

INTERFACE ADAPTER-AOR

DTA119A71

INSTALLATION MANUAL

IMPORTANT SAFETY INSTRUCTIONS

The following symbols and labels are used throughout this manual to indicate immediate or potential safety hazards. It is the owner's and installer's responsibility to read and comply with all safety information and instructions accompanying these symbols. Failure to heed safety information increases the risk of personal injury, property damage, and/or product damage.

WARNING

HIGH VOLTAGE!

**DISCONNECT ALL POWER BEFORE SERVICING.
MULTIPLE POWER SOURCES MAY BE PRESENT.
FAILURE TO DO SO MAY CAUSE PROPERTY DAMAGE,
PERSONAL INJURY OR DEATH.**



WARNING

ONLY PERSONNEL THAT HAVE BEEN TRAINED TO INSTALL, ADJUST, SERVICE OR REPAIR (HEREINAFTER, "SERVICE") THE EQUIPMENT SPECIFIED IN THIS MANUAL SHOULD SERVICE THE EQUIPMENT. THE MANUFACTURER WILL NOT BE RESPONSIBLE FOR ANY INJURY OR PROPERTY DAMAGE ARISING FROM IMPROPER SERVICE OR SERVICE PROCEDURES. IF YOU SERVICE THIS UNIT, YOU ASSUME RESPONSIBILITY FOR ANY INJURY OR PROPERTY DAMAGE WHICH MAY RESULT. IN ADDITION, IN JURISDICTIONS THAT REQUIRE ONE OR MORE LICENSES TO SERVICE THE EQUIPMENT SPECIFIED IN THIS MANUAL, ONLY LICENSED PERSONNEL SHOULD SERVICE THE EQUIPMENT.

IMPROPER INSTALLATION, ADJUSTMENT, SERVICING OR REPAIR OF THE EQUIPMENT SPECIFIED IN THIS MANUAL, OR ATTEMPTING TO INSTALL, ADJUST, SERVICE OR REPAIR THE EQUIPMENT SPECIFIED IN THIS MANUAL WITHOUT PROPER TRAINING MAY RESULT IN PRODUCT DAMAGE, PROPERTY DAMAGE, PERSONAL INJURY OR DEATH.

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SHIPPING INSPECTION

Shipping damage, and subsequent investigation is the responsibility of the carrier. The distributor or manufacturer will not accept claims from dealers for transportation damage or installation of incorrectly shipped units.

CODES & REGULATIONS

This product is designed and manufactured to comply with national codes. Installation in accordance with such codes and/or prevailing local codes/regulations is the responsibility of the installer. Please refer to the Codes & Regulations in outdoor unit Installation and Operation manuals.

This device complies with Part 15 of the FCC's Rules. Operation of this device is subject to two conditions:

- (1) This device may not cause harmful interference; and
- (2) This device must accept any interference received, including interference that may cause undesirable operation.

And this device meets the applicable Industry Canada technical specifications. CAN ICES-3(B)/NMB-3(B)

The FCC responsible party is Goodman Manufacturing Company, L.P., and may be contacted by calling (713)-861-2500, or at 19001 Kermier Rd., Waller, TX 77484. (www.GoodmanMFG.com)

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:




- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.


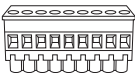

FEATURES

This interface adapter is part of a system that uses inverter technology to more efficiently remove heat and achieve the target comfort conditions. This adapter is designed to be compatible with any non-communicating gas furnaces. The adapter may **ONLY** be paired with Daikin *One+* Smart Thermostat as part of the digital communicating system.

NOTE: The installation of the adaptor with unmatched system units will not allow for proper operation.

ACCESSORIES

Name	① Installation manual	② Screw (M4 x 16 mm)	③ Screw (M4 x 10 mm)
Shape			
Quantity	1	2	4 (Including 2 spares)

Name	④ Clamp	⑤ Wiring terminal (Use for X1A)	⑥ Sealing material
Shape			
Quantity	1	1	1

SAFETY CONSIDERATIONS

Read these Safety considerations for Installation carefully before installing the adapter. After completing the installation, make sure that the unit operates properly during the system start-up operation. Instruct the customer on how to operate and maintain the unit. Inform customers that they should store this Installation Manual for future reference.

