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AMERICAN PATRIOT
FAMILY OF COMPANIES

Motor Pool Shelter AP100097A

Manual

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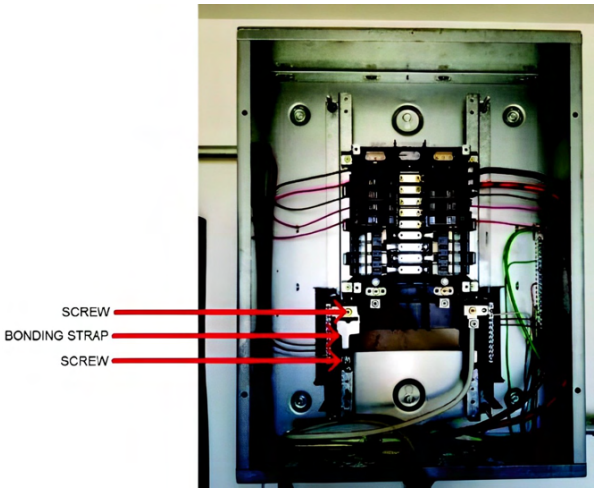
THIS ELECTRICAL SYSTEM IS 220 VAC 1 PHASE. IF YOU HOOK THIS CONTAINER TO 3 PHASE IT WILL VOID THE WARRANTY.

Installation (From Generator)

INSTALL THE BONDING STRAP – THE PANEL BECOMES SERVICE EQUIPMENT

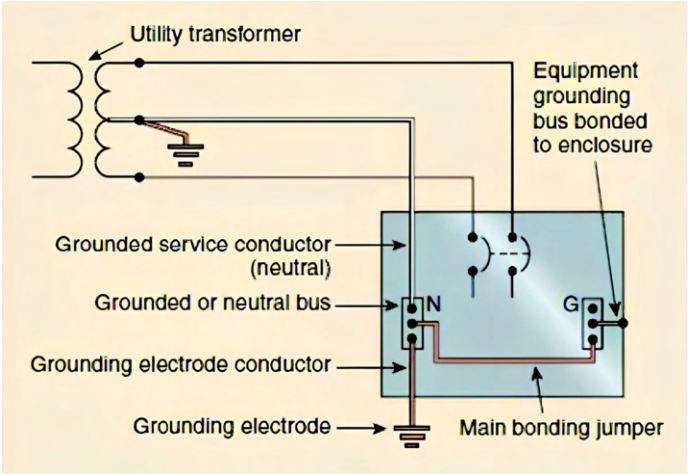
If the shelter is going to be powered by a generator or another power source that does not have a circuit breaker, then the bonding strap will need to be installed.



PER 2017NEC, Article 250.24(B):
"For a grounded system, an unspliced main bonding jumper shall be used to connect the equipment grounding conductor(s) and the service-disconnect enclosure to the grounded conductor within the enclosure for each service disconnect"

If the panel is service equipment (note: it MUST be listed for use as "suitable for service equipment"), then a "system bonding jumper" aka "main bonding jumper" must be installed that connects the grounded conductor (neutral) to the equipment grounding conductor (including grounding electrode conductor) and the enclosure itself WITHIN the enclosure for the "service disconnect" (main breaker).

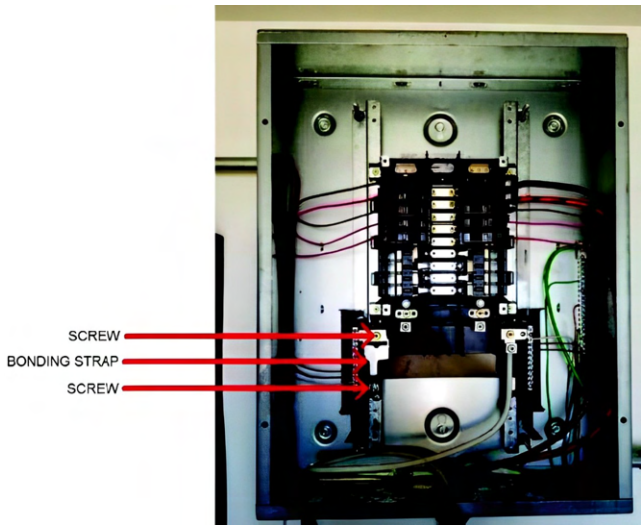
This diagram shows a grounded single-phase. 3-wire service supplied from a utility transformer. Inside the service enclosure, the grounded conductor is intentionally connected to a grounding electrode via the grounding electrode conductor. By bonding the equipment grounding bus to the grounded or neutral bus via the main bonding jumper provides a ground for exposed non-current parts of the system. It also provides a circuit for ground-fault current through the grounded service conductor back to the source of supply. At the source of supply, an additional connection is made from the grounded conductor to a separate grounding electrode.



Installation (From Building)

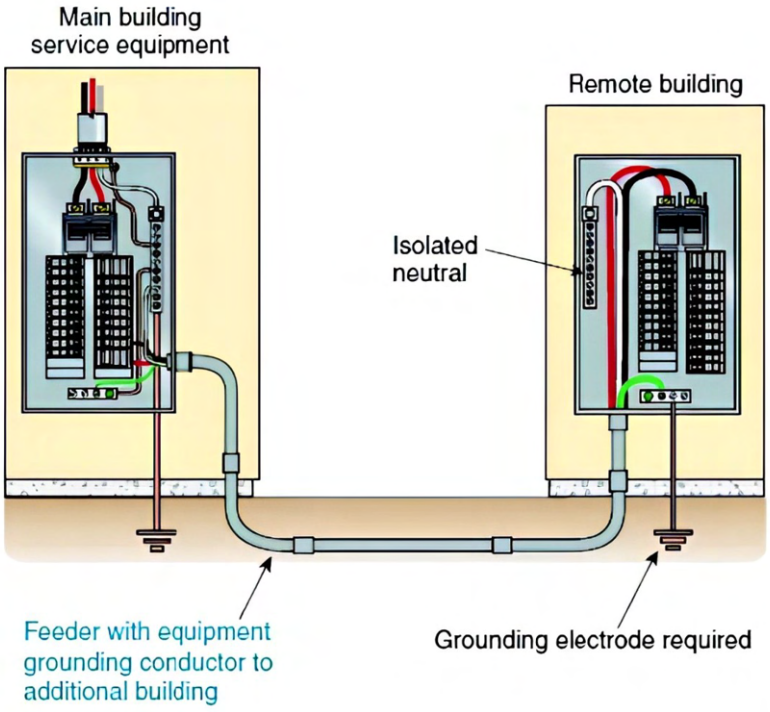
REMOVE THE BONDING STRAP – THE PANEL BECOMES FEEDER EQUIPMENT

If the shelter is being powered from a building with a panel (equipment) upstream from the shelter that meets the requirements above to be service equipment, then the panel box must have the bonding strap removed; replace the screws. Do not discard the strap. It may be needed if the shelter will ever be powered by a generator (see previous section).

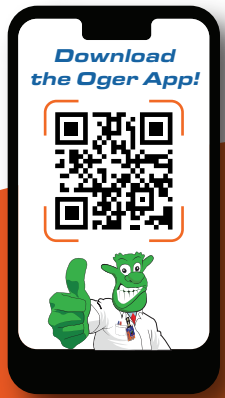


PER 2017NEC, Article 250.32(B):

"An equipment grounding conductor... shall be run with the supply conductors and be connected to the building or structure [panel] and to the grounding electrode. The equipment grounding conductor shall be used for grounding or bonding of equipment, structures, or frames required to be grounded or bonded... Any installed grounded conductor (neutral) shall not be connected to the equipment grounding conductor or to the grounding electrodes."



The neutral shall not be connected to the equipment grounding conductor or anything it is required to be bonded to. The neutral can only be bonded to other neutral conductors. This diagram illustrates how to configure the grounded conductor (neutral) and the equipment grounding conductor (EGC) at a panel used as "feeder". A connection from the equipment grounding terminal bus to the grounding electrode is required.



ELECTRICAL SPECIFICATIONS

- All wiring is IAW the NEC and the UFGS Division 26 Electrical Section.
- The electrical requirement for this shelter is 100A.
- The shelter is wired identical to a residential system, it has two 110 VAC legs, neutral and ground.
- The feed cable that hooks up to the building/generator is 4/4 SEOOW 600v 100A.
- The #1 and #2 are the lines, the #3 is the neutral, and the #4 is the ground.
- The entire container is grounded through the electrical system.
- There is an earth ground bus on the bottom right rear of the container and is marked with the ground symbol.
- All plugs, lights, and exhaust fans are wired with THHN 12G wire in metal conduit.
- The HVAC circuit is wired with 10G Romex in metal conduit. All lines are black and red, Neutral is white or grey, and the Grounds are green.
- The panel box is wired from the outside receptacle with #2G THHN with the colors being the same as above.
- There are 6 ea 20A plugs, 5 of which are dedicated for each of the chargers.
- The 4 lights are LED.
- The HVAC unit is on a dedicated 220VAC circuit.

INCLUDED WITH INITIAL DELIVERY

- Grounding rod
- An Appleton connector to connect the shelter to a building
- An Appleton connector to connect the shelter to a generator

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Crimper 100638A

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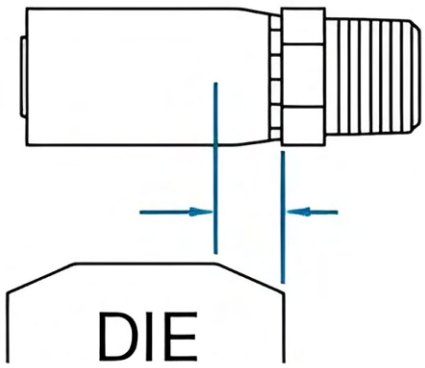
TECHNICAL DATA REPORT

The table below is the recommended crimp diameters and settings for designated fittings to hose combinations using American Patriot 100638A crimper. All machines are calibrated differently and so the settings are for reference only. Verify the crimp diameter by measuring the middle of the crimp at half the height of the die fingers using calipers. All units of measure are in inches. All crimp diameters are nominal and carry a tolerance of ±0.005 inches.

The tables below refer to fittings and hose distributed by American Patriot. American Patriot is always striving to optimize the performance of the products offered to customers please check periodically for changes to technical data.

A full body crimp is defined as 1/8 of an inch past the major diameter of the shell to the top of the crimp fingers.



Hose Part #	Hose Diameter	Hose Type	Fitting	Die Position	Die	Crimp Diameter	Gauge Setting	Skive Length
100883	¼	Tough	STND	To Knurl	.520	.600	88	0
			W	Full	.520	.660	77	0
			K2	Full	.520	.660	77	0
100884	3/8	Tough	STND	To Knurl	.670	.750	90	0
			W	Full	.670	.800	80	0
			K2	Full	.670	.760	88	0
100885	½	Tough	STND	To Knurl	.830	.860	98	0
			W	Full	.830	.950	81	0
			K2	Full	.830	.925	87	0
48966-13	5/8	Tough	STND	To Knurl	.830	.985	75	0
			W	Full	1.100	1.170	91	0
100886	¾	Tough	STND	To Knurl	1.100	1.151	94	0
			W	Full	1.100	1.240	74	0
100887	1	Tough	STND	To Knurl	1.320	1.455	78	0
			W	Full	1.500	1.545	95	0
100888	1-1/4	2SN	STND	To Knurl	1.730	1.875	72	0
			W	Full	1.920	2.060	74	0
100889	½	Spiral	W	Full	.830	1.010	70	0
100890	¾	Bend	W	Full	1.320	1.330	100	0
			WHP	Full	1.320	1.440	82	0
100891	1	Bend	W	Full	1.500	1.670	73	0
100892	1-1/4	Bend	W	Full	1.920	1.985	92	0

GMS INDUSTRIAL SUPPLY
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Hand Pump
100638A

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PLEASE READ AND FOLLOW THIS INSTRUCTION BEFORE YOU USE AMERICAN PATRIOT HAND PUMPS.

SAFETY

To avoid personal injury or property damage, please follow all safety precautions. AMERICAN PATRIOT cannot be responsible for injury or damage resulting from unsafe and incorrect products use or system operation, or lack of maintenance.

