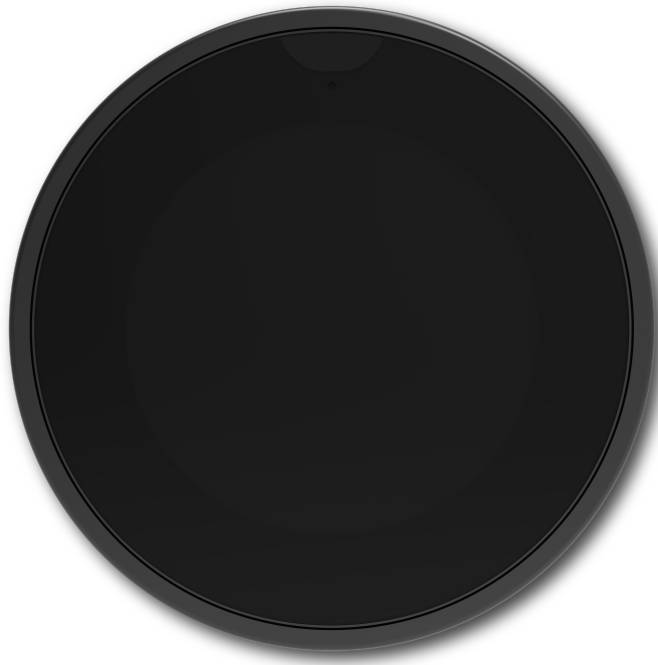


Turn 2

TY-K-TURN





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All pertinent state, regional, and local safety regulations must be observed when installing and using this product. For reasons of safety and to help ensure compliance with documented system data, only the manufacturer shall perform repairs to components. Failure to observe this information can result in injury or equipment damage.

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Product Modifications

Year	Version	Modifications
01/01/2021	1.0	Initial release

Document Revisions

Date	Version	Document Changes
01/01/2021	1.0	Initial draft
29/07/2022	1.1	Updated for features introduced in software 1.0.22
07/03/2023	1.2	Updated for features introduced in software 1.1.0
06/09/2023	1.3	Added 5GHz & RCM
12/02/2024	1.4	Added Sonos & new settings options
07/08/2024	1.5	Added Ethernet Support



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1 Preface

1.1 Description of the User

This User Guide is intended for professional installers such as electricians or system integrators.

1.2 Explanation of Safety Warnings

⚠ DANGER

Danger indicates a hazard with a high level of risk which, if not avoided, will result in death or serious injury

⚠ WARNING

Warning indicates a hazard with a medium level of risk which, if not avoided, could result in death or serious injury.

⚠ CAUTION

Caution indicates a hazard with a low level of risk which, if not avoided, could result in minor or moderate injury.

NOTICE

Indicates information considered important, but not hazard-related.

1.3 Retaining Instructions

Read and understand this manual and its safety instructions before using this product. Failure to do so can result in serious injury or death.

Ensure that each person who uses the product has read these warnings and instructions and follows them.

Tyba Home Limited is not liable for cases of material damage or personal injury caused by incorrect handling or non-compliance with the safety instructions. In such cases, the warranty will be voided.



2 Product Description

2.1 Intended Use and Reasonably Foreseeable Misuse

Turn 2 is intended to be used as a room controller to adjust environment parameters such as lights, climate, shades and AV. Turn 2 is not intended to be used for any function outside those described.

Turn 2 should be used with the following software, original accessories and components only:

- Tyba IOS & Android applications.
- Tyba genuine accessories such as Bus Connectors, wall plates or stands.
- Tyba control system drivers or third party API.

2.2 System Overview

Turn 2 is a room controller designed to adjust room parameters with a rotating outer ring. Turn 2 also features a touch screen used to switch between control functions. Turn 2 can be used either stand alone, powered by USB C or with one of the optional Bus Connectors. The Bus Connectors are designed to provide a mounting interface, power and optional system integration.

2.3 Technical Data

Parameter	Description
Product Name	Turn 2
Product Code	TY-K-TURN
Display	2.1" IPS 320x320 Resolution at 216 ppi
Processor	Cortex A9 Dual Core
Wireless	Wi-Fi 802.11a/b/g/n 2.4GHz 5Ghz
Bluetooth	Bluetooth 4.2
Sensors	Motion Temperature
Power USB C	5VDC 5W
Dimensions	W 81.6mm H 81.6mm D 22.6mm
Weight	205g



2.4 Product Compliance

This product complies to all relevant Directives associated with CE, UKCA, IC, FCC & RCM. The Declaration of Conformity and further certification documentation can be found at www.tybahome.com/downloads. The Product is in conformity with the following relevant product safety standard:

- BS EN IEC 62368-1

3 Safety Instructions

⚠ CAUTION

Read and understand this manual and its safety instructions before using this product. Failure to do so can result in minor or moderate injury.

