

INSTALLATION MANUAL of DISTRIBUTOR (model SPX-DST1) for Room Air-conditioner

1. SAFETY SUMMARY

1.1 DANGER

DO NOT pour water into the distributor. This product is equipped with electrical parts. If water is poured into the distributor, it will cause a serious electrical shock.

1.2 WARNING

DO NOT perform installation work and electrical wiring connection by yourself. Contact your "HITACHI" distributor or dealer and ask them for a service person to do installation work and electrical wiring.

1.3 CAUTION

1.3.1 DO NOT install the indoor and outdoor unit of room air-conditioner, remote controller and cable at places such as;

- (1) Where oil (including machine oil) vapor and steam are dispersed.
- (2) Where hot springs are near (in a sulfuric environment).
- (3) Where generation, flow, remaining or leakage of flammable gas is detected.
- (4) Near sea (salty environment).
- (5) Acidic or alkaline environment.
- (6) Humid environment.
- (7) Environment which is exposed to direct sunshine.

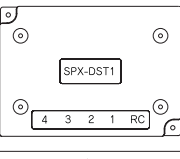
1.3.2 DO NOT install the indoor and outdoor unit, remote controller and cable within approximately 3 meters from strong electromagnetic wave radiators such as medical equipment. In case that they are installed in a place where there is an electromagnetic wave direct-radiation, shield the remote controller and cables by covering them with steel box and run the cables through the metal conduit tube.

2. INSTALLATION WORK

2.1 BEFORE INSTALLATION

2.1.1 Confirming packed accessories

Check the contents and the number of the accessories which are packed as follows;

Name	Distributor kit	Binder	Tapping screw	Wood screw
Shape				
Number	1	5	4	2
Use for	—	For binding the cable	For fixing top and bottom case	For installing distributor kit to WALL

3.2 CAUTION on ELECTRICAL WIRING

Perform the wiring work with great care as follows.

3.2.1 Turn off the power supply of the room air-conditioner and the central control device.
Failure to turn off the power supply and central control device when performing wiring work may cause a failure on the distributor and the control device.

3.2.2 DO NOT run all cables of the remote controller, distributor and room air-conditioners along the power supply cable and other signal cable. Failure to do so may cause malfunction due to the noise, etc. If it is necessary to run the cables along each other, separate the cables from each other at a distance of 30cm or run the cables through metal tube. The metal tube must be earthed.

3.2.3 Use special order WIRING KIT (SPX-WDST 8M) as connecting cable between the distributor and room air-conditioner and between distributors.

3.2.4 Do not connect the distributor in three stages or more.

3.3 ELECTRICAL WIRING

3.3.1 Connection with Room air-conditioner

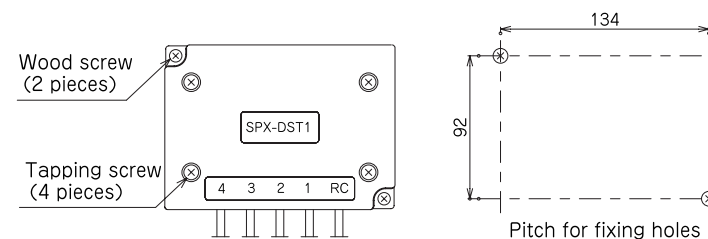
- (1) Stop the operation of room air-conditioner and remove the power plug from the outlet.
- (2) Turn off the breaker of the power source in case that power comes from the outdoor unit.
- (3) Remove the cosmetic cover of the room air-conditioner and the cover of electrical box.
- (4) Connect the cable to the connectors on PCB in the indoor unit.
- (5) Install the electrical box cover and pay attention so as not to clamp the cable.
- (6) Refer to the installation manual of each room air-conditioner for confirming how to assemble and connect the cable.
- (7) In case that the cables are connected to the No.2,3,4 in PCB cut off the thin plate of case by a pair of small pliers, and then remove the burr by a cutter etc.
- (8) When connecting the cables, put the convexity of binder in the groove of bottom case.

2.2 INSTALLATION PROCEDURE

2.2.1 Fix the top and bottom case of the distributor kit with 4 tapping screws. Fixing torque shall be 0.70~1.20N · m.

In case where additional cables are required to be fixed to the distributor kit, additional care must be taken when unscrew or fixing the tapping screw to the distributor kit. This is to prevent the screw holes from being damaged.

