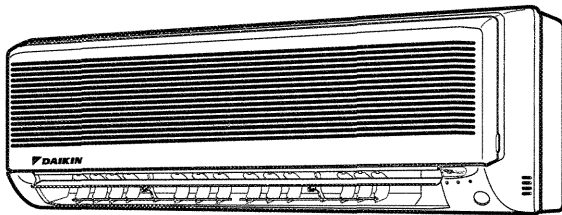




INSTALLATION MANUAL

Split series indoor units



Installation manual
Split series indoor units

English

FTX25GV1NB

FTX35GV1NB

DAIKIN INDUSTRIES, LTD.

declares under its sole responsibility that the air conditioning models to which this declaration relates:
erklärt auf seine alleinige Verantwortung daß die Modelle der Klimageräte für die diese Erklärung bestimmt ist:
déclare sous sa seule responsabilité que les appareils d'air conditionné visés par la présente déclaration:

verklaart hierbij op eigen exclusieve verantwoordelijkheid dat de airconditioning units waarop deze verklaring betrekking heeft:
declara baja su única responsabilidad que los modelos de aire acondicionado a los cuales hace referencia la declaración:
dichiara sotto sua responsabilità che i condizionatori modello a cui è riferita questa dichiarazione:

δηλώνει με αποκλειστική της ευθύνη ότι τα μοντέλα των κλιματιστικών συσκευών στα οποία αναφέρεται η παρούσα δήλωση:
declara sob sua exclusiva responsabilidade que os modelos de ar condicionado a que esta declaração se refere:
erklærer under eneansvar, at klimaanlægmodellerne, som denne deklaration vedrører:

deklarerar i egenskap av huvudansvarig, att luftkonditioneringsmodellerna som berörs av denna deklaration innebär att:
erklærer et fullstendig ansvar for at de luftkonditioneringsmodeller som berøres av denne deklarasjon innebærer at:
ilmoittaa yksinomaan omalla vastuullaan, että tämän ilmoituksen tarkoittamat ilmastointilaitteiden mallit:

FTX25GV1NB,FTX35GV1NB
RX25GV1NB,RX35GV1NB

are in conformity with the following standard(s) or other normative document(s), provided that these are used in accordance with our instructions:
der/den folgenden Norm(en) oder einem anderen Normdokument oder -dokumenten entspricht/entsprechen, unter der Voraussetzung, daß sie gemäß unseren Anweisungen eingesetzt werden:
sont conformes à la/aux norme(s) ou autre(s) document(s) normatif(s), pour autant qu'ils soient utilisés conformément à nos instructions:

conform de volgende norm(en) of één of meer andere bindende documenten zijn, op voorwaarde dat ze worden gebruikt overeenkomstig onze instructies:
están en conformidad con la(s) siguiente(s) norma(s) u otro(s) documento(s) normativo(s), siempre que sean utilizados de acuerdo con nuestras instrucciones:
sono conformi al(i) seguente(i) standard(s) o altro(i) documento(i) a carattere normativo, a patto che vengano usati in conformità alle nostre istruzioni:

είναι σύμφωνα με το(α) ακόλουθο(α) πρότυπο(α) ή άλλο έγγραφο(α) κανονισμών, υπό την προϋπόθεση ότι χρησιμοποιούνται σύμφωνα με τις οδηγίες μας:
estão em conformidade com a(s) seguinte(s) norma(s) ou outro(s) documento(s) normativo(s), desde que estes sejam utilizados de acordo com as nossas instruções:
overholder følgende standard(er) eller andet/andre retningsgivende dokument(er), forudsat at disse anvendes i henhold til vore instrukser:

respektive utrustning är utförd i överensstämmelse med och följer följande standard(er) eller andra normgivande dokument, under förutsättning att användning sker i överensstämmelse med våra instruktioner :
respektive utstyr er i overensstemmelse med følgende standard(er) eller andre normgivende dokument(er), under forutsetning av at disse brukes i henhold til våre instrukser:
vastaavat seuraavien standardien ja muiden ohjeellisten dokumenttien vaatimuksia edellyttäen, että niitä käytetään ohjeidemme mukaisesti:

EN60335-2-40,

following the provisions of:
gemäß den Vorschriften der:
conformément aux stipulations des:

overeenkomstig de bepalingen van:
siguiendo las disposiciones de:
secondo le prescrizioni per:

με τήρηση των διατάξεων των:
de acordo com o previsto em:
under iagttagelse af bestemmelserne i:

enligt villkoren i:
gitt i henhold til bestemmelsene i:
noudattaen määräyksiä:

* Note	as set out in the Technical Construction File DAIKIN.TCF. 015 and judged positively by KEMA according to the Certificate 74736-KRQ/EMC97-4957
Hinweis	wie in der Technischen Konstruktionsakte DAIKIN.TCF. 015 aufgeführt und von KEMA positiv ausgezeichnet gemäß Zertifikat 74736-KRQ/EMC97-4957
Remarque	tel que stipulé dans le Fichier de Construction Technique DAIKIN.TCF. 015 et jugé positivement par KEMA conformément au Certificat 74736-KRQ/EMC97-4957
Bemerk	zoals vermeld in het Technisch Constructiedossier DAIKIN.TCF. 015 en in orde bevonden door KEMA overeenkomstig Certificaat 74736-KRQ/EMC97-4957
Nota	tal como se expone en el Archivo de Construcción Técnica DAIKIN.TCF. 015 y juzgado positivamente por KEMA según el Certificado 74736-KRQ/EMC97-4957
Nota	delineato nel File Tecnico di Costruzione DAIKIN.TCF. 015 e giudicato positivamente da KEMA secondo il Certificato 74736-KRQ/EMC97-4957
Σημείωση	όπως προσδιορίζεται στο Αρχείο Τεχνικής Κατασκευής DAIKIN.TCF. 015 και κρίνεται θετικά από το KEMA σύμφωνα με το Πιστοποιητικό 74736-KRQ/EMC97-4957
Nota	tal como estabelecido no Ficheiro Técnico de Construção DAIKIN.TCF. 015 e com o parecer positivo de KEMA de acordo com o Certificado 74736-KRQ/EMC97-4957
Bemærk	som anført i den Tekniske Konstruktionsfil DAIKIN.TCF. 015 og positivt vurderet af KEMA i henhold til Certifikat 74736-KRQ/EMC97-4957
Information	utrustningen är utförd i enlighet med den Tekniska Konstruktionsfilen DAIKIN.TCF. 015 som positivt intygas av KEMA vilket också framgår av Certifikat 74736-KRQ/EMC97-4957
Merk	som det fremkommer i den Tekniske Konstruktionsfilen DAIKIN.TCF. 015 og gennem positiv bedømmelse af KEMA ifølge Sertifikat 74736-KRQ/EMC97-4957
Huom	jotka on esitetty Teknisessä Asiakirjassa DAIKIN.TCF. 015 ja jotka KEMA on hyväksynyt Sertifikaatin 74736-KRQ/EMC97-4957 mukaisesti.

Directives, as amended.

Direktiven, gemäß Änderung.

Directives, telles que modifiées.

Richtlijnen, zoals geamendeerd.

Directivas, según lo enmendado.

Directive, come da modifica.

Οδηγιών, όπως έχουν τροποποιηθεί.

Directivas, conforme alteração em.

Direktiver, med senere ændringer.

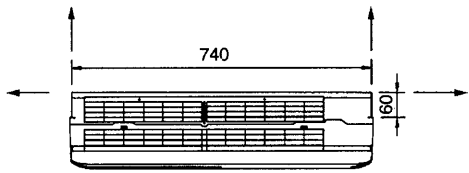
Direktiv, med företagna ändringar.

Direktiver, med foretatte endringer.