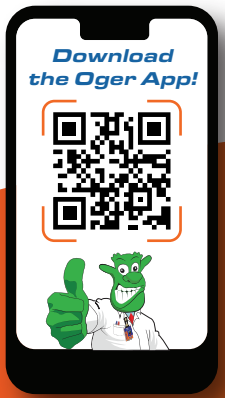
- *The hydraulic equipment operator must be a qualified operator must have correct training and work experience with hydraulic equipment. Lack of knowledge in any of these areas can lead to equipment damage or personal injury.*
- *Carefully inspect cylinder(s), coupler(s), hose(s) and hand pump before using hydraulic equipment. Any damage can cause personal injury when you use the hand pumps.*
- *To avoid personal injury, please do not modify or weld hydraulic equipment*
- *Please never lift a more than the rated capacity of the cylinder(s), overloading causes equipment failure and serious personal injury.*
- *The cylinder is a load lifting device, not a load holding device. After the load has been raised or lowered, it must always be held mechanically, never work under a load supported by a hydraulic unit.*
- *Keep hands and feet away from cylinder(s) and workplace during operation to avoid personal injury.*
- *Do not put unbalanced or off-center loads on cylinders. The incorrect load can result in equipment failure and serious personal injury.*

WARNING

- *Wear safety glasses, helmet and other necessary personal protective equipment when operating hydraulic equipment.*
- *Cylinder(s) used to lift load must have solid footing for correct support. Please select steel or wood blocks that are capable of supporting the load.*
- *Install Pressure gauges in the system to monitor the operating pressure. The gauge must have the same pressure rating as the pump and cylinder(s). The wrong gauges may result in Personal injury.*
- *The system operating pressure must lower than the lowest rated pressure in the system.*
- *Carefully inspect the cylinder(s) and couplers before use cylinder(s). Never connect the cylinder(s) with damaged couplers or damaged port threads. The damaged coupler(s) or damaged port threads may cause equipment failure and possible personal injury.*
- *Install coupler(s) in a clean environment. Prevent dirt or other debris from entering into cylinder(s) body or tube. Dirt or other debris will damage the cylinder(s) and result in equipment failure and possible personal injury.*
- *Cylinder must be placed on a stable base, use AMERICAN PATRIOT hydraulic or motorpool table.*
- *Before removing or tightening hose(s) or coupler(s), release hydraulic pressure in system.*
- *Never handle pressurized hoses; escaping oil under high pressure can penetrate the skin, causing serious injury. Seek medical aid immediately if injured.*
- *American Patriot has no obligations under any warranty with respect to products that have been repaired by unauthorized personnel, modified, or damaged through misuse, abuse, accident, neglect, or mishandling.*

IMPORTANT

- *Keep the hand pump clean all the time.*
- *When the hand pump is not in use, release the valve, remove hose and use rubber cap to recover the port.*
- *Do not drop objects on hose.*
- *Do not lift and carry hydraulic equipment by the hoses or couplers, use the handle or other means.*
- *Use hydraulic equipment in normal operating temperatures. Do not use equipment in temperatures of 65 °C(150°F) or higher. Overheating will soften seals and weakens hose materials, resulting in oil leaking or other equipment failure.*



SETUP

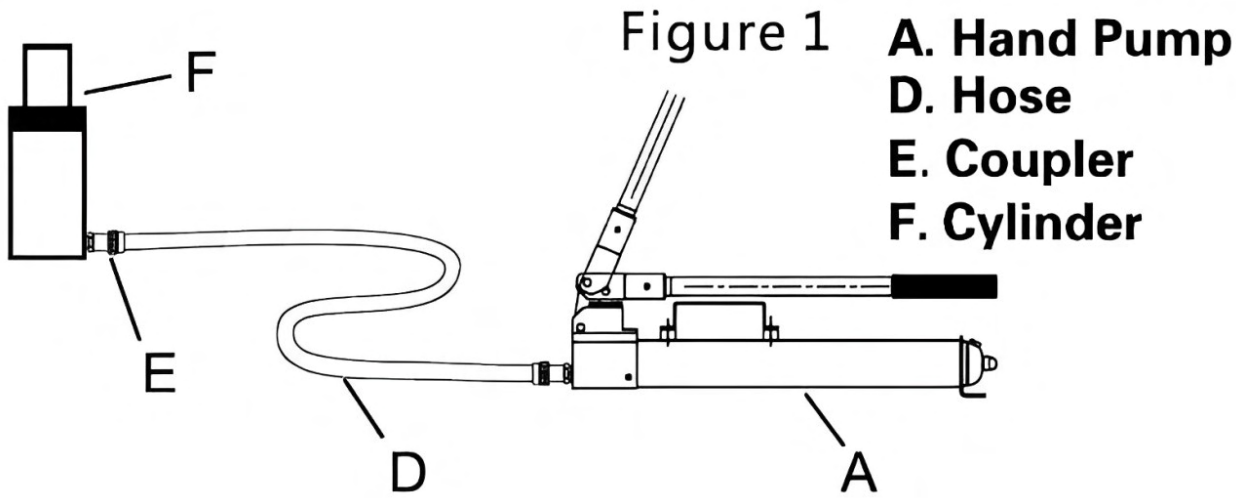


Figure 1

A. Hand Pump
D. Hose
E. Coupler
F. Cylinder

Before using hand pumps, visually check all units, to make sure there is no damage to pump or other hydraulic equipment. Ensure that no oil is leaking or missing parts.

To connect the hand pump, please refer to Figure 1 and follow the steps below.

Step 1: Clean all hose ends, couplers and other areas around oil ports of pump and cylinder. Remove thread protectors from the hydraulic oil outlets.
Step 2: Thread hose into pump.
Step 3: Connect the hose(s) to cylinder or tool.

IMPORTANT - To fully seal the connections, use of Teflon tape or sealing compound is necessary. Please leave first complete thread free to prevent tape particles from entering into the hydraulic system. Any tape particles in the hydraulic system may jam the oil flow.

BLEEDING AIR FROM THE CYLINDER

Air may accumulate within a hand pump during shipment or after refilling the hydraulic oil. This trapped air can cause the hand pump feel weak. Use the steps below to bleed the air from cylinder.

Position the cylinder so that the piston rod is extended down and the cylinder lower than the pump. Fully extend and retract the cylinder 1 or 2 times. It may be necessary to repeat the above steps several times.

OPERATION

Some hand pumps have air vent screw. Please loosen it before use hand pump. To avoid the oil leak from oil reserve, please tighten the air vent screw when not in use.

- *Turn the hand pump's release valve clockwise to close the valve. Operate the pump handle up and down to produce the pressure to the cylinder, causing the piston to extend to the work position.*
- *Monitor the pressure gauge while completing the application.*
- *Slowly turn the hand pump's release valve counterclockwise to release the pressure; the release speed is controlled by how fast the valve is opened.*

WARNING

- *Hand tighten the valve only, applying too much force to the valve may damage the valve stem*
- *Always release the pressure slowly*
- *Do not use an extension handle, an extension handle will damage the pump.*

MAINTENANCE

Adding/changing hydraulic oil

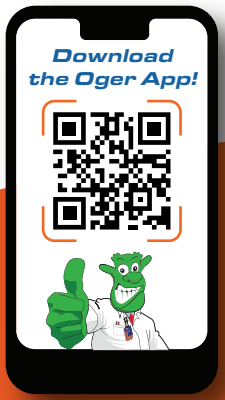
When oil level in hand pump is low, please add hydraulic oil. With cylinder full retract, set hand pump in its normal level position, remover oil filler screw. Fill until oil is within the oil filler screw hole opening, reinstall oil filler screw. For best performance and increased system life, replace the complete hydraulic oil at least once per year.

Lubrication

A coating of light lubricating oil to pivot points, axles and hinges will help to prevent rust and assure that pump assemblies move freely.

Storage

Always keep hand pump and other attachments clean, use dust cap to protect couplers. When not in use, cylinder and hand pump piston must be fully retracted and stored in the clean place.



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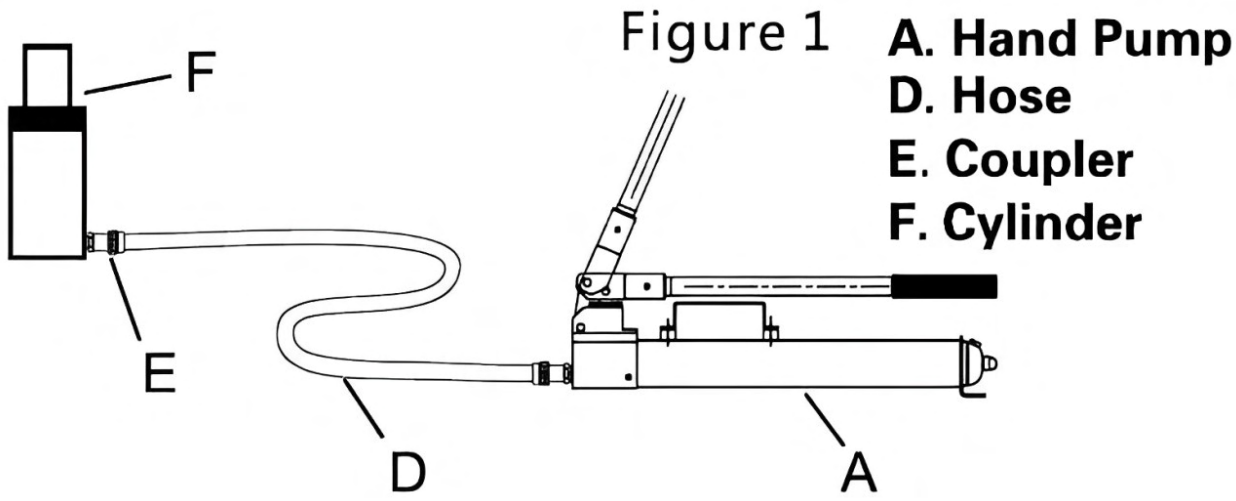

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Air Conditioner 32011

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INTRODUCTION

Model Number _____

Serial Number _____

Purchase Date _____

IMPORTANT SAFETY INSTRUCTIONS

WARNING

For Your Safety

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance. Read product labels for flammability and other warnings.

WARNING

Prevent Accidents

To reduce the risk of fire, electrical shock, or injury to persons when using your air conditioner, follow basic precautions, including the following:

- Be sure the electrical service is adequate for the model you have chosen. This information can be found on the serial plate, which is located on the side of the cabinet and behind the grille.
- If the air conditioner is to be installed in a window, you will probably want to clean both sides of the glass first. If the window is a triple-track type with a screen panel included, remove the screen completely before installation.
- Be sure the air conditioner has been securely and correctly installed according to the separate installation instructions provided with this manual. Save this manual and the installation instructions for possible future use in removing or reinstalling this unit.
- When handling the air conditioner, be careful to avoid cuts from sharp metal fins on front and rear coils.

WARNING

Electrical Information

The complete electrical rating of your new room air conditioner is stated on the serial plate. Refer to the rating when checking the electrical requirements.

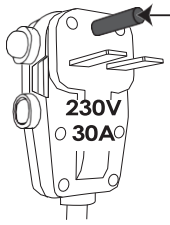
- Be sure the air conditioner is properly grounded. To minimize shock and fire hazards, proper grounding is important.

The power cord is equipped with a three-prong grounding plug for protection against shock hazards.

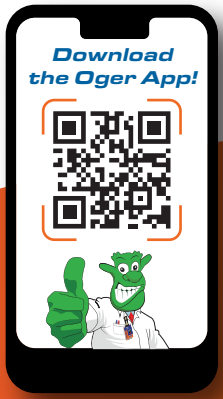
- Your air conditioner must be used in a properly grounded wall receptacle. If the wall receptacle you intend to use is not adequately grounded or protected by a time delay fuse or circuit breaker, have a qualified electrician install the proper receptacle.
- Do not run air conditioner without outside protective cover in place. This could result in mechanical damage within the air conditioner.
- **Do not use an extension cord or an adapter plug.**

WARNING

Avoid fire hazard or electric shock. Do not use an extension cord or an adaptor plug. Do not remove any prong from the power cord.



Do not, under any circumstances, cut, remove or bypass the grounding prong.



NOTE

The power supply cord with this air conditioner contains a current detection device designed to reduce the risk of fire.
Please refer to the section 'Operation of Current Device' for details.
In the event that the power supply cord is damaged, it cannot be repaired. It must be replaced with a cord from the product manufacturer.

SAFETY PRECAUTIONS

DANGER! Avoid Serious Injury or Death

- This air conditioner contains no user-serviceable parts. Always call an authorized Electrolux servicer for repairs.
- Do not insert or place fingers or objects into the air discharge area in the front of the unit.
- Do not start or stop the air conditioner by unplugging the power cord or turning off the power at the electrical box.
- Do not cut or damage the power cord.
- If the power cord is damaged, it should only be replaced by an authorized Electrolux servicer.
- In the event of a malfunction (sparks, burning smell, etc.), immediately stop the operation, disconnect the power cord, and call an authorized Electrolux servicer.
- Do not operate the air conditioner with wet hands.
- Do not pull on the power cord.
- Do not drink any water that is drained from the air conditioner.

SAFETY PRECAUTIONS

CAUTION! Avoid Injury or damage to the unit or other property

- Provide ventilation per installation instructions.
- Do not direct airflow at fireplaces or other heat related sources as this could cause flare ups or make units run excessively.
- Do not climb on or place objects on outdoor part of the unit.
- Do not hang objects off the unit.
- Do not place containers with liquids on the unit.
- Turn off the air conditioner at the power source when it will not be used for an extended period of time.
- Periodically check the condition of the unit's installation accessories for any damage.
- Do not apply heavy pressure to the radiator fins of the unit.
- Operate the unit with air filter in place.
- Do not block or cover the intake grille, discharge area and outlet ports.
- Ensure that any electrical/electronic equipment is one yard away from the unit.
- Do not use or store flammable gases near the unit.
- Do not touch the metal parts of the unit when removing the filter. Injuries can occur when handling sharp metal edges.
- Do not use water to clean inside the air conditioner. Exposure to water can destroy the insulation, leading to possible electric shock.
- When cleaning the unit, first make sure that the power and circuit breaker are turned off.

