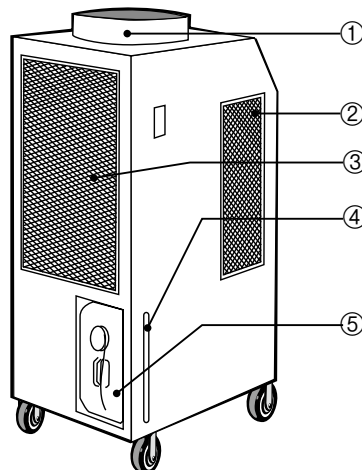
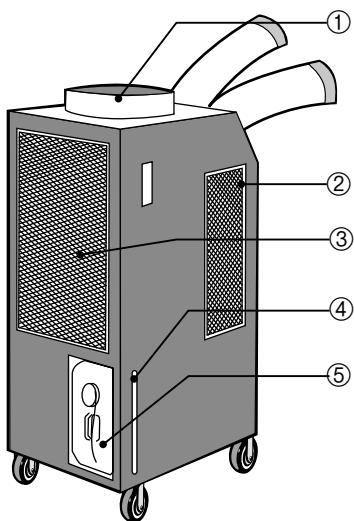
※ HSC(O)-14 & HSC(O)-18 & HSC(O)-24A

### FRONT VIEW



- ① Cool Air Ooulet
- ② Handle
- ③ Digital Controller
- ④ Electrical Access panel
- ⑤ Power Plug
- ⑥ Fire Alarm Connection Port
- ⑦ Casters (Front Lockable)

### BACK&SIDE VIEW



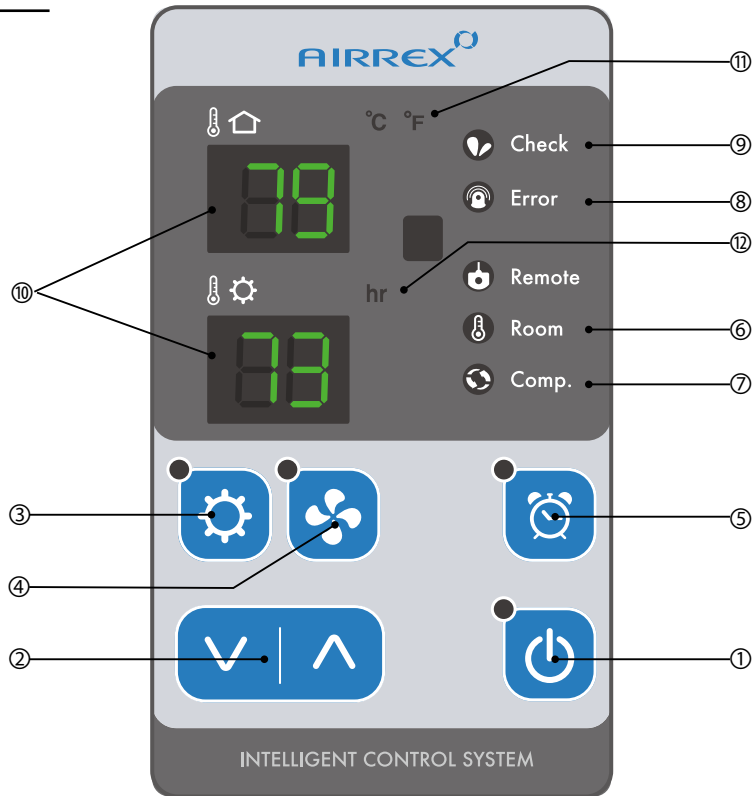
- ① Top Fan/Wiregrille
- ② Evaporator Filter Ambient Air Intake
- ③ Condenser Filter
- ④ Water Level Indicator to Check water Level of the Condensate Tank
- ⑤ Condensed Water Tank to collect water generated during cooling

