



DAIKIN ONE+ SMART THERMOSTAT

Daikin *One*+ smart thermostat Reference Guide





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 servise 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.

PROP 65 WARNING FOR CALIFORNIA CONSUMERS

Cancer and Reproductive Harm www.P65Warnings.ca.gov

0140M00517-A

TABLE OF CONTENTS

INTRODUCTION

Features and Benefits	6
How to Use the Quick Reference Cards	8
Equipment Compatibility	9
Installing the Daikin One+ smart thermostat	10
Wiring Thermostat to Communicating Systems	11
Wiring Diagram	12
How to Wire a Humidifier to Daikin furnace	17
Wiring Troubleshooting	18
SYSTEM POWER-UP	
System Power-up Sequence	29
Commissioning the Daikin One+ smart thermostat	30
Quick setup (NOT RECOMMENDED TO USE)	30
Full-setup	31
Step 1 – Personalization	32
Step 2 – Communication	33
Step 3 – Equipment Set-up	34
How to Configure Humidifier on	
Modulating and 2-stage Furnaces	35
How to Configure Heat Kit	35
How to Set-up Lockout	27
Stop 4 System Optimization	/ د
Step 4 – System Optimization	
Inverter Outdoor Units	39
How to Use Charge Mode	40
How to Calibrate Temperature	
How to Check Error History	42
How to Check System Operational Information	43
Step 5 – Preferences	44
How to Create Reminder	45
Dealer Navigation (How to return to Dealer Edit Mode)	
How to Set-up Humidification	
and Dehumidification Set-points	48
REFERENCES	
54.0	= 0

FAQs	52
Support and Resources	54
Menu Outline Overview	55
Important Notes	65





Introduction





Features and Benefits

Designed with quality components

- 1 The high-resolution color touch screen display is protected by the same toughened glass used in smart phones.
- 2 The anodized aluminum bezel and dial are precision manufactured. The surfaces have a fine bead blast with a warm hued anodized finish. The dial rotation is extraordinarily smooth because it rests on a bearing assembly typically found in precision instruments. A switch behind the dial enables users to return to the home screen from any menu with a single tap.
- 3 An integrated Wi-Fi radio connects to the internet (via a home router) to the cloud and onto the homeowner mobile application. The Daikin cloud will also seamlessly integrate with open smart home architectures, including *Amazon Alexa* and *Google Assistant*, enabling consumers to effortlessly use features such as voice control.
- 4 A thin LED light bar sits flush within the bottom surface and runs from edge to edge, delicately illuminating the wall beneath. Emitting a soft emotive glow, the light bar indicates the current system mode: red for heating, blue for cooling.
- 5 Built-in bubble level aids professional installation

- See page 65 for important notice concerning FCC





How to Use the Quick Reference Cards

There are quick reference cards packaged with the Daikin *One*+ to help answer questions during the installation and commissioning.



For further details on the Quick Reference Cards refer to page 66, or visit <u>https://www.daikinone.com/smart_thermostats/oneplus</u>

DAIKIN



The Daikin *One+* offers two-way communication when combined with Daikin's smart inverter HVAC systems, serving as a cloud-connected hub and controller for communicating HVAC systems.

					Indo	or Unit		
			Furn	ace	Coil	Air	Handler/Blo	ower
			DM97MC DC97MC	DM96VC DC96VC DM80VC DC80VC	CAPE CHPE	DVFEC	DVPEC	DVPVC DVPTC MBVC
	ner	DX20VC	\checkmark	\checkmark	-	-	\checkmark	\checkmark
	ditio	DX17VSS	√	\checkmark	\checkmark	-	-	1
	Con	DX18TC	\checkmark	\checkmark	-	-	-	\checkmark
Juit	Air	DX16TC	\checkmark	\checkmark	-	-	-	\checkmark
borl		DZ20VC	\checkmark	\checkmark	-	-	\checkmark	\checkmark
Intde	Ê	DZ18VC	-	-	-	-	\checkmark	-
	at Pi	DZ18TC	\checkmark	\checkmark	-	-	-	\checkmark
	He	DZ17VSA	\checkmark	\checkmark	\checkmark	\checkmark	-	√(MBVC)
		DZ16TC	\checkmark	\checkmark	-	-	-	\checkmark
	24	VAC Condenser	\checkmark	\checkmark	-	-	-	-

24 VAC Condenser (Legacy 24V) is compatible only with communicating furnace



Installing the Daikin One+ smart thermostat



- » Mounting the thermostat will be leveled:
 - Approximately 5' from the floor.
 - On an interior wall using the included screws.

