



ZXT-300
(Z-Wave-to-AV IR Extender)



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ZXT-300

(Z-Wave-to-AV IR Extender)

Operating Instructions

Introduction

ZXT-300 is a Z-Wave-to-AV IR Extender (Figure 1) and it works with any Z-Wave compliant controller or gateway by translating Z-Wave Simple AV command to IR control code. User can set the IR code from the built-in code library of ZXT-300, or use the learning function of ZXT-300 through the simple UI of Z-URC™ 550 or gateway. User can also download the preset code or learnt command from Z-URC™ 550 to ZXT-300.



Figure 1 Operation diagram

It also supports Z-Wave networks with multiple gateways and controllers. Like every Z-Wave accessory, the user will need to include the ZXT-300 into his Z-Wave network using the primary controller. Then, the user can use either the primary controller or secondary controller to configure and setup the ZXT-300 using Z-Wave's configuration command class. Once the configuration and setup is completed, the controller can use Z-Wave's "Simple AV commands class" to control their IR-controlled AV equipment with the ZXT-300. User can enjoy fully wireless control and home automation system anywhere at home.

Controller and Gateway Requirements

The ZXT-300 is architected to work with any Z-Wave compliant controller or gateway supporting the following Z-Wave commands.

- Configuration Command Class
- Simple AV Command Class
- Multi-channel Command Class (optional)

Built-in IR code library

The built-in IR code library enables the ZXT-300 to work with any Z-Wave compliant gateway and controller. Gateway and controller will not need to have any knowledge related to IR control code. It also eliminates the need for complex set up procedures and proprietary Z-Wave commands to configure the system. The IR code library supports various brand name of AV equipment found in the today's market. User can use his controller or gateway to send a 4 digits AV IR code number (include the brand selection) using standard Z-Wave configuration command.

Glossary

Device or Node	Devices and nodes are all terms to describe an individual Z-Wave device. These are all interchangeable when setting up your Z-Wave network.
Inclusion	Add a Z-Wave device to the network.
Exclusion	Delete a Z-Wave device from the network.
Remove	To take a device out of a group, scene or association group while that device still exists in the same Z-Wave network.
Z-Wave Network	A collection of Z-Wave devices is controlled by primary and secondary controllers operating on the same system. A Z-Wave network has its own unique ID code so that controllers not in the network cannot control the system.
Primary Controller	The first controller is used to set up your devices and network. Only the Primary Controller can be used to include or delete modules from a network. It is recommended that you mark the primary controller for each network for ease in modifying your network.
Secondary Controller	A controller containing network information about other modules within the network and is used for controlling devices. Secondary controller is created from the Primary Controller and cannot include or delete modules to the network.
Inclusion Controller	A controller containing network information about other modules within the network and is used for controlling devices. Inclusion controller is created from the Primary Controller in a SIS enabled Z-Wave network. Inclusion Controller has the ability to add and remove devices from the network.
Scene	A collection of Z-Wave devices configured to turn to a specific level, setting, mode, or perform an operation. Scenes are usually activated by a controller, timed event, or specific conditions.

ZXT-300 Operations

Before using the ZXT-300, please read the [INSTALLATION] if it is needed to mount the ZXT-300 to a wall. Power up the ZXT-300 by the supplied AC/DC adaptor.

ⓘ CAUTION

- Be sure to always use the supplied AC/DC adaptor.
- Do not try to power up other device with the supplied AC/DC adaptor. This could damage the AC/DC adaptor or the connected device.

