# ZXT-800 AC/AV MASTER USER MANUAL









APPS DOWNLOAD: CONEXUM ZXT-800

# **CONTENTS**

	_					
1	Intro	oduction	1			
2	Pro	duct Overview	1			
	2.1	Description	1			
	2.2	Features	2			
	2.3	Z-Wave Glossary	3			
3	Get	Started	4			
	3.1	Step-1 Apply Power to ZXT-800	4			
	3.2	Step-2 Include ZXT-800 to a Z-Wave™Gateway	5			
	3.3	Step-3 Setup Automatic Status Report Associate to Gateway	6			
	3.4	Step-4 Setup IR code	6			
	3.5	Setup IR Code by ZXT-800 App (AC+AV)	9			
	3.6	IR Code learning	10			
4	Con	figuration Master Table	15			
5	Res	et to Factory Default	18			
6	Μοι	ınting and Placement	19			
7	Tec	hnical Specifications	20			
8	BLE	Channels and Frequency	21			
9	War	ranty	22			
10	Reg	ulatory information	23			
11	IC N	otice	24			
12	12 Warnings 24					
13	Cau	tion	24			

## 1. Introduction

ZXT-800 is a Z-Wave<sup>™</sup> plus compliant Z-Wave<sup>™</sup>-to-IR Bridge to control split air conditioner and entertainment devices by receiving Z-Wave<sup>™</sup> command and translating to Infrared command. With its comprehensive built-In and cloud-stored IR database (library). ZXT-800 can control different brands and models of infrared devices worldwide.

ZXT-800 is a security enabled Z-Wave<sup>™</sup> plus device. A security Enabled Z-Wave<sup>™</sup> Plus Controller must be used in order to fully utilize the feature.

ZXT-800 is a Z-Wave<sup>™</sup> slave device, it can be up to gateway to setup particular brand with correct IR code. User can setup the IR (AV + AC) code by "Conexum ZXT-800" App through Bluetooth download. iOS and Android App are available in Apps store.

#### 2. Product Overview

## 2.1 Description



♠ Continued on next page

CONTENTS [1|24]

#### 2.2 Features

- Working as a Z-Wave<sup>™</sup>thermostat (AC) and Simple AV device
- Supports Classic Inclusion, NWI and SmartStart
- Built-in AC IR database for worldwide market, direct use it in gateway
- Cloud-base downloadable AC + AV IR library by Smart phone
- Supports Basic, Smart and Learning search in Smart Phone App
- Support IR learning
- Supports AC  $\times$  1 and AV  $\times$  3 by download
- Built-in temperature and humidity sensor
- Support firmware upgrades via Over-the-air (OTA) by Z-Wave™and BLE
- Z-Wave<sup>™</sup>Plus 2 compliant
- Working on battery (3 × AAA batteries) or USB power
- This product can be operated in any Z-Wave<sup>™</sup>network with other Z-Wave<sup>™</sup>certified
  devices from other manufacturers. All mains operated nodes within the network will act as repeaters regardless of vendor to increase reliability of the
  network.
- SmartStart enabled products can be added into a Z-Wave™network by scanning the Z-Wave™QR Code present on the product with a controller providing SmartStart inclusion. No further action is required and the SmartStart product will be added automatically within 10 minutes of being switched on in the network vicinity.

♠ Continued on next page

CONTENTS [2|24]