Important Notes:

- » You do not need the trim plate to mount the thermostat.
- » Screws included are designed to mount in sheetrock or studs
- » Its recommended to use the screws provided with Daikin *One*+ packaging for best results

Wiring Thermostat to Communicating Systems



- » Maximum wire distance between the Daikin One+ and the indoor unit should not exceed 125 feet using 18-gauge wire.
- » For installing the Daikin *Fit* outdoor system, it is strongly recommended (for best results) to use 18-gauge wire.
- » Check for proper voltage before and after wiring is installed.
 - 0.6 VDC between Data 1 and 2
 - 24 VAC between common and power
- » Wiring **communicating** indoor unit to **communicating** outdoor units.
 - Connect 1, 2, C and R from the Daikin One+, to 1, 2, C and R at the indoor unit.
 - Connect wires 1 and 2 from the indoor unit to 1 and 2 at the outdoor unit.
- » Wiring communicating indoor furnace unit to non-communicating outdoor units.
 - Connect 1, 2, C and R from the Daikin One+, to 1, 2, C and R at the indoor furnace unit.
 - Connect wire $\boldsymbol{Y1}$ from the indoor furnace unit to $\boldsymbol{Y1}$ at the outdoor unit
 - Under Equipment Setup add '24 VAC Condenser'.
 - Under '24 VAC Condenser' select the matching kBTU from 'cool CFM' settings



Wiring Diagram



- » Communicating indoor units supplied with a 9 pin connector only, will move the connector to the far left to pair R, C, G, W1 on the 9 pin with 1, 2, R, C on the indoor PCB.
- » Communicating outdoor units supplied with a 7 pin connector only, will move the connector to the far left to pair R, C on the 7 pin with 1, 2 on the outdoor PCB.

Note: The Daikin *One*+ is labeled 1, 2, C, R. If wired incorrectly you will receive a communication error, or your equipment may not be recognized and displayed.

INTRODUCTION



- » Communicating indoor units with a 4 pin connector supplied, will match 1, 2, R, C on the 4 pin with 1, 2, R, C on the indoor PCB.
- » Communicating outdoor units with a 4 pin connector supplied, will match 1, 2 on the 4 pin with 1, 2 on the outdoor PCB.

Note: The Daikin *One*+ is labeled 1, 2, C, R. If wired incorrectly you will receive a communication error, or your equipment may not be recognized and displayed.



Wiring Diagram





DAIKIN







Wiring Diagram



Note: It is recommended to use a minimum of 18-Gauge wire. Maximum operating length of wire is 125 ft.

DAIKIN

How to Wire a Humidifier to Daikin Furnace



- » The indoor furnace control is equipped with a dedicated humidification relay which is available through ¼ inch terminals HUM-IN and HUM-OUT
- » HUM-IN must be powered with the desired voltage (24 VAC from the R terminal or 115 VAC from L1 terminal)
- » Humidification relay turns ON when there is call for heat and a call for humidification
- » For 2-stage furnace only, humidifier relay supports below modes
 - ON: Humidifier is turned on with a heat demand and humidification demand
 - OFF: Humidifier remains off (relay never closes).



The following steps require no power to be applied.

- Check for any loose, disconnected, broken, or shorted wires between all connected components **BEFORE** applying power
- No short between Data 1 or Data 2 wires and R (24 VAC) or C (24 VAC common)
- Check for Data 1 and Data 2 wires reversed at the indoor unit, thermostat, or outdoor unit

After fixing all the wiring issues apply power

- Check for 24 VAC across R (24 VAC) and C (24 VAC common) terminals
- If there are still problems discovering the indoor or outdoor equipment then check for bias reading of 0.6 VDC. Bias reading of 0.6 VDC indicates a robust network that can handle high data volume without lock-up.



Follow the steps below to measure and achieve 0.6 VDC bias value.

- Turn OFF the thermostat and make sure the system is idle
- Take Bias readings on the outdoor Heat Pump or Air Conditioner
- Measure DC voltage between 24 VAC common to Data 1 = D1 VDC
- Measure DC voltage between 24 VAC common and Data 2 = D2 VDC
- Bias reading = D1 VDC D2 VDC (Subtract D2 from D1 to calculate bias voltage) = 0.61 VDC
- Measure DC voltage between Data 1 and Data 2. This value should equal the value calculated in the previous step.
- Take Bias readings on indoor Air Handler or Furnace by repeating above steps on its terminal blocks.
- Take Bias readings on CAPE EEV coil if connected by repeating above steps on its terminal blocks.
- The Bias readings should match on all the equipment's terminal blocks.
- If Bias reading is below 0.6 VDC, check the TERM Dip-Switch (DS1) setting on the outdoor unit. Move the TERM Dip-Switch (DS1) to OFF position. This should improve the Bias reading to 0.6 VDC.
- After stabilizing the network, power down the entire HVAC system. Wait for a few minutes and power back up. It will take approximately 3-5 minutes for the HVAC system and thermostat to discover the indoor and outdoor equipment.

For a view of the DS1 switch on the outdoor unit PC boards, see pages 20-24.

- 1. 17 SEER Daikin Fit
- 2. 18 SEER (all tonnage)
- 3. 20 SEER (2 and 3 Ton)
- 4. 20 SEER (4 Ton)
- 5. 20 SEER (5 Ton)



Wiring Troubleshooting

View of the DS1 Switch on the Outdoor Unit PC Boards

1. 17 SEER Daikin Fit







Wiring Troubleshooting

3. 20 SEER (2 and 3 Ton)



4. 20 SEER (4 Ton)





Wiring Troubleshooting

5. 20 SEER (5 Ton)







System Power-Up





smart thermostat setup

1 personalization	\rightarrow
2 communication	\rightarrow
3 equipment setup	\rightarrow
4 system optimization	\rightarrow
5 preferences	\rightarrow

DAIKIN

welcome

The Daikin smart quickly setup with customized in the

The application s proceed. You can change your setti

begin quick setu

begin full setup

learn more



Follow the instructions to wire the Daikin *One*+ smart thermostat with the communicating indoor and outdoor systems.