Configurations

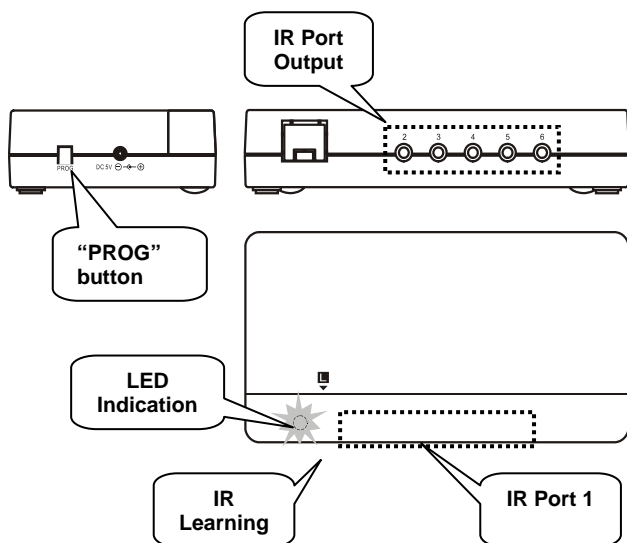


Figure 2 PROG Key and IR Ports of ZXT-300

ZXT-300 Information

Change Z-Wave-to-IR Channel (EP) on ZXT-300

Step	Setup Key	LED Indication Status on ZXT-300
1	Press and hold PROG button on the ZXT-300 for 3seconds to start switching the EP (1->2->3->4->5->6->1->2..)	<ul style="list-style-type: none">• LED flashes once = EP1• LED flashes twice = EP2• LED flashes 3 times = EP3• LED flashes 4 times = EP4• LED flashes 5 times = EP5• LED flashes 6 times = EP6

How to get the NIF “Node Information Frame” on ZXT-300

Step	Setup Key	LED Indication Status on ZXT-300
1	Make sure ZXT-300 switched to Channel 1 (EP1)	<ul style="list-style-type: none">• LED flashes once then keep on
2	Press the PROG button on the ZXT-300 (EP1 will response “NIF” EP2, EP3, EP4, EP5, EP6 will response “Multi-channel capability report”)	<ul style="list-style-type: none">• LED flashes once then keep on <p>(ZXT-300 will report the supported command class)</p>

Parameter No. and Parameter Value in ZXT-300

Parameter Number	Definitions	Parameter Value
1—20 (0x01—0x14)	UIRD formatted raw data for the Simple AV command number or key being downloaded or uploaded	Depends on IR code data
21 (0x15)	The Simple AV command number or key going to be downloaded to the ZXT-300	Referred to Simple AV command class key ID
22 (0x16)	Download status register	0x00 : IR channel idle 0x01 : OK

		0x02 : Downloading 0x03 : Command Full 0x04 : Operation Fail
23 (0x17)	The Simple AV command number or key going to be uploaded	Referred to Simple AV command class key ID
24 (0x18)	Upload status register	0x00 : IR channel idle 0x01 : Ready 0x02 : Invalid key ID 0x03 : Operation Fail
25 (0x19)	The Simple AV command number or key going to be learned	Referred to Simple AV command class key ID
26 (0x1A)	Learning status register	0x00 : IR channel idle 0x01 : OK 0x02 : Learning 0x03 : Command Full 0x04 : Learning Fail
27 (0x1B)	IR code number for built-in code library	Refer "Code list" for details
28 (0x1C)	External IR Emitter power level	0x00: normal power mode 0xFF: high power mode (default)
29 (0x1D)	IR output port routing	0x06: Route IR output from this Z-Wave-to-IR channel to IR Port 6 0x05: Route IR output from this Z-Wave-to-IR channel to IR Port 5 0x04: Route IR output from this Z-Wave-to-IR channel to IR Port 4 0x03: Route IR output from this Z-Wave-to-IR channel to IR Port 3 0x02: Route IR output from this Z-Wave-to-IR channel to IR Port 2 0x01: Route IR output from this Z-Wave-to-IR channel to IR Port 1

30 (0x1E)	Magic code - Controller can use this information to identify the ZXT-300.	0x52548340
31 (0x1F)	IR transmission mode	0x00: Continuous IR transmission mode (default) 0xff: Single shot IR transmission mode