## SPECIFICATIONS

MODEL		HSC-12L	HSC-14 HSCO-14	HSC-18 HSCO-18	HSC-24A HSCO-24A	
Cooling capacity	Btu/h (kW)	12,000 (3.5)	13,600 (4.0)	16,800 (4.9)	23,500 (6.9)	
Power Supply	-	115Vac 60Hz 1Ph			220Vac 60Hz 1Ph	
Dimensions (WxDxH)	inch	16.5x24.4x40.3	19.3x23.6x46.8	19.3x23.6x49.8	19.3x23.6x51.3	
Weight	lb	127	176	185	210	
Power Consumption	kW	1.34	1.5	1.95	2.74	
Current Consumption	A	12	13	17	12.6	
Moisture Removal	MAX	gal/day	11.4	13.3	19	22.8
	AHAM	gal/day	7.6	8.9	13.3	15.9
Refrigerant (R-410A)	lb	1.54	1.33	1.76	2.97	
Operating Range	Cooling	72 °F DB60%RH~ 104 °F DB40%RH	72 °F DB60%RH~113 °F DB40%RH			
	Dehumidifier	59 °F DB 60%RH~113 °F DB 40%RH				
Nema Plug		LCDI 5-15		LCDI 5-20	LCDI 6-20	

## CONTROL PANEL FUNCTIONS

### ※ HSC-12L

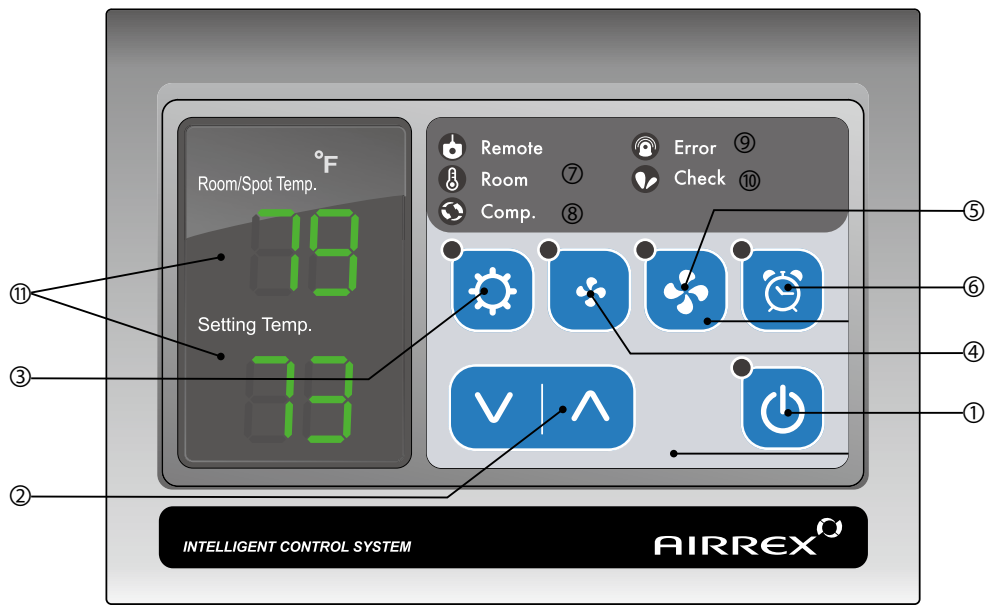


- ① Power : Use to power On / Off.
- ② ∨ ∧ : Raises or lowers setting temperature and/ or sleep (off) time.
- ③ Mode : Use to select cooling mode or Dehumidifier mode or FAN mode.
- ④ Fan Speed : Controls fan low/high speed.
- ⑤ Off Timer : To set the length of operating time, once turned on, that you 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.  
If the LED is Off, the displayed temperature is for spot temp.
- ⑦ Comp. : When the compressor is operating, the LED is On.
- ⑧ Error : Error signal  
( E2 : Low Pressure, E3 : Sensor, E5 : BLDC Motor, AF: Eva Freezing)
- ⑨ Check : If Water full or Align Drain Tank is checking. The LED is on.
- ⑩ Display : Display Room/Spot temperature, the setting temp and off time in case of setting them.  
(Display of 'LO' : under the 32°F, Display of 'HI' : over the 99°F)
- ⑪ °C,°F : When the user change temperature unit °C↔°F, °C or °F will be turn on.
- ⑫ hr : When the user set the off timer, 'hr' will be turned on.