CAUTION

- This appliance is not intended for use by persons (including children) with reduced physical ,sensory or mental capabilities or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
  - Children should be supervised to ensure that they do not play with the appliance.

- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- The appliance shall be installed in accordance with national wiring regulations.

READ THIS SECTION BEFORE ATTEMPTING TO OPERATE AIR CONDITIONER.

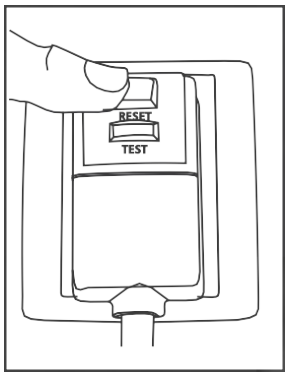
Unit must be upright for one hour prior to operating.

Operation of Current Device

The power supply cord contains a current device that senses damage to the power cord. To test your power supply cord do the following:

1. Plug in the Air Conditioner.
2. The power supply cord will have TWO buttons on the plug head. Press the TEST button. You will notice a click as the RESET button pops out.
3. Press the RESET button. Again you will notice a click as the button engages.
4. The power supply cord is now supplying electricity to the unit. (This is also indicated by a light on the plug head).

Plug in & press RESET



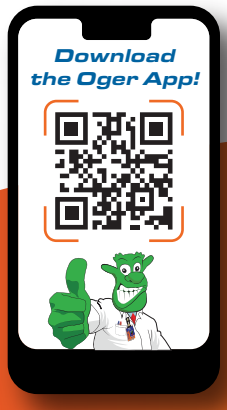
NOTE

- Do not use this device to turn the unit on or off.
- Always make sure the RESET button is pushed in for correct operation.
- The power supply cord must be replaced if it fails to reset when either the TEST button is pushed, or it cannot be reset. A new one can be obtained from the product manufacturer.
- If power supply cord is damaged, it CANNOT be repaired. It MUST be replaced by one obtained from the product manufacturer.

WARNING

FOR FLAMMABLE REFRIGERANT

- Servicing shall only be performed as recommended by the equipment manufacturer. Maintenance and repair requiring the assistance of other skilled personnel shall be carried out under the supervision of the person competent in the use of flammable refrigerants.
- DO NOT modify the length of the power cord or use an extension cord to power the unit.
- DO NOT share a single outlet with other electrical appliances. Improper power supply can cause fire or electrical shock.
- Please follow the instruction carefully to handle, install, clear, service the air conditioner to avoid any damage or hazard.
- Flammable Refrigerant R32 is used within air conditioner. When maintaining or disposing the air conditioner, the refrigerant (R32) shall be recovered properly, shall not discharge to air directly.
- Compliance with national gas regulations shall be observed.
- Keep ventilation openings clear of obstruction.
- The appliance shall be stored so as to prevent mechanical damage from occurring.



- A warning that the appliance shall be stored in a well-ventilated area where the room size corresponds to the room area as specified for operation.
- Any person who is involved with working on or breaking into a refrigerant circuit should hold a current valid certificate from an industry-accredited assessment authority, which authorizes their competence to handle refrigerants safely in accordance with an industry recognized assessment specification.

Examples for such working procedures are:

- Breaking into the refrigerating circuit;
- Opening of sealed components;
- Opening of ventilated enclosures.
- No any open fire or device like which may generate spark/arcing shall be around air conditioner to avoid causing ignition of the flammable refrigerant used. Please follow the instruction carefully to store or maintain the air conditioner to prevent mechanical damage from occurring.
- Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer. The appliance shall be stored in a room without continuously operating ignition sources (for example: open flames, an operating gas appliance) and ignition sources or (for example: an operating electric heater) close to the appliance.
- Do Not pierce or burn.
- Be aware that the refrigerants may not contain an odour.

1. **Transport of equipment containing flammable refrigerants.**
   See transport regulations.
2. **Marking of equipment using signs**
   See local regulations.
3. **Disposal of equipment using flammable refrigerants**
   See national regulations.
4. **Storage of equipment/appliances**
   The storage of equipment should be in accordance with the manufacturer's instructions.
5. **Storage of packed (unsold) equipment**
   Storage package protection should be constructed such that mechanical damage to the equipment inside the package will not cause a leak of the refrigerant charge. The maximum number of pieces of equipment permitted to be stored together will be determined by local regulations.
6. **Information on servicing**

a) Checks to the area

Prior to beginning work on systems containing flammable refrigerants, safety checks are necessary to ensure that the risk of ignition is minimized. For repair to the refrigerating system, the following precautions shall be complied with prior to conducting work on the system.

b) Work procedure

Work shall be undertaken under a controlled procedure so as to minimize the risk of a flammable gas or vapour being present while the work is being performed.

c) General work area

All maintenance staff and others working in the local area shall be instructed on the nature of work being carried out. Work in confined spaces shall be avoided. The area around the workspace shall be sectioned off. Ensure that the conditions within the area have been made safe by control of flammable material.

d) Checking for presence of refrigerant

The area shall be checked with an appropriate refrigerating detector prior to and during work, to ensure the technician is aware of potentially flammable atmospheres. Ensure that the leak detection equipment being used is suitable for use with flammable refrigerants, i.e. non-sparking, adequately sealed or intrinsically safe.

e) Presence of fire extinguisher

If any hot work is to be conducted on the refrigeration equipment or any associated parts, appropriate fire extinguishing equipment shall be

available to hand. Have a dry powder or CO2 fire extinguisher adjacent to the charging area.

f) No ignition sources

No person carrying out work in relation to a refrigerating system which involves exposing any pipe work that contains or has contained flammable refrigerant shall use any sources of ignition in such a manner that it may lead to the risk of fire or explosion. All possible ignition sources, including cigarette smoking, should be kept sufficiently far away from the site of installation, repairing, removing and disposal, during which flammable refrigerant can possibly be released to the surrounding space. Prior to work taking place, the area around the equipment is to be surveyed to make sure that there are no flammable hazards or ignition risks. No Smoking signs shall be displayed.

g) Ventilated area

Ensure that the area is in the open or that it is adequately ventilated before breaking into the system or conducting any hot work. A degree of ventilation shall continue during the period that the work is carried out. The ventilation should safely disperse any released refrigerant and preferably expel it externally into the atmosphere.

h) Checks to the refrigerating equipment

Where electrical components are being changed, they shall be fit for the purpose and to the correct specification. At all times the manufacturer's maintenance and service guidelines shall be followed. If in doubt consult the manufacturer's technical department for assistance. The following checks shall be applied to installations using flammable refrigerants: The actual refrigerant charge is in accordance with the room size within which the refrigerant containing parts are installed; The ventilation machinery and outlets are operating adequately and are not obstructed; If an indirect refrigerating circuit is being used, the secondary circuit shall be checked for the presence of refrigerant; Marking to the equipment continues to be visible and legible. Markings and signs that are illegible shall be corrected; Refrigerating pipe or components are installed in a position where they are unlikely to be exposed to any substance which may corrode refrigerant containing components, unless the components are constructed of materials which are inherently resistant to being corroded or are suitably protected against being so corroded.

i) Checks to electrical devices

Repair and maintenance to electrical components shall include initial safety checks and component inspection procedures. If a fault exists that could compromise safety, then no electrical supply shall be connected to the circuit until it is satisfactorily dealt with. If the fault cannot be corrected immediately but it is necessary to continue operation, an adequate temporary solution shall be used. This shall be reported to the owner of the equipment so all parties are advised. Initial safety checks shall include: That capacitors are discharged: this shall be done in a safe manner to avoid possibility of sparking; That there no live electrical components and wiring are exposed while charging, recovering or purging the system; That there is continuity of earth bonding.

7. Repairs to sealed components

a) During repairs to sealed components, all electrical supplies shall be disconnected from the equipment being worked upon prior to any removal of sealed covers, etc. If it is absolutely necessary to have an electrical supply to equipment during servicing, then a permanently operating form of leak detection shall be located at the most critical point to warn of a potentially hazardous situation.

b) Particular attention shall be paid to the following to ensure that by working on electrical components, the casing is not altered in such a way that the level of protection is affected. This shall include damage to cables, excessive number of

connections, terminals not made to original specification, damage to seals, incorrect fitting of glands, etc. Ensure that apparatus is mounted securely.

Ensure that seals or sealing materials have not degraded such that they no longer serve the purpose of preventing the ingress of flammable atmospheres. Replacement parts shall be in accordance with the manufacturer's specifications.

NOTE: The use of silicon sealant may inhibit the effectiveness of some types of leak detection equipment. Intrinsically safe components do not have to be isolated prior to working on them.

8. **Repair to intrinsically safe components**

Do not apply any permanent inductive or capacitance loads to the circuit without ensuring that this will not exceed the permissible voltage and current permitted for the equipment in use. Intrinsically safe components are the only types that can be worked on while live in the presence of a flammable atmosphere. The test apparatus shall be at the correct rating. Replace components only with parts specified by the manufacturer. Other parts may result in the ignition of refrigerant in the atmosphere from a leak.

9. **Cabling**

Check that cabling will not be subject to wear, corrosion, excessive pressure, vibration, sharp edges or any other adverse environmental effects. The check shall also take into account the effects of aging or continual vibration from sources such as compressors or fans.

10. **Detection of flammable refrigerants**

Under no circumstances shall potential sources of ignition be used in the searching for or detection of refrigerant leaks. A halide torch (or any other detector using a naked flame) shall not be used.

The following leak detection methods are deemed acceptable for systems containing flammable refrigerants. Electronic leak detectors shall be used to detect flammable refrigerants, but the sensitivity may not be adequate, or may need re-calibration. (Detection equipment shall be calibrated in a refrigerant-free area). Ensure that the detector is not a potential source of ignition and is suitable for the refrigerant used. Leak detection equipment shall be set at a percentage of the LFL of the refrigerant and shall be calibrated to the refrigerant employed and the appropriate percentage of gas (25 % maximum) is confirmed. Leak detection fluids are suitable for use with most refrigerants but the use of detergents containing chlorine shall be avoided as the chlorine may react with the refrigerant and corrode the copper pipe-work. If a leak is suspected, all naked flames shall be removed/extinguished. If a leakage of refrigerant is found which requires brazing, all of the refrigerant shall be recovered from the system, or isolated (by means of shut off valves) in a part of the system remote from the leak. Removal of refrigerant shall be according to Removal and evacuation.

11. **Removal and evacuation**

When breaking into the refrigerant circuit to make repairs – or for any other purpose– conventional procedures shall be used. However, for flammable refrigerants it is important that best practice be followed, since flammability is a consideration. The following procedure shall be adhered to:

a) safely remove refrigerant following local and national regulations;
b) purge the circuit with inert gas;
c) evacuate (optional for A2L);
d) purge with inert gas (optional for A2L);
e) open the circuit by cutting or brazing.

The refrigerant charge shall be recovered into the correct recovery cylinders if venting is not allowed by local and national codes. For appliances containing flammable refrigerants, the system shall be purged with oxygen-free nitrogen to render the appliance safe for flammable refrigerants. This process might need to be repeated several times. Compressed air or oxygen shall not be used for

purging refrigerant systems. For appliances containing flammable refrigerants, refrigerants purging shall be achieved by breaking the vacuum in the system with oxygen-free nitrogen and continuing to fill until the working pressure is achieved, then venting to atmosphere, and finally pulling down to a vacuum (optional for A2L). This process shall be repeated until no refrigerant is within the system (optional for A2L). When the final oxygen-free nitrogen charge is used, the system shall be vented down to atmospheric pressure to enable work to take place. Ensure that the outlet for the vacuum pump is not close to any potential ignition sources and that ventilation is available.

12. **Charging procedures**

In addition to conventional charging procedures, the following requirements shall be followed. Ensure that contamination of different refrigerants does not occur when using charging equipment. Hoses or lines shall be as short as possible to minimize the amount of refrigerant contained in them. Cylinders shall be kept in an appropriate position according to the instructions. Ensure that the refrigeration system is earthed prior to charging the system with refrigerant. Label the system when charging is complete (if not already). Extreme care shall be taken not to overfill the refrigeration system. Prior to recharging the system it shall be pressure tested with OFN. The system shall be leak tested on completion of charging but prior to commissioning. A follow up leak test shall be carried out prior to leaving the site.