3.1 How to Use the Product Safely

When using this product, ensure all guidance is followed regarding technical specification, installation, setup and operation. Never use this product with anything other than Tyba genuine accessories.

3.2 Graphical Symbols

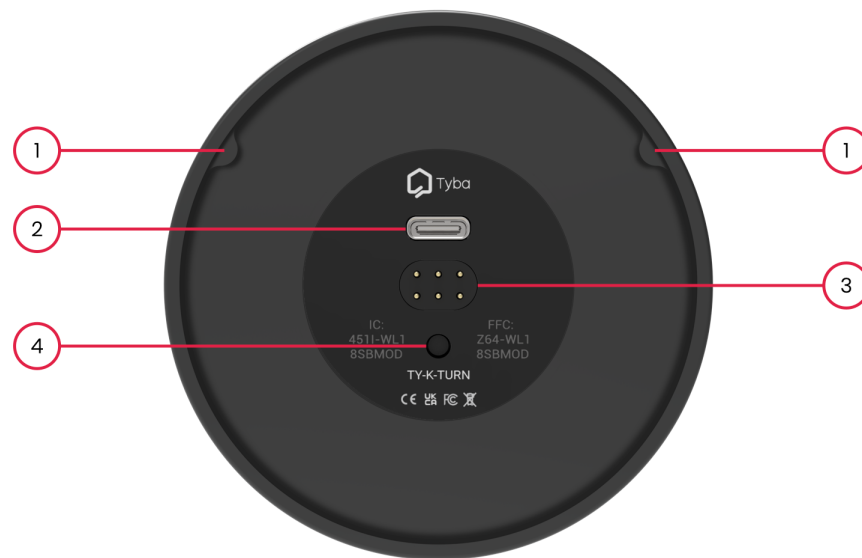
Symbol	Meaning
	The CE Marking on the product is the manufacturer's declaration that the product complies.
	The UKCA Marking on the product is the manufacturer's declaration that the product complies.
	The FCC Marking on the product is the manufacturer's declaration that the product complies.
	The RCM Marking on the product is the manufacturer's declaration that the product complies.
	The WEEE Marking on the product is the manufacturer's confirmation that the product is not recyclable.

4 Installation

⚠ CAUTION

The product should only be installed by a qualified and trained person.

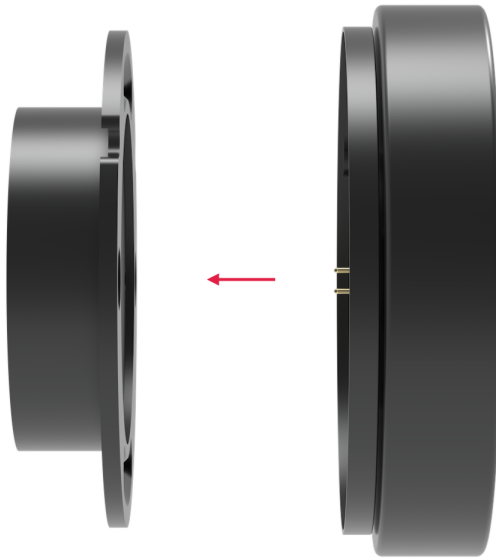
4.1 Connections and Physical Details



Key	Description
1	Bus Connector mounting locators
2	USB C connector
3	Bus Connector proprietary connector
4	Dual function button

4.2 Mounting to a Bus Connector

Turn 2 mounts to the Bus Connector range using a magnetic mounting system. Once the Bus Connector is installed, align Turn 2 with the front of the Bus Connector ensuring that the mounting locators on both Turn 2 and the Bus Connector are the right way around. Slowly move Turn 2 towards the Bus Connector until the magnets engage.



⚠ CAUTION

Before releasing ensure Turn 2 is correctly seated on the Bus Connector.



5 Setup

NOTICE

It is recommend that setup is carried out by a qualified and trained person.

5.1 Powering On

Once Turn 2 is powered using a Bus Connector or USB C, the display will turn on and the device will begin to start up. If you are using a Cresnet, KNX or Power DC Bus Connector or USB C directly it will automatically display a QR code as below ready for WiFi setup.