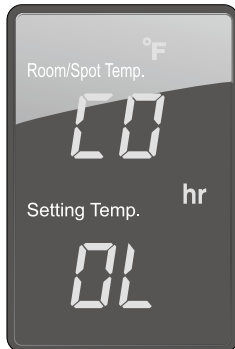
## CONTROL PANEL FUNCTIONS

### ※ HSC(O)-14 & HSC(O)-18 & HSC(O)-24A



- 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 Low Mode : Controls fan low speed.
- ⑤ High Mode : Control fan high speed.
- ⑥ 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.
- ⑦ Room : If the LED is on, the displayed temperature is for room temp.
- ⑧ Comp. : When the compressor is operating. the LED is on.
- ⑨ Error : Error signal (E1:High pressure,E2:Low pressure,E3:Sensor problem,rP:Reverse phase)
- ⑩ Check : If water full or Aligh Drain Tank is checking. The LED is on.
- ⑪ Display : Display Room temperature, and also the setting temp and sleep time if they had been set.  
(Display of 'LO' : under the 32°F, Display of 'HI' : over the 99°F)

## MODE CHANGING METHOD



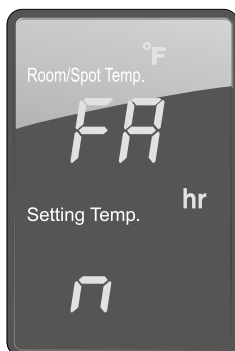
### COOLING MODE

If you press 'cool' button. 'COOL' is displayed. then LED is on.



### DEHUMIDIFIER MODE

When the cooling is operating, If you press the 'cool' button. 'dEHU' is displayed. then LED is on.

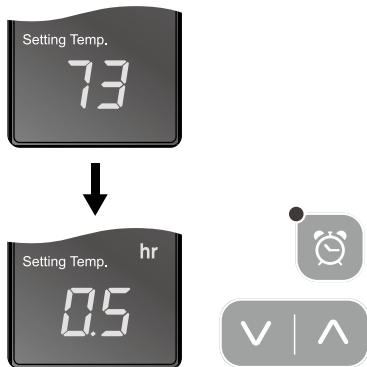


### FAN MODE

When the Dehumidifier is operating. If you press the 'cool' button, 'FAn' is displayed. then LED is off.

## HOW TO SET THE 'OFF' TIMER.

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

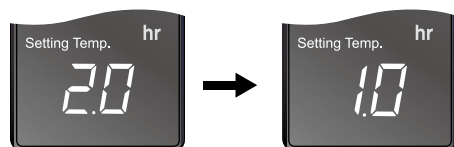


1. When AIR CONDITIONER is operating, press the 'Off Timer' button and set the length of time you want by pressing  $\wedge$  or  $\vee$ . Each time you press the button you will increase the 'time to off' period by 30mins. up to 10 hours, and 1 hour up to 24 hours. The display will show .5 for 30min and 1 for an hour. e.g. One and a half hours will show 1.5.



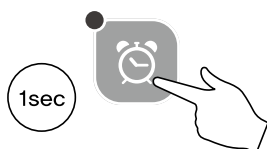
OFF TIMER LAMP IS ON

2. When you have finished setting the time period, the 'Off Timer' lamp will be on which indicates the AIR CONDITIONER is in sleep (Off Timer) mode.



AFTER 1hr

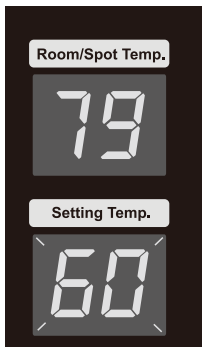
3. If you press the 'Off Timer' button during its operation, the remaining time will be shown.



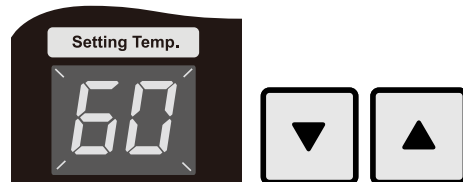
4. To CANCEL timing, press and hold 'Off Timer' button for ONE second. It will then switch the timer off automatically.