Always use a licensed installer or contractor to install this product. Improper installation can result in water or refrigerant leakage, electrical shock, fire, or explosion.

MEANINGS OF SYMBOLS

⚠ WARNING Indicates imminently or potentially hazardous situation which, if not avoided, will result in death or serious injury.

⚠ CAUTION Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

NOTICE Indicates situations that may result in equipment or property-damage accidents only.

While these items will not cover every conceivable situation, they should serve as a useful guide.

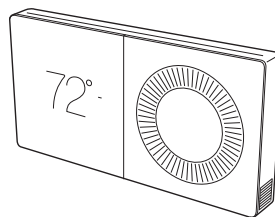
⚠ WARNING

- **DO NOT GROUND UNITS TO WATER PIPES, SUCTION LINE, TELEPHONE WIRES, OR LIGHTNING RODS AS INCOMPLETE GROUNDING WILL RESULT A SEVERE SHOCK HAZARD RESULTING IN SEVERE INJURY OR DEATH. ADDITIONALLY, GROUNDING TO GAS PIPES WILL RESULT A GAS LEAK AND POTENTIAL EXPLOSION RESULTING IN SEVERE INJURY OR DEATH.**
- **SAFELY DISPOSE ALL PACKING AND TRANSPORTATION MATERIALS IN ACCORDANCE WITH FEDERAL/STATE/LOCAL LAWS OR ORDINANCES. PACKING MATERIALS INCLUDING PLASTIC PACKING MATERIALS USED FOR TRANSPORTATION WILL RESULT IN INJURIES OR DEATH BY SUFFOCATION.**
- **ONLY QUALIFIED PERSONNEL MUST CARRY OUT THE INSTALLATION WORK. INSTALLATION MUST BE DONE IN ACCORDANCE WITH THIS INSTALLATION MANUAL. IMPROPER INSTALLATION COULD RESULT IN WATER LEAKAGE, ELECTRIC SHOCK, OR FIRE.**

- **USE ONLY SPECIFIED ACCESSORIES AND PARTS FOR INSTALLATION WORK. FAILURE TO USE SPECIFIED PARTS COULD RESULT IN WATER LEAKAGE, ELECTRIC SHOCKS, FIRE, OR THE UNIT FALLING.**
- **INSTALL THE ADAPTER ON A PLACE STRONG ENOUGH THAT IT CAN WITHSTAND THE WEIGHT OF THE UNIT. A PLACE OF INSUFFICIENT STRENGTH COULD RESULT IN THE UNIT FALLING AND CAUSING INJURIES.**
- **MAKE SURE THAT A SEPARATE POWER SUPPLY CIRCUIT IS PROVIDED FOR THIS UNIT AND THAT ALL ELECTRICAL WORK IS CARRIED OUT BY QUALIFIED PERSONNEL ACCORDING TO LOCAL, STATE AND NATIONAL REGULATIONS. AN INSUFFICIENT POWER SUPPLY CAPACITY OR IMPROPER ELECTRICAL CONSTRUCTION COULD RESULT IN ELECTRIC SHOCKS OR FIRE.**

APPLICATION

This system is designed to work with Daikin *One+* Smart Thermostat only.
(Not available for CTK04 or other thermostats)
This system can be paired with conventional gas furnaces (single-stage or two-stage).



Allowed indoor and outdoor unit combinations

Please refer to *DAIKIN CITY* or *PartnerLink* for the available indoor and outdoor unit combinations.

NOTICE

All AHRI (Air Conditioning, Heating and Refrigeration Institute) system ratings are accessible in the unitary matchup tool via *DAIKIN CITY* or in the DAIKIN system configurator tool via *PartnerLink*.