13. **Decommissioning**

Before carrying out this procedure, it is essential that the technician is completely familiar with the equipment and all its detail. It is recommended good practice that all refrigerants are recovered safely. Prior to the task being carried out, an oil and refrigerant sample shall be taken in case analysis is required prior to re-use of reclaimed refrigerant. It is essential that electrical power is available before the task is commenced.

a) Become familiar with the equipment and its operation.
b) Isolate system electrically.
c) Before attempting the procedure ensure that: Mechanical handling equipment is available, if required, for handling refrigerant cylinders; All personal protective equipment is available and being used correctly; The recovery process is supervised at all times by a competent person; Recovery equipment and cylinders conform to the appropriate standards.
d) Pump down refrigerant system, if possible.
e) If a vacuum is not possible, make a manifold so that refrigerant can be removed from various parts of the system.
f) Make sure that cylinder is situated on the scales before recovery takes place.
g) Start the recovery machine and operate in accordance with instructions.
h) Do not overfill cylinders. (No more than 80% volume liquid charge).
i) Do not exceed the maximum working pressure of the cylinder, even temporarily.
j) When the cylinders have been filled correctly and the process completed, make sure that the cylinders and the equipment are removed from site promptly and all isolation valves on the equipment are closed off.
k) Recovered refrigerant shall not be charged into another refrigeration system unless it has been cleaned and checked.

14. **Labelling**

Equipment shall be labelled stating that it has been de-commissioned and emptied of refrigerant. The label shall be dated and signed. Ensure that there are labels on the equipment stating the equipment contains flammable refrigerant.

15. **Recovery**

When removing refrigerant from a system, either for servicing or decommissioning, it is recommended

good practice that all refrigerants are removed safely. When transferring refrigerant into cylinders, ensure that only appropriate refrigerant recovery cylinders are employed. Ensure that the correct number of cylinders for holding the total system charge is available. All cylinders to be used are designated for the recovered refrigerant and labelled for that refrigerant (i.e. special cylinders for the recovery of refrigerant). Cylinders shall be complete with pressure relief valve and associated shut-off valves in good working order. Empty recovery cylinders are evacuated and, if possible, cooled before recovery occurs.

The recovery equipment shall be in good working order with a set of instructions concerning the equipment that is at hand and shall be suitable for the recovery of flammable refrigerants. In addition, a set of calibrated weighing scales shall be available and in good working order. Hoses shall be complete with leak-free disconnect couplings and in good condition. Before using the recovery machine, check that it is in satisfactory working order, has been properly maintained and that any associated electrical components are sealed to prevent ignition in the event of a refrigerant release. Consult manufacturer if in doubt. The recovered refrigerant shall be returned to the refrigerant supplier in the correct recovery cylinder, and the relevant Waste Transfer Note arranged. Do not mix refrigerants in recovery units and especially not in cylinders.

If compressors or compressor oils are to be removed, ensure that they have been evacuated to an acceptable level to make certain that flammable refrigerant does not remain within the lubricant. The evacuation process shall be carried out prior to returning the compressor to the suppliers. Only electric heating to the compressor body shall be employed to accelerate this process. When oil is drained from a system, it shall be carried out safely.

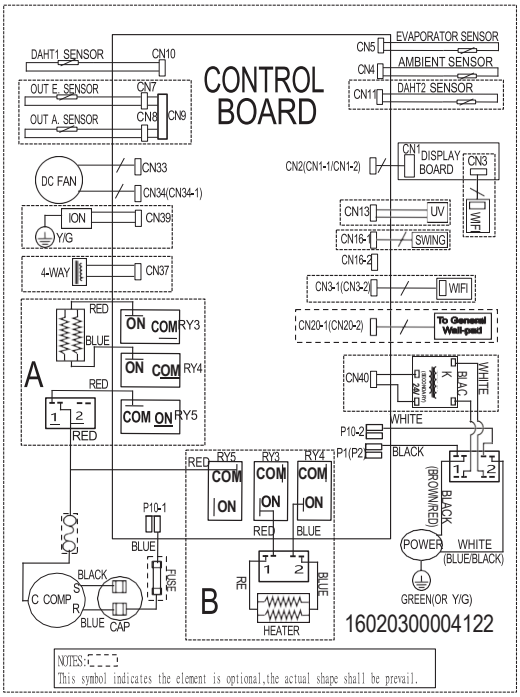
Non-duct connected appliances containing A2L refrigerants with the supply and return air openings in the conditioned space may have the body of the appliance may be installed in open areas such as false ceilings not being used as return air plenums, as long as the conditioned air does not directly communicate with the air of the false ceiling.

CAUTION:
Risk of fire flammable materials

IMPORTANT NOTE: Read this manual carefully before installing or operating your new air conditioning unit. Make sure to save this manual for future reference.

	CAUTION	This symbol shows that the operation manual should be read carefully.
	CAUTION	This symbol shows that information is available such as the operating manual or installation manual.
	CAUTION	This symbol shows that a service personnel should be handling this equipment with reference to the installation manual.

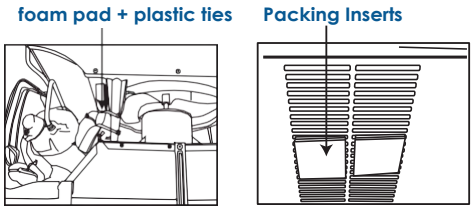
Wiring Diagram



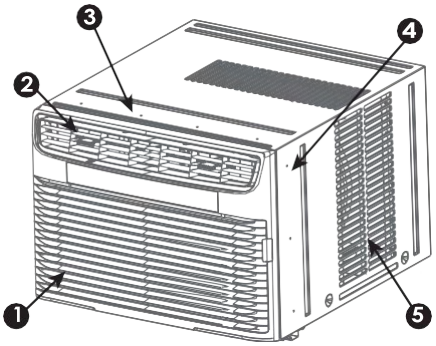
PACKAGING & NORMAL SOUNDS

Packaging

Remove all packaging from inside the carton, along with any inserts placed into the side louvers.
Remove the plastic ties and foam pad that secure the compressor to the fan shroud (where applicable). See diagram.



Normal Sounds



1 Gurgle/Hiss
"Gurgling or hissing" noise may be heard due to refrigerant passing through evaporator during normal operation.

2 Sound of Rushing Air
At the front of the unit, you may hear the sound of rushing air being moved by the fan.

3 High pitched Chatter
Today's high efficiency compressors may have a high pitched chatter during the cooling cycle.

4 Vibration
Unit may vibrate and make noise because of poor wall or window construction or incorrect installation.

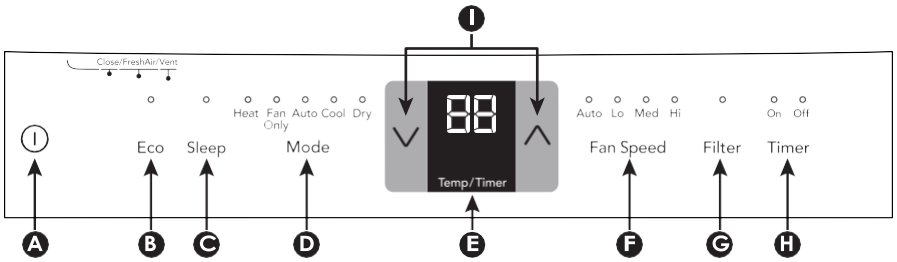
5 Pinging or Swishing
Droplets of water hitting condenser during normal operation may cause "pinging or swishing" sounds.
Note: Don't try to drill any holes on the base pan to eliminate the normal sounds, otherwise it will void the warranty.

AIR CONDITIONER FEATURES

Air Conditioner Features

ELECTRONIC CONTROL

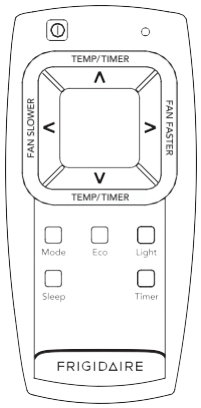
Before you begin, thoroughly familiarize yourself with the control panel, remote control and all its functions (as shown below). The unit can be controlled through the control panel or with the remote control.



A	Turns Unit On Or Off
B	Eco Feature
C	Sleep Feature
D	Sets Mode
E	Displays Temperature/time

F	Sets Fan Speed
G	Check Filter Reset Button
H	Activates Timer
I	Adjusts Temperature Or Time

REMOTE CONTROL



STANDARD REMOTE

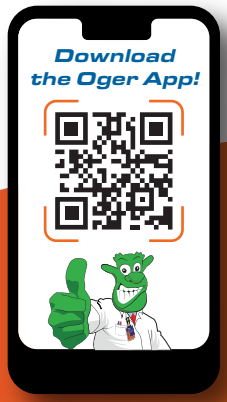
Light Feature:

The display and all LED indicators on the control panel of the unit can be turned off by pressing the "Light" button on the remote control. If any other button of the control panel and remote control is pressed after that, the unit will beep to indicate it works as the corresponding direction of pressing specific button, and the display and LED indicators will illuminate accordingly, but they will turn off again in 5 seconds if no further operation.

Press the "Light" button again or unplug the unit to cancel this setting.

Battery Size: AAA

Warning: Do not mix old and new batteries. Do not mix alkaline, standard (carbon-zinc), or rechargeable (nickel-cadmium) batteries. Caution for ingestion. Keep out of the reach of children.

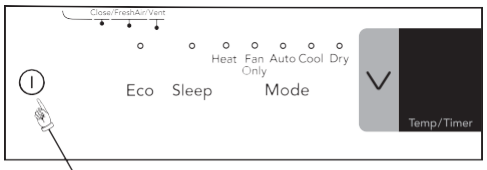


OPERATING INSTRUCTIONS

NOTE

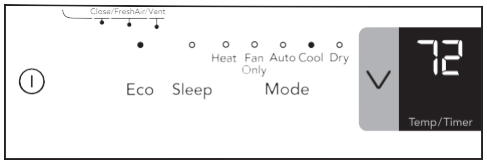
The following instructions are for the control panel. The same instructions can be used for the remote control.

TO TURN UNIT ON:



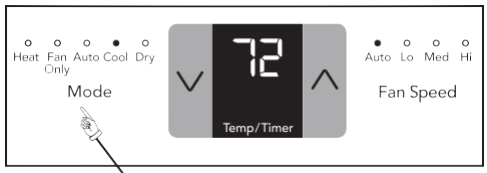
DO THIS:
PRESS ON/OFF BUTTON

YOU WILL SEE:



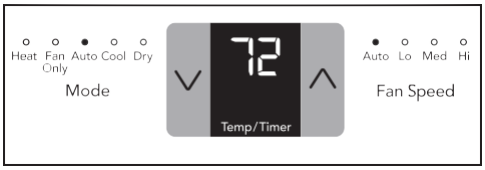
NOTE: The unit will run in Cool mode with Eco feature and Auto fan speed setting when used for the first time. With the Eco feature, when the room temperature is below the set temperature, the fan will continue to run for 3 minutes after the compressor shuts off. The fan then cycles on for 2 minutes at 10 minute intervals until the room temperature is above the set temperature, at which time the compressor turns back on. Eco feature can be activated or deactivated by pressing Eco button, but it is invalid in fan only mode.

AUTO FEATURE:



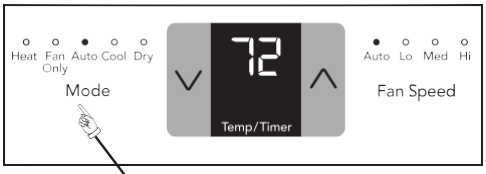
DO THIS:
PRESS MODE BUTTON
CHOOSE AUTO

YOU WILL SEE:



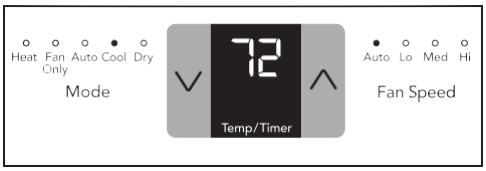
This mode is a fixed combination of Cool mode and Auto fan speed setting. In this mode, the fan speed can not be selected manually.

COOL FEATURE:



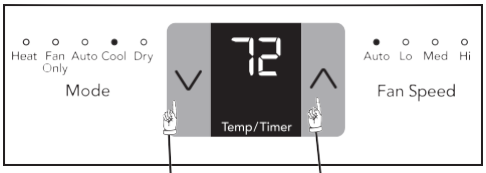
DO THIS:
PRESS MODE BUTTON
CHOOSE COOL

YOU WILL SEE:



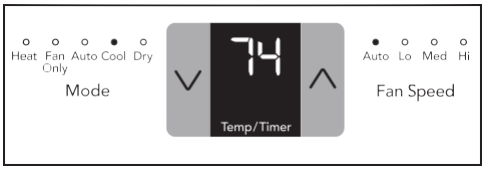
In this mode, the fan remains on all of the time with the compressor cycling on and off when the desired room temperature is reached.