Parameter Table

US Keys				
Key ID(Dec)	Standard Key function	Description	Key in device	Z-Wave Cmd#(Dec)
0	(RESERVED)	(not used)	(RESERVED)	
1	POWER	Power toggle ON/OFF	POWER	39
2	CH_DOWN	Channel down	CH▼	5
3	CH_UP	Channel up	CH▲	4
4	VOL_DOWN	Volume down	VOL▼	2
5	VOL_UP	Volume up	VOL▲	3
6	MUTE	Mute	MUTE	1
7	REW	Rewind	◀◀	23
8	PLAY	Play	▶	19
9	FF	Fast forward	▶▶	22
10	STOP	Stop	■	20
11	PAUSE	Pause		21
12	REC	Record	●	25
13	DIGIT_ZERO	0	0	6
14	DIGIT_ONE	1	1	7
15	DIGIT_TWO	2	2	8
16	DIGIT_THREE	3	3	9
17	DIGIT_FOUR	4	4	10
18	DIGIT_FIVE	5	5	11
19	DIGIT_SIX	6	6	12
20	DIGIT_SEVEN	7	7	13
21	DIGIT_EIGHT	8	8	14
22	DIGIT_NINE	9	9	15
23	MENU	Menu mode	MENU	29
24	ENTER	Channel enter	ENTER	40
25	TV_VCR	AV, TV/VCR or Source	AV	38
26	STANDBY	Standby or power off	STANDBY	404
27	PREV_CHAN	Previous channel or last channel	LAST CH	16
28	CHAP_DOWN	Chapter down, or skip backward	◀◀	284
29	CHAP_UP	Chapter up, or skip backward	▶▶	283
30	GUIDE	On screen program guide	GUIDE	28
31	PIP	Picture in picture	PIP	241
32	TOGGLE	Toggle picture in picture screen	PIP SWAP	244
33	INFO	Information or on screen display	DISPLAY	17
34	SUBTITLE	Subtitle or close caption	CC	103
35	HOLD	(not used)		
36	EP_RD	(not used)		
37	SMT	(not used)		
38	SLEEP	Sleep timer	SLEEP TIMER	285
39	BR_DOWN	(not used)		
40	BR_UP	(not used)		
41	QUIT	Exit from Menu mode	BACK	37
42	ARROW_LEFT	Menu mode arrow left	◀	32
43	ARROW_UP	Menu mode arrow up	▲	30
44	ARROW_RIGHT	Menu mode arrow right	▶	33
45	MENU_OK	Menu mode OK or select	OK	36
46	ARROW_DOWN	Menu mode arrow down	▼	35

AV Command to IR Control Code (US) Mapping Table

EU Keys				
Key ID(Dec)	Standard Key function	Description	Key in device	Z-Wave Cmd#(Dec)
0	(RESERVED)	(not used)	(RESERVED)	
1	POWER	Power toggle ON/OFF	POWER	39
2	CH_DOWN	Channel down	CH▼	5
3	CH_UP	Channel up	CH▲	4
4	VOL_DOWN	Volume down	VOL▼	2
5	VOL_UP	Volume up	VOL▲	3
6	MUTE	Mute	MUTE	1
7	REW	Rewind	◀◀	23
8	PLAY	Play	▶▶	19
9	FF	Fast forward	▶▶▶▶	22
10	STOP	Stop	■	20
11	PAUSE	Pause		21
12	REC	Record	●	25
13	DIGIT_ZERO	0	0	6
14	DIGIT_ONE	1	1	7
15	DIGIT_TWO	2	2	8
16	DIGIT_THREE	3	3	9
17	DIGIT_FOUR	4	4	10
18	DIGIT_FIVE	5	5	11
19	DIGIT_SIX	6	6	12
20	DIGIT_SEVEN	7	7	13
21	DIGIT_EIGHT	8	8	14
22	DIGIT_NINE	9	9	15
23	MENU	Menu mode	MENU	29
24	EXIT	Exit from Menu mode	EXIT	37
25	AV	AV, TV/VCR or Source	AV1	38
26	I, II	Audio selection, L/R	I-II	301
27	RED	Teletext Red		157
28	GREEN	Teletext Green		155
29	YELLOW	Teletext Yellow		129
30	BLUE	Teletext Blue		154
31	MIX	Teletext Mix mode		323
32	TV MODE	Teletext TV mode, Teletext Off		324
33	INDEX	Teletext Index mode	100	322
34	TEXT	Teletext Text mode		319
35	HOLD	Teletext Hold / STOP		321
36	EP_RD	Teletext Expand/Reduce		320
37	DEVICE_TX	(not used)		
38	S_POW	Sleep timer	SLEEP TIMER	285
39	BR_DW	Brightness Down	BR-	89
40	BR_UP	Brightness Up	BR+	90
41	COL_DW	Color Down	COL-	106
42	COL_UP	Color Up	COL+	107
43	CON_DW	Contrast Down	CONT-	115
44	CON_UP	Contrast Up	CONT+	116
45	INFO	Information or OSD	INFO	17
46	P_P	Previous Channel	PREV. CH	16
47	-/--	One/Two digit for channel	- / --	51
48	<<	Chapter down, or skip backward	◀◀	284
49	>>	Chapter up, or skip backward	▶▶	283
50	S_AV	Alternate AV, TV/VCR or Source	AV2	355
51	S_I,II	Alternate Audio or Stereo	STEREO	65
52	LEFT	Menu mode arrow left	◀	32
53	UP	Menu mode arrow up	▲	30
54	RIGHT	Menu mode arrow right	▶	33
55	SELECT	Menu mode OK or select	OK	36
56	DOWN	Menu mode arrow down	▼	35
57	BOX_OFFICE / VOD	Cable box functions	BOX_OFFICE / VOD	386
58	ACTIVE / INTERACTIVE	Cable box functions	ACTIVE / INTERACTIVE	179
59	PLANNER / SERVICE	Cable box functions	PLANNER / SERVICE	276
60	HELP	Cable box functions	HELP	174
61	TV_GUIDE	Program Guide or EPG	EPG	28
62	SETUP	Setup	SETUP	277
63	ASPECT	Aspect Ratio, 16:9, Wide Screen	ASPECT	64