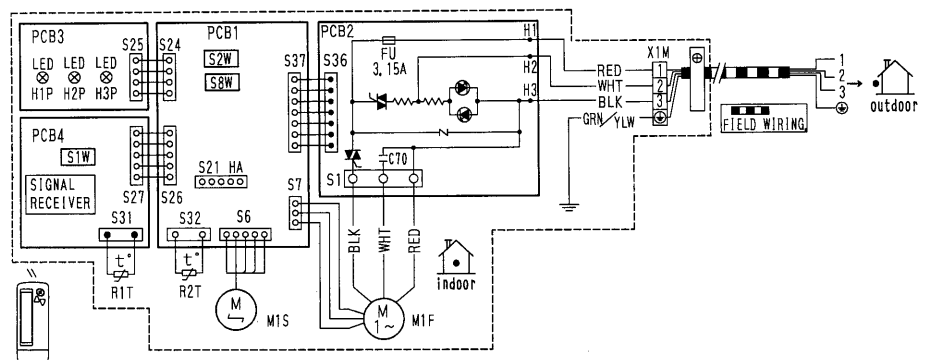
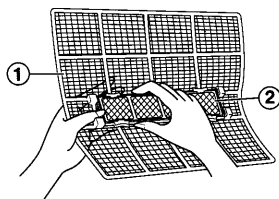
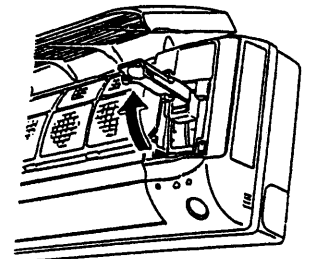
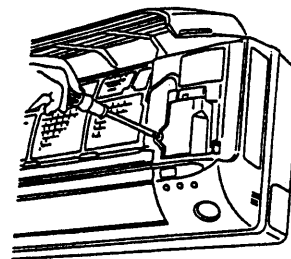
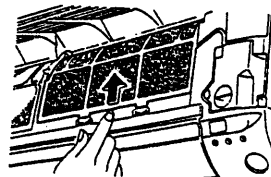
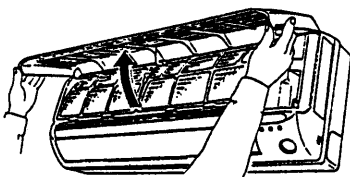
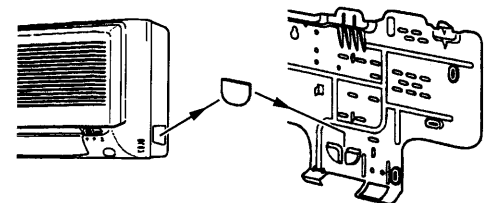
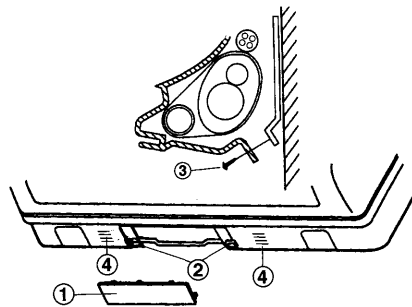
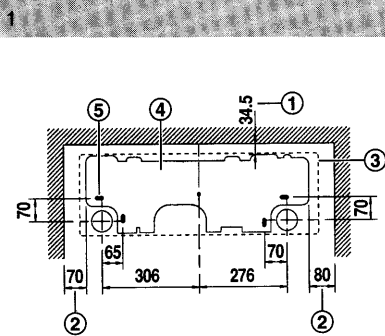
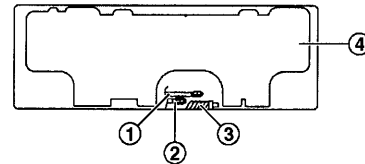
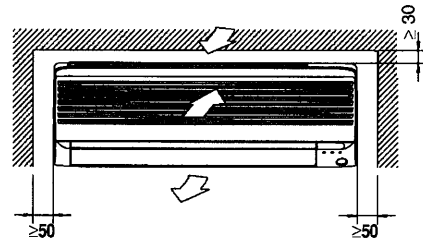
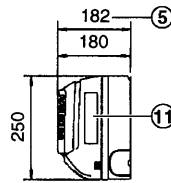
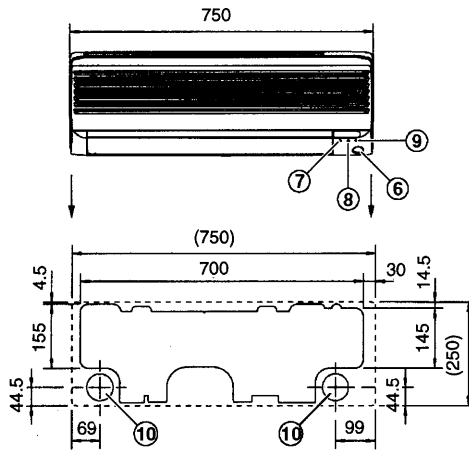
Direktiivellä, sellaisina kuin ne ovat muutettuina.