TO CHANGE TEMPERATURE SETTING:



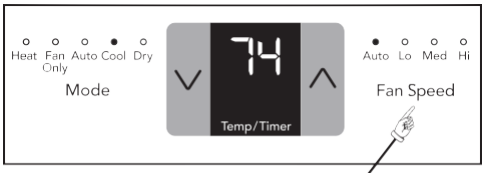
DO THIS:
PRESS ∧ TO RAISE
PRESS ∨ TO LOWER

YOU WILL SEE:



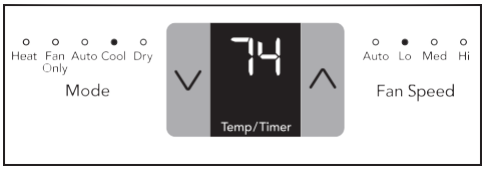
Tap or hold either up (∧) or down (∨) buttons until the desired temperature is seen on the display. This temperature will be automatically maintained anywhere between 62 °F (17 °C) and 86 °F (30 °C). If you want the display to read the actual room temperature. See "To Operate on Fan Only" section.

TO ADJUST FAN SPEEDS:



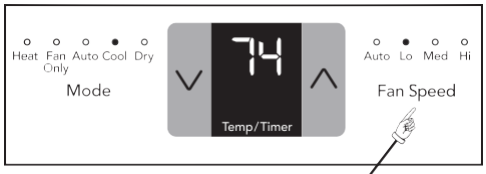
DO THIS:
PRESS TO SELECT

YOU WILL SEE:



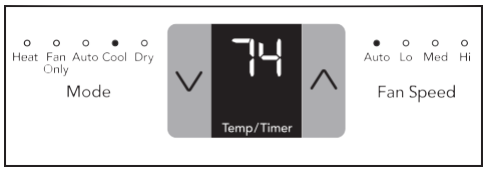
Note: The fan speed can be selected among four settings: Auto, Lo(Low), Med(Medium) and Hi(High), unless the unit runs in "Auto" or "Dry" mode, or the Sleep feature is activated.

TO USE AUTO FAN FEATURE:



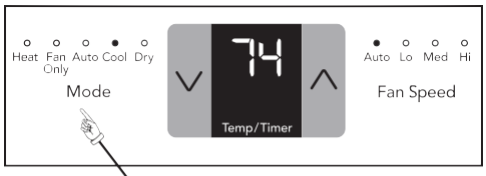
DO THIS:
PRESS FAN BUTTON,
CHOOSE AUTO

YOU WILL SEE:

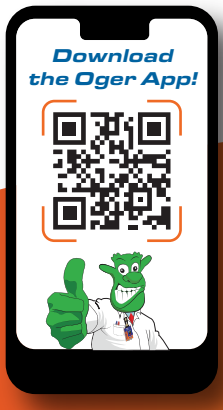


Fan starts at Low Speed and adjusts to a proper speed according to the room temperature dictates. For example, if the room doesn't get too warm, it will stay at the slowest speed. If the room temperature rises quickly, such as a door being opened, it will automatically go to the highest speed. The fan speeds will re-adjust back to the slowest speed as the room returns to the original set temperature.

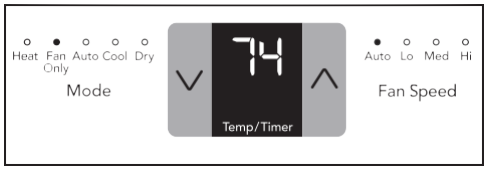
TO OPERATE ON FAN ONLY:



DO THIS:
PRESS MODE BUTTON
CHOOSE FAN ONLY



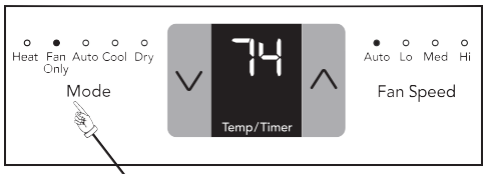
YOU WILL SEE:



Use this function only when cooling is not desired, such as for room air circulation or to exhaust stale air on some models. (Remember to open the vent during this function, but keep it closed during cooling for maximum cooling efficiency.) You can choose any fan speed you prefer.

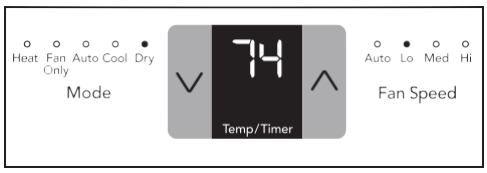
During this function, the display will show the actual room temperature, not the set temperature as in the cooling mode.

DRY MODE:



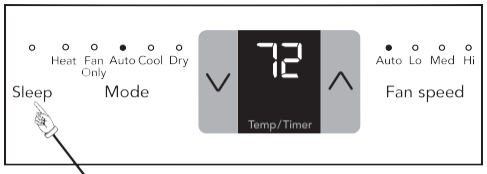
DO THIS:
PRESS MODE BUTTON
CHOOSE DRY

YOU WILL SEE:



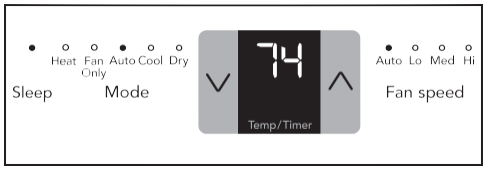
In this mode, the air conditioner will work like a dehumidifier, but will still cool the room. The temperature can be adjusted between 62 °F (17 °C) and 86 °F (30 °C) and the fan speed will be held at "Lo" speed.

SLEEP FEATURE:



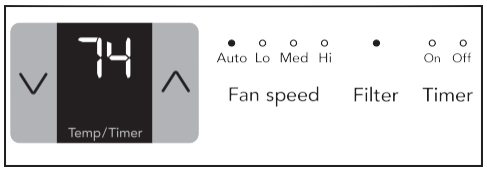
DO THIS:
PRESS SLEEP
BUTTON

YOU WILL SEE:

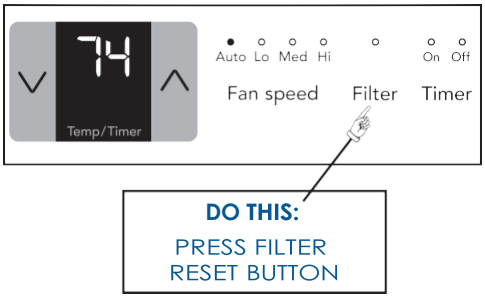


In this mode, the unit will automatically select the Auto fan speed, and the selected temperature will increase by 2 °F 30 minutes after sleep mode is selected. The temperature will then increase by another 2 °F after an additional 30 minutes. This new temperature will be maintained for 7 hours before it returns to the originally selected temperature. This ends the "Sleep" mode and the unit will continue to operate as originally programmed. The "Sleep" mode program can be cancelled at any time during operation by pressing the "Sleep" button, "Fan speed" or "Mode" button.

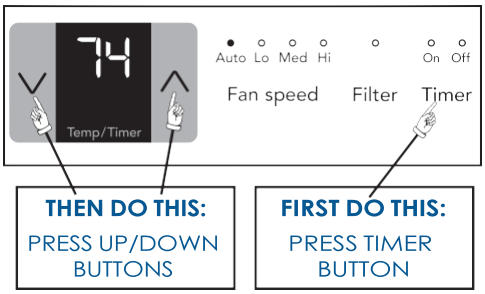
CHECK FILTER FEATURE, YOU WILL SEE:



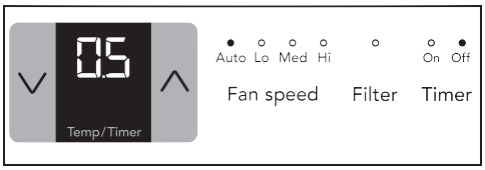
This feature is a reminder to clean the Air Filter (See Care and Cleaning) for more efficient operation. The LED (light) will illuminate after 250 hours of operation. To reset after cleaning the filter, press the "Filter Reset" button and the light will go off.



TIMER: DELAY STOP/START FEATURE:



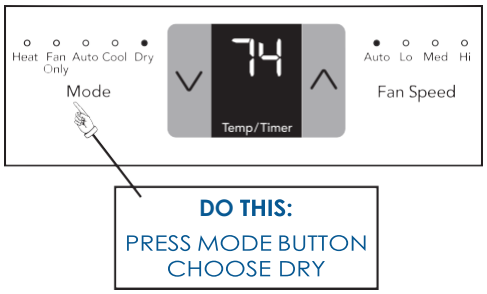
YOU WILL SEE HOW MUCH TIME IS CHOSEN:



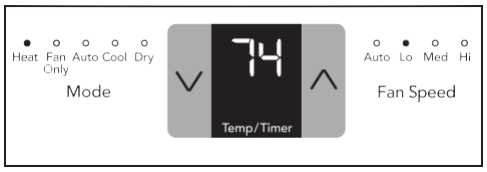
To delay stop(or start), press the Timer button when the unit is power-on(or power-off), then the "timer off" indicator(or "timer on" indicator) will illuminate. Then adjust timer setting, tap or hold the UP arrow (∧) or the DOWN arrow (∨) to change delay timer at 0.5 hour increments, up to 10 hours, then at 1 hour increments up to 24 hours. The setting will be confirmed automatically in 5 seconds, then the control will count down the time(8h, 7.5h, 7h, etc.) left, and all other settings will remain the same as they were before the timer setting is confirmed, until stop(or start).

Setting combination of "delay stop turn off delay start" or "delay start turn on, delay stop" is workable. Both "timer off" indicator and "timer on" indicator will illuminate then. The timer setting can be canceled by either pressing and holding the timer button for 2 seconds, or pressing the power on/off button at any time to turn off the unit directly.

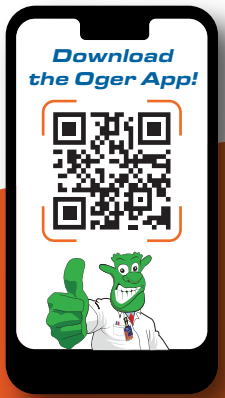
HEATING FEATURE:



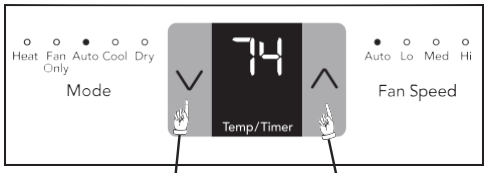
YOU WILL SEE:



Note: This feature can be used with any combination of FAN Speeds (Low speed only on 115V models), Timer, or Sleep Modes. When in the "Heat" mode, the fan will run continuously while heat is needed. The temperature will automatically be maintained anywhere between 62 °F(17 °C) and 86 °F(30 °C). When the room set temperature is satisfied, the fan will cycle off and on to circulate and sample the room air. Eco feature is invalid in heating mode.

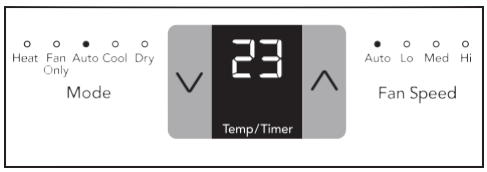


TO CHANGE TEMPERATURE DISPLAY:



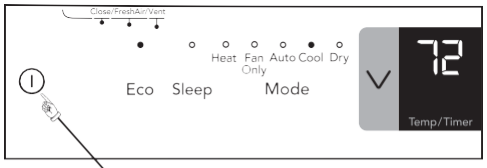
DO THIS:
PRESS AND HOLD THE UP/DOWN BUTTONS SIMULTANEOUSLY FOR 3 SECONDS

YOU WILL SEE:



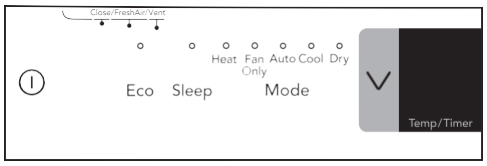
Your AC is capable of displaying temperature in degrees Fahrenheit or degrees Celsius.

TO TURN UNIT OFF:

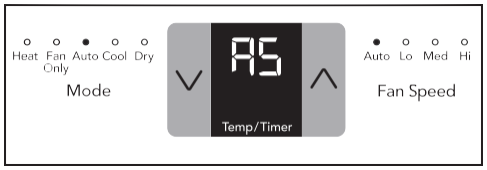


DO THIS:
PRESS ON/OFF BUTTON

YOU WILL SEE:



FAULT CODES:



If the display reads "HS", "AS", "ES", "CS" or "OS", a sensor has failed. Contact your Authorized Frigidaire Service Center.

ADDITIONAL THINGS YOU SHOULD KNOW

Now that you have mastered the operating procedure, here are more features in your control that you should become familiar with.

NOTE

The "Cool" circuit has an automatic 3 minute time delayed start if the unit is turned off and on quickly. This prevents overheating of the compressor and possible circuit breaker tripping. The fan will continue to run during this time.

- There is a 2-Second delay for the compressor shutting down when selecting FAN ONLY. This is to cover the possibility of having to roll through to select another mode.
- The control will maintain the set temperature within 2 degrees Fahrenheit, between 60°F and 90°F degrees.
- After a power outage, the unit will memorize the last setting and return the unit to the same setting once power is restored.
- The unit should be operated in an indoor temperature range of 60°F - 90°F (16°C - 32°C), and an outdoor temperature range of 64°F - 109°F (18°C - 43°C). Performance may be reduced outside of these operating temperatures.

