

OPERATION MANUAL

DUCTED SYSTEM R-32 Series

Air Conditioners

MODELS (Ceiling concealed duct type)

FDYAN50/60/71/85/100/125/140/160AV1 FDYA71/85/100/125/140/160AV1

> PLEASE READ THESE INSTRUCTIONS CAREFULLY BEFORE INSTALLATION. KEEP THIS MANUAL IN A HANDY PLACE FOR FUTURE REFERENCE.

Operation Manual

FDYAN50-160, FDYA71-160AV1

SAFETY CONSIDERATIONS

We recommend that you read this operation manual carefully before using your air conditioner to gain full advantage of the functions and to avoid malfunction due to mishandling or incorrect operation.

The precautions described below are WARNINGS and CAUTIONS. These are very important precautions concerning safety.

Be sure to observe all of them without fail.

After reading, keep this manual in a place where any user can read at any time. Furthermore, make certain that this operation manual is handed to a new user if required.

If the air conditioner appears to be operating abnormally (smell of something burning, etc.), switch the air conditioner off at the main switch and contact the dealer where you purchased the air conditioner. Continued operation under such circumstances may result in a failure, electric shock or fire.

• Only use a qualified installer for installation of the air conditioner. Incorrect installation may result in a water leakage, electric shock or fire.

 Ask you dealer to carry out improvements, repairs and maintenance. Incorrect improvements, repairs and maintenance may result in a water leakage, electric shock or fire.

• Never remove any fixed covers on the indoor or outdoor unit. Removal of the covers may expose fast moving fan blades or electrical components operating at a hazardous voltage. Contact with the blades or high voltage components may result in injury or electric shock.

 Precaution against refrigerant leakage. If the air conditioner is to be installed in an unventilated room it is necessary to take proper measures to ensure that the allowable refrigerant concentration per cubic metre cannot be exceeded, should a refrigerant leak occur. If the allowable refrigerant concentration is exceeded, drowsiness or asphyxiation due to oxygen deficiency may occur.

 For installation of separately sold component parts, ask a specialist only. Be sure to use separately sold component parts designated by Daikin. Incomplete installation performed by yourself may result in a water leakage, electric shock or fire.

Ask your dealer to move and reinstall the air conditioner.
 Incomplete installation may result in a water leakage, electric shock or fire.

 Never insert any objects into the openings in the indoor or outdoor unit. This may damage the product or result in injury or death to the person inserting the object.

• When the air conditioner is used in combination with burners or heaters, ensure sufficient ventilation. Insufficient ventilation may result in an oxygen deficiency accident.

• Regularly check the quality of the foundation blocks. If they are left in a damaged condition, the unit may fall and result in injury.

• Do not place or use a flammable spray can near the air conditioner. Doing so may result in a fire.

• To clean the air conditioner, stop the operation and switch the power off at the main switch. Otherwise, an electric shock and injury may result.

• Do not expose the indoor unit or remote controller to rain or moisture. Water or other fluids on the electrical components may result in fire or electric shock.

• Always replace any blown fuse with a fuse of the same specification. The use of the wrong type fuse may allow the electrical wiring to overheat and catch on fire. If the correct type of fuse continues to blow contact your installer or electrician.

• Do not place a burner or heater in a place directly exposed to the airstream from the air conditioner. Incomplete combustion of the burner or heater may result.

Do not wash the air conditioner with water. An electric shock may result.

• Do not install the air conditioner in an area where flammable gas may be present. If the gas leaks out and stays around the air conditioner, a fire may break out.

• Avoid prolonged exposure of your body to direct streams of cold air. Your physical condition may deteriorate.

• This product contains Refrigerant Type: R32.

• R32 Classification as Flammable Refrigerant with Category 1 Flammable Gas (in WHS Regulations), and Division 2.1 Flammable Gas in Transport Code.

Do not charge R32 into systems other than those designated for R32.

Do not charge R32 system with oil other than those designated for R32.

• Do not use a reclaim cylinder other than an R32 reclaim cylinder.

• Do not install pipe work with diameters that are not specified for that model.

Do not forget to add additional refrigerant if required.