Low Voltage 73/23/EEC
Machinery Safety 89/392/EEC
Electromagnetic Compatibility 89/336/EEC *





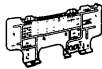
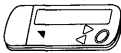
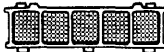
	② ØA	① ØB
FTX25	Ø9.5mm or 3/8" cut	Ø6.4mm or 1/4" cut
FTX35	Ø12.7mm or 1/2" cut	Ø6.4mm or 1/4" cut



COMBINE THIS INDOOR UNIT WITH A DAIKIN OUTDOOR UNIT ONLY!

READ THIS MANUAL CAREFULLY TO ENSURE CORRECT INSTALLATION. BE SURE TO GIVE THE CUSTOMER THE ENCLOSED OPERATION MANUAL. REFER TO THE INSTALLATION MANUAL OF THE OUTDOOR UNIT FOR THE ITEMS NOT DESCRIBED BELOW.

STANDARD SUPPLIED ACCESSORIES

	FTX	
mounting plate	1	
remote controller	1	
dry batteries	2	
operation manual installation manual	1 of each	
air purifying filter	2	
indoor unit fixing screw M4×12	2	

OPTIONAL ACCESSORIES

remote controller holder



IMPROPER INSTALLATION OR ATTACHMENT OF EQUIPMENT OR ACCESSORIES COULD RESULT IN ELECTRIC SHOCK, SHORT-CIRCUIT, LEAKS, FIRE OR OTHER DAMAGE TO THE EQUIPMENT. BE SURE ONLY TO USE ACCESSORIES MADE BY DAIKIN WHICH ARE SPECIFICALLY DESIGNED FOR USE WITH THE EQUIPMENT AND HAVE THEM INSTALLED BY A PROFESSIONAL.

IF UNSURE OF INSTALLATION PROCEDURES OR USE, ALWAYS CONTACT YOUR DAIKIN DEALER FOR ADVICE AND INFORMATION.

1. INSTALLING THE INDOOR UNIT



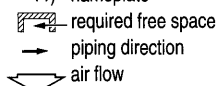
Never turn the circuit breaker ON until all the installation work is completed!

1.1. OUTLOOK DRAWING (see figure 1)

- 1) liquid pipe ØB
- 2) gas pipe ØA
- 3) drain hose (ID Ø14.0 - OD Ø18.0)
- 4) mounting plate
- 5) dimensions: unit + mounting plate

- 6) ON/OFF switch
- 7) operating indicator lamp
- 8) timer indicator lamp
- 9) cleaning indicator lamp
- 10) hole for rear piping

- 11) nameplate



1.2. SELECTING THE LOCATION



Make sure that the indoor and outdoor unit is installed out of reach for children!

Leave sufficient space for piping and electric wiring.

Be sure to install the unit so that:

- the indoor and outdoor unit, the interconnection and the power supply cable are at least 1m away from televisions or radios. This is to prevent interference from the air conditioner on your televisions or radios.
- the air will be distributed to the entire room.
- the wall is strong enough to bear the weight of the indoor unit.
- the unit is not exposed to direct sunlight.
- there are no obstructions for the air inlet and outlet.
- the wall hole to the outdoor side for the electric wiring, the refrigerant and drain piping can be made without problems in terms of building structure.