Fresh Air Vent Control (on some models)

The Fresh Air Vent allows the air conditioner to:

1. Recirculate inside air - Vent Closed (see Fig. 1)
2. Draw fresh air into the room - Fresh Air (see Fig. 2)
3. Exchange air from the room - Vent Open (see Fig. 3)

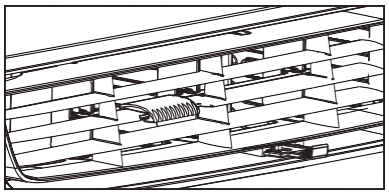


Figure 1 (VENT CLOSED)

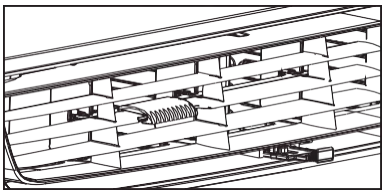


Figure 2 (FRESH AIR)

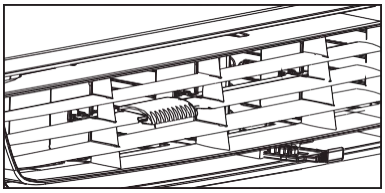


Figure 3 (VENT OPEN)

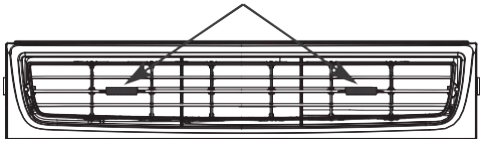
Air Directional Louvers

Air directional louvers control air flow direction. Your air conditioner has the louver type described below.

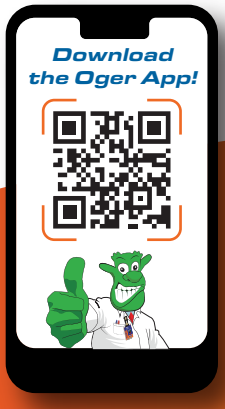
Slider Type

The louvers will allow you to direct the air flow Up or Down and Left or Right throughout the room as needed. Drag the adjuster tablet until the desired Left/Right direction is obtained. Pivot horizontal louvers until the desired Up/Down direction is obtained.

ADJUSTER TABLET



(6-WAY)



CARE AND CLEANING & ENERGY SAVING IDEAS

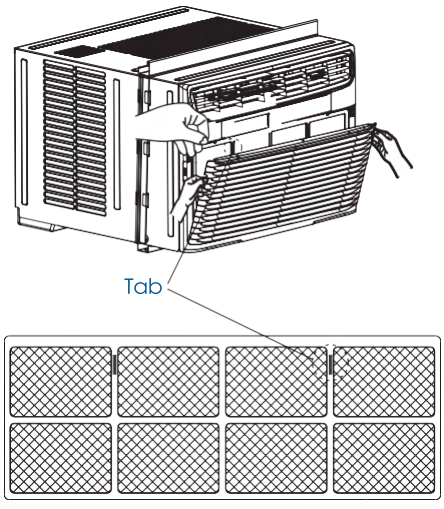
Clean your air conditioner occasionally to keep it looking new. **Be sure to unplug the unit before cleaning to prevent shock or fire hazards.**

Air Filter Cleaning

The air filter should be checked at least once a month to see if cleaning is necessary. Trapped particles in the filter can build up and cause an accumulation of frost on the cooling coils.

- Push the vent handle to the Vent Closed position(where applicable).
- Open the front panel.
- Grasp the filter by the center and pull up and out.
- Wash the filter using liquid dishwashing detergent and warm water. Rinse filter thoroughly. Gently shake excess water from the filter. Be sure filter is thoroughly dry before replacing.
- Or instead of washing, you may vacuum the filter clean.

NOTE: When replacing the air filter after cleaning, make sure the tabs on the air filter are on the upper part of filter, and placed outward as shown in the drawing on the left side.



Air Filter

Cabinet Cleaning

Be sure to unplug the air conditioner to prevent shock or fire hazard. The cabinet and front may be dusted with an oil-free cloth or washed with a cloth dampened in a solution of warm water and mild liquid dishwashing detergent. Rinse thoroughly and wipe dry.

- Never use harsh cleaners, wax or polish on the cabinet front.
- Be sure to wring excess water from cloth before wiping around the controls. Excess water in or around the controls may cause damage to the air conditioner.

Winter Storage

If you plan to store the air conditioner during the winter, remove it carefully from the window according to the installation instructions. Cover it with plastic or return it to the original carton.

Energy Saving Ideas

- **Do not block air flow inside with blinds, curtains or furniture; or outside with shrubs, enclosures, or other buildings.**
- The capacity of the room air conditioner must fit the room size for efficient and satisfactory operation.
- Install the room air conditioner on the shady side of your home. A window that faces north is best because it is shaded most of the day.
- Close the fireplace damper, floor and wall registers so cool air does not escape up the chimney and into the duct work.
- Keep blinds and drapes in other windows closed during the sunniest part of the day.
- Clean the air filter as recommended in the section "Care and Cleaning".
- Proper insulation and weather stripping in your home will help keep warm air out and cool air in.
- External house shading with trees, plants or awnings will help reduce the air conditioner's work load.
- Operate heat producing appliances such as ranges, washers, dryers and dishwashers during the coolest part of the day.

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FAMILY OF COMPANIES

Smoke Detector
063120

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USER'S MANUAL

SMOKE ALARM

10-YEAR SEALED BATTERY

Model SM210

IMPORTANT! PLEASE READ CAREFULLY AND SAVE.

The warnings/limitations card and manual contains important information about your Smoke Alarm's operation. If you are installing this Alarm for use by others, you must leave this manual—or a copy of it—with the end user.

Para el manual del usuario en español, por favor visite firstalert.com

01 INTRODUCTION

BASIC SAFETY INFORMATION

! WARNING!

- This unit will not alert hearing impaired residents. It is recommended that you install special units which use devices like flashing strobe lights to alert hearing impaired residents.
- Do not connect this unit to any other Alarm or auxiliary device. It is a single-station unit that cannot be linked to other devices. Connecting anything else to this unit may prevent it from working properly.
- Unit will not operate without battery power. The Smoke Alarm cannot work until you activate the battery power pack.

! CAUTION!

- Do not install this unit over an electrical junction box. Air currents around junction boxes can prevent smoke from reaching the sensing chamber and prevent the unit from Alarming. Only AC powered units are intended for installation over junction boxes.
- Do not stand too close to the unit when the Alarm is sounding. It is loud to wake you in an emergency. Exposure to the horn at close range may harm your hearing.
- Do not paint over the unit. Paint may clog the openings to the sensing chamber and prevent the unit from operating properly.

02 ABOUT SMOKE ALARMS

TYPES OF ALARMS

All these Smoke Alarms are designed to provide early warning of fires if located, installed and cared for as described in the user's manual, and if smoke reaches the Alarm. If you are unsure which type of unit to install, refer to NFPA (National Fire Protection Association) 72 (National Fire Alarm and Signaling Code) and NFPA 101 (Life Safety Code). National Fire Protection Association, One Batterymarch Park, Quincy, MA 02269-9101. Local building codes may also require specific units in new construction or in different areas of the home.

Battery (DC) operated Smoke Alarms: Provide protection even when electricity fails, provided the batteries are fresh and correctly installed. Units are easy to install, and do not require professional installation. They do not, however, provide interconnected functionality.

AC powered Smoke Alarms: Can be interconnected so if one unit senses smoke, all units Alarm. They do not operate if electricity fails.

AC with battery (DC) back-up: will operate if electricity fails, provided the batteries are fresh and correctly installed. AC and AC/DC units must be installed by a qualified electrician.

Smoke Alarms for Solar or wind energy users and battery backup power systems: AC powered Smoke Alarms should only be operated with true or pure sine wave inverters. Operating this Smoke Alarm with most battery powered UPS (uninterruptible power supply) products or square wave or "quasi sine wave" inverters **will damage the Alarm**. If you are not sure about your inverter or UPS type, please consult with the manufacturer to verify.

Smoke Alarms for the hearing impaired: Special purpose Smoke Alarms should be installed for the hearing impaired. They include a visual Alarm and an audible Alarm horn, and meet the requirements of the Americans with Disabilities Act. These units can be interconnected so if one unit senses smoke, all units Alarm.

Smoke Alarms are not to be used with detector guards unless the combination has been evaluated and found suitable for that purpose.

All First Alert® Smoke Alarms conform to regulatory requirements, including UL217 and are designed to detect particles of combustion. Smoke particles of varying number and size are produced in all fires.

Ionization technology is generally more sensitive than photoelectric technology at detecting small particles, which tend to be produced in greater amounts by flaming fires, which consume combustible materials rapidly and spread quickly. Sources of these fires may include paper burning in a wastebasket, or a grease fire in the kitchen.

Photoelectric technology is generally more sensitive than ionization technology at detecting large particles, which tend to be produced in greater amounts by smoldering fires, which may smolder for hours before bursting into flame. Sources of these fires may include cigarettes burning in couches or bedding.

For maximum protection, use both types of Smoke Alarms on each level and in every bedroom of your home.

03 INSTALLATION

BEFORE YOU INSTALL THIS SMOKE ALARM

Important! Read "Recommended Locations for Smoke Alarms" and "Locations to Avoid for Smoke Alarms" before beginning. This unit monitors the air, and when smoke reaches its sensing chamber, it Alarms. It can give you more time to escape before fire spreads. This unit can ONLY give an early warning of developing fires if it is installed, maintained and located where smoke can reach it, and where all residents can hear it, as described in this manual. This unit will not sense gas, heat, or flame. It cannot prevent or extinguish fires.

Understand The Different Type of Smoke Alarms: Battery powered or electrical? Different Smoke Alarms provide different types of protection. See "About Smoke Alarms" for details.

Know Where To Install Your Smoke Alarms: Fire Safety Professionals recommend at least one Smoke Alarm on every level of your home, in every bedroom, and in every bedroom hallway or separate sleeping area. See "Recommended Locations for Smoke Alarms" and "Locations to Avoid for Smoke Alarms" for details.

Know What Smoke Alarms Can and Can't Do: A Smoke Alarm can help alert you to fire, giving you precious time to escape. It can only sound an Alarm once smoke reaches the sensor. See "Limitations of Smoke Alarms" for details.

Check Your Local Building Codes: This Smoke Alarm is designed to be used in a typical single family home. It alone will not meet requirements for boarding houses, apartment buildings, hotels or motels. See "Special Compliance Considerations" for details.

WHERE TO INSTALL THIS ALARM

- On every level of your home, including finished attics and basements.
- Inside every bedroom, especially if people sleep with doors closed.
- In the hall near every sleeping area. If your home has multiple sleeping areas, install a unit in each. If a hall is over 40 feet (12 meters) long, install an Alarm at each end.
- At the top of the first-to-second level stairway, and at bottom of basement stairway.

RECOMMENDED PLACEMENT:

Smoke Alarm
One on every level and in every bedroom

Carbon Monoxide Alarm
One on every level and in every bedroom

Fire Extinguisher
One on every level, plus kitchen and garage

WHERE NOT TO INSTALL THIS ALARM

FOR BEST PERFORMANCE, IT IS RECOMMENDED YOU AVOID INSTALLING SMOKE ALARMS IN THESE AREAS:

- Where combustion particles are produced. Combustion particles form when something burns. Areas to avoid include poorly ventilated kitchens, garages, and furnace rooms. Keep units at least 20 feet (6 meters) from the sources of combustion particles (stove, furnace, water heater, space heater) if possible. In areas where a 20-foot (6-meter) distance is not possible – in modular, mobile, or smaller homes, for example – it is recommended the Smoke Alarm be placed as far from these fuel-burning sources as possible. The placement recommendations are intended to keep these Alarms at a reasonable distance from a fuel-burning source, and thus reduce "unwanted" Alarms. Unwanted Alarms can occur if a Smoke Alarm is placed directly next to a fuel-burning source. Ventilate these areas as much as possible.
- In air streams near kitchens. Air currents can draw cooking smoke into the sensing chamber of a Smoke Alarm near the kitchen.
- In very damp, humid or steamy areas, or directly near bathrooms with showers. Keep units at least 10 feet (3 meters) away from showers, saunas, dishwashers, etc.
- Where the temperatures are regularly below 40˚ F (4.4˚ C) or above 100˚ F (37.8˚ C), including unheated buildings, outdoor rooms, porches, or unfinished attics or basements.
- In very dusty, dirty, or greasy areas. Do not install a Smoke Alarm directly over the stove or range. Keep laundry room Smoke Alarms free of dust or lint.
- Near fresh air vents, ceiling fans, or in very drafty areas. Drafts can blow smoke away from the unit, preventing it from reaching the sensing chamber.
- In insect infested areas. Insects can clog openings to the sensing chamber and cause unwanted Alarms.
- Less than 12 inches (305mm) away from fluorescent lights. Electrical "noise" can interfere with the sensor.
- In "dead air" spaces. "Dead air" spaces may prevent smoke from reaching the Smoke Alarm.