## TEMPERATURE CONTROL OPERATION

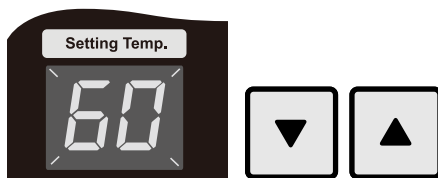
### ※ HSC-12L



1. When turn ON, the setting temperature is displayed.



2. When you push either ▼ or ▲ button, the setting temperature is changed.



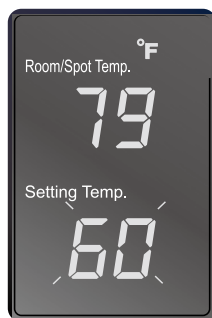
3. The display showing the set temperature will blink 3 times.

Mode	Display range	Setting range
Room Temp	32°F~99°F	64°F~86°F
Spot Temp	32°F~99°F	32°F~86°F

Cooling operates when Room/Spot temperature is higher than set temperature.

Cooling stops when Room/Spot temperature is lower than set temperature.

### ※ HSC(O)-14 & HSC(O)-18 & HSC(O)-24A



1. When turn ON, the setting temperature is displayed.



2. When you push either ▼ or ▲ button, the setting temperature is changed.



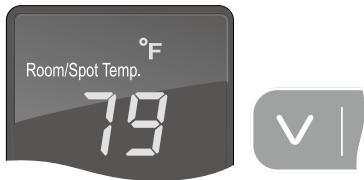
3. The display showing the set temperature will blink 3 times.

Mode	Display range	Setting range
Room Temp	32°F~99°F	64°F~86°F
Spot Temp	32°F~99°F	32°F~86°F

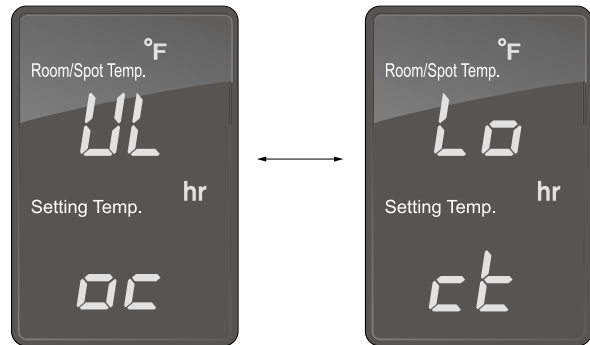
Cooling operates when Room/Spot temperature is more than set temperature.

Cooling stops when Room/Spot temperature is less than set temperature.

## SELECTION OF LOCK OR UNLOCK



1. When turn OFF If press 'v' for 5 seconds, you can control 'LOCK, UNLOCK' mode.

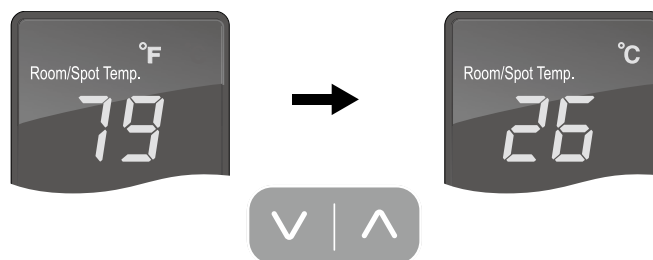


2. You can set 'UNLOCK' or 'LOCK' after pressing '^' button.



3. When You set 'LOCK' there will be '.' below the number in the screen.

## SELECTION OF °F OR °C


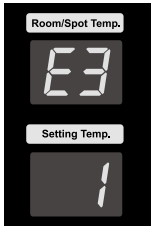
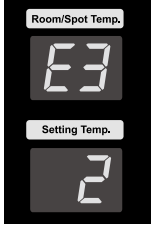
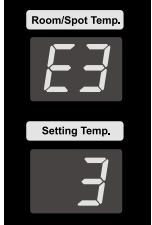






1. If you want to change temperature unit °F ↔ °C, when Heat Pump is stopped, push v and ^ button simultaneously for three seconds.

## 'ERROR' and WARNING INDICATORS













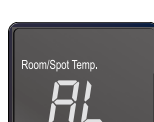

The machine's safety devices will automatically signal any problems via the display window on the control panel. The information below shows how to read these signals.

