

SHINKA CONTROLLER

User interface quick guide







Safety Information and General Warnings

Improper installation, operation, or maintenance of this device may result in property damage, serious injury, or death. To reduce these risks, follow the safety instructions carefully and, if necessary, consult a qualified technician for installation.

Warnings Electrical Hazard



Turn off the power supply to the electrical panel or circuit breaker before beginning installation. Failure to do so could result in electric shock, injury or death.

This device is designed to be installed by qualified personnel. If you are unfamiliar with electrical systems, contact a licensed electrician or HVAC technician. Improper installation could damage the unit or connected systems.

Wear protective equipment and use insulated tools to avoid electrical hazards.

Make sure the supply voltage matches the voltage indicated on the unit's label. Incorrect voltage could damage the unit and cause safety hazards.

Do Not Install in Hazardous Environments.

Avoid installing the device in areas exposed to moisture, extreme heat, direct sunlight or chemicals. These conditions can cause malfunction or damage to the unit and the device. Make sure that cables are not damaged or crushed during installation. Damaged cables can cause short circuits, overheating or fire.

Comply with Local Rules and Regulations.

Installation must comply with all local building codes, safety regulations, and electrical standards.

Caution

General Safety Information



Do not force components or apply excessive pressure. Handle all parts with care to avoid damage to sensitive components.

Keep the Device Out of the Reach of Children

This device contains small parts that may pose a choking hazard. Also, make sure that children do not tamper with the thermostat settings or wires.

Maintenance and Faults

Inspect the device and associated components periodically for signs of wear or damage.

Contact qualified technical service personnel for necessary repair or adjustment work.

Perform work in accordance with the operation and installation manual.

Attention

Disposal Provisions



This device contains electronic components that should not be disposed of with household waste. At the end of its useful life, dispose of the device in accordance with local electronic and environmental waste regulations. Proper disposal helps to avoid potential damage to the environment and public health.

Do not dispose of the device in ordinary waste, as it may contain harmful chemicals.

For information on how to properly dispose of the device, contact your local authorities or authorized collection centers. This device complies with the current European directive on the disposal of WEEE. Penalties established by current local regulations apply in case of improper disposal.

Specifications and Installation

Content of the box

- Front display panel (Figure 1)
- Rear panel with terminal blocks (Figure 2)
- Quick guide

The Shinka user interface must be combined with the fan coil control PCB (FWEDA) for proper operation of the Daikin control system.

Technical Data

Display LCD TFT RGB 480x272, 16bit, 4.3"

Supply Voltage24 VACMax power consumption110 mAOperating temperature $0 \div 50 \,^{\circ}\text{C}$ Temperature sensor $\pm 0.2 \,^{\circ}\text{C}$ Relative humidity sensor $\pm 2\%$ Protection classIP30

Dimensions 130mm x 95mm x 22.5mm **Communication specification** WiFi 2.4GHz 802.11.b/g/n

Bluetooth 4.2 N.02 RS485

Internal sensors Time-of flight sensor

(only for the Shinka Sense model) - Up to 400 cm distance measurement

- Typical full field-of-view (FoV): 27°

Light sensor

- Detection range up to max 64.000 lux

Electrical connections (located on the rear panel)

Upper terminal block	Lower terminal block	
GND	RS485-1 – GND	Default setting = Slave Set for connection with: - BMS/Supervisor - Shinka Zone (for Touch/Sense models)
IO1 (Optional for Shinka Sense)	RS485-1 – A	
IO2 (Optional for Shinka Sense)	RS485-1 – B	
24VAC – A	RS485-2 – GND	Default setting = Master Set for connection with: - FWEDA Control PCB - Shinka Touch/Sense (for Zone model)
24VAC – B	RS485-2 – A	
	RS485-2 – B	

Dimensions

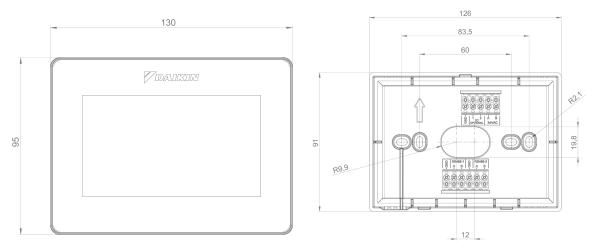


Figure 1 – Front display panel

Figure 2 – Rear panel

Installation

Important: Before starting, make sure the power supply is turned off to avoid electric shock. You should wear protective equipment and use insulated tools. If you are not experienced in electrical installations, contact a qualified technician for installation.

Read the Manual

Before starting the installation, read all instructions carefully and make sure you have the necessary tools.

Choose the Location

Install the device on an interior wall away from heat sources, direct sunlight, drafts, and doors.

The ideal location is about 1.5 meters above the floor for accurate temperature measurement.

Verify Compatibility

Ensure that the Shinka controller is compatible with the existing fan coil system. Check the voltage and connections indicated in the device's installation and operation manual.

Mounting Methods: The Shinka fan coil controller can be installed in two ways, directly on the wall or by integrating it into an electrical junction box (product not included).