If you have powered up Turn 2 with an active Ethernet Bus Connector then you will not be presented with a QR code at start up as WiFi setup is not required.



5.2 Connecting

To setup Turn 2 you will need to download the Tyba app for IOS or Android.





Within the Tyba app, press + or the “add a device” button. If you are presented with a QR code for WiFi setup on Turn 2 then scan the QR code with the Tyba app to start the setup process. Once the Tyba app has connected to the device follow the steps:

- Choose a friendly name for the device. If you don’t enter one it will default to “Turn 2”
- Select a Wi-Fi network from the list
- Enter the password for the selected Wi-Fi network
- The device will now be added to your local network
- Choose “Setup Later”

If a QR code is not displayed on Turn 2 either because the device has already been setup before, or you have an Ethernet Bus Connector attached, choose the “Add Existing Device” option instead. See section 5.11 for more detail.

NOTICE

A Wi-Fi network with DHCP enabled is required for initial setup. Ensure good Wi-Fi signal strength for reliable operation. The Tyba app requires mDNS for discovery of Turn 2.

5.3 Settings

Now that you have added the device to the Tyba app, it will be shown in the devices list. Next to each device is a traffic light status indicator.

Colour	Description
Green	Online and configured
Amber	Online but not configured
Red	Offline

- Choose the device from the list, it should have an amber status indicator as setup has not been completed
- You will be taken to the devices settings menu

NOTICE

If you selected to “Setup Now” during section 5.2 you will have been taken directly to the devices settings menu.

The settings available on the device are as follows:

Setting	Description
Name	The friendly name of the device
Product Code	The product code of the device, e.g. TY-K-TURN
Serial Number	The unique serial number of the device
Software	The current software version and the ability to check/install software updates
Date & Time	The date and time of the device, select from automatic or manual
LED	Enable or disable the LED
Clicker	Enable or disable the audible click
Motion	Enable or disable the motion detector
Display Sleep	Change the period until the device sleeps
Screensaver	Choose a screensaver

5.4 Wi-Fi Network

You can change or modify the WiFi network settings of the device after the initial setup described in section 5.2. The options are as follows:

Setting	Description
Network	Change the Wi-Fi network the device is connected to
Mode	Manual or Automatic (Static or DHCP)
IP Address	Choose an IP address
Subnet	Choose a subnet address
Gateway	Choose a Gateway address

DNS	Choose up to two DNS addresses
MAC Address	The unique MAC address of the WiFi interface

5.5 Ethernet Network

You can change or modify the Ethernet network settings. The Ethernet Network setting will only be visible if your Bus Connector type is set to Ethernet and you have an Ethernet Bus Connector physically attached. The options are as follows:

Setting	Description
Mode	Manual or Automatic (Static or DHCP)
IP Address	Choose an IP address
Subnet	Choose a subnet address
Gateway	Choose a Gateway address
DNS	Choose up to two DNS addresses
MAC Address	The unique MAC address of the Ethernet interface

5.6 mDNS Advertisements

Turn 2 advertises itself using mDNS for use with the Tyba app or other third party integrations that use discovery to locate Turn 2. If you are using multiple network interfaces (both WiFi and Ethernet), Turn 2 will priorities Ethernet and it will use this interface to advertise over mDNS. If Ethernet is removed it will revert to advertising over WiFi. Turn 2 will not advertise over both interfaces at the same.

5.7 Connectivity

The options are as follows:

Setting	Description
Bus Connector	Choose which Bus Connector you have connected

Beacon	Turn On or Off Bluetooth Beacon broadcasting
Beacon Setup	Choose between iBeacon & Eddystone standards
Sonos	Connect Turn 2 with Sonos

5.8 Sonos

To connect Turn 2 to a Sonos system use the following steps within the Tyba app:

- Select the Sonos option from the settings menu, you will be redirected to the Sonos website. Press Continue.
- Enter your Sonos account email and password, press Sign in.
- Check you are happy with the permissions information presented by Sonos and press Okay.
- You will be returned to the Tyba app and presented with a list of Households associated with your account. Select the Household you want to connect Turn 2 with. The households are presented as an ID, this is a Sonos requirement.
- You will be presented with a list of Sonos groups, select the group you want to connect Turn 2 with.
- A source called Sonos will appear in the Media controls section.

