**USER'S MANUAL** 

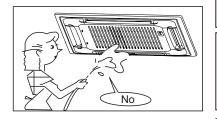
# FLOOR & CEILING SERIES

# ASF-12A, ASF-18A, ASF-24A, ASF-30A ASF-36A, ASF-48A, ASF-60A



# **IMPORTANT SAFETY INFORMATION**





### **A**CAUTION

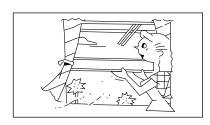
Do not attempt to install this unit by yourself. This unit requires installation by qualified persons.

## **A** DANGER

Do not attempt to service the unit yourself. This unit has no user serviceable components. Opening or removing the cover will expose you to dangerous voltage. Tuning off the power supply will not prevent potential electric shock.

# **A** DANGER

Never put hands or objects into the Air Outlet of indoor or outdoor units. These units are installed with a fan running at high speed. To touch the moving fan will cause serious injury.

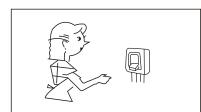


# **A** DANGER

To avoid the risk of serious electrical shock, Never sprinkle or spill water or liquids on unit.

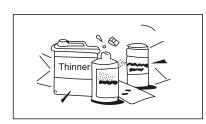
# 

Ventilate the room regularly while the air conditioner is in use, especially if there is also a gas appliance in use in this room, Failure to follow these directions may result in a loss of oxygen in the room.



# WARNING

To prevent electric shock, turn off the power or disconnect the power supply plug before beginning any cleaning or other routine maintenance. Follow the directions for cleaning in the Owner's Manual.





# **A**WARNING

Do not use liquid cleaners or aerosol cleaners, use a soft and dry cloth for cleaning the unit. To avoid electric shock, never attempt to clean the units by sprinkling water.

# **A**CAUTION

Do not use caustic household drain cleaners in the unit. Drain cleaners can quickly destroy the unit components (drain pan and heat exchanger coil etc).

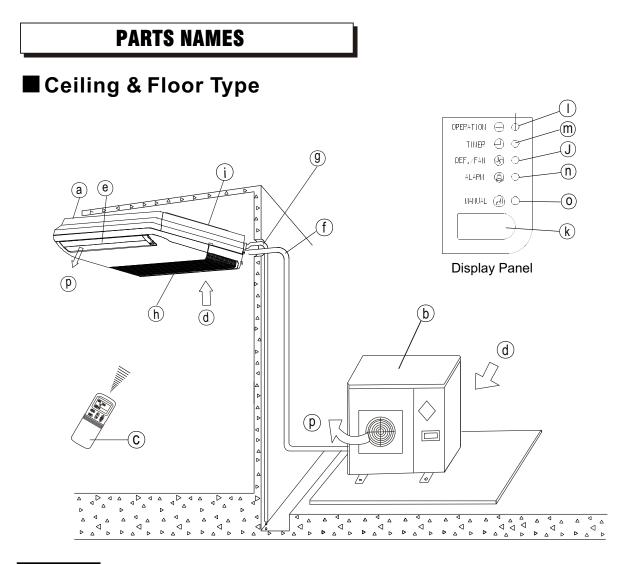
# **A**NOTE

For proper performance, operate the unit in temperature and humidity ranges indicated in this owner's manual. If the unit is operated beyond these conditions, it may cause malfunctions of the unit or dew dripping from the unit.

# HINTS FOR ECONOMICAL OPERATION

The following should be noticed to ensure an economical operation. (Refer to corresponding chapter for details)

- Adjust the air flow direction properly to avoid winding toward your body.
- Adjust the room temperature properly to get a comfortable situation and to avoid supercooling and superheat.
- In cooling, close the curtains to avoid direct sunlight.
- To keep cool or warm air in the room, never open doors or windows more often than necessary.
- Set the timer for the desired operating time.
- Never put obstructions near the air outlet or the air inlet. Or it will cause lower efficiency, even a sudden stop.
- If you don't plan to use the unit for a long time, please disconnect power and remove the batteries from the remote controller. When the power switch is connected, some energy will be consumed, even if the air conditioner isn't in operation. So please disconnect the power to save energy. And please switch the power on 12 hours before you restart the unit to ensure a smooth operation.
- A clogged air filter will reduce cooling or heating efficiency, please clean it once two weeks.



