

Window-Type Air Conditioner Owner's Manual

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≥ *I* **FOR YOUR RECORDS**

Write the model and serial numbers here:

Model

Serial #

You can find them on a label on the side of each unit.

Dealer's Name

Date Purchased

Staple your receipt to this page in the event you need it to prove date of purchase or for warranty issues.

$\mathcal O$ READ THIS MANUAL

Inside you will find many helpful hints on how to use and maintain your air conditioner properly. Just a little preventive care on your part can save you a great deal of time and money over the life of your air conditioner.

You'll find many answers to common problems in the chart of troubleshooting tips. If you review our chart of

Troubleshooting Tips first, you may not need to call for service at all.

- Contact the authorized service technician for repair or maintenance an this unit.
- Contact an installer for installation of this unit.
- The air conditioner is not intended for use by young children or invalids without supervision.
- Young children should be supervised to ensure that they do not play with the air conditioner.
- When the power cord is to be replaced, replacement work shall be performed by authorized personnel only using only genuine replacement parts.
- Installation work must be performed in accordance with the National Electric Code by qualified and authorized personnel only.



Safety Precautions

To prevent injury and property damage, follow these instructions.

Incorrect operation due to ignoring instructions may cause harm or damage, the seriousness of which is indicated by the following symbols.

ACAUTION This symbol indicates the possibility of death or serious injury.
 ACAUTION This symbol indicates the possibility of injury or damage to properties only.

Meanings of other symbols used:





Installation ⋅

Always install the expansion panel(s).

Do not place the power cord near a heater.

• No installation may cause fire or electric shock accident.



Do not use the power cord near flammable gas or combustibles such as gasoline, benzene, thinner, etc.

• Doing so may cause explosion or fire.





Do not disassemble or modify products.

• Doing so may cause failure or electric shock.



Operation

Plug in the power plug properly.

• Otherwise, it may cause electric shock or fire due to heat generation.



Do not modify power cord length.

• Doing so may cause electric shock or fire due to heat generation.



Do not operate or turn-off unit by inserting or pulling out the power plug.

• Doing so may cause electric shock or fire due to heat generation.



Do not share the outlet with other appliances.

• Doing so may cause electric shock or fire due to heat generation.



Do not use a damaged or unspecified power cord.

• Doing so may cause electric shock or fire.



Always plug into a grounded outlet.

• No grounding may cause electric shock (See Installation instructions p10).



Unplug the unit if strange sounds, odors, or smoke are emitted.

• Not doing so may cause electric shock or fire.



Do not use the socket if it is loose or damaged.

• Doing so may cause fire or electric shock.



Do not operate unit with wet hands or in damp environment.

• Doing so may cause electric shock.



Do not allow water to run into electric parts.

• Doing so may cause failure of machine or electric shock.



Leave the door closed while the air conditioner is running.

• It is not designed to cool the entire house.



Installation —

Never touch the metal parts of the unit when removing the filter.

- They are sharp and may cause injury.
- Do not block the inlet or outlet.
- It may cause failure of appliance or accident.
- Ensure that the outer case is not damaged by age or wear.
- Using a damaged outer case may hinder airflow or cause the chassis to fall.



Be cautious not to touch the sharp edges when installing.

• It may cause injury.





Hold the plug by the head when taking it out.

• Improper handling may cause electric shock or damage.





Turn off the main power switch when not using it for a long time.

• Prevent accidental startup and the possibility of injury.



Operation -

Do not place heavy object on the power cord. Ensure that the cord is not pinched.

 There is danger of fire or electric shock.



First turn off the power and breaker when cleaning the unit.

 Since the fan rotates at high speed during operation, it may cause injury.



Always insert the filter securely. Clean it every two weeks.

 Operation without filters will cause failure.



If water enters the product, turn off the the power switch of the main body of appliance. Contact service center after taking the power-plug out of the socket.



Do not put a pet or house plant where it will be exposed to direct air flow.

• This could injure the pet or plant.