Allowable Air flow CFM range

Rated performance is based on fan speed changing under low load conditions. This lower airflow will also provide best dehumidification and comfort. The fan taps must be properly set to provide rated airflows. Please refer to Specification Sheets for correct airflow rates. Any airflow setting beyond the range specified may cause condensation, dehumidification, or compressor reliability issues.

Check the installation restrictions of each unit.

The latest Installation Manual can be obtained from the website “DAIKIN CITY (Installation Manual/Unitary Split System)” or “PartnerLink (Info-FinderPlus/Literature)”.

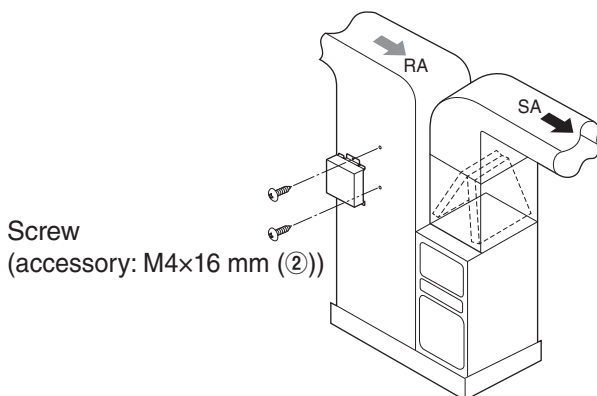
[DAIKIN CITY URL]

<https://www.daikincity.com/Library/>

[PartnerLink URL]

<https://partnerlinkmarketing.goodmanmfg.com/goodman/info-finder-plus>

INSTALLATION



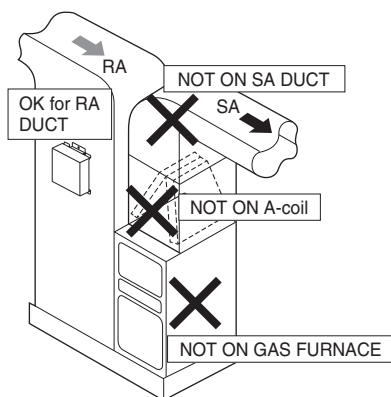
Mount the adapter with the screws (accessory: M4×16 mm (②)) on a place which has sufficient strength and stability.

(Return air duct, beams, pillars, walls, or other place which can support this adapter appropriately)

DO NOT mount this adapter in a place has risk of vibration or water droplets.

Please refer to the wiring diagram part for adding a standard single-pole double-throw (SPDT) relay when needed. This user-supplied SPDT relay will be installed in the existing furnace.

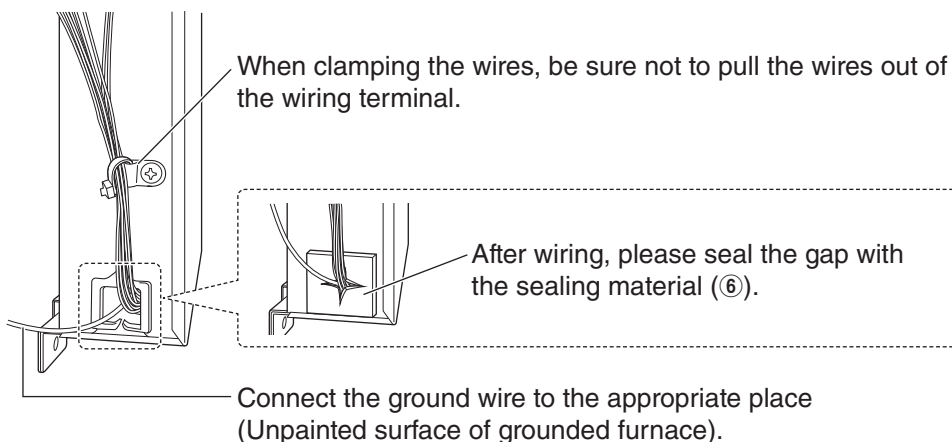
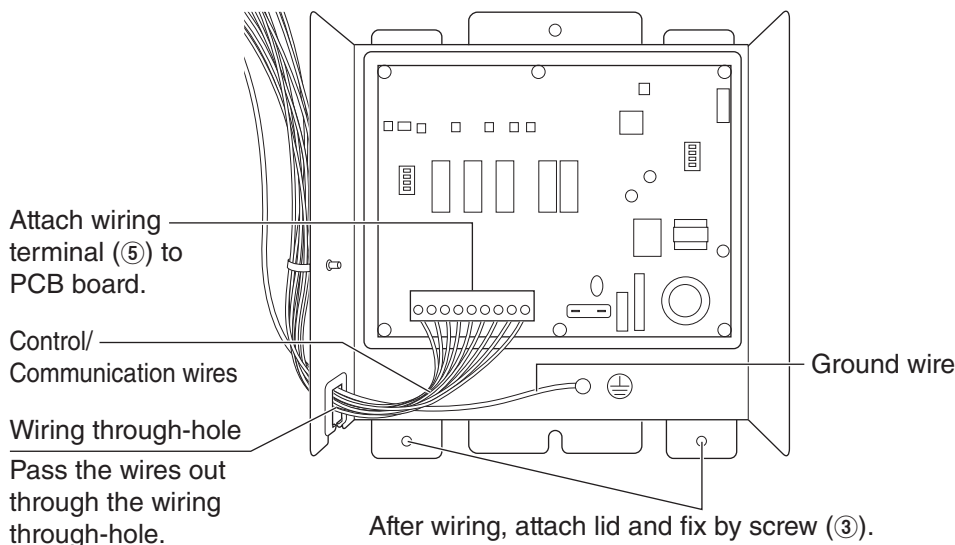
⚠ CAUTION



