

# Sanyo 09KHS71 Installation Instructions Manual

Indoor/outdoor unit inverter split system air conditioner

```
19
20
21
22
23
24
```

•	PAGE	
	1	
	OF 24 GO	

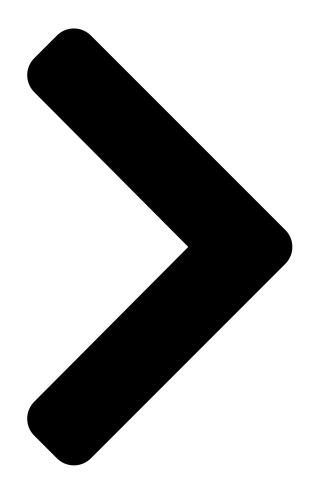
•



## Quick Links

- 1 Accessories Supplied with Unit
- 2 Wiring Instructions
- 3 Remote Control Unit Installation Position
- 4 Mounting on a Wall
- 5 Address Setting of the Remote Control Unit

Download this manual



05-423 KHS0971-1271 12/13/05

# - Inverter Split System Air Conditioner -

,
IMPORTANT!
Please Read Before Starting 2
1.
GENERA 3
1-1. Tools Required for Installation (not supplied)
1-2. Accessories Supplied with Unit
1-3. Optional Copper Tubing Kit
1-4. Type of Copper Tube and Insulation Material
1-5. Additional Materials Required to Masallation
2.
INSTALLATION SITE SELECTION 4
2-1. Indoor Unit
2-2. Outdoor Unit
3.
HOW TO INSTALL THE INDOOR UNIT 6

3-1. Remove the Rear Panel from the Unit	
3-2. Make a Hole	
3-3. Install the Rear Panel on the Wall	
3-4. Remove the Grille to Install the Indoor Unit	
3-5. Shape the Indoor Side Tubing	
3-6. Wiring Instructions	
3-7. Recommended Wire Length and Diameter	_
3-8. Wiring Instructions for Inter-unit Connections	
3-9. Mounting	
3-10. Drain Hose 4.	
HOW TO INSTALL THE OUTDOOR WAY	
4-1. Wiring Instructions for the Outdoor Unit	
5.	
REFRIGERANT TUBING 17	
5-1. Use of the Flaring Method	
5-2. Flaring Procedure with a Flare Tool	
5-3. Caution before Connecting Tubes Tightly	
5-4. Connecting Tubing between Indoor and	
Outdoor Units	
5-5. Insulation of Refrigerant Tubing	
5-6. Taping the Tubes	
5-7. Finishing the Installation	
6.	
AIR PURGING	
Air Purging with a Vacuum Pump (for Test Run)	
Basic Functions of the Service Valves	
Pump Down	
85264189990003 © SANYO 2006	
1:23 PM	
Page a	
This air conditioner uses the new refrigerant R410A.	
_	
Contents	
Contents Page SANYO FISHER COMPANY  Wanuals	
SANYO FISHER COMPANY A DIVISION OF SANYO NORTH AMERICA CORPORATION	
21605 Plummer Street	
Chatsworth, CA 91311 U.S.A.	
COOL / DRY/ HEAT Model	
Model Combinations	
Combine indoor and outdoor units only as listed	
below.	
Indoor Unit	
KHS0971	
KHS1271	
Power Source:	
60 Hz, single-phase, 115 V	
Be sure to read the yellow instruction sheet	
attached to the outdoor unit for models using the	
new refrigerant R410A.	
7.	
REMOTE CONTROL UNIT INSTALLATION	
POSITION	
7-1. Mounting on a Wall	
8.	
VI .	
ADDRESS SWITCH 24	

# 8-1. Address Setting of the Remote Control Unit

The illustrations are based on the typical appearance of a standard model. Consequently, the shape may differ from that of the air conditioner that you are installing. In Canada

#### SANYO Canada Inc.

300 Applewood Crescent, Concord Ontario, L4K 5C7, Canada

#### **Outdoor Unit**

CH0971 CH1271





#### Related Manuals for Sanyo 09KHS71

Air Conditioner Sanyo 09KHS71 Instruction Manual

Inverter-controlled split system air conditioner (50 pages)

Heat Pump Sanyo 09KHS71 Submittal Data

Split system indoor/outdoor wall mounted heat pump (2 pages)

Air Conditioner Sanyo 18KHS72 Specifications

Wall mounted air conditioners & heat pumps 9,000-24,000 btu/h 16-20 seer (2 pages)

Air Conditioner Sanyo XHS1271 Technical & Service Manual

Dc inverter split system air conditioner (123 pages)

Air Conditioner Sanyo CH0971 Technical & Service Manual

Dc inverter split system air conditioner (104 pages)