Use a soft cloth to clean. Do not use wax, thinner, or a strong detergent.

• The appearance of the air conditioner may deteriorate, change color, or develop surface flaws.



Do not clean the air

 Water may enter the unit and degrade the insulation. It may also cause an electric shock.



Do not use this appliance for special purposes such as pets, foods, precision machinery, or objects of art.

 It is an air conditioner, not a precision refrigeration system.



Do not drink water drained from air conditioner. / Do not direct airflow directly at room occupants.

 It contains containments that would make you sick. / This could harm your health.





Prior to Operation

Preparing for Operation

- 1. Contact an installation specialist for installation.
- 2. Plug in the power plug properly.
- 3. Use a dedicated circuit.
- 4. Do not use an extension cord.
- 5. Do not start/stop operation by plugging/unplugging the power cord.
- 6. If the cord/plug is damaged, only replace it with an authorized replacement part.

Usage

- 1. Being exposed to direct airflow for an extended period of time could be hazardous to your health. Do not expose occupants, pets, or plants to direct airflow for extended periods of time.
- 2. Due to the possibility of oxygen deficiency, ventilate the room when used together with stoves or other heating devices.
- 3. Do not use this air conditioner for non-specified special purposes (e.g. preserving precision devices, food, pets, plants, and art objects). Such usage could damage the items.

Cleaning and Maintenance

- 1. Do not touch the metal parts of the unit when removing the filter. Injuries can occur when handling sharp metal edges.
- 2. Do not use water to clean inside the air conditioner. Exposure to water can destroy the insulation, leading to possible electric shock.
- 3. When cleaning the unit, first make sure that the power and breaker are turned off. The fan rotates at a very high speed during operation. There is a possibility of injury if the unit's power is accidentally triggered on while cleaning inner parts of the unit.

Service

For repair and maintenance, contact your authorized service dealer.

Introduction

Symbols Used in this Manual



This symbol alerts you to the risk of electric shock.



This symbol alerts you to hazards that could cause harm to the air conditioner.



This symbol indicates special notes.



A WARNING

This appliance should be installed in accordance with the National Electric Code.



Electrical Safety

Electrical Data

115V~230V~Power cord may include a current
interrupter device. A test and reset button is
provided on the plug case. The device
should be tested on a periodic basis by first
pressing the TEST button and then the
RESET button. If the TEST button does not
trip or if the RESET button will not stay
engaged, discontinue use of the air
conditioner and contact a qualified service
technician.

NOTE!

The shape may be different according to its model.

Use Wall Receptacle	Power Supply	
Standard 125V, 3-wire grounding receptacle rated 15A, 125V AC	Use 15 AMP. time delay fuse or 15 AMP.	
Standard 250V, 3-wire grounding receptacle rated 15A, 250V AC	circuit breaker.	
Standard 250V, 3-wire grounding receptacle rated 20A, 250V AC	Use 20 AMP. time delay fuse or 20 AMP. circuit breaker.	

ELECTRICAL SAFETY

IMPORTANT GROUNDING INSTRUCTIONS

Air conditioner has a three-prong grounding plug on its power supply cord, which must be plugged into properly grounded three-prong wall receptacle for your protection against possible shock hazard.

230/208 VOLT UNITS

These units are equipped with a three-prong grounding plug on the power supply cord, which must be plugged into a matching properly grounded three-prong wall receptacle for your protection against possible shock hazard. If such an outlet is not present, one must be installed by a qualified electrician in accordance with the National Electrical Code and local codes and ordinances.



DO NOT USE AN EXTENSION CORD on 230/208 Volt units.

Use of extension cords

Because of potential safety hazards, we strongly discourage the use of an extension cord. However, if you wish to use an extension cord, use a CSA certified/UL-listed 3-wire (grounding) extension cord, rated 15A, 125V.

All wiring should be made in accordance with local electrical codes and regulations.

NOTE!

Aluminum house wiring may pose special problems. Consult a qualified electrician.