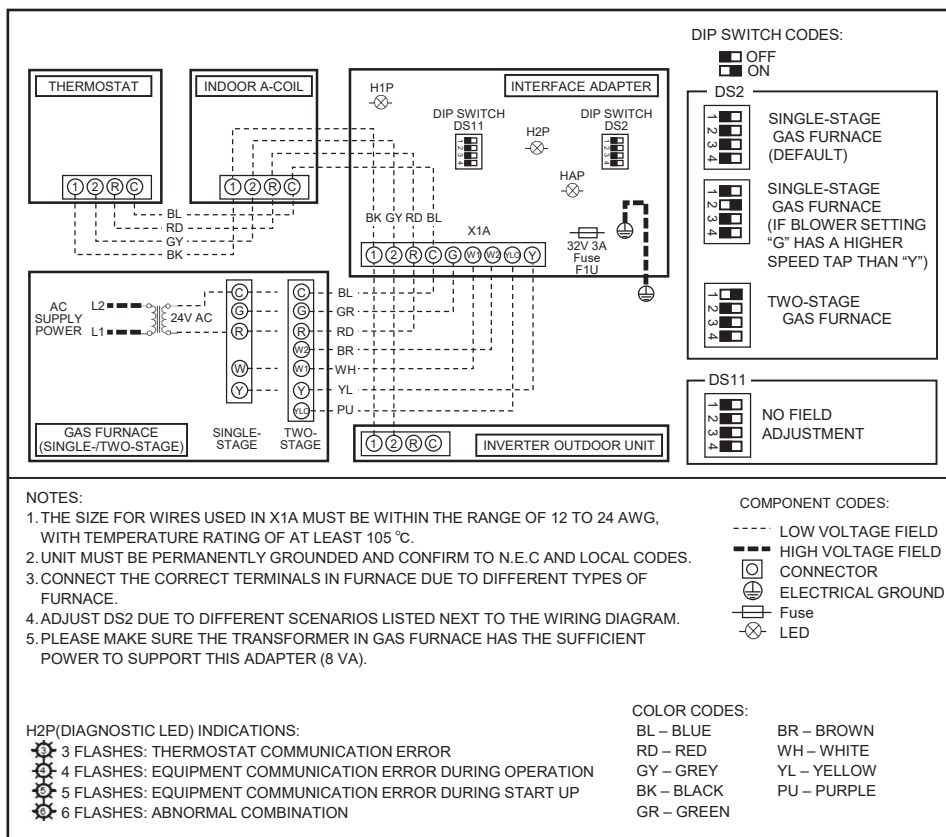
Do NOT mount DTA119A71 to any supply duct. Also, avoid mounting the adapter directly to any air handler, furnace, hot water coil or evaporator cabinet in the area. Otherwise, this may cause damages to those parts.