Mount the thermostat and power ON the indoor and outdoor units. The Daikin *One*+ smart thermostat gets power from the indoor unit.

Follow the steps mentioned under Commissioning Daikin *One*+ to configure the indoor unit and outdoor unit.



Commissioning the Daikin One+ smart thermostat

Full set-up

- » Start-up screen is displayed upon powering the thermostat.
- » The welcome screen displays basic instructions.
- » An explanation of two set-up options is displayed on the learn more screen.
- » Demo mode displays a quick video of the full set-up and a few homeowner navigation features.

V DAIKIN	< learn more
Welcome The Daikin smart thermostat can be quickly setup with default settings or customized in the full setup.	quick setup Use quick setup when you need to get the HVAC equipment running as soon as possible. Once the site is more comfortable, you can complete the full
The application saves each step as you proceed. You can always go back to change your settings.	setup. full setup Use full setup to customize settings and ensure the system is properly configured and ready for homeowners to use.
begin quick setup	Use demo modes for display in your showroom.
begin full setup	demo modes >
learn more >	firmware: 1.1.0

Quick setup (NOT RECOMMENDED)

DO NOT use Quick setup for normal commissioning operation. Quick setup is intended to be used for rare emergency cases where the system must be started with default settings

Full set-up

- » Tapping full set-up starts the five step set-up process:
 - 1. Personalization.
 - 2. Communication.
 - 3. Equipment Set-up.
 - 4. System Optimization.
 - 5. Preferences.
- » Full set-up ensures the system is configured properly and ready for the homeowner to use.

Note: All steps must be completed and reviewed before full set-up

/	DAIKIN	
W	elcome	
The qui cus	e Daikin smart thermosta ckly setup with default s stomized in the full setup	at can be ettings or
The pro cha	e application saves each ceed. You can always go ange your settings.	step as you back to
beg	gin quick setup	>
beg	gin full setup	>
lea	rn more	>



Commissioning the Daikin One+ smart thermostat

Full set-up

Step 1 – Personalization

- » Tapping the **personalization tab** allows you to edit default information.
- » Personalization displays:
 - Language.
 - Date & Time.
 - If Wi-Fi is connected, date & time set automatically.
 - Thermostat Name.
 - Degree Units.

Note: Tapping Daikin logo returns to welcome screen





Full set-up

Step 2 – Communication

- » Configures Communication Networks.
- » Select home Wi-Fi to search for networks.
- » With Wi-Fi configured, the system can check the software version and update software to the latest version automatically.

DAIKIN		communicati	on	
smart thermostat setup		equipment type	unitary	
1 personalization	\rightarrow	home wifi	disconnected	>
2 communication	\rightarrow			
3 equipment setup	\rightarrow			
4 system optimization	\rightarrow			
5 preferences	\rightarrow			
complete setup	\rightarrow			
		previous step	next step	



Commissioning the Daikin One+ smart thermostat

Full set-up

Step 3 – Equipment set-up



- » Displays equipment found by searching the communication network, or by adding/removing equipment and accessories from the preset list.
- » There are options to view and optimize settings that apply to the installed units.
 - View unit Specifications.
 - Configure
 - Cool settings
 - Heat Settings
 - Heat Pump Settings
 - Humidifier Relay
 - Aux alarm
 - Heater Kit

Reference to Menu Outline

- » For a detailed view of menu and sub-menu settings, refer to the Menu Outline Overview on pages 55-64 or visit <u>https://daikinone.com/smart_thermostats/oneplus/pros/ DaikinOnePlus-CommissioningMenuOutline.pdf</u>
- » Menus and sub-menus will display or not depending on the type of indoor and outdoor units detected.

Full set-up

How to Configure Humidifier on Modulating and 2-stage Furnaces

- » Refer to the Humidifier in the furnace section under Installing Daikin Onet section for details on wiring humidifier to the furnace board
- » For 2-Stage furnace, Daikin One+ supports 'humidifier relay' settings. It has the following options:
 - ON: Humidifier is turned on with heat demand & humidification demand
 - OFF: Humidifier remains off (relay never closes).
- » For Modulating furnace, humidifier is turned ON with heat demand & humidification demand.

How to Configure Heat Kit

Heater kit configuration varies based on the type of the Indoor units.

DVPVC, DVPTC, MBVC

<	air handler	
	Daikin DV59PTCD14A ComfortNet Variable Speed Air Hand with TXV	ller
	specifications	>
	heater kit installed	\searrow
	heater kit	>
	aux alarm of	f >

- » Use dip switches on the board to configure the heater kit size. Please refer to the installation manual of these boards to locate the dip switches.
- » Heater kit size configured with dip switches will appear under

Installer Wizard > equipment setup > air handler > heater kit > size (kW)

Enable 'heater kit installed' checkbox.

Installer Wizard > equipment setup > air handler > heater kit installed

- » 'heater kit' sub-menu appears on enabling 'heater kit installed' checkbox
- » Inside 'heater kit' sub-menu 'heat airflow trim' value can be adjusted



Commissioning the Daikin One+ smart thermostat

Full set-up

DVPEC

size (kW)	11 kW	
electric heat airflow trim	-4%	~
heat airflow on delay	0 sec	
heat airflow off delay	90 690	

Some details have advanced settings.