# 2.3 Z-Wave Glossary

	Devices and nodes are all terms to describe an individual
Device or Node	Z-Wave™device. These are all interchangeable when setting up
	your Z-Wave™network.
Inclusion	Add a Z-Wave™device to the network.
Exclusion	Remove a Z-Wave™device from the network.
Remove	Remove a Z-Wave™device from the network.
	Network Wide Inclusion (NWI) enables both end-user friendly,
	Plug and Play like Z-Wave™network installation as well as
Network Wide	professional installation scenario where the inclusion process, in
Inclusion (NWI)	terms of time will be reduced significantly. NWI is a feature
	supported by a new frame type named Explorer which enables
	the Z-Wave™protocol to implement Adaptive Source Routing.
	A collection of Z-Wave™devices is controlled by primary and
Z-Wave Network	secondary controllers operating on the same system. A
Z-wave Network	Z-Wave™network has its own unique ID code so that controllers
	not in the network cannot control the system.
Indicator	The device supports the Indicator Command Class and support
	the Indicator ID 0x50 (Identify) and Properties ID 0x03, 0x04 and
Command	0x05
	FLiRS is abbreviation for "Frequently Listening Routing Slave".
	FLiRS mode is targeted for battery operated applications and will
FLiRS Mode	enter sleep mode frequently in order to conserve battery
FLIKS Mode	consumption. The response to Z-Wave™command is not as
	quick as Always Listening Device. Normally there is 1-2 seconds
	latency.
	Always Listening Mode is targeted for AC power operated
Alwaya	applications and it can act as a repeater, which will re-transmit
Always-	the RF signal to ensure that the signal is received by its intended
Listening Mode	destination by routing the signal around obstacle and radio dead
	spots. The response to Z-Wave™command is immediate.
	Association is used to organize nodes in different groups
Association	allowing the device to identify the nodes by a group identifier. The
	groups can also be copied to other devices.
Thermostat	Thermostat may support mode: OFF / HEAT / COOL /AUTO/
mode	RESUME(ON)/ FAN ONLY /DRY AIR which depends on AC code.
L	

CONTENTS [3|24]

#### 3. Get Started

User Guide	X	1
ZXT-800	×	1

## 3.1 Step-1 Apply Power to ZXT-800

- 3 × AAA batteries or Micro USB
- ZXT-800 will detect the first applied power source to decide what Z-Wave™device
  role it will be in after included into the Z-Wave™gateway:
  - Battery = sleeping device (FLiRS mode)
  - USB power = always awake device (Always Listening mode)

Please refer to Z-Wave™Glossary for more information.

- Once the ZXT-800 is included into a Z-Wave<sup>™</sup> network, the working mode (sleeping or awake) cannot be changed, unless it is excluded and re-apply the power.
- ZXT-800 can be included and operated in any Z-Wave<sup>™</sup>network with other Z-Wave<sup>™</sup>certified devices from other manufacturers and/or other applications.
   All non-battery operating nodes within the network will act as repeaters regardless of Vendor to increase reliability of the network.

#### **Caution**

- Use new batteries of the recommended type and size only.
- · Never mix used and new batteries together.
- To avoid chemical leaks, remove batteries from the ZXT-800 if you do not intend to use the device for an extended period of time.
- Dispose of used batteries properly; Do not burn or bury them.

CONTENTS [4|24]

## 3.2 Step-2 Include ZXT-800 to a Z-Wave™Gateway

There are two methods to include to a Z-Wave™network,

## **Classic inclusion**

Step	Procedure / Description	Status Indicator
	Refer to your primary controller to	
1	enter into the Inclusion Mode or	-
	Exclusion Mode	
	Once the primary controller is ready to	Purple LED will flash until complete
2	include/exclude the device, press the	the step of inclusion / exclusion. If
	"PROG" button once.	success, blue LED will flash twice; if
		fail, red LED will flash twice.

#### **SmartStart inclusion**

Step	Procedure / Description	Status Indicator
1	Refer to your primary controller (gateway) instruction then use Smart Phone App to scan ZXT-800 SmartStart QR code, it will include the device into the Z-Wave™network automatically. User can find out the QR code at device bottom Z-Wave™DSK area. Make sure your gateway supports SmartStart feature.	Purple LED will flash until complete the step of inclusion / exclusion. If success, blue LED will flash twice; if fail, red LED will flash twice.

#### **Notes**

- It is recommended to perform the Remove (Exclude) procedure before per-forming an Add (Include) procedure.
- If the Add (Include) process fails, try to Remove (Exclude) from your primary controller (or reset the ZXT-800 to Factory Default), then repeat the above steps.