1. Wall Mounting

This method requires attaching the thermostat base directly to the wall surface (Figure 3).

Choose a spot about 1.5 meters above the ground, away from heat sources, direct light, and drafts, to get an accurate temperature reading.

Using the base plate of the device (Figure 2) as a template, mark the points for the mounting holes on the wall. Be sure to keep the plate perfectly level with the help of a spirit level.

Drill the holes at the marked points and place the base plate by fixing it to the wall, tightening them until a stable and secure mounting is achieved.

Pass the electrical wires through the center opening of the base plate and connect them to the appropriate terminals, following the wiring directions on the connectors.

Hook the main unit of the controller to the base plate, making sure it is secure and well positioned.

2. Mounting with Electrical Box (not supplied)

Mounting with electrical box is suitable for walls that already have a standard junction box (Figure 4 for box 503 and Figure 5 for box 502). This mode allows for secure and stable attachment when an electrical box is present.

Align the base plate of the device with the holes in the electrical box, making sure it is perfectly centered and horizontal.

Use electrical box screws to attach the base plate directly to the box. Make sure the plate is firmly anchored to prevent movement of the thermostat.

Insert the wires into the electrical box and run them through the center opening of the base plate. Connect each wire to the terminals specified on the unit, following the wiring diagram provided.

Hook the main unit of the controller to the base plate mounted on the electrical box, making sure it is secure and well positioned.

Electric Box 503 (Rectangular)

External dimensions: approximately 86 mm (width) x 156 mm (height) x 50 mm (depth)

Electric Box 502 (Round) Diameter: about 60-65 mm

Depth: 40 to 50 mm

Dimensions may vary slightly by manufacturer, but these measurements are considered the standard.

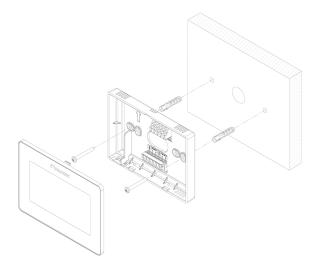


Figure 3 – Wall Mounting

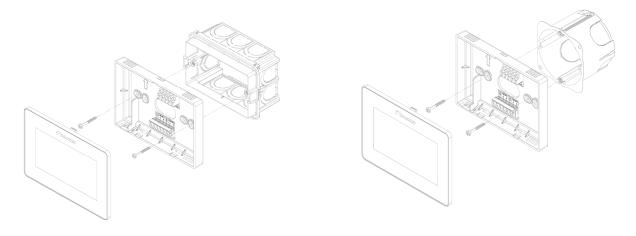


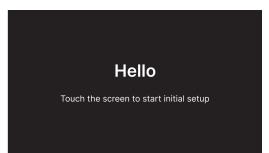
Figure 4 – Installation with 503 electric box

Figure 4 – Installation with 502 electric box

Quick Configuration

The first time the device is turned on, it must be initialized.





During the initial setup the user can set:

- The system language
- The full brightness of the display
- The date and time

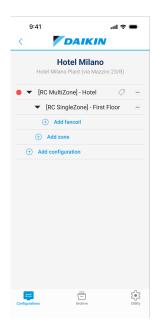
Following system initialization, it will be possible to proceed with system configuration ("Plant Configuration"). The system configuration can be done more easily and quickly through the "Daikin Shinka Manager" Mobile App, otherwise it can be done in a guided way through the same user interface, following the instructions on the screen.

Download the Daikin Shinka Manager Mobile App





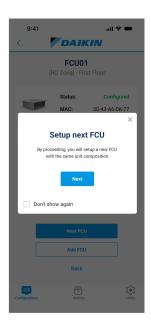
Through the Daikin Shinka Manager App, you can create, edit and fully configure your "Plant" (user interfaces + fan coil units).

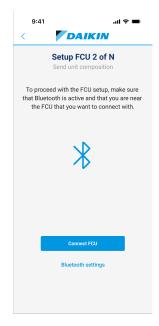












Within a Plant, each Shinka user interface (Touch/Sense/Zone model) can be associated with a "Configuration". In each Configuration it is possible to arbitrarily add and set "Zones" of fan coils (single zone in case of Shinka Touch/Sense models, multiple zones in case of Shinka Zone).

Each Zone can consist of 1 or more fan coils (on which the FWEDA control board is already installed and wired). The fan coils added within a Zone must be configured through the creation of the "Unit Composition", setting the unit's parameters (2/4 pipe, fan-motor type, presence of valves etc.).

Once every Unit Composition has been completed for each fan coil unit within a Zone, it is possible to proceed with the "Setup" of the fan coil units and finally of the Shinka user interfaces through a Bluetooth addressing connection.

For any additional and more comprehensive information, please refer to the Shinka Controller Installation and Operation Manual available on the Daikin Applied Europe website or contact your local Daikin representative. https://www.daikinapplied.eu/products/daikin-shinka-fancoil-control



Scan to discover more about the Daikin Shinka FCU Controller