» Navigate to heater kit size sub-menu under the Air Handler

Installer Wizard > equipment setup > air handler > heater kit > size (kW) > Select the heater kit size by scrolling available 'size(kW)' options.

» If required, adjust 'electric heat airflow trim'

Installer Wizard > equipment setup > air handler > heater kit > electric heat airflow trim
Full set-up

How to Setup Lockout Temperature for Heat Pump

Heat pump settings allow for adjustment of compressor lockout temperature and auxiliary (secondary) lockout temperature

ELECTRIC BACKUP HEAT

» Auxiliary heat lockout temperature:

- Auxiliary electric strip heat won't run above this outdoor temperature.
- Must be at least 10°F greater than heat pump lockout temperature.

Installer Wizard > equipment setup > heat pump > heat pump settings > aux heat lockout temp

» Heat pump lockout temperature:

- The heat pump compressor won't run below this outdoor temperature.
- Must be at least 10°F less than aux heat lockout temperature.

Installer Wizard > equipment setup > heat pump > heat pump settings > heat pump lockout temp

When the outdoor temp is between the heat pump lockout and aux lockout temperatures

 Backup heat is requested immediately if the difference between the heat setpoint and indoor temperature is greater than 4°F

aux heat lockout temp
50 °F
55
Aux (electric strip heat) and/or gas heat won't run above this outdoor temperature. Must be at least 10°F > heat pump lockout temp.
heat pump lockout temp:
30 °F
heat pump lockout temp
25
30 1
Heat pump won't run below this outdoor temperature. Must be at least 10°F < aux heat lockout temp.
aux heat lockout temp:
45
50 °F

 Depending on load conditions and system performance, the thermostat will wait to request backup heat. Backup heat will only be requested when the temperature is not rising to meet the heat setpoint in a reasonable amount of time.

GAS FURNACE BACKUP HEAT:

» Auxiliary heat lockout temperature:

- The heat pump will only turn on above this lockout temperature.
- A gas furnace will only turn on below this lockout temperature.
- Heat pump lockout temperature is not required on a duel fuel system.



Commissioning the Daikin One+ smart thermostat

Full set-up

Step 4 – System Optimization System optimization displays:

- » System test.
 - Inverters only
- » Charge mode
 - Inverters only

- » Optional test
- » Error history
 - Logs alerts with an error code
 - White = not critical
 - Yellow = critical
- » Calibration
- » Status

DAIKIN	
smart thermostat setup	
1 personalization	\rightarrow
2 communication	\rightarrow
3 equipment setup	\rightarrow
4 system optimization	\rightarrow
5 preferences	\rightarrow
complete setup	\rightarrow

< system optimization

system test	>
charge mode	>
optional tests	>
error history	>
calibration	>
status	>
previous step	next step

Full set-up

How to Run System Test for Inverter Outdoor Units

Navigate to system optimization > system test > Inverters only

- » On initial power-up the inverter heat pump or air conditioner will display code E11, signaling that initial system test must be run.
- » System test is required to check the equipment settings and functionality.
- » Once selected, it checks the equipment for approximately 10-15 minutes. System test may exceed 15 minutes if there is an error.
- » While the system test is active "test running" message shows up on the screen.
- » System test is complete only when display code E11 notice clears from the seven segment LED display on the heat pump or air conditioner. Please wait for test to complete and for code to clear.
- » As soon as the test completes, "test running" message is cleared from the screen.

< system test		<	system test	t
run test	>		test running	\V <u>r</u>
This is approximately a 5 If the thermostat is set to system will enter charge completion, otherwise it w	-15 minute test. cool mode, the mode upon will stop.		This is approxim If the thermostal system will enter completion, othe	ately a 5-15 minute test. t is set to cool mode, the r charge mode upon erwise it will stop.
	< system optim	niza	tion	
	✓ system test		>	
	optional tests		>	
	error history		>	
	calibration		>	
	status		>	
	previous step		next step	



Commissioning the Daikin One+ smart thermostat

Full set-up

How to Use Charge Mode

Navigate to system optimization > charge mode > run test

- » Charge mode allows for the contractor/technician to monitor system performance and top off the charge if needed.
- » System operates for a duration of approximately **one hour** while the equipment runs at full capacity.
- » During this time, the contractor/technician will add vapor refrigerant into the suction line while monitoring system performance. Refrigerant should no longer be charged into the system once performance is correct.
- » After one hour, the charge mode ends and the system resumes normal thermostat operation.
- » To terminate charge mode select 'stop'.



FOR PROPER CHARGING OF A SYSTEM, SEE EQUIPMENT INSTALLATION MANUAL.

DAIKIN

Full set-up

How to Calibrate Temperature

Navigate to system optimization > calibration > temperature calibration

- » To calibrate or make adjustment to the thermostat displayed temperature drag the offset up or down.
- » Adjustment can be made -7° F to +7° F in 1° F steps.