Electrical Safety

IMPORTANT (PLEASE READ CAREFULLY)

FOR THE USER'S PERSONAL SAFETY, THIS APPLIANCE MUST BE PROPERLY GROUNDED

A. SITUATIONS WHEN THE APPLIANCE WILL BE DISCONNECTED OCCASIONALLY:

Because of potential safety hazards, we strongly discourage the use of an adapter plug. However, if you wish to use an adapter, a TEMPORARY CONNECTION may be made. Use UL-listed adapter, available from most local hardware stores.

The large slot in the adapter must be aligned with the large slot in the receptacle to assure a proper polarity connection.

ACAUTION

Attaching the adapter ground terminal to the wall receptacle cover screw does not ground the appliance unless the cover screw is metal, and not insulated, and the wall receptacle is grounded through the house wiring. The customer should have the circuit checked by a qualified electrician to make sure the receptacle is properly grounded.

Disconnect the power cord from the adapter, using one hand on each. Otherwise, the adapter ground terminal might break. DO NOT USE the appliance with a broken adapter plug.

B. SITUATIONS WHEN THE APPLIANCE WILL BE DISCONNECTED OFTEN.

Do not use an adapter plug in these situations. Unplugging the power cord frequently can lead to an eventual breakage of the ground terminal. The wall power outlet should be replaced by a three-slot (grounding) outlet instead.

Installation

Installation Kits Contents



NO.	NAME OF PARTS	QTY
1	Curtain	1
2	Curtain Frame	1
3	Upper Guide	1
4	Side Guide	2
5	Support Bracket	1
6	Bracket	1
7	Leveling Bolt & Nut	1
8	Bolt	2
9	Nut	2
10	Washer	2
11	Side Guide seal	1
12	Foam Seal Strip	1
13	Window Track Seal	1
14	Window Locking Bracket	1
15	Screw (Type A)	9
16	Screw (Type B)	3
17	Screw (Type C)	8

Window Requirements

- 1. These instructions are for a horizontal sliding or a casement window.
- 2. The electrical outlet must be within reach of the power cord.

For installation in a casement window, the window frame assembly and the side of the building must be adequate to support the weight of the air conditioner.



21 ½" min. 15 ½" min. 16 ½" max.

Horizontal sliding window



How to Install the Unit

- 1. To prevent vibration and noise, make sure the unit is installed securely and firmly
- 2. Install the unit where the sunlight does not shine directly on the unit.
- 3. The outside of the cabinet must extend outward for at least 14" and there should be no obstacles, such as a fence or wall, within 20" from the back of the cabinet because it will prevent heat radiation of the condenser. Restriction of outside air will greatly reduce the cooling efficiency of the air conditioner.



NOTE!

All side louvers of the cabinet must remain exposed to the outside of the structure.

- 4. Install the unit at a slight incline so the back is slightly lower than the front(about 1/4"). This will force condensed water to flow to the outside.
- 5. Install the unit with the bottom about 30"~60" above the floor level.

Installing the Power cord

You can choose between the two methods below according to your preference and window sill shape.

Using slit "A"

• Fasten the stopper using Type A screw, and pass the power cord through slit "A".



• Fasten the stopper using left screw hole, and rotate properly to pass the power cord through slit "B".





Horizontal Sliding Window Installation

- Loosely attach the Support Bracket to the bottom of Bracket using Bolts, Washer, and Nuts. Attach the Leveling Bolt and Nut. (Fig. 1)
- 2. Remove protective backing from Window Track Seal and apply seal to window track. (Fig.2)
- 3. Measure and lightly mark a line 8-1/4 inches from window jamb. Center the Support Bracket assembly on the window track and fasten with 4 Type C screws.(Fig. 2)
- 4. Put the Support Bracket against the outside wall and tighten the Bolts on top of the Bracket. Adjust the Leveling Bolt so that the air conditioner will be installed with a very slight tilt (about 1/4") downward toward the outside for proper drainage. Tighten the nut. (Fig. 3)

NOTE!