ELECTRIC WIRING WORK

1. Connect the wires to the devices according to the wiring diagram.
The connections are different due to different gas furnace (single-stage or two-stage).
2. Connect the ground wire to the grounding screw.



WIRING DIAGRAM



TERMINAL LABELS:

1 – COMMUNICATION SIGNAL
2 – COMMUNICATION SIGNAL
C – 24 V AC COMMON

G – INDOOR FAN
R – 24 V AC POWER
W1 – LO HEATING

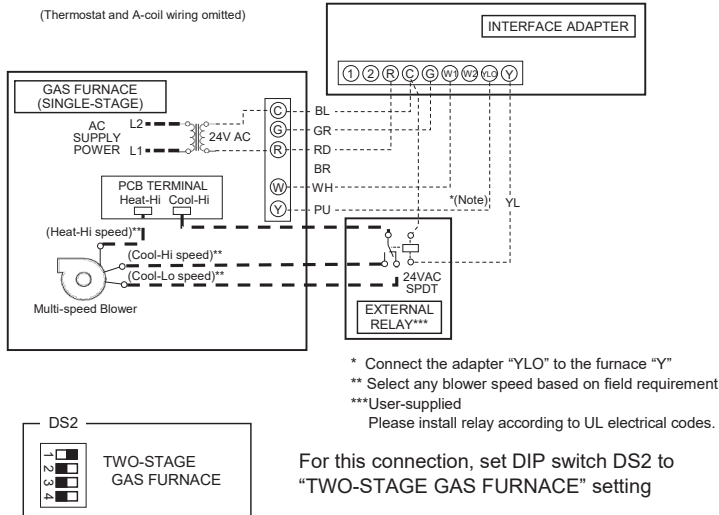
W2 – HI HEATING
YLO – LO COOLING
Y – HI COOLING

Please notice the wiring length limit in the system. The wiring length from the adapter to outdoor unit should be less than 250 ft, from the adapter to gas furnace should be less than 100 ft, and from the adapter to Daikin One+ Smart Thermostat should be less than 125 ft. Wire with thermostat, indoor a-coil, outdoor unit and gas furnace according to the wiring diagram.

Wiring is subject to change. Always refer to the wiring diagram on the unit for the most up-to-date wiring.

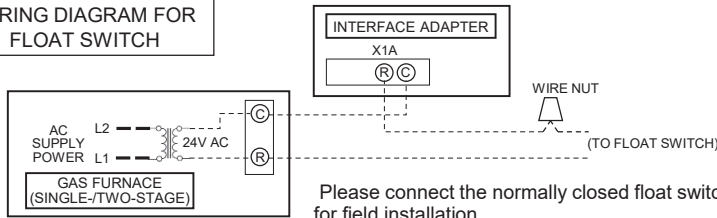
The required wires are data lines 1 and 2 for communication, "R" (24 V AC power) and "C" (24 V AC common) for power supply. For single-stage furnaces, connect "G", "W1", and "YLO" on the terminal interface adapter. (See WIRING DIAGRAM for external relay wiring). For two-stage furnaces, connect "W1", "W2", "YLO/Y1", "Y/Y2" to the same terminal in the interface adapter, and change switch on "DS2" according to the wiring diagram.