♠ Continued on next page

CONTENTS [5|24]

## 3.3 Step-3 Setup Automatic Status Report Associate to Gateway

Please refer to your primary controller (gateway) instruction for more detail. Normally, User can ignore this step during the setup.

ZXT-800 support 1 association group, Association Group #1 (max. 1 node) is default to associate with the primary controller (Gateway/Hub/Controller) for ZXT-800 status change report, refer to below for report details:

- Current Room Temperature (report in precision of 0.5°C or 1°F), It will be according to Configuration Parameter 30 setting to decide the trigger level.
- Current Battery Level (Only apply in Low Battery Warning happened)
- Device Reset Locally Notification (Only report when the ZXT-800 has been triggered the RESET TO DEFAULT)

## 3.4 Step-4 Setup IR code

The user interface of setup the IR code varies from different gateways. If gateways have dedicated UI for the IR code setup, please refer to the gateway UI and ignore the below steps.

If your gateway does not have dedicated UI for ZXT-800 IR code setup, but support Z-Wave™Configuration Command Class. Please refer to below method-A to setup the IR code using the configuration options in your gateway.

♠ Continued on next page

CONTENTS [6|24]

There are two methods A) and B) to set up IR code:

## A) By Z-Wave<sup>™</sup>gateway configuration (Setup AC code with internal library)

Step	Procedure / Description	Status Indicator
1	Refer to your primary controller user manual, enter	
'	Configuration setting.	
	Set up IR code with internal library, Input parameter	
	number: 27, Input parameter value: XXXX (AC code no.);	Purple LED will turn
	User can scan product QR code (near the Z-Wave™logo)	on. If success, blue
2	which will reach to our Code Finder Webpage, it obtains	LED flash ONCE; If
	a list of AC codes. Example: AC IR code number: 13;	fail, red LED will
	Parameter no.: 27 (Setup IR code); Parameter value size:	flash TWICE.
	2 bytes; Parameter value: 0013 (AC code number); Then	Hasii i wice.
	activate or save it in gateway.	
	Once you finished the IR code setup, please go back to	
	the control page of ZXT-800 on the gateway's Browser or	
	App. Try the function such as (Cool, Temperature Set). If	Red LED flashing
3	the Air Conditioner does not respond to the command	ONCE if device
	you set on the Gateway (Cool, Heat, Auto, Temperature	sends out one IR.
	Set, etc···.), repeat step 2 to step 3. Select the next IR	
	code for test from the code list.	

#### **Important Notes**

- · Above procedures are for AC code configuration only.
- Different brand or model of air conditioner has different function. For example, some air conditioner only support temperature set from 10°C - 30°C, if user set 17°C on gateway, ZXT-800 will not respond it.
- There are more than 1 code for each brand, some does not support Heat, if
  User selected a code that does not support Heat but original air conditioner
  supports Heat Function, please continue to try next code until the correct one
  is selected.
- It is not allowed to set up the IR Code when the battery level below 20%.
- You can record down your Device Code for future reference after setting up the ZXT-800 correctly.

•	AC co	de set:				
---	-------	---------	--	--	--	--

CONTENTS [7|24]

### B) By Smart Phone App "Conexum ZXT-800" (Setup AC + AV with cloud library)

User can download "Conexum ZXT-800" App to implement Basic Search for AC and Smart Search for AV then setup the IR code. ZXT-800 supports AC  $\times$  1 and AV  $\times$  3 devices storage memory. Once your IR code setup completed, user should add ZXT-800 into the Z-Wave $^{\text{M}}$ network then control it directly.

Please make sure Z-Wave<sup>™</sup>gateway support AV control interface when you setup AV control. For more detail operation, please refer to below section.

♠ Continued on next page

CONTENTS [8|24]

## 3.5 Setup IR Code by ZXT-800 App (AC+AV)

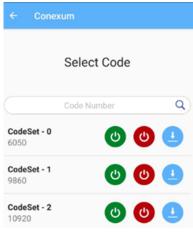
1. Please install "Conexum ZXT-800" App, turn on the "Bluetooth" and "GPS", "WiFi / 4G" on the Smart phone. The App is available in Google Play & Apple App Store.