Please consult with your dealer for installing in a special environment (e.g. a place in oily surroundings, a place with sulfide gas such as hot springs, a place where chemicals are used nearby, a place with big voltage fluctuations such as factories).

1.3. INSTALLATION

1.3.1. Fixing the mounting plate

Position the mounting plate and check that the position is right and horizontal.

Check the clearance from the ceiling and from the right end position of the unit. For rear piping, determine the position of the wall hole to the outdoor side in the same way. (see figure 2)

- 1) clearance between the ceiling and the mounting plate
- 2) space for installation work
- 3) unit outer dimension

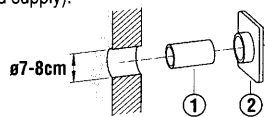
- 4) mounting plate
- 5) reference point for wall hole

Fix the mounting plate on the wall with 6 to 8 screws.

1.3.2. Making the wall hole to the outdoor side for the electric wiring, the refrigerant and drain piping

- The hole must slope down toward the outdoor side.
- The hole size must be just as large as to hold the protective pipe (Ø70–80mm) (field supply).
- Use a wall hole cover (field supply) to hide the wall hole as much as possible.

- 1) protective pipe (field supply)
- 2) wall hole cover (field supply)



1.3.3. Mounting the indoor unit on the mounting plate

Extend the drain hose if required. Remove the bottom frame cover. Mount the indoor unit on the mounting plate.

- Press the lower part of the indoor unit bottom frame onto the mounting plate with both hands and hook the bottom frame claws into the rectangle holes on the mounting plate.

- 1) mounting plate
- 2) bottom frame

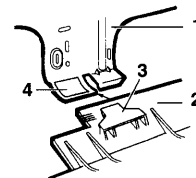
- 3) claw
- 4) catch

- Fix the bottom frame to the mounting plate with the supplied screws (M4 x 12) (see figure 3)

- 1) bottom frame cover
- 2) bottom frame fixing position

- 3) screw M4 x 12
- 4) push mark

- Check that the unit is securely mounted, by slightly shaking the unit.



Note To remove the indoor unit from the mounting plate, press the push marks upwards at the bottom frame of the indoor unit.

2. INSTALLING THE OUTDOOR UNIT

Refer to the installation manual of the outdoor unit.

3. REFRIGERANT PIPING

3.1. FIELD PIPING

All field piping must be provided by a licensed refrigeration technician and must comply with the relevant local and national codes.

3.2. PIPE CONNECTIONS

- Refer to the outlook diagram (see figure 1) for the required piping diameters.
- Cut the plates in the bottom frame of the indoor unit according to the piping direction. The removed plate can be kept in the mounting plate pocket (see figure 4).
- Be sure to insulate the gas pipe and the liquid pipe separately with polyethylene foam insulation material (thermal conductivity = 0.041–0.052 kW/mK).

model	gas pipe insulation		liquid pipe insulation	
	inside diameter	wall thickness	inside diameter	wall thickness
FTX25GV1NB	12-15mm	8-10mm	8-10mm	7-10mm
FTX35GV1NB	14-16mm	10mm	8-10mm	7-10mm

Note For the gas pipe, use a polyethylene foam resistant to a temperature of 110°C.

3.3. FOR PIPING CONNECTIONS ON THE RIGHT SIDE OF THE UNIT (RIGHT, REAR OR BOTTOM), TAKE THE FOLLOWING STEPS

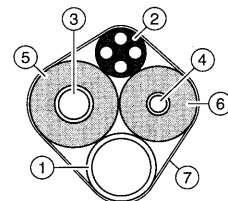
- Place the drain hose under the refrigerant pipes.

- 1) drain hose
- 2) interconnection cable
- 3) gas pipe
- 4) liquid pipe

- 5) gas pipe insulation
- 6) liquid pipe insulation
- 7) finishing tape

- Hang the indoor unit on the hooks at the top of the mounting plate.