Operation Manual

• Do not use the air conditioner for other purposes. Do not use the air conditioner for special applications such as storage of foods, animals and plants, precision machines and art objects. Deterioration of quality may result.

• Ensure drain piping is completed. Incomplete piping may result in a water leakage.

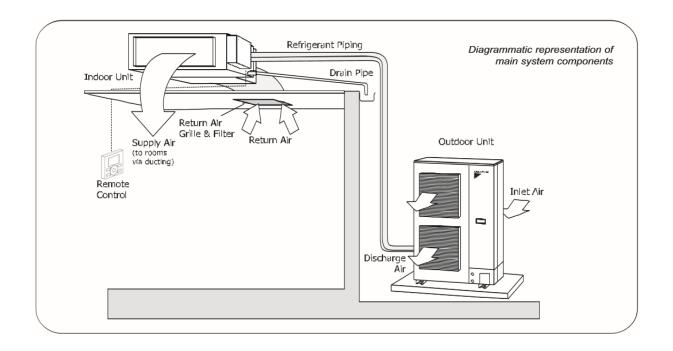
• Do not expose animals and plants directly to the airstream from the outdoor unit. Adverse influence to animals and plants may result.

• Never operate the air conditioner without the return air filter(s) in place. Operating the unit without the filter(s) will allow dust to enter the indoor unit and build up on the heat exchanger coil and fan motor. This will cause a malfunction of the unit which will not be covered by Warranty.

• This electrical appliance is not intended for use by young children or infirm persons without supervision. Young children should be supervised to ensure that they do not play with the outdoor unit.

CONTENTS

Safety Considerations	2
Controllers	4
What to do Before Operating Your System for the first time	4
Important Notes About the Operation of Your Air Conditioner	4
Trouble Shooting	5
Maintenance	6
Self Diagnosis	6
•	



CONTROLLERS

This equipment can operate with a variety of Daikin Controllers. Please refer to the Operation Manual supplied with your controller.

WHAT TO DO BEFORE OPERATING YOUR SYSTEM FOR THE FIRST TIME

• Carefully read the operation manual supplied with your controller. Be sure to follow the operation instructions to ensure the system functions correctly.

• Ensure that your installer shows you the location of the main power switch of the air conditioning system. This switch is normally located adjacent to the outdoor unit or in the fuse box / switchboard.

• The main switch must be turned on at least 6 hours before the air conditioner is operated to warm up the compressor. Failure to do so may result in damage to the compressor which will not be covered by warranty.

• Ensure that there are no obstacles near the air outlet of the outdoor unit. Obstacles such as plants, boxes, fences, etc. may result in declined performance and increased running noises.

• Ensure the air filter is installed in the return air grille.

• If applicable, please ask your installer to verify the minimum number or combinations of zones required to be operating before starting your air conditioning unit.

IMPORTANT NOTES ABOUT THE OPERATION OF YOUR AIR CONDITIONER

AUTOMATIC RESTART AFTER POWER FAILURE

• If the air conditioner is operating during a power failure it may automatically restart in the same mode when the power is restored.

DUAL REMOTE CONTROL OPERATION (Optional)

• A second (optional) remote control may be added to the system to allow setting and control of the unit at two different locations. This is particularly useful in two storey applications where one controller can be installed upstairs and the other controller downstairs. When dual controls are used the air conditioner will store the last command entered into either controller. Both controllers will display the same information so if the temperature on the downstairs controller is increased from 21 to 23 degrees, the upstairs controller will also indicate 23 degrees.

OPTIMUM OPERATION

Observe the following precautions to ensure the system operates efficiently.

• Adjust the room temperature for a comfortable environment. Avoid excessive heating or cooling.

• Prevent direct sunlight from entering a room during cooling operation by using curtains or blinds.

• Keep doors and windows closed. If the doors and windows remain open, room air will flow out and decrease the effect of cooling and heating.

• Never place objects near the air inlet and the air outlet of the unit. It may not operate effectively or cause operation to stop.