WIRING DIAGRAM FOR THE SINGLE-STAGE FURNACE APPLICATION OF ADDING A RELAY



For this connection, set DIP switch DS2 to "TWO-STAGE GAS FURNACE" setting

WIRING DIAGRAM FOR FLOAT SWITCH

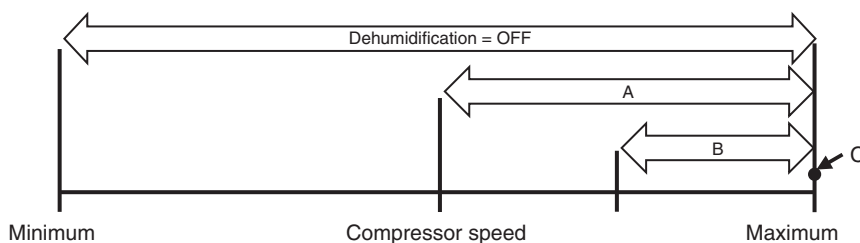


Please connect the normally closed float switch to "R" channel for field installation.

DEHUMIDIFICATION SETTING

The dehumidification performance will be improved by changing the setting in Daikin *One+* Smart Thermostat to “A” or “B” or “C”. Accordingly, the minimum compressor speed will be locked due to different setting. For example, by selecting “C” the minimum compressor speed will be fixed at 100% dehumidification capability. This operating range limitation will be unlocked when the humidity reaches the set value.

The default setting is “B”. Please select the proper setting due to your dehumidification demand or local climate. The setting can be changed from the dehumidification setting menu at any time when required. For instance, if “B” is still not adequate, you can select “C” to achieve the maximum dehumidification performance.



DEHUMIDIFICATION SET-UP ON Daikin One+ Smart Thermostat

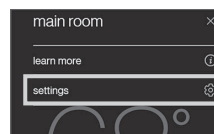
For a system using the adapter, Daikin One+ Smart Thermostat allows customers to have a dehumidification profile setting to achieve different dehumidification performance due to different requirements.

Navigating to dealer edit will allow you to access the dehumidification set-up.

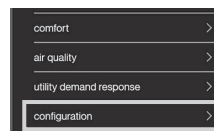
1. On the “HOME” screen, select the icon in the top right corner.



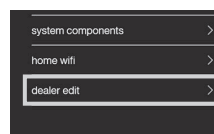
2. Select “settings”.



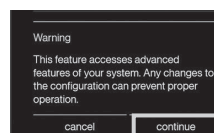
3. Select “configuration”.



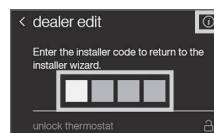
4. Enter dealer edit mode by selecting “dealer edit”.



5. Select “continue”.

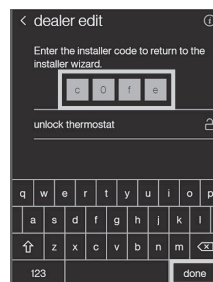
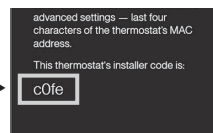


6. The installer code is need, and it can be found by referring to the icon in top right corner.

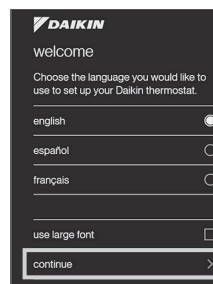


7. Find the unique installer code and enter the code, click “done” to unlock thermostat.

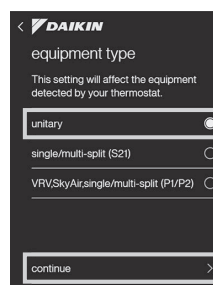
Example: c0fe →



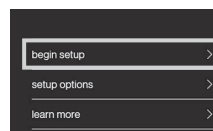
8. Choose the language and click “continue”.



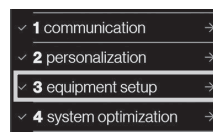
9. Select “unitary” and click “continue”.



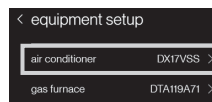
10. Select “begin setup”.



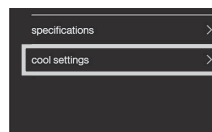
11. Choose “equipment setup”.



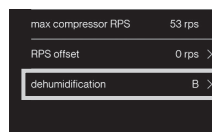
12. Select “air conditioner”, which is the outdoor unit in the system.