AVOIDING DEAD AIR SPACES

"Dead air" spaces may prevent smoke from reaching the Smoke Alarm. To avoid dead air spaces, follow the installation recommendations below.

On ceilings, install Smoke Alarms as close to the center of the ceiling as possible. If this is not possible, install the Smoke Alarm at least 4 inches (102 mm) from the wall or corner.

For wall mounting (if allowed by building codes), the top edge of Smoke Alarms should be placed between 4 inches (102 mm) and 12 inches (305 mm) from the wall/ceiling line, below typical "dead air" spaces.

On a peaked, gabled, or cathedral ceiling, install the first Smoke Alarm within 3 feet (0.9 meters) of the peak of the ceiling, measured horizontally. Additional Smoke Alarms may be required depending on the length, angle, etc. of the ceiling's slope. Refer to NFPA 72 for details on requirements for sloped or peaked ceilings.

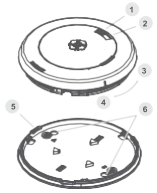
HOW TO INSTALL THIS ALARM

This unit is designed to be mounted on the ceiling, or on the wall if necessary.

Tools you will need: pencil, drill with 3/16" (5 mm) drill bit, standard flathead screwdriver, hammer.

THE PARTS OF THIS SMOKE ALARM

1. Test/Silence button
2. Dual power indicator light and Alarm indicator: Green LED provides visual indication of an Alarm memory condition; Red LED provides visual indication of an Alarm and hush modes
3. Turn this way to remove
4. Turn this way to attach
5. Mounting bracket
6. Mounting slots



FOLLOW THESE SIMPLE STEPS

1. Choose a location. See "Where to Install This Alarm" for reference.
   WARNING! Do not install this Alarm over an existing electrical box. Only AC powered units are intended for installation over electrical boxes.
2. Mark hole locations 4-1/4" apart. Use the mounting bracket to verify the hole mark locations are accurately spaced. If mounting on the wall, holes must be aligned horizontally to ensure Alarm is mounted upright. Put the Alarm where it won't get covered with dust while you drill the holes.
3. Use a 3/16" (5mm) drill bit to drill through the marks you made for the mounting holes.
4. Insert the plastic screw anchors (in the plastic bag with the screws) into the holes. Tap the screw anchors gently with a hammer, if necessary, until they are flush with the ceiling or wall.
5. Insert the screws but do not tighten completely. Leave them about 1/4" (6mm) away from the wall. Attach the mounting bracket to the wall or ceiling by aligning the round part of the slots with the screws. To mount on a wall, align the hole marked A with the left screw. Rotate the bracket until the screws are completely inside the raised portion of the circular recesses (see image). Once the screws are completely inside the raised portion of the circular recesses, tighten the screws until they are snug to secure the bracket. Do not over-tighten the screws.

Mounting Hole Sets

6. Activating the battery. Mount Alarm to mounting bracket to activate. Alarm will be oriented as shown. Once unit is activated, it cannot be turned off. Make sure the Alarm is locked into the mounting bracket.
   NOTE: After you activate the battery, there may be Power and LED activation indicators.
7. Test the Alarm. See "Weekly Testing."

Action	What You Will See & Hear
Under Normal Operations	**Horn:** Silent; **Power LED:** Flashes green once a minute
When You Test the Alarm	**Horn:** A short "chirp" and then 3 beeps, pause, 3 beeps
If Battery Becomes Low	**Horn:** 5 chirps every minute; **Power LED:** One green flash approximately once a minute
If Alarm is Not Operating Properly	**Horn:** 3 chirps every minute; **Power LED:** Three green flashes approximately once a minute
Alarm has reached End of Life	**Horn:** 5 chirps every minute; **Power LED:** Five green flashes approximately once a minute
Smoke is Detected	**Horn:** 3 beeps, pause, 3 beeps; **Power LED:** Flashes red
Smoke Alarm is Silenced	**Horn:** Off; **Power LED:** Flashes red

04 ALARM FEATURES

- **No Battery Replacements:** Or low battery chirps for the life of the Alarm.
- **Easy Installation:** Add protection in minutes.
- **End-of-Life Warning:** Let's you know when it's time to replace.

OPTIONAL LOCKING FEATURE

The optional locking feature is designed to prevent unauthorized removal of the Alarm. It is not necessary to activate the lock in single-family households where unauthorized Alarm removal is not a concern.

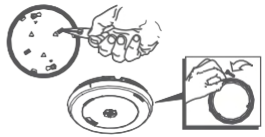
Tools you will need: Needle-nose pliers or utility knife, standard flathead screwdriver

The feature uses a locking pin which is molded into the mounting bracket. Remove locking pin by using needle-nose pliers or a utility knife.

IMPORTANT!
To permanently remove the locking pin, insert a flathead screwdriver between the locking pin and the lock and pry the pin out of the lock.

TO LOCK THE MOUNTING BRACKET

1. Using needle-nose pliers, detach the pin from the mounting bracket.
2. Insert the locking pin through the hole on the back of the Smoke Alarm as shown in the diagram.
3. When you attach the Alarm to the mounting bracket the locking pin's head will fit into a notch on the bracket.

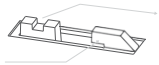


TO UNLOCK THE MOUNTING BRACKET

1. Insert a flathead screwdriver in between the mounting bracket and the locking pin.
2. Pry the Alarm away from the bracket by pushing up the screwdriver and turning the Alarm counterclockwise (left) at the same time.

HOW TO PERMANENTLY DEACTIVATE THE SMOKE ALARM

After Malfunction, 10 years of Operation Low Battery or End of Life Warnings, deactivate the Alarm: Insert a tool below edge where shown and break tab.



Then slide activation switch to deactivate mode.

NOTE: At end of life (chirp): unit must be put into deactivation mode to deactivate remaining stored energy in battery. Unit will no longer function once put into this mode. Unit will resist re-mounting.

05 TESTING & MAINTENANCE

WEEKLY TESTING

! WARNING!

- **NEVER** use an open flame of any kind to test this unit. You might accidentally damage or set fire to the unit or to your home.
- If the Alarm ever fails to test properly, replace it immediately. Products under warranty may be returned to the manufacturer for replacement. See "Limited Warranty" for details.
- **DO NOT** stand close to the Alarm when the horn is sounding. Exposure at close range may be harmful to your hearing. When testing, step away when horn starts sounding.

! CAUTION!

It is important to test this unit every week to make sure it is working properly. Using the Test/Silence button is the recommended way to test this Smoke Alarm. Press and hold the Test/Silence button on the cover of the unit until the Alarm sounds (the unit may continue to Alarm for a few seconds after you release the button). If it does not Alarm, make sure the unit is receiving power and test it again. If it still does not Alarm, replace it immediately. During testing you will hear a loud, repeating horn pattern: 3 beeps, pause, 3 beeps, pause. Red LED flashes rapidly.

REGULAR MAINTENANCE

This unit has been designed to be as maintenance free as possible, but there are a few simple things you must do to keep it working properly.

- Test it at least once a week.
- Clean the Smoke Alarm at least once a month; gently vacuum off any dust using your household vacuum's soft brush attachment, and test the Smoke Alarm after cleaning. Never use water, cleaners or solvents since they may damage the unit.
- If the Smoke Alarm becomes contaminated by excessive dirt, dust and/or grime, and cannot be cleaned to avoid unwanted Alarms, replace the unit immediately.
- If the green power LED flashes 2 times every minute (horn is silent) it means that the Alarm needs to be cleaned as indicated above. If green light continues to flash, replace Alarm.
- Relocate the unit if it sounds frequent unwanted Alarms. See "Locations to Avoid for Smoke Alarms" for details.
- Protect or cover the alarm when doing any maintenance to home i.e. sanding floors, painting, drywall patching, etc. to prevent contamination.

IMPORTANT!

Actual service life depends on the Smoke Alarm and the environment in which it is installed. You **MUST** replace the Smoke Alarm immediately once the unit starts "chirping" (the End of Life or Malfunction warning).

TROUBLESHOOTING GUIDE

IF THE ALARM...	PROBLEM...	YOU SHOULD...
Horn sounds 3 "chirps" every minute.	**MALFUNCTION SIGNAL.** Device is not working properly, and needs to be replaced.	If unit is under warranty, contact Consumer Support to process a warranty replacement.
Horn sounds 5 chirps every minute; **LED** has one Green flash approx every minute.	Low Battery Signal, Alarm needs to be replaced.	Immediately replace the Alarm.
The **light** flashes GREEN and the **horn** sounds 5 "chirps" every minute.	**END OF LIFE SIGNAL.** Alarm needs to be replaced.	Immediately replace the Alarm.
Smoke Alarm sounds when no smoke is visible.	Unwanted Alarm may be caused by nonemergency source like cooking smoke.	Silence Alarm using Test/Silence button; clean the Alarm's cover with a soft, clean cloth. If frequent unwanted Alarms continue, relocate your Alarm. Alarm may be too close to a kitchen, cooking appliance, or steamy bathroom.
Power LED flashes Green 2 times every minute.	Alarm requires cleaning.	Clean Alarm then press and release the test button. See Regular Maintenance section. If Green LED Continues to flash, contact Consumer Support.

If you have questions that cannot be answered by reading this manual, call the Consumer Support Team at 1-800-323-9005

FIRE SAFETY TIPS

Follow safety rules and prevent hazardous situations: 1) Use smoking materials properly. Never smoke in bed. 2) Keep matches or lighters away from children; 3) Store flammable materials in proper containers; 4) Keep electrical appliances in good condition and don't overload electrical circuits; 5) Keep stoves, barbecue grills, fireplaces and chimneys grease- and debris-free; 6) Never leave anything cooking on the stove unattended, 7) Keep portable heaters and open flames, like candles, away from flammable materials; 8) Don't let rubbish accumulate. Keep Alarms clean, and test them weekly. Replace Alarms immediately if they are not working properly. Smoke Alarms that do not work cannot alert you to a fire. Keep at least one working fire extinguisher on every level, and an additional one in the kitchen. Have fire escape ladders or other reliable means of escape from an upper level in case stairs are blocked; 9) Have an escape plan and practice it regularly.

06 IF THIS SMOKE ALARM SOUNDS

RESPONDING TO AN ALARM

During an Alarm, you will hear a loud, repeating horn pattern: 3 beeps, pause, 3 beeps, pause. The Red LED flashes rapidly.

! WARNING!

- If the unit Alarms get everyone out of the house immediately.
- If the unit Alarms and you are not testing the unit, it is warning you of a potentially dangerous situation that requires your immediate attention. **NEVER** ignore any Alarm. Ignoring the Alarm may result in injury or death.
- Never remove the batteries from a battery operated Smoke Alarm to stop an unwanted Alarm (caused by cooking smoke, etc.). Removing batteries disables the Alarm so it cannot sense smoke, and removes your protection. Instead open a window or fan the smoke away from the unit. The Alarm will reset automatically.

WHAT TO DO IN CASE OF FIRE

- Don't panic; stay calm. Follow your family escape plan.
- Get out of the house as quickly as possible. Don't stop to get dressed or collect anything.
- Feel doors with the back of your hand before opening them. If a door is cool, open it slowly. Don't open a hot door. Keep doors and windows closed, unless you must escape through them.
- Cover your nose and mouth with a cloth (preferably damp). Take short, shallow breaths.
- Meet at your planned meeting place outside your home, and do a head count to make sure everybody got out safely.
- Call the Fire Department as soon as possible from outside. Give your address, then your name.
- Never go back inside a burning building for any reason.
- Contact your Fire Department for ideas on making your home safer.

! WARNING!

Alarms have various limitations. See "General Limitations of Smoke Alarms" for details.

07 USING THE SILENCE FEATURES

The Silence Feature can temporarily quiet an unwanted Alarm for up to 9 minutes. To use this feature, press the Test/Silence button on the cover. If the unit will not silence and no heavy smoke is present, or if it stays in silence mode continuously, it should be replaced immediately. The LED will flash every 10 seconds while in silence.

! WARNING!

The Silence Feature does not disable the unit—it makes it temporarily less sensitive to smoke. For your safety, if smoke around the unit is dense enough to suggest a potentially dangerous situation, the unit will stay in Alarm or may re-Alarm quickly. If you do not know the source of the smoke, do not assume it is an unwanted Alarm. Not responding to an Alarm can result in property loss, injury, or death.

SILENCING THE LOW BATTERY WARNING

This Silence Feature can temporarily quiet the Low Battery Warning "chirp". Press the Test/Silence button on the Alarm. The Red light flashes normally, once every 6 minutes, during Low Battery Warning silence. After time, the low battery "chirp" will resume. Deactivate the Smoke Alarm and replace it immediately.

IF YOU SUSPECT A PROBLEM

Smoke Alarms may not operate properly because of a dead or weak battery, a build-up of dirt, dust or grease on the Smoke Alarm cover, or installation in an improper location. Clean the Smoke Alarm as described in "Regular Maintenance," and then test the Smoke Alarm again. If it fails to test properly when you use the test button, or if the problem persists, replace the Smoke Alarm immediately.