- 2. Pair with ZXT-800 by Smart Phone BLE
  - · Open the App and follow the Smart phone setup UI.
  - · Press "Add extender".
  - Trible click on the PROG button within 1.0s to pair with Smart Phone, blue LED will keep flashing.
  - In Smart Phone, please select "Conexum unit" that you want to pair it.
  - Once BLE pairing completed, blue LED will turn off.
- 3. IR code set up
  - For AC setup, please type-in or select your brand then follow the Basic Search to test it one by one.
  - For AV setup, please select your device type (TV, CBL, B-Ray, Soundbar···), brand then follow the Smart Search steps to test it.
  - Once you have successfully found an IR Code that matches your device, tap to confirm the code and download it into the ZXT-800.





AC Basic search

AV Smart Search

4. After IR code setup completed, please refer to Z-Wave™inclusion and add ZXT-800 into the Z-Wave™network, then go to your Z-Wave™control panel for device

CONTENTS [9|24]

control directly.

# 3.6 IR Code learning

In case the IR code can't support full keys controls, user can use the IR learning function to capture the IR data from original remote controller, please follow below steps.

## **AC IR Code Learning**

Please refer to "Configuration Master Table" for all configuration settings.

Step	Procedure / Descript	Status Indicator	
1	Refer to your primary		
'	Configuration setting		
	To learn AC IR code, I	ook up AC Learning Mapping Table	
	for learning and decide which IR setting you wants to		Then Red LED turns
2	learn, <i>example</i> :Param	eter number: 25 (Learn AC IR	ON for indicating the
	code) Parameter valu	le size: 1 byte Parameter value: 5	IR Code Learning
	(Cool mode, 20°C) Th	en activate or save it in gateway.	
	Learning location:		
		Adjust your original AC remote	
		to Cool mode 21°C, aim your	
		original AC remote to ZXT-800	Successful: Blue
3	[+]	according to above position	LED flashes TWICE;
3		within 1-3cm. Press and release	Unsuccessful: Red
	Infrared receiving area	temperature down button to	LED flashes TWICE
	adjust to 20°C, ZXT-8	00 will learn the IR code	
	automatically. If the l	earning is failed or need to learn	
	next IR code, repeat s	step 2 to step 3.	
	Once you finished the	e IR Code Learning, please go to	
	Configuration setting page on the Gateway. Parameter		
4	number: 27 (Set IR co	ode) Parameter value size: 2 bytes	
4	Parameter value: 000	0 (AC learning location) Then	
	activate or save it in g	gateway. ZXT-800 will set the code	
	number to "0000" whi	ich is AC learning code location.	

♠ Continued on next page

CONTENTS [10|24]

#### **TIPS**

- 1. User need at least Learn the OFF (Parameter Value 0), and one Temperature Mode (Parameter Value 2  $\sim$  28) to complete the usage model.
- 2. Keep away from Incandescent Light or Direct Sunlight during learning.
- 3. Make sure IR Transmitter of your Original Remote alight with learning diode of ZXT-800, you may also slight adjust closer or further away the distance of two devices. Some of Remotes the IR transmitter in hidden behind lens and may not installed center of remote.
- 4. Make sure the power is good on both devices, especially the Original remote.

  Use Fresh Batteries in both devices recommended. ZXT-800 will not implement the learning process if the battery level below 20%.