### NOTICE!

The chart based on one model of our product is for reference only, which may be different from the unit you purchased.

### NAMES AND FUNCTIONS

<b>a</b>	indoor unit	b	outdoor unit	0	remote controller
d	air-in	e	air flow louver (at air outlet)	ſ	connecting pipe
9	drain hose	h	air inlet (with air filter in it)		
í	installation part	Ú	FAN/DEF indicator (For cooling and heating type, its D EF., for cooling only type, its F AN)		
®	infrared signal receiver	$\bigcirc$	operation lamp		
$\bigcirc$	timer indicator	n	alarmindicator		
0	temporary button	$\bigcirc$	air-out		

# HINTS FOR ECONOMICAL OPERATION

The following should be noticed to ensure an economical operation. (Refer to corresponding chapter for details)

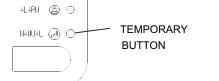
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- A clogged air filter will reduce cooling or heating efficiency, please clean it once two weeks.

# **TEMPORARY OPERATIONS**

This function is used to operate the unit temporarily in case you misplace the remote controller or its batteries are exhausted. Two modes including AUTO and mandatory COOL can be selected through the TEMPORARY BUTTON on the air inlet grill control box of the indoor unit. Once you push this button, the air conditioner will run in such order: AUTO, mandatory COOL, OFF, and back to AUTO.

#### 1. AUTO

The OPERATION lamp is lit, and the air conditioner will run under AUTO mode. The remote controller operation is enabled to operate according to the received signal.



#### 2. mandatory COOL

The OPERATION lamp flashes, the air conditioner will turn to AUTO after it is enforced to cool with a wind speed of HIGH for 30 minutes. The remote controller operation is disabled.

#### 3. OFF

The OPERATION lamp goes off. The air conditioner is OFF while the remote controller operation is enabled.

**Note:** Only take the cassette type as example.

# MAINTENANCE

#### **WARNING**

OPERATION  $\ominus$   $\bigcirc$ 

DEF,/FAN (S) ()

**Display Panel** 

TIMER ① O

WARNING

Before you clean the air conditioner, be sure to disconnect the power supply plug.

#### Cleaning the indoor unit and remote controller

#### **A**CAUTIONS

- Use a dry cloth to wipe the indoor unit and remote controller.
- A cloth dampened with cold water may be used on the indoor unit if it is very dirty.
- Never use a damp cloth on the remote controller.
- Do not use a chemically-treted duster for wiping or leave such material on the unit for long, because it may damage or fade the surface of the unit.
- Do not use benzine, thinner, polishing powder, or similar solvents for cleaning. These may cause the plastic surface to crack or deform.

If you do not plan to use the unit for at least 1 month.

- (1) Operate the fan for about half a day to dry the inside of the unit.
- (2) Stop the air conditioner and disconnect power.
- (3) Remove the batteries from the remote controller.

#### Checks before operation

#### **A**CAUTIONS

- Check that the wiring is not broken off or disconnected.
- Check that the air filter is installed. (Some air-conditioners haven't air filters.)
- Check that the outdoor unit air outlet or inlet is not blocked.

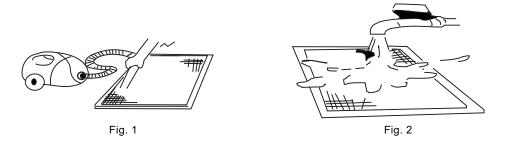
Before you clean the air conditioner, be sure to disconnect the power supply plug.

#### Cleaning the air filter

- The air filter can prevent the dust or other particulate from going inside .In case of blockage of the filter , the working efficiency of the air conditioner may greatly decrease .Therefore , the filter must be cleaned once two weeks during long time usage.
- If the air conditioner is positioned in a dust place, the cleaning frequency of the air filter must be increased.
- If the accumulated dust is too heavy to be cleaned , please replace the filter with a new one(replaceable air filter is an optional fitting).
- 1. Open the air-in grill (front panel) Push the grill switches towards the middle simultaneously. Then pull down the air-in grill.

**Cautions:** The control box cables ,which are originally connected with the main body electrical terminators must be pulled off before doing as indicated above.