DO NOT drill a hole in the bottom of the base pan. The air conditioner is designed to operate with the bottom of the base pan approximately half-full of water.

- Fasten Side Guides to the sides of the Air Conditioner using 3 Type A screws per Guide. Start with first screw at middle of Guide. (Fig. 4)
- 6. Fasten Upper Guide on the top of the Air Conditioner using 3 Type A screws. (Fig. 4)



Installation

- Measure height of window opening from top of Bracket assembly as shown Fig. 5. Subtract 20-3/4 inches. Mark this measurement on Curtain and cut the Curtain. (Fig. 5)
- Slide Curtain into Curtain Frame. Slide Curtain Frame assembly into side Guides of the Air Conditioner cabinet. Make sure Curtain is firmly enclosed on all sides by the Frame. (Fig. 6)
- 9. Cut side Guide seal into 2 equal lengths. Remove protective backing and apply it to the rear side of cabinet Side Guides, starting just below Curtain Frame assembly. Pinch off excess length so seal is even with the bottom of side Guide. (Fig. 7)
- 10. Place Air Conditioner in window opening. It should sit on Bracket assembly so that Curtain Frame and cabinet Side Guides are against top and side window jambs. Mate front of Bracket with Base Guide attached to the bottom of base pan.
- Drill 1/8 inch holes in window track through the existing holes on Base Guide. Screw 4 Type C screws through the holes. (Fig. 8)
- If this is a casement window installation, proceed to Casement Window Installation. If not, slide inner window sash firmly against side of the cabinet.
- Drill 1/8 inch hole in window jamb to align with the existing holes in the Curtain Frame. Attach Curtain Frame to window frame with 2 Type B screws. (Fig. 8)



NOTE!

Check all seals and plug any remaining air gaps with a suitable weatherproof caulk.

- 14. If this is a casement window installation, proceed to Casement Window Installation. If not, stuff the Foam Seal Strip between the vertical sash and the window glass. (Fig. 9)
- 15. Attach the L Bracket with a Type B screw. (Fig. 9)



Casement Window Installation

- 1. Installation procedure is the same as that described in steps 1 through 11 and step 13 of the Horizontal Sliding Window installation.
- 2. If the window opening is wider than 15-3/4 inches you will need to install a filler panel. Make this panel from 3/4 inch thick wood and run it the full length of the window. Attach it securely to the window frame and paint it to protect it from the weather.
- 3. Since styles and sizes of casement windows vary widely, it is advisable to have the air conditioner installed by someone skilled in this type of installation.

Operating Instructions

Controls

When the air conditioner has been performing its cooling operation and is turned off or set to the fan position, wait at least 3 minutes before resetting to cooling mode again.

Function



• FOR NORMAL COOLING

- 1. Turn the MODE Knob to the LOW COOL or MED COOL.
- 2. Set the TEMP control to the desired temperature mark (The mid point is a good starting position.)

If the room temperature is not satisfactory after a reasonable time, adjust the control to a cooler or warmer setting, as appropriate.

• FOR QUIETER OPERATION

- 1. Turn the MODE Knob to the LOW COOL setting.
- 2. Set the TEMP control as needed.

• FOR MAXIMUM COOLING

- 1. Turn the MODE Knob to the HI COOL setting.
- 2. Set the TEMP control to the highest temperature setting (All the way to the right).

Additional Features

Additional controls and important information.

Ventilation

The ventilation lever must be in the CLOSE position in order to maintain the best cooling conditions.

When fresh air is necessary in the room, set the ventilation lever to the OPEN position.

The damper is then opened and room air is exchanged with external air.

Air Direction

The direction of air can be controlled by adjusting the horizontal and vertical louvers.

• HORIZONTAL AIR-DIRECTION CONTROL

The horizontal air direction is adjusted by rotating the vertical louver right or left.

• VERTICAL AIR-DIRECTION CONTROL

The vertical air direction is adjusted by rotating the horizontal louver up or down.