### ※ HSC-12L

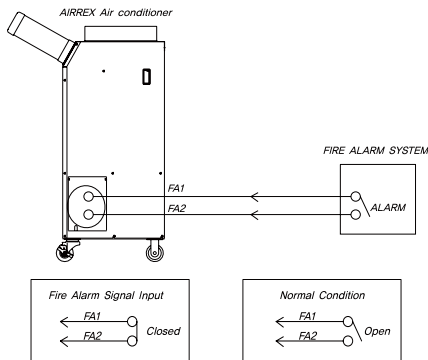
Error Code	Problem	Cause	Corrective Action
	Low pressure	Verify Electrical Refrigerant may be low	Clean Filters and Coils Verify Power (Voltage/Amps) Check Filters Evaporator/Condenser Check Evaporator/Condenser Coils Check refrigerant level and/or refrigerant leak.
	AF sensor	If the AF sensor is short circuited or cut 'E3&1' displayed and the 'Error' LED will be on.	Exchange temperature sensor (Contact Airrex U.S.A. at 1-888-535-8841)
	RT sensor	If the RT sensor is short circuited or cut 'E3&2' displayed and the 'Error' LED will be on.	Exchange temperature sensor (Contact Airrex U.S.A. at 1-888-535-8841)
	OT sensor	If the OT sensor is short circuited or cut 'E3&3' displayed and the 'Error' LED will be on.	Exchange temperature sensor (Contact Airrex U.S.A. at 1-888-535-8841)
	Water full	Water tank is full	Empty the water tank
	Anti-Freezing alarm	Evaporator is below 25 °F (-4 °C) due to being used in a low ambient temperature area.	Do not use the unit in an ambient temperature less than 72°F (22°C). Check refrigerant level.
	Align water tank	Water tank is not positioned correctly	Place the water tank in right position
	BLDC MOTOR	If BLDC MOTOR is not operated 'E5' displayed and the 'Error' led will be on.	Check BLDC MOTOR

# 'ERROR'and WARNING INDICATORS

## ※ HSC(O)-14 & HSC(O)-18 & HSC(O)-24A

Error Code	Problem	Cause	Corrective Action
 <span style="display: inline-block; vertical-align: middle; margin-left: 10px;">  Error         </span>	High pressure	Blocked air filter Blocked / kinked exhaust duct Ambient temperature is too high	Ensure exhaust duct is not blocked / kinked Do not use the air conditioner if ambient temperature is higher than 113°F
 <span style="display: inline-block; vertical-align: middle; margin-left: 10px;">  Error         </span>	Low pressure	Verify Electrical Refrigerant may be low	Clean Filters and Coils Verify Power (Voltage/Amps) Check Filters Evaporator/Condenser Check Evaporator/Condenser Coils Check refrigerant level and/or refrigerant leak.
 <span style="display: inline-block; vertical-align: middle; margin-left: 10px;">  Error         </span>	Sensor Problem	Temperature sensor has an electric short.	Exchange temperature sensor (Contact Airrex U.S.A. at 1-888-535-8841)
 <span style="display: inline-block; vertical-align: middle; margin-left: 10px;">  Water Full         </span>	Water full	Condensate tank is full	Empty the water tank
 <span style="display: inline-block; vertical-align: middle; margin-left: 10px;">  Error         </span>	Anti-Freezing alarm	Evaporator is below 25 °F (-4 °C) due to being used in a low ambient temperature area.	Do not use the unit in an ambient temperature less than 72°F (22°C). Check refrigerant level.
 <span style="display: inline-block; vertical-align: middle; margin-left: 10px;">  Align Drain Tank         </span>	Align water tank	Water tank is not positioned correctly	Place the water tank in right position
 <span style="display: inline-block; vertical-align: middle; margin-left: 10px;">  Error         </span>	Fire alarm signal	Fire alarm signal is received from Fire alarm system.	Reset unit by pushing and holding the "OFF TIMER" button for 5 seconds.