- 2. Take out the air-in grill.
- 3. Dismantle the air filter
- 4. Clean the air filter (Vacuum cleaner or pure water may be used to clean the air filter. If the dust accumulation is too heavy, please use soft brush and mild detergent to clean it and dry out in cool place).



- The air-in side should face up when using vacuum cleaner. (See Fig. 1)
- The air-in side should face down when using water. (See Fig. 2)

**Cautions :** Do not dry out the air filter under direct sunshine or with fire. 5. Re-install the air filter

Install and close the air-in grill in the reverse order of step 1 and 2 and connect the control box cables to the corresponding terminators of the main body.

Note: High-static Pressure Parvis Split Type has no air filter.

# AIR CONDITIONER OPERATIONS AND PERFORMANCE

#### **Three-minute protection feature**

A protection feature prevents the air conditioner from being activated for approximately 3 minutes when it restarts immediately after operation.

#### **Power failure**

Power failure during operation will stop the unit completely.

- The OPERATION lamp on the indoor unit will start flashing when power is restored.
- To restart operation, push the ON/OFF button on the remote controller.
- Lightning or a car wireless telephone operating nearby may cause the unit to malfunction.

Disconnect the unit with the power and then connect the unit with the power again. Push the ON/OFF button on the remote controller to restart operation.

#### Air conditioner operating conditions

For proper performance, run the air conditioner under the following temperature conditions:

	Outdoor temperature: 21 to 43°C		
	Room temperature: 17 to 32°C		
Cooling operation	<b>CAUTION</b> Room relative humidity less than 80%. If the air conditioner operates in excess of this figure, the surface of the air conditioner may attract condensation.		
Heating operating	Outdoor temperature: -5 to 24°C		
(cooling only type without)	Room temperature: 0 to 30°C		
Dry operation	Outdoor temperature: 11 to 43°C		
	Room temperature: 17 to 30°C		

If air conditioner is used beyond the above conditions, safety protection features may come into operation.

### **REMOTE CONTROLER**

### NOTE

- 1. The outline figure on cover is for reference only, which may differ from what you purchased.
- 2. Make sure to read chapter PRECAUTIONS before you operate the air conditioner.
- 3. This manual is available for model R05/BG.
- R05/BGE can be applicable for cool only type and cool&heat type air conditioners.

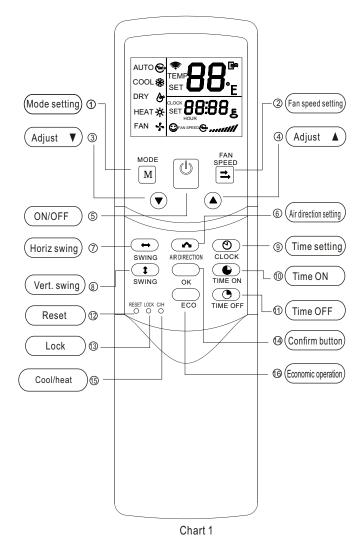
#### PRECAUTIONS

- Curtain, door or the like objects will prevent the remote signal from being received by air conditioner.
- Do not get the interior of remote controller wet. It is forbidden to expose it to direct sunlight or locate it in the place with high temp.
- Malfunction may occur if infrared signal receiver on air conditioner is exposed to sunlight. Please shelter the signal receiver from sunlight with curtain.
- Please remove the nearby electronic device for they may affect the performance of remote controller. If necessary, contact the local Sinclair service centre or technical support centre.
- Do not put the used or different batteries into the remote controller, otherwise remote controller will fail to send signal.
- Please remove the batteries before long period unused, otherwise the remote controller may be damaged.
- If pressing the button reset the remote controller, which indicates low battery, please replace the batteries.
- If no receiving sound is heard from indoor unit or son remote controller does not flash, please replace the batteries.
- Effective transmitting distance of remote controller is 8m, please aim the signal sending part to the receiver on air conditioner.

