



Air-Conditioners For Building Application

**IT signal adapter    PAC-IT51AD-E  
PAC-IT52AD-E**
**Installation Manual**


This installation manual describes only the connection of the IT signal adapter to the indoor unit of CITY MULTI air conditioner series. For your safety, be sure to read firstly "1. Safety Precautions" described below thoroughly and then install the adapter (PAC-IT51AD-E/PAC-IT52AD-E).


## 1. Safety Precautions

- The following two symbols are used to denote dangers that may be caused by incorrect use.

 <b>WARNING</b>	This symbol denotes what could lead to serious injury or death if you misuse the adapter.
 <b>CAUTION</b>	This symbol denotes what could lead to a personal injury or property damage if you misuse the adapter.

- After reading this instruction manual, keep it in a place where the end user can find it anytime he or she wants to it. When someone moves, repairs or uses the adapter, make sure that this manual is forwarded to the final user.

 <b>WARNING</b>	
<ul style="list-style-type: none"> <li>■ <b>Ask your dealer or technical representative to install the unit.</b> Any deficiency caused by your own installation may result in an electric shock or fire.</li> <li>■ <b>Ensure that installation work is done correctly following this instruction manual.</b> Any deficiency caused by installation may result in an electric shock or fire.</li> <li>■ <b>Firmly connect the wiring using the specified cables. Carefully check that the cables do not exert any forces on the terminals.</b> Improper wiring connections may produce heat and possibly a fire.</li> <li>■ <b>Never modify or repair the adapter.</b> Any deficiency caused by your modification or repair may result in an electric shock or fire. Consult with your dealer about repair.</li> </ul>	<ul style="list-style-type: none"> <li>■ <b>All electrical work must be performed by a licensed technician, according to local regulations and the instructions given in this manual.</b> Any lack of electric circuit or any deficiency caused by installation may result in an electric shock or fire.</li> <li>■ <b>Do not move and re-install the adapter yourself.</b> Any deficiency caused by installation may result in an electric shock or fire. Ask your distributor or special vendor for moving and installation.</li> <li>■ <b>Stop the operation if any malfunction occurs.</b> If malfunction occurs (burning smell, etc.) stop the operation and turn off the power supply. Contact your dealer or technical representative. If the controller continues to operate after a malfunction occurs, this may cause damage, electric shock or fire.</li> <li>■ <b>Do not turn on the main power until installation has been completed.</b> Doing so may result in electric shock or fire.</li> </ul>

 <b>CAUTION</b>	
<ul style="list-style-type: none"> <li>■ <b>Do not install in any place exposed to flammable gas leakage.</b> Flammable gases accumulated around the body of the adapter may cause an explosion.</li> <li>■ <b>Do not use in any special environment.</b> Using in any place exposed to oil (including machine oil), steam and sulfuric gas may deteriorate the performance significantly or give damage to the component parts.</li> <li>■ <b>Wire so that it does not receive any tension.</b> Tension may cause wire breakage, heating or fire.</li> <li>■ <b>Do not install in any place at a temperature of more than 40 °C (104 °F) or less than 0 °C (32 °F) or exposed to direct sunlight.</b></li> </ul>	<ul style="list-style-type: none"> <li>■ <b>Do not install in any place where acidic or alkaline solution or special spray are often used.</b> Doing so may cause an electric shock or malfunction.</li> <li>■ <b>Do not install in any steamy place such a bathroom or kitchen.</b> Avoid any place where moisture is condensed into dew. Doing so may cause an electric shock or malfunction.</li> <li>■ <b>Use standard wires in compliance with the current capacity.</b> A failure to this may result in an electric leakage, heating or fire.</li> <li>■ <b>Do not wash with water.</b> Doing so may cause an electric shock or malfunction.</li> </ul>

## 2. Parts list

Make sure that the following items are included in the package.

- IT signal adapter: 1 pcs.

### 3. Connection to the Indoor Unit

Connect an IT signal adapter PAC-IT51AD-E or PAC-IT52AD-E to each indoor unit, depending on the optional parts that are used. If no optional parts are used, either PAC-IT51AD-E or PAC-IT52AD-E can be used.

Example) If an optional part is connected to CN51 on the indoor unit circuit board, use PAC-IT52AD-E.

	PAC-IT51AD-E	PAC-IT52AD-E
Wiring method	<p>8-pin connector (white) -&gt; Connect to CN100. 5-pin connector (red) 5-pin connector (<b>white</b>) -&gt; Connect to CN51.</p>	<p>8-pin connector (white) -&gt; Connect to CN100. 5-pin connector (red) 5-pin connector (<b>green</b>) -&gt; Connect to CN52.</p>
Wiring diagram	<p>Indoor unit circuit board IT signal adapter IT-terminal-compatible devices (field supplied)</p>	<p>Indoor unit circuit board IT signal adapter IT-terminal-compatible devices (field supplied)</p>

### 4. Wiring Restrictions

- Keep the length of the field supplied cable connecting to the circuit board of the indoor unit shorter than 2 meters (6.6 ft).  
Longer than 2 meters (6.6 ft) could cause improper operation.  
Use a transit relay when extending wiring such as remote wiring.
- Notes on connecting wires  
Shut off the power to both indoor and outdoor units before connecting the wires. Guard against static electricity to reduce the risk of damage to circuit boards.
- Connecting IT-terminal-compatible devices (field supplied)  
Cover the wires with tubes with an auxiliary layer.  
Make sure the wiring between the indoor unit circuit board and the IT-terminal-compatible device (field supplied) has an insulation withstand voltage of at least 2750 V.
- Insert connectors in the correct orientation to prevent damage to the connectors.

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