<	system optimization		< temperat	ure calib	ration
~	system test	>			
	optional tests	>	thermostat measured		
	error history	>	68°	=	
	calibration	>			
	status	>	display		\bigcirc °
			calibrated	-	
			68		
	previous step ne:	kt step			



Commissioning the Daikin One+ smart thermostat

Full set-up

How to Check Error History

Navigate to system optimization > error history

- » Daikin *One*+ "error history" menu provides access to the most recent equipment and system errors.
- » Errors are stored in order from most recent to least recent.
- » Each error entry comprises an error code, the equipment type which generated the error, brief error description and a timestamp.
- » Critical errors are displayed with an alert icon with a yellow head.
- » Any consecutively repeated error is stored only once.
- » For more information please refer to Daikin *One+* communicating thermostat documentation.



Critical errors are displayed with an alert icon with a yellow head.

Full set-up

How to Check System Operational Information

Navigate to system optimization > status

- » The status menu displays data pertaining to the selected equipment
- » The scrollable list can be accessed any time by returning to the installer set-up screen

<	system optimiz	ation	
	system test		>
	charge mode		>
	optional tests		>
	error history		>
	calibration		>
	status		>
	previous step	next step	

COOL
21
0%
50%
310 CFM
and 4%
0.bre



Commissioning the Daikin One+ smart thermostat

Full set-up

Step 5 – Preferences

There are four preference settings to choose from in order to optimize your systems performance.

- » Cool/Heat
- » House settings
- » Dealer information
- » Reminders

Note: Changing preferences is not required, but reminders and dealer contact information should be input.

V DAIKIN		< preferences	
smart thermostat setup		cool/heat	>
1 personalization	\rightarrow	house settings	>
2 communication	\rightarrow	dealer information	>
3 equipment setup	\rightarrow	reminders	>
4 system optimization	\rightarrow		
5 preferences	\rightarrow		
complete setup	\rightarrow		
		previous step	next step

SYSTEM POWER-UP

Full set-up

How to Create Reminder

- » The number of reminders are based on the installed equipment with accessories.
- » Once the equipment has been added, a **1 24** month service reminder can be selected for the installed equipment.

Note: The homeowner cannot edit service reminders.



electronic filter	12 months	>
HEPA filter	12 months	>
media filter	12 months	>
UV bulbs	24 months	>
dehumidification filter	12 months	>
humidifier pad	12 months	>
service reminder	off	>



Dealer Navigation

How to return to Dealer Edit mode (Full Set-up) Navigating to dealer edit will allow you to access or revisit the installer set-up screen.

» Advanced adjustments to the Daikin One+ will be made here.

	Ξ	<	settings	
			system mode	>
_	_		display	>
\bigcap	\bigcap°		schedule	>
	\succ _		away	>
			comfort	>
			air quality	\geq
system in	off mode		configuration	>
\wedge				
υυ				
< configuration	ı	<	reset	
account	>		Reset the connection between the thermostat and your online account.	
dealer	>		reset registration	>
date & time	>			
messages	>			
system componen	its >			
home wifi	>			
reset	>			
			dealer edit	>



Warning

This feature accesses advanced features of your system. Any changes to the configuration can prevent proper operation.

cancel

continue

X

dealer edit

Dealer edit accesses the advanced settings for the thermostat created during the initial setup process.

Each thermostat has an unique installer code used to unlock the thermostat's advanced settings — last four characters of the thermostat's MAC address.

This thermostat's installer code is:



< dealer edit

Enter your 4-digit PIN to unlock the thermostat:



unlock thermostat



1

q	v	r	e)	r		t		2	/	ι	ı			¢)	k	5
a	ł		;	c	i	f		ç	1	ł	1			ł	۲.			
Û	5	z		>	¢	c	:	١	′	ķ	þ	r	ı	'n	n	<	×	
1	23	i.													d	on	е	

< dealer edit

Edit configuration with installer wizard.

installer wizard

Reset all thermostat settings back to factory defaults. Equipment settings will not be affected.

factory reset



How to Set-up Humidification and Dehumidification Set-points

On the homeowner menu navigate to settings > comfort > target humidity

- » Drag the value left or right to set the target humidity level
- » Top value displays the target humidification level
- » Bottom value displays the target dehumidification level
- » The system attempts to keep the humidity as close as possible to your selected value

< target humidity

Drag the value left or right to set a target humidity level to keep your environment best for your needs.



The system attempts to keep humidity as close as possible to your selected value.





References



1. What are the support resources available?

- a. For general support for the Daikin *One+* smart thermostat call 1-855-daikin1 and select option #1.
- b. For troubleshooting* and error codes call 1-855-daikin1 and select option #4 (*For optimal support experience, dealers/installers must be on site before calling our troubleshooting lines).
- c. <u>www.Daikinone.com</u> has resources for homeowners and professionals.
- d. For questions on where to find educational materials call 1-855-daikin1 and select option #6.
- e. Technical specifications and training content can be found on <u>www.DaikinCity.com</u>.

2. What to do if equipment isn't found during discovery mode?

- a. Find the AHU but not the outdoor unit?
 - Ensure wiring is tight, as this may cause dysfunctional systems due to loose wiring at the *One+* mounting plate. Reference back to the wiring troubleshooting section (page 18).