#### MODEL AND SPECIFICATION

Model	R05/BGE
Rated voltage	3.0V(2 pieces of LR03 7# batteries)
Min voltage for sending signal of CPU	2.4V
Effective receiving distance	8m~11m
Operation condition	-5~60°C

### **BUTTONS AND THEIR FUNCTIONS**



 MODE: Once pressing, running mode will be selected in the following sequence:

← AUTO → COOL → DRY → HEAT → FAN

#### NOTE: No heating mode for cool only type unit.

② FAN SPEED: Fan speed will be selected in following sequence once pressing this button:

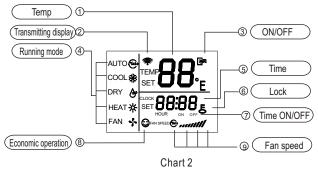
► AUTO → LOW → MED → HIGH—

- ③ Adjust♥: Decrease the set temp. Keeping pressing will decrease the temp with 1℃ per 0.5s.
- ④ Adjust▲ : Increase the set temp. Keeping pressing will increase the temp with 1°C per 0.5s.
- ⑤ ON/OFF: For turning on or turning off the air conditioner.
- ⑥ AIR DIRECTION: Activate swing function of air deflector. Once pressing, air deflector will turn 6°C. For normal operation and better cooling and heating effect, deflector will not turn to the degree which is the state of deflector when the unit is turned off.( Only available when remote controller is used with corresponding unit.)
- ⑦ HORIZ SWING: Activate or turn off horizontal swing function. (Only available when remote controller is used with corresponding unit.)
- ⑧ VERT SWING: Activate or turn off vertical swing function. (Only available when remote controller is used with corresponding unit.)
- ③ CLOCK: Display the current time. (12:00 is displayed when resetting or electrifying for the first time.) Press CLOCK for 5s, icon indicating hour will flash with 0.5s. Press it again, icon indicating minute will flash with 0.5s. ▼ and ▲ are used

to adjust the figure. Setting or modification is effective only by pressing OK button to make confirmation.

- IME ON: For time ON setting. Once pressing this button, the time will increase by 0.5 hour. When the set time exceeds 10 hours, pressing the button will increase the time by 1 hour. Adjusting the figure to 0.00 will cancel time ON setting.
- TIME OFF: For time OFF setting. Once pressing this button, the time will increase by 0.5 hour. When the set time exceeds 10 hours, pressing the button will increase the time by 1 hour. Adjust the figure to 0.00 will cancel time ON setting.
- RESET (inner located): Press this button with a needle of 1mm to cancel the current setting and reset remote controller.
- IOCK (inner located): Press this button with a needle of 1mm to lock or unlock the current setting.
- <sup>®</sup> OK: Used to confirm the time setting and modification.
- <sup>(i)</sup> COOL/HEAT (inner located): Press this button with a needle of 1mm to shift mode between COOL only and COOL&HEAT. During setting, back light will be lightened. Factory default mode is COOL &HEAT.
- (i) ECO: Activate or turn off economic operation mode. It is suggested to turn on this function when sleeping. (Only available when remote controller is used with corresponding unit.)

#### (INDICATORS AND FUNCTIONS)



- Temp: Display the set temperature. Adjust temperature via▲ and▼. No display in this area if the unit is on FAN mode.
- ② Transmitting display: The icon will flash once when the signal is sent by remote controller.
- ③ ON/FF: Icon is displayed when the remote controller is turned on, or vice versa.
- ④ Running mode: Press MODE to display current running mode. AUTO, COOL, DRY, HEAT and FAN can be selected. (HEAT function is invalid for cool only type unit.)
- ⑤ Time: Display the current set time. Press CLOCK for 5s, icon indicating hour will flash. Press this button again, icon indicating minute will flash.▲ And▼ are used to adjust the figure. Setting or modification is effective only by pressing OK button to make confirmation.
- ⑥ Lock: The icon will be lightened or off when pressing LOCK. In locked state, all the buttons are ineffective except button LOCK.
- ⑦ Time ON/OFF: In the state of time ON, icon ON will be lightened, which is the same to the state of time OFF. Setting timer ON and OFF simultaneously, both icons ON and OFF are displayed.

- ⑧ Fan speed: Press FAN SPEED to display the current wind speed. AUTO, LOW, MED and HIGH can be selected. The default state is high fan speed for the unit without medium fan speed.

#### NOTE: All the above icons will be displayed only when the remote controller is electrified for the first time or reset.

#### OPERATION INSTRUCTIONS

#### Install and replace batteries

- ➤ Install 2 pieces of 7# alkaline batteries.
- Slide the cover to install batteries and make sure to place them in right pole.