5.9 Control Elements

The control elements presented on Turn 2 are configured under the device settings menu of the Tyba app. The controls interface provides a flexible method for building the control options required for your specific application. The options are as follows:

Lights

Controls	Description
Light Scenes	Configure control of up to 8 light scenes
Lights	Configure control of up to 5 independent lights or light groups. Choose per light if it is dimmable or switched.

Climate

Controls	Description
----------	-------------

Temperature	Configure display of temperature and control set point. Provide the operating temperature range, increment and temperature source, e.g. Internal or External. If set to Internal, choose between C or F and optionally provide a temperature offset
Fan	Configure control of up to 8 fan speeds
Humidity	Configure display of humidity and control set point. Provide the operating humidity range
Modes	Configure control of up to 8 modes
Air Quality	Configure display of Air Quality
Air Pressure	Configure display of Air Pressure

Shades

Controls	Description
Shade Scenes	Configure control of up to 8 shade scenes
Shades	Configure control of up to 5 shades or shade groups. Choose per shade if it is a position or open/close shade

Media

Controls	Description
Media Controls	Configure control of up to 8 sources, including volume, transport controls and metadata

NOTICE

By default control elements will appear in a predetermined order for consistency. However, the order in which the controls appear on the device can be changed by dragging and dropping the sections of the control interface within the Tyba app to reflect the desired order.

5.10 Reboot, Reset, Report Error and Remove

Option	Description
Reboot	In the device settings menu scroll to the bottom and choose reboot. The device will be reboot.

Reset	In the device settings menu scroll to the bottom and choose reset. The device will be reset back to default. The devices network settings will remain. You can also press and hold the device in the device list to bring up the remove and reset menu.
Report Error	If you are experiencing a technical issue with Turn 2 and have contacted Tyba support you may be asked to provide additional information. Use the report feature to set Tyba support technical logs.
Remove	In the device settings menu scroll to the bottom and choose remove. This will remove the device from the device list. You can also press and hold the device in the device list to bring up the remove and reset menu.

5.11 Add Existing Devices to the Tyba app

To add a device that has already been setup to the Tyba app use the following steps:

- Press + or the “add a device” button
- Choose “Add Existing Device”
- The Tyba app will scan the network for existing devices and you will be presented with the discovered devices.
- Select the devices you want to add and press the tick icon to finish.
- The devices will appear in the device list.

NOTICE

If no devices are found ensure the mobile device with the Tyba app installed is on the same Wi-Fi network as the device you intend to add.

5.12 Setup Mode

Should you need put the device back in setup mode for any reason, remove the device from the Bus Connector and power via USB C. Once the device has fully started up, press the button on the back of the device to enter setup mode and follow the steps in section 5.2.

5.13 Software Update

Keeping your device up to date with the latest software is simple. Use the following steps to check and install updates.

- Select a device from the device list
- Press the settings icon to enter device settings menu
- Press on the Software section within settings. The device will now check if there are any updates available
- If there is an update, press “Update Now” to start the upgrade. Status of the process will be presented with the Software section. The device will reboot once the update has been installed.

NOTICE

In the very unlikely instance where an update fails or causes any issues, you can roll back to the previous version using the following steps:

- Remove the device from the Bus Connector
- Press and hold the button on the back of Turn 2
- Connect a USB C power source
- Continue to hold the button for 30 seconds
- The device will roll back to the previous version

6 Operation

6.1 User Interactions

Turn 2 has been designed around two key user interactions; rotation and touch. Rotation always is used to control the selected parameter, e.g. temperature set point . Touch is used to change what you are controlling.



Key	Description
1	Touch screen display
2	Rotation ring

6.2 Touch

Use the touch screen to swipe left and right between the configured primary controls, e.g. lights, climate, shades and media. These controls are signified by the paging dots at the bottom of the display. Once the primary control is selected, tap the display to cycle through the secondary control options, e.g. if lights was selected, tap the display to cycle through all of the available lighting related functions. Continue to tap and the control will cycle back to the start, or press and hold the display to go straight back to the primary control.



6.3 Rotation

Use the ring to control the parameter of the selected control, e.g. the temperature set point. The rotation input will behave differently depending on the selected control.

When a preset control is selected, such as light scenes or fan speeds the rotation will control which preset is selected between 1-8. When a control such as volume or a light is selected the rotation will alter the brightness or volume level in 0-100 increments.



7 Maintenance

⚠ CAUTION

The product is maintenance free. Repair should only be carried out by a qualified and trained person.