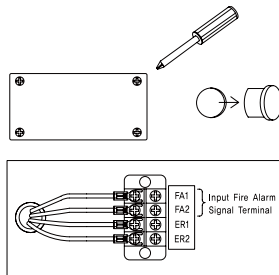
## FIRE ALARM SIGNAL CONNECTION



### Input Terminal FA1 and FA2

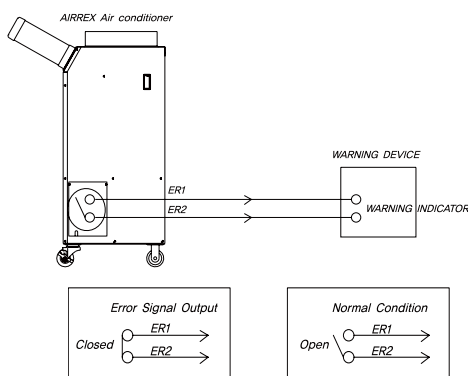
When the signal from the fire alarm system is received, the air conditioner turns off and does not operate until the unit has been RESET.

### Connecting the fire alarm wire from fire alarm system



1. Remove 'Cap' and the 'Fire Alarm cover'.
2. Use recommended fire alarm wire size from 16 AWG to 26 AWG for a solid wire, or 16 AWG to 22 AWG for a stranded wire with ring terminal for #5 stud size.
3. Connect fire alarm to terminal FA1 and FA2.

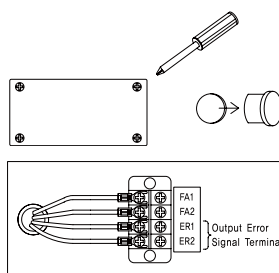
## ERROR SIGNAL CONNECTION



### Output Terminal ER1 and ER2

The air conditioner will output an Error signal (normal open dry contact) when an "Error" has occurred, to show what the failure is on the air conditioner.

### Connecting Error Signal with warning device



1. Remove 'Cap' and the 'Fire Alarm cover'.
2. Use recommended error signal wire size from 16 AWG to 26 AWG for a solid wire, or 16 AWG to 22 AWG for a stranded wire with ring terminal for #5 stud size.
3. Connect the end of the error signal wire to ER1 and ER2, and the other end to the compatible with various warning devices such as alarm speaker, light indicators, and etc.



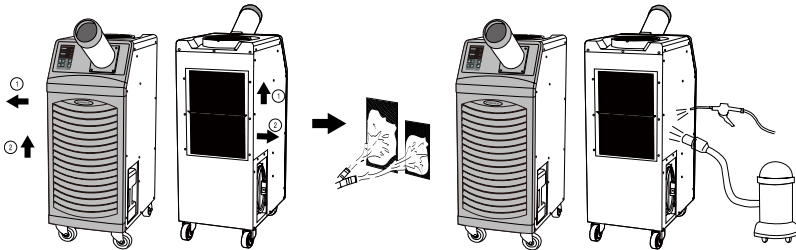
## TROUBLE SHOOTING

TROUBLE	CHECK	REMEDY
NOT WORKING	Power plug correctly connected	Connect plug correctly
	Power button "OFF"	Press POWER button to "ON"
	Fuse (supply) blown	Exchange fuse in board
	Breaker on switch board tripped	Check load capacity and reset
	Ambient temp. too high (Cooling & Dehumidifier: over 113°F or 104°F) (HSC-12L)	Use only below Cooling & Dehumidifier 113°F or 104°F (HSC-12L)
POOR COOLING	Filter blocked with dust	Clean Filter
	Dust in heat exchanger	Clean heat exchanger
	Obstacle against inlet side	Remove and allow 20"(50cm). clearance
	Ambient temp. too high (Cooling & Dehumidifier: over 113°F or 104°F) (HSC-12L))	Use only below Cooling & Dehumidifier 113°F or 104°F (HSC-12L)

## MAINTENANCE

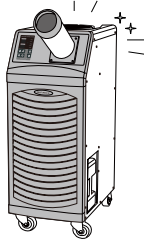
### ※ HSC-12L

#### CLEANING THE AIR FILTERS

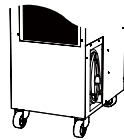


1. To remove EVA filters, open the front grille ① and pull the filter inside ②.
2. To remove COND filters, slide up a little ① and pull towards you ②.
3. Clean the filters with water or compressed air.
4. Clean evaporator and condenser units with a vacuum cleaner or compressed air.