3. How do I connect to Wi-Fi?

- a. You can connect the Daikin One + smart thermostat to Wi-Fi by following the steps below. If you have more than one thermostat each one will need to be connected individually.
 - i. Select the menu icon located in the upper right-hand corner section.
 - ii. Select Settings and then Configuration.
 - iii. Then select Home Wi-Fi.
 - iv. Ensure the "Use Wi-Fi" box is checked and then select scan network.

< settings

system mode	>
display	>
schedule	>
away	>
comfort	>
air quality	>
configuration	>

< configuration

account	>
dealer	>
date & time	>
messages	>
system components	>
home wifi	>
reset	>

< home wifi

use wifi

networks

disconnected >

 $\mathbf{\mathbf{v}}$



Support and Resources

If you encounter any issues or would like assistance with setting up your Daikin *One*+ smart thermostat:

CONTACT DAIKIN SUPPORT AT **1-855-DAIKIN1 AND SELECT OPTION ONE** TO BE CONNECTED WITH OUR SUPPORT TEAM

Other resources:

 Go to www.daikinone.com and click on the banner to access homeowner site and dealer site for Daikin One+

DAIKIN

About Dakin | Homeowners | Professionals | Ma

» Homeowner

- Welcome page:
 - https://www.daikinone.com/smart_thermostats/oneplus/welcome/
- Contains information for homeowner for how to use Daikin One+ Smart Thermostat and how to use the mobile app

» Professional (Contractor/Installer)

- Get help at www.daikinone.com/smart_thermostats/oneplus/Pros
- Installation and commissioning information
- Commissioning menu outline
- Wiring diagram, troubleshooting table
- » Daikin One+ Installation and Commissioning webinar is also available from Daikin City > Daikin University
 - https://youtu.be/_3q_UhF84Xs
 - https://www.youtube.com/user/DaikinAC



Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
	language	english			
		(month, day, and year selection)	-		
	date & time	use 24-hour			
5		format davlight savings			
izati		time			
ileuo		main room upstairs			
erse	thermostat	downstairs			
<u> </u>	name	bedroom			
		kitchen other			
	degree units	fahrenheit			
=		celsius			
atio	equipment type	unitary			
unic	home wi-fi				
m		-	-		
చి					
			Model #		
			Serial #		
			Control Software Version		
		Specifications	Inverter Software Version		
			# of AC Stages		
			# of HP Stages		
£.			Tonnage		
t Se	Air Conditioner			Low speed trim	-15% to 15% in
men	(model # from			Intermediate speed trim	-15% to 15% in
din 1	61)		Cool Airflow Trim		3% increments
ш				High speed trim	3% increments
		Cool Sottingo		-10% to 10% in 2%	
		Coorsettings		Profile A	
			Cool Profiles	Profile B Profile C	
				Profile D	
			Cool Airflow ON Delay	5, 10, 20, 30s	
			Cool Airflow OFF Delay	30, 60, 90, 120s	



REFERENCES

Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
	A. O. 194		Min compressor RPS limit		
	(model # from	Cool Settings	RPS limit offset	0 to 20 in 0.5 RPS steps	
	CT)	-	Dehumidification	Dehumidify with cooling: Off/On	
			Model #		
			Serial #		
			Control Software Version		
		Specifications	Inverter Software Version		
			# of AC Stages		
			# of HP Stages		
			Tonnage		
		Cool Settings	Cool Airflow Trim	Low speed trim	-15% to 15% in 3% increments
Setup	Heat Pump (model # from CT)			Intermediate speed trim	-15% to 15% in 3% increments
ment				High speed trim	-15% to 15% in 3% increments
quip				-10% to 10% in 2% increments	
ŭ			Cool Profiles	Profile A Profile B Profile C Profile D	
			Cool Airflow ON Delay	5, 10, 20, 30s	
			Cool Airflow OFF Delay	30, 60, 90, 120s	
			Min compressor RPS limit		
			RPS limit offset	0 to 20 in 0.5 RPS steps	
			Dehumidification	Dehumidify with cooling: Off/On	
				Low speed trim	-15% to 15% in 3% increments
		Heat Settings	Heat Airflow Trim	Intermediate speed trim	-15% to 15% in 3% increments
				High speed trim	-15% to 15% in 3% increments



I

Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
			Heat Airflow Trim	-10% to 10% in 2% increments	
			Heat Airflow ON Delay	5, 10, 15s	
			Heat Airflow OFF Delay	30, 50, 70, 90s	
			Defrost Interval	30, 60, 90, 120m	
		Heat Settings	Defrost Compressor Delay	0, 5, 15, 30s	
	Heat Pump (model # from		Defrost Heat	Always On, Always Off, 30° F, 35° F, 40° F, 45° F, 50° F, 55° F, 60° F, 65° F	
	CT)		Min compressor RPS limit		
			RPS limit offset	0 to 20 in 0.5 RPS steps	
			enable heat pump lockout		
		Heat Pump	heat pump lockout temp	-20° F to 65° F in 5° F increments	
		Settings	enable aux heat lockout		
a.			aux heat lockout temp	-10° F to 75° F in 5° F increments	
setu		Specifications	Model #		
ent S			Serial #		
j.			Control Software Version		
Equ			# of Furnace Stages		
			Size/Capacity		
			Blower Motor Size		
			Coolloot Airflow Trim	-15% to 15% in 3% increments	
	Furnace (model # from		das neat Annow Inni	-10% to 10% in 2% increments	
	CT)		Gas Heat Airflow ON Delay	5 to 30s in 5s increments	
		Heat Settings	Gas Heat Airflow OFF Delay	30 to 180s in 30s increments	
			Heat Airflow Profile	Profile 1 Profile 2 Profile 3 Profile 4	
		User differ Delay	Humidification Mode	On, Off, or Independent	
		numatier Kelay	Humidification Fan Speed	25, 50, 75, 100%	
		Aux Alarm	On/Off		