♠ Continued on next page

CONTENTS [11|24]

Parameter-Value	Thermostat Command & IR Setting		
(Storage Location)	Storage in Celsius Unit	Storage in Fahrenheit Unit	
0	OFF	OFF	
1	ON (RESUME)	ON (RESUME)	
2	17°C Cool	63°F Cool	
3	18°C Cool	64°F Cool	
4	19°C Cool	66°F (67°F Cool)	
5	20°C Cool	68°F (69°F Cool)	
6	21°C Cool	70°F (71°F Cool)	
7	22°C Cool	72°F (73°F Cool)	
8	23°C Cool	74°F (75°F Cool)	
9	24°C Cool	76°F Cool	
10	25°C Cool	77°F (78°F Cool)	
11	26°C Cool	79°F (80°F Cool)	
12	27°C Cool	81°F (82°F Cool)	
13	28°C Cool	83°F (84°F Cool)	
14	29°C Cool	85°F Cool	
15	30°C Cool	86°F Cool	
16	17°C Heat	63°F Heat	
17	18°C Heat	64°F Heat	
18	19°C Heat	66°F (67°F Heat)	
19	20°C Heat	68°F (69°F Heat)	
20	21°C Heat	70°F (71°F Heat)	
21	22°C Heat	72°F (73°F Heat)	
22	23°C Heat	74°F (75°F Heat)	
23	24°C Heat	76°F Heat	
24	25°C Heat	77°F (78°F Heat)	
25	26°C Heat	79°F (78°F Heat)	
26	27°C Heat	81°F (82°F Heat)	
27	28°C Heat	83°F (84°F Heat)	
28	29°C Heat	85°F Heat	
29	30°C Heat	86°F Heat	
30	Dry Mode	Dry Mode	
31	Auto Mode	Auto Mode	
32	Fan Mode	Fan Mode	

Table 1: AC IR Learning Mapping Table (Parameter number 25)

<u>CONTENTS</u> [12|24]

## **Mapping Information**

- 1. BASIC Set Value 0x00 will map to Thermostat mode OFF 0x00
- 2. BASIC Set Value 0xFF will map to Thermostat mode Resume 0x05
- 3. Energy Saving Mode will map to Thermostat mode OFF

## **AV IR Code Learning**

Please refer to "Configuration Master Table" for all configuration settings.

Step	Procedure / Description	Status Indicator	
1	Refer to your primary co	ontroller user manual, enter	
I	Configuration setting.		-
	Select AV endpoint (learning location), example:		
2	Parameter number: 38 (	(Select AV endpoint); Parameter	
۷	value size: 1 byte; Paran	neter value: 2 (AV1); Then	
	activate or save it in gat	eway.	
	To learn AV IR code, loo	k up AV Learning Mapping Table	
	for learning and decide which IR setting you wants to		Then Red led turns
3	learn, example: Parameter number: 26 (Learn AV IR		ON for indicating the
	code); Parameter value size: 1 byte; Parameter value: 11		IR Code Learning.
	(VOL+); Then activate or save it in gateway.		
	Learning location:		
		Aim your original AV remote	
		to ZXT-800 according to above	Successful: Blue
	_	position within 1-3cm. Press	LED flashes TWICE;
4	[+]	and hold the "VOL+" button	Unsuccessful: Red
		until blue LED flashes twice.	LED flashes TWICE
	Infrared receiving area	ZXT-800 will learn the IR code	LLD Hashes TWICE
	automatically. If the lear	rning is failed or need to learn	
	next IR code, repeat ste	p 2 to step 4.	

♠ Continued on next page

CONTENTS [13|24]

#### ZXT-800 AC/AV MASTER USER MANUAL

Parameter-Value (Storage Location)	Simple AV Command & IR Setting		
Parameter-value (Storage Location)	Function	Z-Wave™AV key ID	
0	Power	0x0027	
1	Input	0x0026	
2	Menu	0x001D	
3	Smart	0x0185	
4	Guide	0x001C	
5	Back	0x004B	
6	Up	0x001E	
7	Down	0x001F	
8	OK	0x0024	
9	Left	0x0020	
10	Right	0x0021	
11	VOL+	0x0003	
12	VOL-	0x0002	
13	Mute	0x0001	
14	Home	0x00AF	
15	CH+	0x0004	
16	CH-	0x0005	
17	Skip-	0x011C	
18	Stop	0x0014	
19	Skip+	0x011B	
20	Play	0x0013	
21	Pause	0x0015	
22	Rewind	0x0017	
23	Record	0x0019	
24	Fast Forward	0x0016	
25	Red	0x009D	
26	Green	0x009B	
27	Yellow	0x009F	
28	Blue	0x009A	