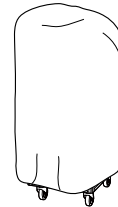
#### MAINTENANCE



1. After cleaning, completely dry the inside of the unit by operating on 'Fan Mode' for 3 to 4 hours.



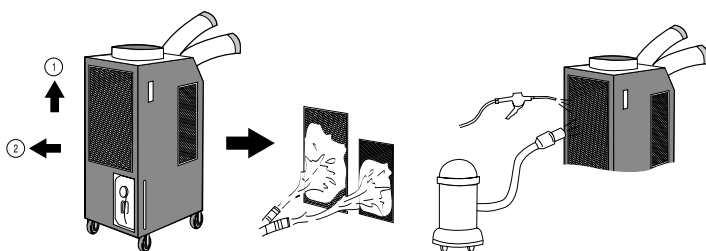
2. Turn "OFF" at control panel, remove plug from socket. Coil and store cable neatly.



3. Keep machine suitably covered to prevent damage by damp, humidity and dust.

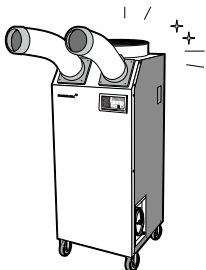
### ※ HSC(O)-14 & HSC(O)-18 & HSC(O)-24A

#### CLEANING THE AIR FILTERS

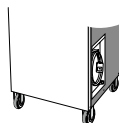


1. To remove filters, slide up a little ① and pull towards you ②.
2. Clean the filters with water or compressed air.
3. Clean evaporator and condenser units with a vacuum cleaner or compressed air.

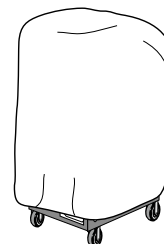
#### MAINTENANCE



1. After cleaning, completely dry the inside of the unit by operating on 'Fan Mode' for 3 to 4 hours.



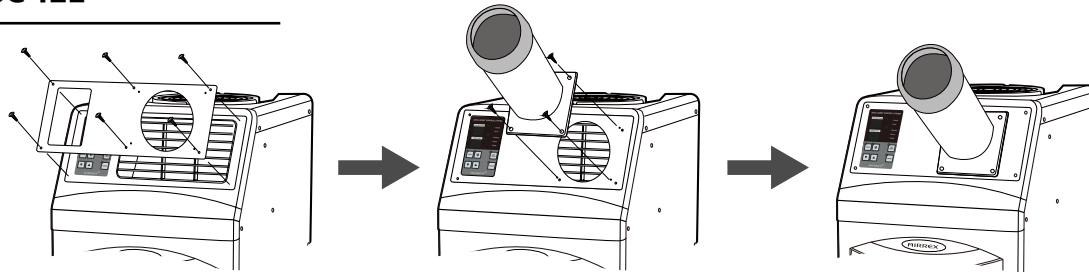
2. Turn "OFF" at control panel, remove plug from socket. Coil and store cable neatly.