Air Conditioner Sanyo COOL Installation Instructions Manual

Inverter split system air conditioner (36 pages)

Heat Pump Sanyo 12KHS71 Submittal Data

Split system indoor/outdoor wall mounted heat pump (2 pages)

Air Conditioner Sanyo 000 BTU/H 16-20 SEER Brochure & Specs

Wall mounted air conditioners & heat pumps (2 pages)

Air Conditioner Sanyo 09KS71 Submittal Data

Split system indoor/outdoor wall mounted air conditioner (2 pages)

Air Conditioner Sanyo KS1271 Instruction Manual

Inverter-controlled split system air conditioner (50 pages)

Air Conditioner Sanyo 09KLS51 Specification Sheet

Sanyo ductless split system air conditioners specification sheet (3 pages)

Air Conditioner Sanyo 09KS51 Submittal Sheet

Indoor/outdoor wall mount air conditioner (3 pages)

Air Conditioner Sanyo 09KLS71 Submittal Data

Split system indoor/outdoor wall mounted low ambient air conditioner (2 pages)

Air Conditioner Sanyo Cool/Dry Installation Instructions Manual

Sanyo inverter split system air conditioner installation instructions (24 pages)

Air Conditioner Sanyo 09K11W Service Manual

Split system (71 pages)

Air Conditioner Sanyo ECO-i 09AHX52 Submittal Data

Indoor unit: 1 way air discharge (2 pages)

## Summary of Contents for Sanyo 09KHS71

#### Page 1: Table Of Contents

Consequently, the shape may differ from that of the air conditioner that you are installing. SANYO FISHER COMPANY A DIVISION OF SANYO NORTH AMERICA CORPORATION 21605 Plummer Street Chatsworth, CA 91311 U.S.A. COOL / DRY/ HEAT Model...

#### Page 2: Important

Be careful when picking up and moving the indoor and out- door units. Get a partner to help, and bend your knees when lifting to reduce strain on your back. Sharp edges or thin alu- minum

fins on the air conditioner can cut your fingers. Page 2 When Installing.....

#### Page 3: General

05-423 KHS0971-1271 12/13/05 1:23 PM 1. General This booklet briefly outlines where and how to install the air conditioning system. Please read over the entire set of instructions for the indoor and outdoor units and make sure all accessory parts listed are with the system before beginning.

#### Page 4: Additional Materials Required For Installation

WARNING tion and the possibility of fire, do not place obstacles, enclosures and grilles in front of or surround- ing the air conditioner in a way that may block air flow. AVOID: direct sunlight. nearby heat sources that may affect performance of the unit.

#### Page 5: Outdoor Unit

05-423 KHS0971-1271 12/13/05 1:23 PM 2-2. Outdoor Unit AVOID: heat sources, exhaust fans, etc. (Fig. 4) damp, humid or uneven locations. choose a place as cool as possible. choose a place that is well ventilated. allow enough room around the unit for air intake/ exhaust and possible maintenance.

#### Page 6: How To Install The Indoor Unit

05-423 KHS0971-1271 12/13/05 1:23 PM 3. How to Install the Indoor Unit 3-1. Remove the Rear Panel from the Unit (1) Remove and discard the set screw on the rear panel. (Fig. 6) (2) Press the 2 marks on the frame cover and disen- gage the stationary tabs from the frame.

#### Page 7: Install The Rear Panel On The Wall

05-423 KHS0971-1271 12/13/05 1:23 PM (4) Using a sabre saw, key hole saw or hole-cutting drill attachment, cut a hole in the wall. See Table 4 and Fig. 10. Table 4 Hole Dia. 2-9/16" (65 mm) (5) Measure the thickness of the wall from the inside edge to the outside edge and cut PVC pipe at a slight angle 1/4"...

#### Page 8: Remove The Grille To Install The Indoor Unit

05-423 KHS0971-1271 12/13/05 1:23 PM 3-4. Remove the Grille to Install the Indoor Unit Basically, these models can be installed and wired without removing the grille. If access to any internal part is need- ed, follow the steps as given below. Be sure to wear work gloves CAUTION during installation to avoid being...

#### Page 9: Shape The Indoor Side Tubing

05-423 KHS0971-1271 12/13/05 1:23 PM 3-5. Shape the Indoor Side Tubing (1) Arrangement of tubing by direction a) Right or left tubing Cut out the corner of the right/left frame with a hacksaw or the like. (Figs. 20 and 21) b) Right-rear or left-rear tubing In this case, the corner of the frame need not be cut.

#### Page 10: Recommended Wire Length And Diameter

No wire should be allowed to touch refrigerant tubing, the compressor, or any moving part. WARNING To avoid the risk of electric shock, each air conditioner unit must be grounded. For the installation of a grounding device, please observe local electrical codes.