- Hook while putting the auxiliary piping and the drain hose into the wall hole to the outdoor side.

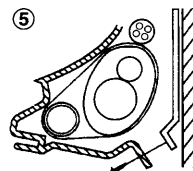
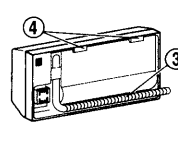
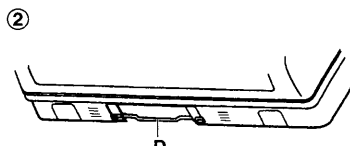
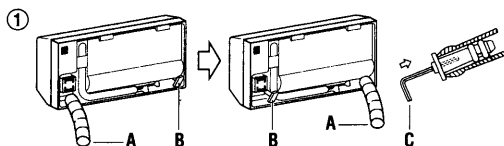


3.4. FOR PIPING CONNECTIONS ON THE LEFT SIDE OF THE UNIT (LEFT, REAR OR BOTTOM), TAKE THE FOLLOWING STEPS

- 1) Switch positions of the drain hose (A) and the drain plug (B). Insert a hexagon wrench (C) into the drain plug to ensure that the drain outlet is perfectly closed.

Note Do not use lubrication oil when inserting the plug into the drain pan outlet. Oil causes deterioration of the drain plug, resulting in drain leakage.

- 2) To work easily, remove the bottom frame cover and cut the bar (D) away.

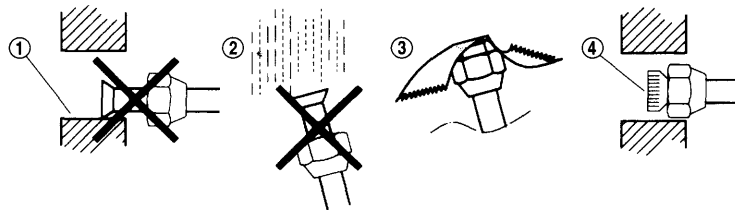


- 3) Insulate the pipes and the electric cable together at the connection of the field piping and the indoor unit piping.
- 4) Hang the indoor unit on the hooks at the top of the mounting plate.
- 5) Fix the bottom frame to the mounting plate. (see 1.3.3. Mounting the indoor unit on the mounting plate).

3.5. CAUTION

When inserting the refrigerant piping in the wall hole, take care not to let dust or moisture come into the piping. Protect the pipes with a cap or seal the pipe end completely with tape.

- 1) dust
- 2) moisture
- 3) tape
- 4) cap

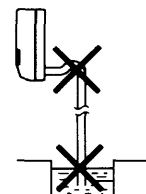
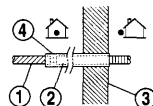


4. DRAIN PIPING

4.1. CAUTIONS

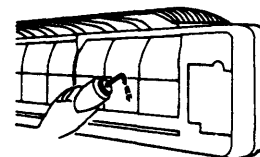
- The drain hose must slope downward to the outdoor side.
- Do not use a trap in the drain piping.
- Never put the end of the drain hose into water.
- If you extend the drain hose, always insulate it up to the outdoor side with polyethylene foam insulation material (field supply).

- 1) drain hose fixed to the indoor unit
- 2) the indoor side extension drain hose
- 3) wall
- 4) polyethylene foam



4.2. DRAIN CHECK

- Open the front grill. (see figure 5)
- Remove the air filters.
 - Push the knob at the centre of the air filter upwards.
 - Pull the filter downward to take it out.



Pour some water into the drain pan to check if the water flows smoothly.

5. VACUUM DRYING OF THE INSTALLATION

Refer to the installation manual of the outdoor unit.

6. FIELD WIRING

6.1. CAUTIONS

- All field wiring and components must be provided by a licensed electrician and must comply with the relevant local and national codes.
- Be sure to use a dedicated power circuit. Never use a power supply shared by another appliance.
- Before supplying the power, check that the voltage is within $\pm 10\%$ of the rated voltage marked on the nameplate.
- Take care not to bend the printed circuit board when inserting or removing the connectors.