♠ Continued on next page

CONTENTS [14|24]

Parameter Value (Starage Leastion)	Simple AV	Command & IR Setting
Parameter-Value (Storage Location)	Function	Z-Wave™AV key ID
29	0	0x0006
30	1	0x0007
31	2	0x0008
32	3	0x0009
33	4	0x000A
34	5	0x000B
35	6	0x000C
36	7	0x000D
37	8	0x000E
38	9	0x000F
39	Info	0x0011
40	Text	0x013F

Table 2: AV IR Learning Mapping Table (Parameter number 26)

# 4. Configuration Master Table

Please using the correct data format, if the Gateway support decimal numbering format, please use decimal value accordingly. If the Gateway support hexadecimal numbering format, please use hex value accordingly.

CONTENTS [15|24]

### ZXT-800 AC/AV MASTER USER MANUAL

Parameter Name/ Description	Parameter Number	Parameter Value	Size (Byte)
Learn AC IR code	25 (0x19)	Storage location 0 –32 for AC IR code learning (refer to AC learning mapping table)	1
Learn AV IR code	26 (0x1A)	Storage location 0 –40 for AV IR code learning (refer to AV learning mapping table)	1
Set IR code from built-in AC library	27 (0x1B)	Refer to AC code list find from code finder page by code list QR code AC Learning code number = 0000(0x0000)	2
External IR Emitter power level	28 (0x1C)	0(0x00) - normal power mode 255(0xFF) - high power mode (default)	1
Set Auto Report Condition, Trigger by Room Temperature change	30 (0x1E)	0(0x00) = Disable AUTO report function (default) It can extend the battery life. Auto report if room temperature is different from last report 1(0x01) = 1°F (0.5°C) 2(0x02) = 2°F (1°C) 3(0x03) = 3°F (1.5°C) 4(0x04) = 4°F (2°C) 5(0x05) = 5°F (2.5°C) 6(0x06) = 6°F (3°C) 7(0x07) = 7°F (3.5°C) 8(0x08) = 8°F (4°C)	1
Set Built-in IR Emitter Control	32 (0x20)	It is allowed to disable internal IR emitter if use external IR emitter jack, it can extend the battery life.  0(0x00) = Disable 255(0xFF) = Enable (default)	1

CONTENTS [16|24]

### ZXT-800 AC/AV MASTER USER MANUAL

Control Air conditioner "Swing" function	33 (0x21)	0(0x00) = Swing OFF 1(0x01) = Swing Auto (default)	1
Temperature and Humidity Auto Report	34 (0x22)	Set Auto Report Condition by Time Interval $0(0x00) = Disable AUTO report$ (default) $1(0x01) = 15 mins$ $2(0x02) = 30 mins$ $3(0x03) = 1 Hr$ $4(0x04) = 2 Hrs$ $5(0x05) = 3 Hrs$ $6(0x06) = 4 Hrs$ $7(0x07) = 8 Hrs$	1
Calibrate temperature reading	37 (0x25)	Temperature offset value $0(0x00) = 0^{\circ}C \text{ (default)}$ $1(0x01) = 0.5^{\circ}C$ $2(0x02) = 1^{\circ}C$ $3(0x03) = 1.5^{\circ}C$ $4(0x04) = 2^{\circ}C$ $5(0x05) = 2.5^{\circ}C$ $6(0x06) = 3^{\circ}C$ $7(0x07) = 3.5^{\circ}C$ $8(0x08) = 4^{\circ}C$ $9(0x09) = 4.5^{\circ}C$ $10(0x0A) = 5^{\circ}C$ $255(0xFF) = -0.5^{\circ}C$ $254(0xFE) = -1^{\circ}C$ $253(0xFD) = -1.5^{\circ}C$ $252(0xFC) = -2^{\circ}C$ $251(0xFB) = -2.5^{\circ}C$ $249(0xF9) = -3.5^{\circ}C$ $248(0xF8) = -4^{\circ}C$ $247(0xF7) = -4.5^{\circ}C$ $246(0xF6) = -5^{\circ}C$	1