#### Page 11: Wiring Instructions For Inter-Unit Connections

05-423 KHS0971-1271 12/13/05 1:23 PM 3-8. Wiring Instructions for Inter-unit Connections (1) Insert the inter-unit wiring (according to local codes) into the through-the-wall PVC pipe. Run the wiring toward the indoor side allowing approx. 10" (25 cm) to extend from the wall face. (Fig. 24) (2) Grasp both ends of the air intake grille, and remove it by opening towards the front and pulling towards you.

<u>Page 12</u> 05-423 KHS0971-1271 12/13/05 1:23 PM Loose wiring may cause the WARNING terminal to overheat or result in unit malfunction. A fire hazard may also exist. There- fore, be sure all wiring is tightly connected. When connecting each power wire to the corresponding terminal, follow the instructions "How to connect wiring to the terminal"...

#### Page 13: Mounting

05-423 KHS0971-1271 12/13/05 1:23 PM 3-9. Mounting (1) To install the indoor unit, mount the indoor unit onto the 2 tabs on the upper part of the rear plate. (2) Hold down the air discharge outlet and press the lower part of the indoor unit until it clicks to securely fasten to the 2 tabs on the lower part of the rear plate.

#### Page 14: Drain Hose

05-423 KHS0971-1271 12/13/05 1:23 PM Left-side tubing (1) Lead the tubing and drain hose through the wall, allowing sufficient length for connection. Then bend the tubing using a tube bender to make the attach- ment. (Fig. 38) (2) Switch the drain hose and drain cap. Switching drain hose and drain cap (a) Locate the drain hose and the drain cap.

<u>Page 15</u> 05-423 KHS0971-1271 12/13/05 1:23 PM To unmount indoor unit Press the 2 marks on the lower part of the indoor unit and unlatch the tabs. Then lift the indoor unit and unmount. (Fig. 42) 3-10. Drain Hose a) The drain hose should be slanted downward to the outdoors.

#### Page 16: How To Install The Outdoor Unit

05-423 KHS0971-1271 12/13/05 1:23 PM 4. How to Install the Outdoor Unit First refer to Section 2. Installation Site Selection. 4-1. Wiring Instructions for the Outdoor Unit Regulations on wire size differ from locality to locality. For field wiring requirements, please refer to your local electrical codes.

#### Page 17: Refrigerant Tubing

05-423 KHS0971-1271 12/13/05 1:23 PM 5. Refrigerant Tubing 5-1. Use of the Flaring Method Many of the conventional split system air conditioners employ the flaring method to connect refrigerant tubes which run between indoor and outdoor units. In this method, the copper tubes are flared at each end and connected with flare nuts.

#### Page 18: Connecting Tubing Between Indoor And Outdoor Units

05-423 KHS0971-1271 12/13/05 1:23 PM 5-4. Connecting Tubing between Indoor and Outdoor Units a) Tightly connect the indoor side refrigerant tubing extended from the wall with the outdoor side tubing. (Fig. 52) b) To fasten the flare nuts, apply specified torque as: Table 6 Tube Dia

#### Page 19: Air Purging

05-423 KHS0971-1271 12/13/05 1:23 PM 6. Air Purging Air and moisture remaining in the refrigerant system have undesirable effects as indicated below. Therefore, they must be purged completely. pressure in the system rises operating current rises cooling (or heating) efficiency drops moisture in the air may freeze and block capillary tubing water may lead to corrosion of parts in the refrigerant system...

<u>Page 20</u> (14) If there is no leakage, stop the air conditioner. (15) Wipe off the soap on the tubing. This completes air purging with a vacuum pump and the air conditioner is ready for actual operation.

<u>Page 21</u> 1:23 PM How to Test Run the Air Conditioner After turning on power to the air conditioner, use the remote controller and follow the steps below to conduct the test run. (1) Set the remote controller in Test Run mode.

#### Page 22: Basic Functions Of The Service Valves

The basic functions of the service valves are given in Table 8 below. Table 8 Narrow Tube Service Action CLOSED Shipping Fully OPEN Operating and test running the air conditioner Fully OPEN Measuring pressure and gas charging CLOSED Air purging with a vacuum pump CAUTION When opening or clos-...

#### Page 23: Remote Control Unit Installation Position

In direct sunlight Behind a curtain or other place where it is covered More than 26' (8 m) away from the air conditioner In the path of the air conditioner's airstream Where it may become extremely hot or cold...

#### Page 24: Address Switch

8-1. Address Setting of the Remote Control Unit The address can be set in order to prevent interference between remote controllers when two Sanyo indoor units are installed near each other. The address is normally set to "A." To set a different address, it is necessary to change the address on the second remote controller.

### This manual is also suitable for:

12khs71Khs0971Khs1271Ch0971Ch1271