Continued on next page

DAIKIN



Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
			Model #		
		C:	Serial #		
		Specifications	Control Software Version		
			Blower Motor Size		
			Is a heater kit installed?	Yes/No	
			DVPEC model	DV25PEC DV37PEC DV59PEC DV61PEC	
				None, 3, 5, 6, 8, 10kW	
	Air Handler	Heat Kit	Size (kW)	None, 5, 6, 8, 10, 15, 19kW	
	(model # from CT)			None, 5, 6, 8, 10, 15, 20kW	
÷				None, 5, 6, 8, 10, 15, 20, 25kW	
Set			Electric Heat Airflow Trim	0% to 10% in 2% steps	
nent				-10% to 10% in 2% steps	
ų.			Heat Airflow ON Delay		
E.			Heat Airflow OFF Delay		
		Humidifier Relay	Humidifier Enable with Blower None		
			Humidification Mode	On Off Independent	
			Humidification Fan Speed	25, 50, 75, 100%	
		Aux Alarm	On/Off		
	Coil (model #	Configuration	Serial #		
	from CT)	Connyuration	Software Version		
	Media filter	Number of filters	1, 2		
	Would Inter	Remove equipment	Do you want to remove this equipment? Yes/No		
		indoor air quality			
	Add Equipment	24 VAC Condenser			
		Humidifier			



Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
		Dehumidifier			
		UV bulb			
	Add Equipment	HEPA filter			
		Electronic filter			
		Zone board			
	Indoor air quality sensor	Remove equipment	Do you want to remove this equipment? Yes/No	Yes/No	
			Cool CFM	18, 24, 30, 36, 42, 48, 60 kBTUs cooling	
			Cool Airflow Trim	-15% to 15% in 3% increments	
				-10% to 10% in 2% increments	
	24 VAC Condenser	Cool Settings	Cool Profiles	Profile A Profile B Profile C Profile D	
Setul			Cool Airflow ON Delay	5, 10, 20, 30s	
ent				1, 5, 10, 20, 30s	
ļ.			Cool Airflow OFF Delay	30, 60, 90, 120s	
E -				0, 30, 60, 90, 120s	
		Remove equipment	Do you want to remove this equipment? Yes/No		
		Connection	Aux1		
			Aux2		
	Humidifier	Control	On with heat On with heat and hum		
		number of pads	1, 2		
		Remove equipment	Do you want to remove this equipment? Yes/No		
		Connection	Aux1		
		Connection	Aux2		
	Dehumidifier	Control	On with cool On with cool and dehum On with dehum On with no cool and dehum		



Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
	Dehumidifier	Fan speed	Off 25% 50% 75% 100%		
		Remove equipment	Do you want to remove this equipment? Yes/No		
		Number of bulbs	1, 2		
Setup	UV Bulb	Remove equipment	Do you want to remove this equipment? Yes/No		
nent		Number of filters	1, 2		
di b	HEPA liller	Remove equipment	Do you want to remove this equipment? Yes/No		
		Number of filters	1, 2		
	Electronic filter	Remove	Do you want to remove this equipment? Yes/No		
	Zone Board	Туре	EWC Zone Board	Zone 1 (radio button) Additional Zone (radio button)	
		Remove	Do you want to remove		
	System Test	Run Stop	this equipment? Tes/No		
	Charge Mode	Run Stop			
		Cooling	Run Stop		
		Fan	Run Stop		
nizati		Heat Pump Heat	Run Stop		
Optin		Gas Heat	Run Stop		
stem	Optional Tests	Electric Heat	Run Stop		
Sys		Humidification	Run Stop		
		Dehumidification	Run Stop		
		Pump Down	Run Stop		
		Force Defrost	Run Stop		

I

Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
	Error History	Equipment: Error: Code: Severity: Date: Time:			
		Clear error history?	Yes/No	Yes/No	
	Calibration	Temperature calibration	-7° F to 7° F in 1° F steps		
	Galibration	Humidity calibration	-15% to 15% in 1% steps		
			operation mode		
			current critical error		
			current minor error		
	Status	AC/Heat Pump	requested heat demand		
<u>.</u>			requested cool demand		
iizati			requested indoor CFM		
Optim			requested indoor fan demand		
stem (requested dehumidification demand		
Sys			compressor runtime		
			compressor reduction mode		
			outdoor fan RPM		
			outdoor fan tap		
			outdoor air temperature		
			outdoor coil temp		
			liquid temperatures		
			discharge temperature		
			outdoor defrost sensor temp		
			suction temperature		
			suction pressure		
		Air Handler	operation mode		



Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
			current critical error		
			current minor error		
			current heat demand		
			requested heat demand		
			current indoor CFM		
			current indoor fan demand		
			requested indoor		
		Air Handler	requested humidification demand		
			requested dehumidification demand		
			refrigerant type		
_			calculated superheat		
ation			calculated subcool		
imiz			fan runtime		
Opti	Status		liquid temperature		
item			suction temperature		
Sys			pressure sensor		
			operation mode		
			current critical error		
			current minor error		
			current heat demand		
			requested heat demand		
		Furnace	current cool demand		
			requested cool demand		
			current indoor CFM		
			current indoor fan demand		
			requested indoor fan demand		
			requested humidification demand		



Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
		Furnace	requested dehumidification demand		
			current critical error		
			current minor error		
	Status		calculated superheat		
	otatao	EEV	calculated subcool		
			liquid temperature		
			suction temperature		
			pressure sensor		
		minimum temp	50° F to 90° F in 1° F		
		set-point	increments		
		maximum temp	50° F to 90° F in 1° F		
		set-point	Increments		
	cool/heat	deadband	Z° F to 9° F IN I° F		
s		dehumidification overcool	0, 1, 2, or 3°F		
enc		boost mode	on/off		
Prefere		boost mode	outdoor activation temperature	Always ON, 70° F, 75° F, 80° F, 85° F 90° F, 95° F, 100° F, 105° F	
			enable quiet mode	(check box)	
			start time:	(start time selection in 15 min. increments)	
		quiet mode	stop time:	(stop time selection in 15 min. increments)	
	house settings	ings	Sound suppression level	Level 1 Level 2 Level 3 (quietest)	
			Capacity priority	On/Off	
		Size of house	500 to 10,000 sf in 100 sf increments		
		Vertical rise	Same level Outdoor Iower Indoor Iower		
		media filter	off, 1, 2, 3, 4, 6, or 12 months		
	reminders	HEPA filter	off, 1, 2, 3, 4, 6, or 12 months		



Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
		Electronic filter	off, 1, 2, 3, 4, 6, or 12 months		
		UV bulbs	off, 6, 12, 18, or 24 months		
		dehumidification filter	off, 1, 3, 6, or 12 months		
	reminders	humidifier pad	off, 3, 6, or 12 months		
rences		service reminder	off, 3, 6, or 12 months		
		add custom reminder	Name	(enter text)	
ref			1-24 months		
E.		dealer name	(text entry)		
		dealer phone	(numeric entry)		
	dealer information	dealer email	(text entry)		
		dealer website	(text entry)		
		dealer message	(text entry)		

T

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.

REMAROUE: Cet équipement a été testé et déclaré conforme aux limites imposées aux appareils numériques de classe B, conformément à la section 15 du règlement de la FCC. Ces limites sont conçues pour fournir une protection raisonnable contre les interférences nuisibles dans une installation résidentielle. Cet équipement génère, utilise et peut émettre des fréquences radio et, s'il n'est pas installé et utilisé conformément aux instructions, il peut causer des interférences nuisibles aux radiocommunications. Cependant, rien ne garantit que des interférences ne se produiront pas dans une installation particulière. Si cet équipement provoque des interférences nuisant à la réception de la radio ou de la télévision, ce qui peut être déterminé en éteignant et en rallumant l'équipement, l'utilisateur est invité à tenter de corriger les interférences en appliquant l'une ou plusieurs des mesures suivantes:

- » Réorienter ou déplacer l'antenne de réception.
- » Augmenter la distance entre l'équipement et le récepteur.
- » Connecter l'équipement à une prise d'un circuit différent de celui auquel le récepteur est connecté.
- » Consulter le concessionnaire ou un technicien expérimenté en radio/ télévision pour obtenir de l'aide.

Quick Reference Card Details

Dealers

Install the thermostat

If you need to cover holes in the wall, place the trim plate against the wall first.

Then use the included screws to secure the terminal plate to the wall (sandwiching the trim plate if you're using it).

After connecting the wires, place the top of the thermostat against the terminal plate and press down until it snaps into place.

Get help at: www.daikinone.com/smart_thermostats/ oneplus/Pros





Scanning the bar code on the bottom left corner will link you to a website related to the title of the card.

Homeowners

Install the app to control your smart thermostat from virtually anywhere.



Available on the App Store and Google Play.





Scanning the bar code on the bottom left corner will link you to a website related to the title of the card.

Notes		
	DAIKIN	67

Notes	

Notes		
	DAIKIN	69



Notes			



About Daikin:

Daikin Industries, Ltd. (DIL) is a global Fortune 1000 company which celebrated its 95th anniversary in May 2019. The company is recognized as one of the largest HVAC (Heating, Ventilation, Air Conditioning) manufacturers in the world. DIL is primarily engaged in developing indoor comfort products and refrigeration systems for residential, commercial and industrial applications. Its consistent success is derived, in part, from a focus on innovative, energy-efficient and premium quality indoor climate and comfort management solutions.



www.daikincity.com

For more information: Sales and Technical Support: 1-855-DAIKIN1 www.daikincomfort.com or daikinac.com



Our continuing commitment to quality products may mean a change in specifications without notice. © 2019 DAIKIN NORTH AMERICA LLC · Houston, Texas · USA · www.daikincomfort.com or www.daikinac.com

PM-ONE+ST 11-19