CONTENTS [17|24]

Select AV endpoint	38 (0x26)	2(0x02) = end point 2 (AV1) default $3(0x03)$ = end point 3 (AV2) $4(0x04)$ = end point 4 (AV3)	1
Calibrate humidity reading	53 (0x35)	0(0x00) = 0% (default) 1(0x01) = 1% to $30(0x1E) = 30%255(0xFF) = -1%$ to $226(0xE2) = -30%$	1
Trigger BLE advertising	60 (0x3C)	0(0x00) = Disable BLE advertising (default) 255(0xFF) = Enable BLE advertising, please also set Parameter 61 below. (If the ZXT-800 is installed at ceiling location, user can trigger BLE advertisement through the Z-Wave™ Configuration without click the PROG button.)	1
BLE advertising option	61 (0x3D)	0(0x00) = ZXT-800 advertises for 10 minutes then stop (default) 1(0x01) = ZXT-800 keep advertising, it is suitable for USB supply power	1
Device reset to default	160 (0xA0)	255(0xFF): device reset to default	1

# 5. Reset to Factory Default

**NOTE**: Please use this procedure only when the network primary controller is missing or inoperable.

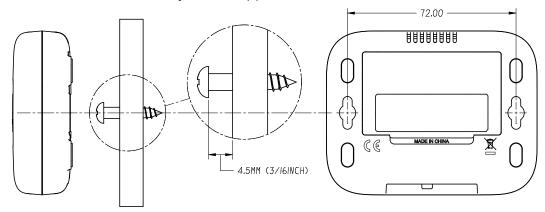
- Press and Hold "PROG" button for 6 seconds on ZXT-800, the Purple indicator will light up. DO NOT release the "PROG" button until Blue indicator flashes TWICE.
- Device will be excluded from network, All Configuration Parameters will be restored to factory default. All downloaded IR data and learned data will be cleared.

CONTENTS [18|24]

- ZXT-800 will send Device Reset Locally Notification to gateway.
- ZXT-800 will not implement the Reset to Factory Default when the battery level below 20%.

## 6. Mounting and Placement

- The ZXT-800 should be mounted on an inner wall about 5ft (1.5m) above the floor where it is readily affected by changes of the general room temperature with freely circulating air.
- Before mounting, check the material and structure of the mounting location.
   If the location does not have the proper material or structure, the ZXT-800 can fall and cause an injury.
- Avoid mounting above or near hot surfaces or equipment (e.g. TV, Heater, Refrigerator). Avoid mounting where it will be exposed to direct sunshine, drafts, or in a laundry room or other enclosed space.
- Better to mount your device where it has no any obstacle or blocked object between the device and your AC Appliance.



- Position ZXT-800 on wall, level and mark hole positions with pencil.
- Drill holes at marked positions, then tap in supplied wall anchors.
- Insert and tighten mounting screws as above figure.

CONTENTS [19|24]

# 7. Technical Specifications

	BW8493US (ZXT-800US)	
	BW8493EU (ZXT-800EU)	
Model number	BW8493AU (ZXT-800AU)	
	BW8493JP (ZXT-800JP)	
	BW8493KR (ZXT-800KR)	
	BW8493IN (ZXT-800IN)	
	BW8493IL (ZXT-800IL)	
	BW8493CN (ZXT-800CN)	
	908.4MHz (ZXT-800US)	
	868.4MHz (ZXT-800EU)	
RF Frequency	921.4MHz (ZXT-800AU)	
	922-926MHz (ZXT-800JP)	
	919-923MHz (ZXT-800KR)	
	865.2MHz (ZXT-800IN)	
	916.0MHz (ZXT-800IL)	
	868.4MHz (ZXT-800CN)	
RF Operating Distance	Up to 500ft / 150m outdoor line of sight, in unobstructed	
Kr Operating Distance	environment	
Temperature	Measurable range: 0°C ∼40°C / 32°F ∼104°F	
Measurement		
Operating Ambient		
Temperature	$\perp$ ()°C $\sim$ 40°C, non-condensing	
Storage Temperature		
Powered Source	USB Power DC 5V 1A or Alkaline Batteries AAA × 3pcs	
Size	<b>Size</b> 90mm × 70mm × 25.5mm	
Weight	70g (exclude battery)	
-		