#### AUTO operation

Switch on the power and running indicator light on indoor unit flashes.

- 1. Press MODE to select AUTO.
- 2. Adjust temp via  $\blacktriangle$  and  $\blacktriangledown$ . Generally the range is 17 °C~30 °C.
- 3. Press ON/OFF and running indicator light on indoor unit is lightened. Air conditioner will work on AUTO mode and fan speed is AUTO which is nonadjustable.
- 4. ECO is effective on AUTO operation.

#### COOL/HEAT/FAN operation

- 1. Press MODE to select COOL, HEAT or FAN.
- 2. Adjust temp via  $\blacktriangle$  and  $\blacktriangledown$  . Generally the range is 17  $^\circ\!\!\!C\text{--}30\,^\circ\!\!\!C$ .
- 3. Press FAN SPEED to select AUTO, LOW, MED or HIGH.
- Press ON/OFF and running indicator light on indoor unit is lightened. Air conditioner will work on the set mode. Stop operation via ON/OFF.

NOTE: On FAN mode, temp is nonadjustable and ECO is ineffective. Procedure 2 is omitted.

#### DRY operation

- 1. Press MODE to select DRY.
- 2. Adjust temp via  $\blacktriangle$  and  $\bigtriangledown$ . Generally the range is  $17^{\circ}C \sim 30^{\circ}C$ .
- 3. Press ON/OFF and running indicator light on indoor unit is lightened. Air conditioner will work on DRY mode. Turn off the unit via ON/OFF.
- 4. On DRY mode, ECO and FAN SPEED are unavailable.

#### Timer operation

TIME ON and TIME OFF are used to turn on and turn off the unit at the set time respectively.

#### TIME ON operation

- 1. PressTIME ON, icon SET, HOUR and ON are lightened.
- 2. PressTIME ON again and adjust the time.
- Keep pressing this button, the time will increase by 0.5 hour. When the set time exceeds 10 hours, pressing the button will increase the time by 1 hour.
- 4. 0.5s after setting, remote controller will send TIMEON command to the unit.
- TIME OFF operation
- 1. PressTIME OFF, icon SET, HOUR and OFF are lightened.
- 2. PressTIME OFF again and adjust the time.
- 3. Keep pressing this button, the time will increase by 0.5 hour. When the settime exceeds 10 hours, pressing the button will increase the time by 1 hour.
- 4. 0.5s after setting, remote controller will send TIME OFF command to the unit.

#### Set TIME ON and TIME OFF simultaneously

- 1. Set TIME ON according to procedures 1 and 2 specified in **TIME ON operation**.
- 2. Set TIME OFF as the procedures 1 and 2 specified in **TIME OFF operation**.
- 3. If both the set time of TIME ON and TIME OFF not exceed 10 hours, time OFF operation will activated 0.5 hour later than time ON operation. If both the set time of TIME ON and TIME OFF exceed 10 hours, time OFF operation will be activated 1 hour later than time ON operation.
- 4. 0.5s after setting, remote controller will send TIME ON command to the unit.

#### Modification of timer operation

Press corresponding button and readjust the time of time ON and time OFF. Adjust the time figure to 0.00 to cancel the timer operation.

NOTE: The time set in timer operation is the relative figure based on the clock on remote controller. Adjusting clock is unavailable when TIME ON or TIME OFF is activated.

# **INSTALLATION**

#### Location:

- During cooling operation, the air conditioner will dry the room air, so please fix a pipe to drain all the water away from the air conditioner.
- Please let the indoor unit more than one metre away from the TV set and the radio in order to avoid the picture and noise interference.
- Powerful radio transmitters or any other devices radiating high frequency radio waves can cause the air conditioner to malfunction. Please consult the dealer where you purchased the air conditioner before installing it.
- Don't fix the unit in the dangerous region with combustible gas or volatile matter.
- If the air conditioner operates in an atmosphere containing oils (machine oil), salt (near a coastal area), sulfide gas (near a hot spring), etc., such substances may lead to failure of the air conditioner.

#### Be careful of noise or vibrations

- Please fix the unit in the stable place to avoid the noise or vibrations.
- The noise near the air outlet of the outdoor unit may enter the air exit.
- Locate the outdoor unit where noise emitted by it or hot air from its air outlet will cause no nuisance to your neighbours.
- If the air conditioner sounds abnormal during operation, contact the dealer where you purchased the air conditioner.