• Turn off the main power supply switch when not using for long periods of time. Electricity is consumed as long as the switch is on. Turn off the main power supply switch in order to save energy. Turn on the main power supply switch 6 hours before restarting operation in order to ensure smooth operation. (Refer to MAINTENANCE)

• Ventilate the room regularly. Using the unit for long periods of time requires regular ventilation of the room.

• When the display shows ". g^{*} " or "filter" (TIME TO CLEAN THE AIR FILTER), clean the filter(s). (Refer to MAINTENANCE)

OPERATION RANGE

If the temperature or the humidity is outside the following conditions, safety devices may not work and the air conditioner may not operate.

Cooling	Temperature (°C)		
	Indoor	DB	19 to 35
Standard	Outdoor	DB	-5 to 46
Premium	Outdoor	DB	-5 to 50

Heating	Temperature (°C)		
Indoor	DB	10 to 27	
Outdoor	DB	-15 to 16	

DB: Dry bulb temperature

NOISE FROM THE AIR CONDITIONER

• A continuous low "shuh" sound is heard when the system is in COOLING or DEFROST OPERATION.

This is the sound of refrigerant gas flowing through both indoor and outdoor units.

• A"shuh" sound which is heard at the start or immediately after the stop of operation or which is heard at the start or immediately after the stop of DEFROST OPERATION.

This is the noise of refrigerant stopping or changing direction.

DUST FROM THE AIR CONDITIONER

• Dust may blow out from the unit when starting the air conditioner after a long resting time.

Dust that has settled in the unit is blown out.

THE AIR CONDITIONER GIVES OFF ODOURS

• The unit absorbs the smell of rooms, furniture, cigarettes, etc., and then emits them.

THE LIQUID CRYSTAL OF THE REMOTE CONTROLLER SHOWS " רור "

Happens immediately after the main power supply switch is turned on.

Shows that the remote controller is in normal condition. Continues temporarily.

TROUBLE SHOOTING

If one of the following malfunctions occurs, take the measures shown below and contact your Daikin dealer.

The system must be repaired by a qualified service person.

When the air conditioner is in abnormal conditions (smell of something burning, etc.), switch off the main switch, and contact your dealer or DAIKIN 1300 36 24 38.

Continued operation under such circumstances may result in a failure, electric shock, or fire.

• If a safety device such as a fuse, a circuit breaker, or an earth leakage circuit breaker frequently actuates, or the ON/OFF switch does not properly work.

Measure: Turn off the main power switch.

Concerning the indoor unit, if water leaks from any location besides the drain pipe.

Measure: Stop the operation.

If a 2 digit fault code appears in the LCD screen.
 Measure: Write down the fault code and then stop the operation.
 Measure: Notify your Daikin dealer and inform him/her of the display.

If the system does not operate properly and none of the above mentioned malfunctions is evident, investigate the system according to the following procedures.

1.If the system does not operate at all.

 Check if there is a power failure. Wait until power is restored. If a power failure occurs during operation, the system may automatically restart immediately after the power supply recovers.

Check if the fuse has blown or circuit breaker has tripped.
 Please contact and notify qualified technicians to check.

2.If the system stops operating after operating for a while.

Check if the air inlet or outlet of outdoor or indoor unit is blocked by obstacles. Remove the obstacle and make it well-ventilated.
Check if the air filter is clogged. Clean the air filter(s). (Refer to MAINTENANCE).

3. The system operates but it does not sufficiently cool or heat.

Check if the air inlet or outlet of the indoor or the outdoor unit is blocked with obstacles. Remove the obstacle and make it well-ventilated.
Check if the air filter is clogged. Clean the air filter(s). (Refer to

 Check if the air filter is clogged. Clean the air filter(s). (Refer MAINTENANCE).
 Check if the set temperature is within a comfortable range.

- Check if the set temperature is within a comfortable range.
- Check if the FAN SPEED CONTROL button is set to high. If you normally use low fan speed ensure the air filter is clean.

• Check if the doors or the windows are open. Shut doors or windows to prevent wind from coming in.

Check if direct sunlight enters the room. (when cooling) Use curtains or blinds.

• When there are too many occupants in the room. (when cooling) Cooling effect decreases if heat gain of the room is too large.

• Check if the heat source of the room is excessive. (when cooling) Cooling effect decreases if heat gain of the room is too large.