6.2. FIELD WIRING

- Open the front grill. (see figure 5)
- Open the service cover. (see figure 7)
- Wire in accordance with the wiring diagrams. (see figures 9)
- Route the field cable through the back of the indoor unit and connect to the terminal block.

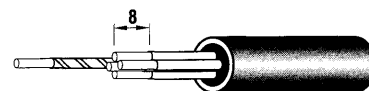
Parts table:

	protective earth	M1S	swing motor	S2W	address switch
C70	running capacitor	PCB1, PCB2, ...	printed circuit board	S8W	cleaning indicator reset switch
FU	fuse	R1T, R2T	thermistor	X1M	terminal strip
H1P, H2P, H3P	pilot lamp	S1, S2, ...	connector on PCB		
M1F	fan motor	S1W	operation switch		

Note  S21 is for master control.

6.3. FIELD CABLE AND FIELD FUSE

- Use solid core cables to avoid loosening of the wires.
- Refer to the installation manual of the outdoor unit for the required field cable section and field fuse.
- Remove maximum 8mm of the wire insulation when connecting the wires to the terminals.
- Insert only one wire in one terminal.

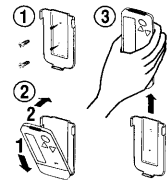


7. **SETTING THE AIR PURIFYING FILTERS**

- The air purifying filters catch pollen, dust, smoke of cigarettes and unpleasant smell.
- Open the front grill. (see figure 5)
 - Remove the air filter. (see 4.2. Drain check)
 - Install the air purifying filter (2) on the air filter (1) as shown in figure 8. Make sure that the net-side (black) of the air purifying filter is facing up.
 - Put the sticker with the sample colours on the back of the grill.
 - Be sure to set the air filters back into place.

8. **INSTALLING THE REMOTE CONTROLLER (optional)**

- 1) Fix the remote controller holder with two screws.
- 2) Set the remote controller on the claw at the holder bottom and press.
- 3) To remove, pull it out upward.



CAUTIONS

- The maximum transmission distance is about 7m in a straight line.
- Check that the signals can be received from the selected position of the remote controller. If there is anything that blocks signals to the signal receiver, such as curtains or doors, the air conditioner does not operate.
- Do not install the remote controller near a heater or in a position exposed to direct sunlight.
- Do not install the remote controller in places where there is a considerable amount of moisture.

9. **CHECK LIST AND TEST RUN**

9.1. **CHECK LIST**

After installing, check the following items:

Is the indoor unit securely installed?	
Is the gas leakage checked?	
Is the heat insulation	- for the gas pipe adequate? - for the liquid pipe adequate? - for the indoor side extension drain hose adequate?
Does the drain flow out smoothly?	
Are the line voltages approximately correct?	
Is the earth wire earthed?	
Are the correct wires used?	
Are the air inlet and outlet of the indoor and outdoor unit not blocked?	

9.2. **TEST RUN**

This program is to test the air conditioner independent from the room temperature and the temperature setting (i.e. as the thermostat of the indoor unit is bridged).

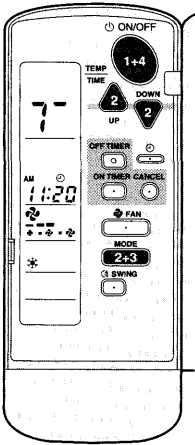
Carry out the test operation in accordance with the operation manual to ensure that all functions and parts, such as louvre movement, are working properly.

Using the remote controller for trial operation

1. Press the ON/OFF button to turn on the system.
2. Simultaneously press DOWN, UP and MODE buttons.
3. Press the MODE button twice. ("7" appears on the display to indicate that the trial operation mode is selected.)
4. Trial run mode terminates in approximately 30 minutes and switches into normal mode. To quit a trial operation, press the ON/OFF button.

Note

The air conditioner requires a small amount of power in stand-by mode. If the system is not to be used for some time after installation, shut off the circuit breaker to eliminate unnecessary power consumption.



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