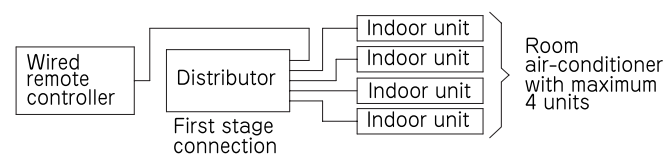
2.2.2 Fix the bottom case with 2 wood screws to wall or rear side of ceiling.



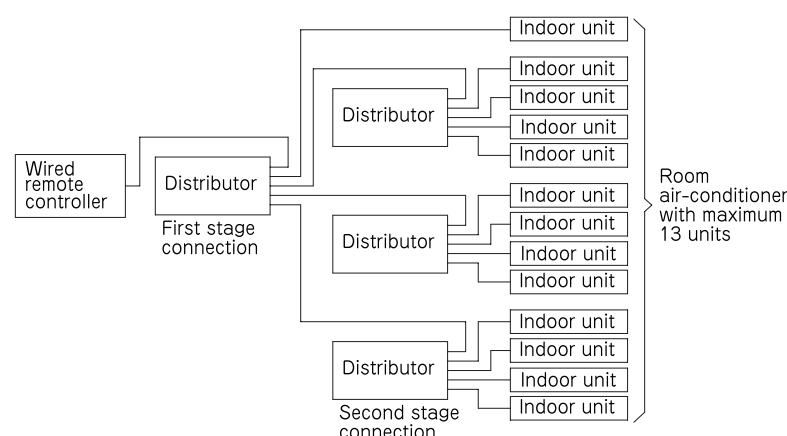
3. ELECTRICAL WIRING PROCEDURE

3.1 SYSTEM COMPOSITION

3.1.1 One distributor can control up to 4 units of room air-conditioner.

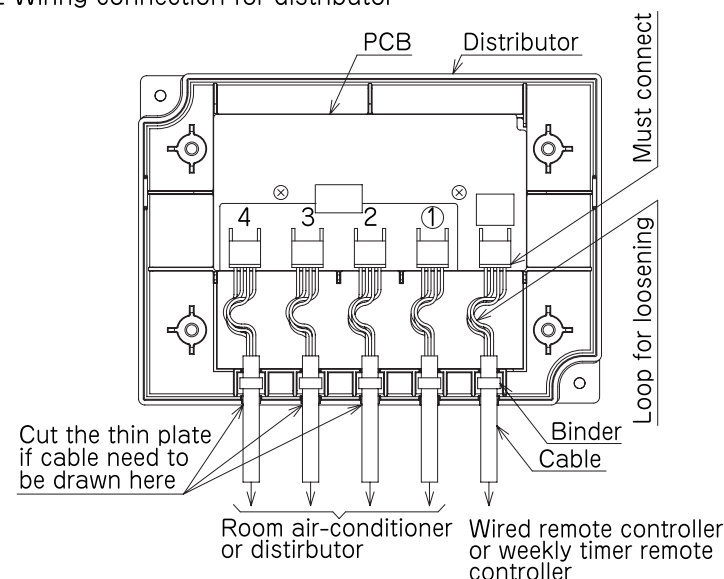


3.1.2 4 distributors can control up to 13 units of room air-conditioner. In case of two stages connection.



NOTE: The connector no 1 of the distributor must be connected to Indoor unit only.
(Do not connect this connector no 1 to other distributor)

3.3.2 Wiring connection for distributor



3.3.3 Caution on wiring connection for the distributor

- (1) DO NOT connect wiring incorrectly. It may cause a failure to the distributor. DO NOT apply high voltage such as AC230V.
- (2) Turn off the power supply of the distributor or central station when performing the wiring work. If the wiring work is performed with the power of the devices being supplied, it may cause the malfunction.
- (3) Make a loop to the cable inside the distributor for loosening, else the connectors will be stressed.
- (4) DO NOT clamp the cable when attaching the distributor cover.
- (5) Attach firmly the binders to the cables.
- (6) Arrange the cables so that the binders are in the fixed position.
- (7) Do not overload the cables with tension or stress of 14.7N(1.5kgf) or more when fixing them on the wall outside the distributor kit.

4. TEST RUN

Test run should be performed as the following after completing the installation, wiring and setting. Refer to the installation manuals and technical hand books enclosed with each remote controller.

4.1 Confirmation on RUN/STOP Operation

Confirm if the room air-conditioners operate correctly by RUN/STOP by using the remote controller. Check also if the room air-conditioner operation changes correctly by each setting.