MAINTENANCE

IMPORTANT!

NO USER SERVICEABLE PARTS ARE INSIDE THE AIR CONDITIONER. DO NOT REMOVE ANY ACCESS PANELS OR FIXED COVERS.

Before cleaning the air conditioner, be sure to stop operation, and turn the power switch off. Otherwise, an electric shock and injury may result.
Do not wash the indoor unit with water. Doing so may result in an electric shock. Be careful erecting scaffolding. Caution must be exercised when working at a height.

CLEANING THE AIR FILTER(s)

• Be sure to always clean the air filter(s) before use at the beginning of summer and winter. (Dirt and dust caught in the air filter causes a drop in airflow, which leads to a decline in performance.)

• When using the unit in a location where dirt may easily accumulate, clean the filter(s) more frequently. Once every 2 weeks is recommended.

NOTE

The air filter(s) and the suction grille(s) are supplied by your dealer. Ask your DAIKIN dealer how to clean them.

HOW TO CLEAN AIR OUTLET GRILLE

Clean with soft cloth.

When it is difficult to remove stains, use water or neutral detergent.

NOTE

• Do not use gasoline, benzene, thinner, polishing powder, liquid

insecticide. It may cause discolouring or warping.

• Do not let the indoor unit get wet. It may cause an electric shock or a fire.

START UP AFTER A LONG STOP

Confirm the following

Check that the air inlet and outlet are not blocked. Remove any obstacle.

Clean the air filter(s)

After cleaning the air filter, make sure to reattach it.

Turn on the main power supply switch

The display on the remote controller will be shown when the power is turned on. To protect the unit, turn on the main power switch at least 6 hours before operation.

WHAT TO DO WHEN STOPPING THE SYSTEM FOR A LONG PERIOD Turn on FAN OPERATION for a half day and dry the unit.

Refer to fan setting or fan speed button on pages 4 & 6 of the installation manual.

Cut off the power supply.

• When the main power switch is turned on, some power is being used even if the system is not operating. Turn off the main power supply switch for saving energy.

• The display on the remote controller will vanish when the main power switch is turned off.

Ensure the drain piping from the indoor unit is free of blockage.

During cooling operation, water should drip from the outlet of the indoor unit's drain piping. If there is no evidence of water from the drain outlet after several hours of cooling it may be that the drain is blocked or the relative humidity is low. If you think the drain is blocked stop the air conditioner and contact your installer.

SELF DIAGNOSIS

• In the unlikely event that a fault develops with the air conditioner the microprocessor in the indoor and outdoor units will diagnose the fault (where possible), Aunique 2 digit fault code will display on the LCD screen. eg.E0

 If this occurs write down the fault code and then switch off the unit and contact your installer. This code will indicate to the installer / repairer what the problem may be.

SYMPTOMS NOT ASSOCIATED WITH THE AIR CONDITIONING EQUIPMENT MALFUNCTIONING

The system does not start immediately after the power supply is turned on.

Wait one minute until the micro computer is prepared for operation.

The outdoor unit is stopped.

This is because the room temperature has reached the set temperature. The indoor unit switches to fan operation.

WHITE MIST COMES OUT OF THE OUTDOOR UNIT

When the system reverts to HEATING OPERATION after DEFROST OPERATION.

Moisture generated by DEFROST becomes steam and is discharged.

Operation Manual

DAIKIN AUSTRALIA PTY. LIMITED

62-66 Governor Macquarie Dr, Chipping Norton, NSW 2170 Australia Phone: 1300 368 300

Technical Support & Spare Parts

200 Governor Macquarie Drive, Warwick Farm, NSW 2170 Phone: 1300 362 438

Daikin New Zealand, 25 Dalrymple Road, Garbutt, 4814.

www.daikin.com.au

DAIKIN INDUSTRIES LTD.

Head office: Umeda Centre Bldg., 2-4-12, Nakazaki-Nishi, Kita-ku, Osaka, 530-8323 Japan

Tokyo office: JR Shinagawa East Bldg., 2-18-1, Konan, Minato-ku, Tokyo, 108-0075 Japan

3P381827-16P