<u>CONTENTS</u> [20|24]

# 8. BLE Channels and Frequency

RF FREQUENCY MHZ	CHANNEL TYPE	DATA CHANNEL INDEX	ADVERTISING CHANNEL INDEX
2402	Advertising channel		37
2404	Data channel	0	
2406	Data channel	1	
2408	Data channel	2	
2410	Data channel	3	
2412	Data channel	4	
2414	Data channel	5	
2416	Data channel	6	
2418	Data channel	7	
2420	Data channel	8	
2422	Data channel	9	
2424	Data channel	10	
2426	Advertising channel		38
2428	Data channel	11	
2430	Data channel	12	
2432	Data channel	13	
2434	Data channel	14	
2436	Data channel	15	
2438	Data channel	16	
2440	Data channel	17	
2442	Data channel	18	
2444	Data channel	19	
2446	Data channel	20	
2448	Data channel	21	
2450	Data channel	22	
2452	Data channel	23	
2454	Data channel	24	
2456	Data channel	25	
2458	Data channel	26	
2460	Data channel	27	
2462	Data channel	28	
2464	Data channel	29	

<u>CONTENTS</u> [21|24]

RF FREQUENCY MHZ	CHANNEL TYPE	DATA CHANNEL INDEX	ADVERTISING CHANNEL INDEX
2466	Data channel	30	
2468	Data channel	31	
2470	Data channel	32	
2472	Data channel	33	
2474	Data channel	34	
2476	Data channel	35	
2478	Data channel	36	
2480	Advertising channel		39

## 9. Warranty

ONE-YEAR LIMITED WARRANTY: Remotec warrants this product to be free from defects in materials and workmanship under normal use and service for a period of one year from the original date of purchase from the distributors or dealer.

REMOTEC shall not be liable for: Damages caused by defective devices for indirect, incidental, special, consequential or punitive damages, including, inter alia, loss of profits, savings, data, loss of benefits, claims by third parties and any property damage or personal injuries arising from or related to the use of the device. Service trips to provide instruction on product use.

Shipping costs for replacement products.

This warranty is limited to the repair or replacement of this product only, if the purchase date cannot be substantiated, the warranty period will begin on the date of manufacture as indicated on this product. All warranty claims must be made to Remotec appointed distributors or dealers during the applicable warranty period. This warranty gives you specific legal right and you may also have other rights which vary in each country.

Website: https://www.remotec.com.hk

CONTENTS [22|24]

## 10. Regulatory information

#### FCC ID: M7N-BW8493

#### **FCC Compliance Statement**

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

- · This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesired operation.

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.

**Notice**: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user authority to operate the equipment.

To maintain compliance with FCC's RF Exposure guidelines, This equipment should be installed and operated with minimum 20cm distance between the radiator and your body: Use only the supplied antenna.

CONTENTS [23|24]

#### 11. IC Notice

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- · This device may not cause interference, and
- This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- · l'appareil ne doit pas produire de brouillage, et
- l'utilisateur de l'appareil doit accepter tout brouillage radioélec trique subi,
   même si le brouillage est susceptible d'en compromettre le fonctionnement.

## 12. Warnings

- · Do not modify the unit in any way.
- Risk of fire.
- · Risk of electrical shock.
- · Risk of burns.
- Do not dispose of electrical appliances as unsorted municipal waste, use separate collection facilities. Contact your local government for information regarding the collection systems available.
- There is no user serviceable parts in this unit.

#### 13. Caution

- Risk of explosion if battery is replaced by an incorrect type.
- Dispose of used batteries according to the instructions.

CONTENTS [24|24]