How to Secure the Drain Pipe

In humid weather, excess water may cause the BASE PAN to overflow and run out the back of the unit. To drain the water, remove the DRAIN CAP and secure the DRAIN PIPE to the rear hole of the BASE PAN.







Maintenance and Service

TURN THE AIR CONDITIONER OFF AND REMOVE THE PLUG FROM THE POWER OUTLET.

Air Filter Cleaning

The air filter behind the front grille should be checked and cleaned at least once every 2 weeks or more often if necessary.

To remove:

- 1. Open the inlet grille downward by pulling out the top of the inlet grille.
- 2. Remove the air filter from the front grille assembly by pulling the air filter up and out.
- 3. Clean the filter with warm, soapy water.
- 4. Rinse and gently shake the water from the filter and let it dry before replacing it.





Inlet Grille

ACAUTION

DO NOT operate the air conditioner without a filter because dirt and lint will clog it and reduce performance.

NOTE!

Before using the air conditioner secure the front grille with two screws enclosed with the owner's manual.

- 1. Open the inlet grille downward and remove the air filter.
- 2. Fasten the front grille with screws.
- 3. Reinstall the air filter.
- 4. Close the inlet grille.



Common Problems and Solutions

Before calling for service

If you have problems with your air conditioner, read the following information and try to solve the problem. If you cannot find a solution, turn off the air conditioner and contact your dealer.

Air conditioner does not operate

- 1. Ensure that the air conditioner is plugged into a proper outlet.
- 2. Check the fuse or circuit breaker.
- 3. Check whether the voltage is unusually high or low.

Air does not feel cold enough on the cooling setting

- 1. Ensure that the temperature settings are correct.
- 2. Check to see if the air filter is clogged with dust. If so, clean the filter.
- 3. Ensure that the air flow from the outside is not obstructed and that there is a clearance of over 20" between the back of the air conditioner and the wall or fence behind it.
- 4. Close all doors and windows and check for any source of heat in the room.



Before calling for service, please review the following list of common problems and solutions.

The air conditioner is operating normally when:

- You hear a pinging noise. This is caused by water being picked up by the fan on rainy days or in highly humid conditions. This feature is designed to help remove moisture in the air and improve cooling efficiency.
- You hear the thermostat click. This is caused by the compressor cycle starting and stopping.
- You see water dripping from the rear of the unit. Water may be collected in the base pan in highly humid conditions or on rainy days. This water overflows and drips from the rear of the unit.
- You hear the fan running while the compressor is silent. This is a normal operational feature.

Troubleshooting

The air conditioner may be operating abnormally when:

Problem	Possible Causes	What To Do
The air conditioner does not operate at all	The air conditioner is unplugged or not plugged in completely.	 Make sure the plug is completely plugged into the outlet.
	The fuse is blown/circuit breaker is triggered.	• Check the fuse/circuit breaker box and replace the fuse or reset the breaker.
	Power failure.	 In the event of a power failure, set the power control to OFF. When the power is restored, wait 3 minutes to restart the air conditioner to prevent the compressor from overloading.
	The current interrupter device is tripped.	 Press the RESET button located on the power cord plug. If the RESET button will not stay engaged, discontinue use of the air conditioner and contact a qualified service technician.
Air conditioner does not cool	■ Air flow is restricted.	 Make sure there are no curtains, blinds, furniture or other obstacles in front of the air conditioner.
	■ The TEMP Control may not be set high enough	 Turn the knob to a higher setting. The highest setting provides maximum cooling.
	■ The air filter is dirty.	 Clean the filter at least every 2 weeks. Refer to the "Maintenance and Service" section of the manual.
	The air conditioner was just turned on.	 After the air conditioner is turned on, you need to give the air conditioner some time to cool the room.
	■ Cold air is escaping.	 Check for open furnace floor resisters and cold air returns. CLOSE the air conditioner vent.
lce appears on the air conditioner.	The cooling coils are iced over.	 Ice may block the air flow and obstruct the air conditioner from properly cooling the room. Set the mode control at High cool with the temperature setting 1 or 2. (warmer setting)