- If you hear 3 or 5 chirps every minute or so, replace the Smoke Alarm.
- If you experience frequent non-emergency Alarms (like those caused by cooking smoke), try relocating the Smoke Alarm.
- If the Alarm sounds when no smoke is visible, try cleaning or relocating the Smoke Alarm. The cover may be dirty.
- If the Alarm does not sound during testing, make sure the power pack activating lever is pushed all the way securely.

Do not try fixing the Alarm yourself — this will void your warranty!

If the Smoke Alarm is still not operating properly, and it is still under warranty, please see "How to Obtain Warranty Service" in the Limited Warranty.

08 REGULATORY INFORMATION FOR SMOKE ALARMS

RECOMMENDED LOCATIONS FOR SMOKE ALARMS

INSTALLING SMOKE ALARMS IN SINGLE-FAMILY RESIDENCES

The National Fire Protection Association (NFPA), recommends one Smoke Alarm on every level, in every sleeping area, and in every bedroom. In new construction, the Smoke Alarms must be AC powered and interconnected. See "Agency Placement Recommendations" for details. For additional coverage, it is recommended that you install a Smoke Alarm in all rooms, halls, storage areas, finished attics, and basements, where temperatures normally remain between 40˚ F (4.4˚ C) and 100˚ F (37.8˚ C). Make sure no door or other obstruction could keep smoke from reaching the Smoke Alarms.

MORE SPECIFICALLY, INSTALL SMOKE ALARMS:

- On every level of your home, including finished attics and basements.
- Inside every bedroom, especially if people sleep with doors closed.
- In the hall near every sleeping area. If your home has multiple sleeping areas, install a unit in each.
- If a hall is over 40 feet (12 meters) long, install an Alarm at each end.
- At the top of the first-to-second level stairway, and at bottom of basement stairway.

IMPORTANT!

Specific requirements for Smoke Alarm installation vary from state to state and from region to region. Check with your local Fire Department for current requirements in your area. **It is recommended AC or AC/DC units be interconnected for added protection.**

09 AGENCY PLACEMENT RECOMMENDATIONS

NFPA 72 CHAPTER 29 "FOR YOUR INFORMATION, THE NATIONAL FIRE ALARM AND SIGNALING CODE, NFPA 72, READS AS FOLLOWS:"

29.5.1 * Required Detection.

29.5.1.1 * Where required by other governing laws, codes, or standards for a specific type of occupancy, approved single and multiple-station Smoke Alarms shall be installed as follows:

1. *In all sleeping rooms and guest rooms
2. *Outside of each separate dwelling unit sleeping area, within 21 ft (6.4 m) of any door to a sleeping room, with the distance measured along a path of travel
3. On every level of a dwelling unit, including basements
4. On every level of a residential board and care occupancy (small facility), including basements and excluding crawl spaces and unfinished attics
5. *In the living area(s) of a guest suite
6. In the living area(s) of a residential board and care occupancy (small facility)

CALIFORNIA STATE FIRE MARSHAL (CSFM)

Early warning detection is best achieved by the installation of fire detection equipment in all rooms and areas of the household as follows: A Smoke Alarm installed in each separate sleeping area (in the vicinity, but outside bedrooms), and Heat or Smoke Alarms in the living rooms, dining rooms, bedrooms, kitchens, hallways, finished attics, furnace rooms, closets, utility and storage rooms, basements, and attached garages.

10 SPECIAL COMPLIANCE CONSIDERATIONS

This Smoke Alarm is suitable for use in apartments, condominiums, townhouses, hospitals, day care facilities, health care facilities, boarding houses, group homes and dormitories provided a primary fire detection system already exists to meet fire detection requirements in common areas like lobbies, hallways, or porches. Using this Smoke Alarm in common areas may not provide sufficient warning to all residents or meet local fire protection ordinances/regulations.

This Smoke Alarm alone is not a suitable substitute for complete fire detection systems in places housing many people—like apartment buildings, condominiums, hotels, motels, dormitories, hospitals, health care facilities, nursing homes, day care facilities, or group homes of any kind. It is not a suitable substitute for complete fire detection systems in warehouses, industrial facilities, commercial buildings, and special-purpose non-residential buildings which require special fire detection and Alarm systems. Depending on the building codes in your area, this Smoke Alarm may be used to provide additional protection in these facilities.

In new construction, most building codes require the use of AC or AC/DC powered Smoke Alarms only. In existing construction, AC, AC/DC, or DC powered Smoke Alarms can be used as specified by local building codes. THIS EQUIPMENT SHOULD BE INSTALLED IN ACCORDANCE WITH THE NATIONAL FIRE PROTECTION ASSOCIATION'S STANDARD 72 (National Fire Protection Association, Batterymarch Park, Quincy, MA 02269). Refer to NFPA 101 (Life Safety Code), local building codes, or consult your Fire Department for detailed fire protection requirements in buildings not defined as "households".

11 GENERAL LIMITATIONS OF SMOKE ALARMS

Smoke Alarms have played a key role in reducing deaths resulting from home fires worldwide. However, like any warning device, Smoke Alarms can only work if they are properly located, installed, and maintained, and if smoke reaches them. They are not foolproof.

Smoke Alarms may not waken all individuals. Practice the escape plan at least twice a year, making sure that everyone is involved – from kids to grandparents. Allow children to master fire escape planning and practice before holding a fire drill at night when they are sleeping. If children or others do not readily waken to the sound of the Smoke Alarm, or if there are infants or family members with mobility limitations, make sure that someone is assigned to assist them in fire drill and in the event of an emergency. It is recommended that you hold a fire drill while family members are sleeping in order to determine their response to the sound of the Smoke Alarm while sleeping and to determine whether they may need assistance in the event of an emergency.

Smoke Alarms cannot work without power. Battery operated units cannot work if the batteries are missing, disconnected or dead, if the wrong type of batteries are used, or if the batteries are not installed correctly. AC units cannot work if the AC power is cut off for any reason (open fuse or circuit breaker, failure along a power line or at a power station, electrical fire that burns the electrical wires, etc.). If you are concerned about the limitations of battery or AC power, install both types of units.

Smoke Alarms cannot detect fires if the smoke does not reach the Alarms. Smoke from fires in chimneys or walls, on roofs, or on the other side of closed doors may not reach the sensing chamber and set off the Alarm. That is why one unit should be installed inside each bedroom or sleeping area—especially if bedroom or sleeping area doors are closed at night—and in the hallway between them.

Smoke Alarms may not detect fire on another level or area of the home. For example, a stand-alone unit on the second level may not detect smoke from a basement fire until the fire spreads. This may not give you enough time to escape safely. That is why recommended minimum protection is at least one unit in every sleeping area, and every bedroom on every level of your home. Even with a unit on every level, stand-alone units may not provide as much protection as interconnected units, especially if the fire starts in a remote area. Some safety experts recommend installing interconnected AC powered units with battery back-up (see "About Smoke Alarms") or professional fire detection systems, so if one unit senses smoke, all units Alarm. Interconnected units may provide earlier warning than stand-alone units since all units Alarm when one detects smoke.

Smoke Alarms may not be heard. Though the Alarm horn in this unit meets or exceeds current standards, it may not be heard if: 1) the unit is located outside a closed or partially closed door, 2) residents recently consumed alcohol or drugs, 3) the Alarm is drowned out by noise from stereo, TV, traffic, air conditioner or other appliances, 4) residents are hearing impaired or sound sleepers. Special purpose units, like those with visual and audible Alarms, should be installed for hearing impaired residents.

The Alarm may not have time to Alarm before the fire itself causes damage, injury, or death, since smoke from some fires may not reach the unit immediately. Examples of this include persons smoking in bed, children playing with matches, when a person's clothing catches fire while cooking, fires caused by violent explosions resulting from escaping gas, or incendiary fires where the fire grows so rapidly that an occupant's egress is blocked even with properly located Smoke Alarms.

Smoke Alarms are not foolproof. Like any electronic device, Smoke Alarms are made of components that can wear out or fail at any time. You must test the unit weekly to ensure your continued protection. Smoke Alarms cannot prevent or extinguish fires. They are not a substitute for property or life insurance.

Smoke Alarms have a limited life. The unit should be replaced immediately if it is not operating properly. You should always replace a Smoke Alarm after 10 years from date of purchase. Write the purchase date on the space provided on back of unit.

For your records, please record:

Date Purchased: _____

Where Purchased: _____

Date Installed: _____/_____Month/Year

Replace Alarm 10 years after installation.

Please write the date in the space provided:

_____/_____Month/Year

The Alarm will also provide an audible End-of-Life Signal approximately 10 years after installation to remind you to replace the unit.

The End-of-Life Signal can be silenced for up to 2 days. Do not unplug or deactivate the Alarm until you get replacement.

GMS INDUSTRIAL SUPPLY
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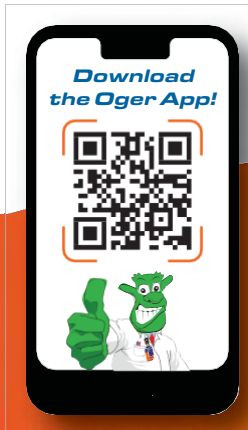
Generator Connection Guide

Certified or Designated Electrician Required

1. *Read data plate or label on container for power requirements.*
2. *Acquire generator that meets supply demands. Recommended power is listed on next page. Make sure to use data to your containers model.*
3. *Acquire 3' female generator cord provided with container. (female connector and bare end)* ***DO NOT CONNECT****, set aside.*

1. *After acquiring the correct generator use the following steps.*
   - *Set generator to 120/208 3PH.*
   - *Turn generator on.*
   - *Use a voltmeter to locate short leg. Short leg is 120V neutral to line.*
   - *Use ground or neutral for lead #1.*
   - *With the second lead, place on L1, L2, L3 to determine the two short legs (120V) and high leg (208V).*
   - *Short leg will read 110-120V (ground or neutral – L?)*
   - *High leg will read 208-220V (ground or neutral -L?)*
   - *You will use the 2 short legs* ***ONLY****; high leg will be eliminated from use. When using 3 phase generators.*
   - *Test the two legs with one lead on each leg, combined voltage should be 230- 240V.*
   - *If the voltage is not 230-240V, adjust voltage on generator.*
5. *Once the voltage is set to listed requirements, turn off the generator.*
6. *Wire female generator cord to generator using previously identified legs.*
   - *Green to ground, White to neutral, Black to short leg 1, Red to short leg 2*
7. *Make sure wires are secured, then turn on generator.*
8. *Test voltage again.*
   - *Ground/ Neutral to L? = 120*
   - *L? to L? (short legs) = 230-240V*
9. *Make sure ALL circuit breakers are off in container.*
10. *Locate 27' cord provided with container.*
11. *Connect container to generator using cord.*
12. *Turn on 100amp circuit breaker.*
13. *Turn on the remaining circuit breakers one by one.*
14. *You are ready to operate.*

Our equipment highest voltage is 240V,* ***NEVER EXCEED* *240V on combined legs**



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Certified or Designated Electrician Required

Battery/ Office Container Generator Recommended

AP#	1 Phase	3 Phase	Max Voltage
AP104016	15KW	20KW	120/240
AP1000096A	15KW	20KW	120/240

Nitrogen Container Generator Recommended

AP#	1 Phase	3 Phase	Max Voltage
AP1001250	20KW	30KW	120/240

Motor Pool Container Generator Recommended

AP#	1 Phase	3 Phase	Max Voltage
AP1000097A	15KW	20KW	120/240

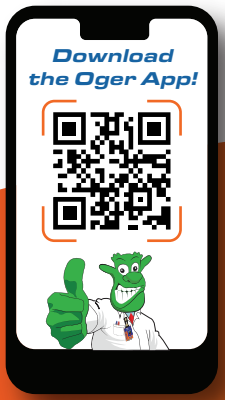
Max Voltage on each leg should NOT EXCEED 120V.

- *When using a 3-phase generator, high leg (208V) will NOT be used, ONLY both short legs*
- *(120V max)*

**Short leg is 120V read on voltage meter when you put one lead on neutral and one lead on a line.*

- *You can use a higher KW generator BUT note you will wet stack.*

**Wet Stack- Unused diesel fuel, accumulated moisture and carbon particles gather in the exhaust of your generator.*



American Patriot proudly offers a minimum 1-year parts and service warranty on every product that we sell. We also offer multiple items in our catalog that exceed the standard 1-year warranty. This ranges anywhere from 2-5 year durations. American Patriot upholds customer satisfaction to the highest priority and backs every item sold. Even in the event that the items are out of their warranty period or not covered, American Patriot will assess the customer needs on a case-by-case basis in order to attain the most effective option for the customer. We have worked with customers in the past that have had various limitations such as inaccessible funds for repair or replacement, inability to ship items, or even just troubleshooting assistance.

At American Patriot we pride ourselves in having customers that buy from us during their entire military career. We do this by going above and beyond just meeting the needs of our customers - including our trouble-free warranty.

Rachel Gorken, Owner/President