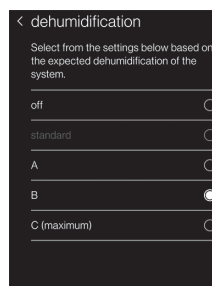
13. Select “cool settings”.



14. Select “dehumidification”.



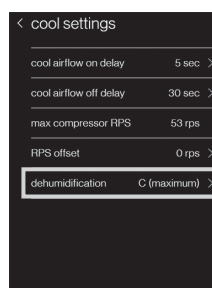
15. Select one of the settings according to your demand at this display.
“off” means no special dehumidification profile setting. “A” has the less dehumidification performance than the default setting “B”, while “C” has the maximum performance.



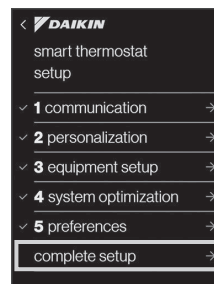
16. For example, select “C”.



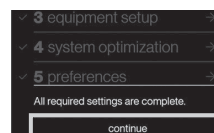
17. And then go back to “cool settings”, confirm the selected profile is correct.



18. Go back to the main smart thermostat setup menu and choose “complete setup”.



19. Last, click “continue” to finish all the setting. It will go back to “HOME” screen.



7-SEGMENT DISPLAY SCREEN 3 (SETTING MODE 1)

Setting No.	Contents	Setting	Installer/Service Notes
7	Dehumidification Select	0:STD 2:A 4:C 1:OFF 3:B	





This setting can be set with Daikin *One+* Smart Thermostat or 7-segment. Please adjust the setting according to customer request.

TROUBLESHOOTING

As shown in wiring diagram, different LED lights show different status or errors. H1P indicates network traffic, H2P shows network status and HAP brinks means CPU is working.

The following fault code will be displayed on the thermostat. Also, the STATUS LED [H2P] on the circuit board blinks. Repair according to the details of the error.

For the other fault codes, refer to the Installation and operation manuals of the outdoor unit and indoor unit.

ClimateTalk Fault Code	STATUS LED [H2P] on interface adapter	Error message on Daikin One+ Smart Thermostat	Probable Causes	Corrective Actions
D2	 6 Flashes	Abnormal combination	<ul style="list-style-type: none"> Abnormal system combination (Connection with non-applicable units) 	<ul style="list-style-type: none"> Check the availability of the combination of indoor unit and outdoor unit. Check the non-communicating gas furnace
76	 4 Flashes	Equipment communication error during operation	<ul style="list-style-type: none"> Communication wiring with indoor unit has loose connection. Communication wiring with outdoor unit has loose connection. 	<ul style="list-style-type: none"> Check communication wiring with indoor unit Check communication wiring with outdoor unit
77	 3 Flashes	Thermostat communication error	<ul style="list-style-type: none"> Communication error between thermostat and interface adapter. 	<ul style="list-style-type: none"> Check communication wiring with thermostat
78	 5 Flashes	Equipment communication error during start up	<ul style="list-style-type: none"> No communication with outdoor unit. (Not detected outdoor unit.) 	<ul style="list-style-type: none"> Check communication wiring with outdoor unit

When the gas furnace shows any abnormal condition, refer to relevant manual for the gas furnace.

Check the installation restrictions of each unit.

The latest Installation Manual can be obtained from the website “DAIKIN CITY (Installation Manual/Unitary Split System)” or “PartnerLink (Info-FinderPlus/ Literature)”.

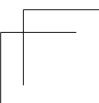
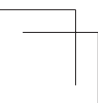
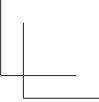
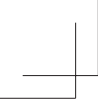
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<https://www.daikincity.com/Library/>

[PartnerLink URL]

<https://partnerlinkmarketing.goodmanmfg.com/goodman/info-finder-plus>

NOTES



CUSTOMER FEEDBACK

Daikin is very interested in all product comments.

Please fill out the feedback form on the following link:

<https://daikincomfort.com/contact-us>

You can also scan the QR code on the right to be directed to the feedback page.



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