FRIEDRICH AIR CONDITIONING CO. Post Office Box 1540 • San Antonio, Texas 78295-1540 (210) 357-4400 • FAX (210) 357-4490

ROOM AIR CONDITIONERS LIMITED WARRANTY

FIRST YEAR

ANY PART: If any part supplied by FRIEDRICH fails because of a defect in workmanship or material within twelve months from date of original purchase, FRIEDRICH will repair the product at no charge, provided room air conditioner is reasonably accessible for service. Any additional labor cost for removing inaccessible units and/or charges for mileage related to travel by a Service Agency that exceeds 25 miles one way will be the responsibility of the owner. This remedy is expressly agreed to be the exclusive remedy within twelve months from the date of the original purchase.

SECOND THROUGH FIFTH YEAR

SEALED REFRIGERANT SYSTEM: If the sealed refrigeration system (defined for this purpose as the compressor, condenser coil, evaporator coil, reversing valve, check valve, capillary, filter drier, and all interconnecting tubing) supplied by FRIEDRICH in your Room Air Conditioner fails because of a defect in workmanship or material within sixty months from date of purchase, FRIEDRICH will pay a labor allowance and parts necessary to repair the Sealed Refrigeration System; **PROVIDED FRIEDRICH** will not pay the cost of diagnosis of the problem, removal, freight charges and transportation of the air conditioner to and from the Service Agency, and the reinstallation charges associated with repair of the Sealed Refrigeration System. All such cost will be the sole responsibility of the owner. This remedy is expressly agreed to be the exclusive remedy within sixty months from the date of the original purchase.

APPLICABILITY AND LIMITATIONS: This warranty is applicable only to units retained within the Fifty States of the U.S.A., District of Columbia, and Canada. This warranty is not applicable to:

- 1. Air filters or fuses.
- 2. Products on which the model and serial numbers have been removed.
- 3. Products which have defects or damage which results from improper installation, wiring, electrical current characteristics, or maintenance; or caused by accident, misuse or abuse, fire, flood, alterations and/or misapplication of the product and/or units installed in a corrosive atmosphere, default or delay in performance caused by war, government restrictions or restraints, strikes, material shortages beyond the control of FRIEDRICH, or acts of God.

OBTAINING WARRANTY PERFORMANCE: Service will be provided by the **FRIEDRICH Authorized Dealer or Service Organization** in your area. They are listed in the Yellow Pages.If assistance is required in obtaining warranty performance, write to: Room Air Conditioner Service Manager, Friedrich Air Conditioning Co., P.O. Box 1540, San Antonio, TX 78295-1540.

LIMITATIONS: THIS WARRANTY IS GIVEN IN LIEU OF ALL OTHER WARRANTIES. Anything in the warranty notwithstanding, ANY IMPLIED WARRANTIES OF FITNESS FOR PARTICULAR PURPOSE AND/OR MERCHANTABILITY SHALL BE LIMITED TO THE DURATION OF THIS EXPRESS WARRANTY. MANUFACTURER EXPRESSLY DISCLAIMS AND EXCLUDES ANY LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGE FOR BREACH OF ANY EXPRESSED OR IMPLIED WARRANTY.

NOTE: Some states do not allow limitations on how long an implied warranty lasts, or do not allow the limitation or exclusion of consequential or incidental damages, so the foregoing exclusions and limitations may not apply to you.

OTHER: This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

PROOF OF PURCHASE: Owner must provide proof of purchase in order to receive any warranty related services.

All service calls for explaining the operation of this product will be the sole responsibility of the consumer.

All warranty service must be provided by an Authorized FRIEDRICH Service Agency, unless authorized by FRIEDRICH prior to repairs being made.

In case of questions regarding the provisions of this warranty, the English version will govern.

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FRIEDRICH AIR CONDITIONING CO. Visit our web site at www.friedrich.com

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