#### Wire

- To avoid the electric shock, please link the air conditioner with the ground. The plug in the air conditioner has joined the ground wiring, please don't change it freely.
- The power socket is used as the air conditioner specially.
- Don't pull the power wiring hard.
- When linking the air conditioner with the ground, observe the local rulers.
- If necessary, use the power fuse or the circuit, breaker or the corresponding scale ampere. If you want to change the power wiring, please contact the centre service of the local MD electric appliance.

#### Relocation

If you move out or if it is desired to relocate the air conditioner, consult your dealer, because special skills to withdraw Freon, purge air and perform other operations are required.

# **TROUBLES AND CAUSES**

Before you ask for servicing or repairs, check the following points.

#### Recheck

#### Inoperative

- The power fuse is blown or the circuit breaker has been tripped.
- The batteries in the remote controller are exhausted.
- The timer is set.

#### Does not cool or heat well.

- The air inlet or outlet of the outdoor unit is blocked.
- Doors or windows are open.
- The air filter is clogged with dust.
- The louver is not at the correct position.
- The fan speed is set to low.
- The temperature setting is too high or too low.

#### These are not failures

#### Room air is smelly.

A bad odor comes from the air conditioner.

• Smells impregnated in the wall, carpet, furniture, clothing, or furs, are coming out. A white mist of chilled air or water is generated from the outdoor unit.

### **A**CAUTION

If any of the following conditions occur, stop the air conditioner immediately, set to off the power switch, and contact the dealer:

- The indicator lamps flash rapidly (five times per second), you disconnect the unit with the power and then connect the unit with the power again after two or three minutes but the lamps still flash.
- Switch operations are erratic.
- The fuse is blown frequently or the circuit breaker is tripped frequently.
- Foreign matter or water has fallen inside the air conditioner.
- Any other unusual condition is observed.

# TROUBLES AND CAUSES (CONCERNING REMOTE CONTROLLER)

Before you ask for servicing or repairs, check the following points.

Setting Change is Impossible			
Symptoms	Causes	Reason and Disposal	
The fan speed can not be	<ul> <li>Check whether the MODE indicated on the display is "AUTO"</li> </ul>	When the automatic mode is selected, the air conditioner automatically selects the fan speed.	
changed.	<ul> <li>Check whether the MODE indicated on the display is "DRY"</li> </ul>	When dry operation is selected, the air conditioner automatically select the fan speed. The fan speed can be selected during "COOL" and "FAN ONLY", and "HEAT"	

The Transmission Indicator "▲ " Never Comes On			
Symptoms	Causes	Reason and Disposal	
The remote control signal is not transmitted even when the ON/OFF button is pushed.	<ul> <li>Check whether the batteries in the remote controller are exhausted.</li> </ul>	The remote control signal is not transmitted, because the power supply is off.	

The Display Never Comes On			
Symptoms	Causes	Reason	
The TEMP. indicator does not come on.	<ul> <li>Check whether the MODE indicated on the display is "FAN ONLY".</li> <li>FAN ONLY</li> </ul>	The temperature cannot be set during fan only operation.	

The Display Goes Off			
Symptoms	Causes	Reason	
The indication on the display disappears after a lapse of time.	<ul> <li>Check whether the timer operation has come to an end when the OFF TIMER is indicated on the display.</li> </ul>	The air conditioner operation stops since the set time elapsed.	
The ON TIMER indicators go off after a lapse of certain time.	<ul> <li>Check whether the timer operation is started when the ON TIMER is indicated on the display.</li> </ul>	When the time set to start the air conditioner is reached, the air conditioner will automatically start and the appropriate indicator will go off.	

The Signal Receiving Tone does Not Sound			
Symptoms	Causes	Disposal	
No receiving tone sounds from the indoor unit even when the ON/OFF button is pushed.	• Check whether the signal transmitter of the remote controller is properly directed to the receiver of the indoor unit when the ON/OFF button is pushed.	Direct the signal transmitter of the remote controller to the receiver of the indoor unit, and then repeatly push the ON/ OFF button twice.	
Buttons on the remote controller don't work.		Press Reset button.	