3. Keep machine suitably covered to prevent damage by damp, humidity and dust.

# ACCESSORY

## ※ HSC-12L

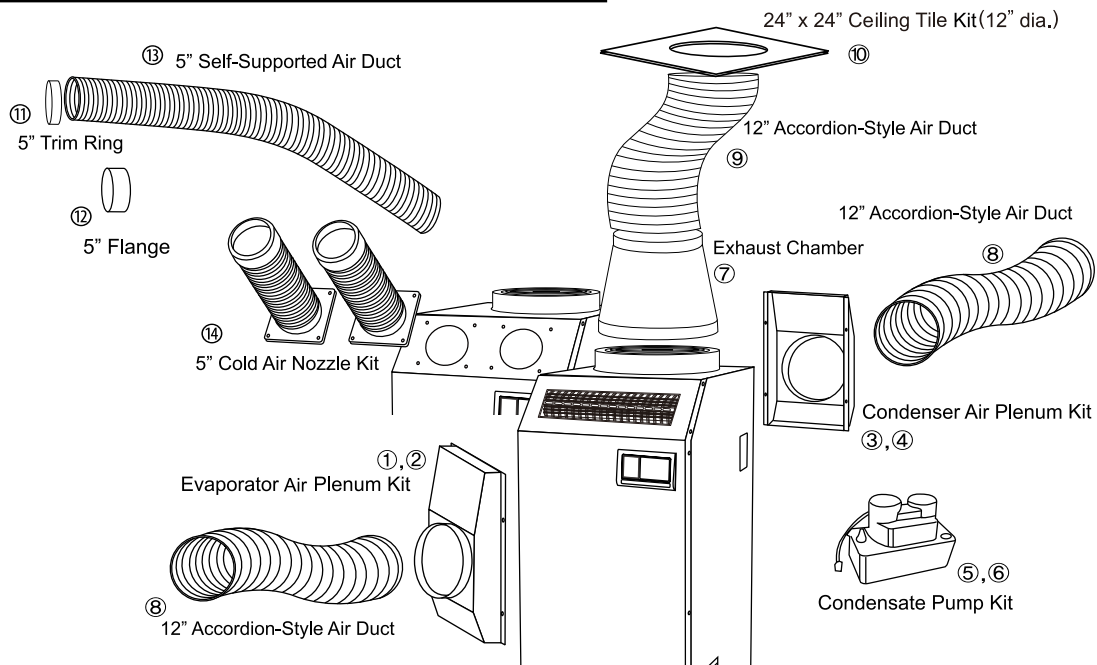


1. Insert a 'Grill Cover' by screwing of 6 bolts.

2. Assemble a 'Nozzle kit' by 4 bolts.

3. Completion.

## ※ HSC(O)-14 & HSC(O)-18 & HSC(O)-24A



No.	Item Description	Part number	HSC(O)-14	HSC(O)-18	HSC(O)-24A
1	Evaporator Air Plenum Kit	GAC0113	✓		
2	Evaporator Air Plenum Kit	GAC0114		✓	✓
3	Condenser Air Plenum Kit	GAC0115	✓		
4	Condenser Air Plenum Kit	GAC0116		✓	✓
5	Condensate Pump Kit, 115Vac	GAC11110	✓	✓	
6	Condensate Pump Kit, 220Vac	GAC11120			✓
7	Exhaust Chamber	GAC01124			✓
8	12" x 10-ft. Accordion-Style Air Duct	GAC01121	✓	✓	✓
9	12" x 25-ft. Accordion-Style Air Duct	GAC01122	✓	✓	✓
10	24" x 24" Ceiling Tile Kit (12" dia.)	GAC01123	✓	✓	✓
			HSC-14	HSC-18	HSC-24A
11	5" Trim Ring	GAC01120	✓	✓	✓
12	5" Flange	GAC01111	✓	✓	✓
13	5"x10-ft. Self-Supported Cold Air Duct	GAC01112	✓	✓	✓
14	5"x1ft Cold Air Nozzle Kit	GAC01119	✓	✓	✓

# 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).

DESCRIPTION	AIRREX HEAT PUMP		
MODEL	HSC-12L,HSC(O)-14,HSC(O)-18,HSC(O)-24A		
DATE OF PURCHASE		PRODUCT SERIAL NO.	
WARRANTY PERIOD	(     ) Months		
DISTRIBUTOR	Name of Company		
	Telephone No.		
CUSTOMER DETAILS	Name :		
	Address :		
	Telephone :		

**Manufactured by :**  
 HEPHZIBAH CO.,LTD.  
 (Juan-dong) 86, Gilpa-ro  
 71beon-gil, Nam-gu,  
 Incheon, Korea  
 TEL : +82-32-509-5834  
 FAX : +82-32-502-5519  
 E-mail : airrex@hdtex.com  
 Website : www.airrex.biz

**Distributed by :**  
 Airrex USA  
 1191 Jewell Dr Ste 101 Waco, TX 76712  
  
 TEL : 888-535-8841  
 FAX : 469-574-7924  
 E-mail : sales@airrexusa.com  
 Website : www.airrexusa.com