AV Command to IR Control Code (EU) Mapping Table



Information

- Please follow this Operating Instructions if you are using Z-URC™ 550 to operate ZXT-300.
- If you are using Gateway or other z-wave controllers to operate ZXT-300, Please follow the instruction from the gateway or other controller.

Operating with Z-URC™ 550

Add/Delete Devices

Adding Device to the Network



Step	Setup Key	LED Indication Status on Z-URC™ 550	LED Indication Status on ZXT-300
1	Make sure ZXT-300 switched to Channel 1 (EP1)	-	<ul style="list-style-type: none">• LED flashes once then keep on
2	Press  in Advance Setup area	<ul style="list-style-type: none">• Back “OK” LED and front “OK” LED turns on	-
3	Press 	<ul style="list-style-type: none">• “LED_B” flashes slowly	-
4	Press the PROG button on ZXT-300	<ul style="list-style-type: none">• Back “OK” LED and front “OK” LED flashing then turns off• “LED_B” off• Device inclusion completed	<ul style="list-style-type: none">• LED flashes twice then keep on• Device inclusion completed

Note 1: Error LED in front or back on Z-URC™ 550 or ZXT-300 Red LED flashes 6 times means the setup process is failed. Please redo the process again.

Note 2: If you can't add your ZXT-300 to network, it might has been included in another Z-Wave network or the ZXT-300 is not on Channel 1 (EP1). In this case, please delete it following the steps in the [Deleting Device from the Network] section then make sure ZXT-300 is on the Channel 1 (EP1) and add it again.

Note 3: This step can be skipped if the device is already existed in the network.

Deleting Device from the Network

Step	Setup Key	LED Indication Status on Z-URC™ 550	LED Indication Status on ZXT-300
1	Make sure ZXT-300 switched to Channel 1 (EP1)	-	• LED flashes once then keep on
2	Press  in Advance Setup area	• Back “OK” LED and front “OK” LED turns on	-
3	Press 	• “LED_B” flashes slowly	-
4	Press the PROG button on the target device	• Back “OK” LED and front “OK” LED flashing then turns off • “LED_B” off • Device exclusion completed	• LED flashes twice then keep on • Device exclusion completed

Note 1: All Simple AV channels will be deleted from the Z-URC™ 550 and ZXT-300 if this step is proceeded.

Add/Remove Device to/from a Simple AV channel

There are 6 Simple AV Channels in ZXT-300, user can assign them to any of the 8 device buttons on Z-URC™ 550: “TV”, “DVD”, “STB/CBL”, “AUX”, “Shift + TV”, “Shift + DVD”, “Shift + STB/CBL”, “Shift + AUX”.

ⓘ Important

- Simple AV Channel is a Z-Wave virtual channel and it is not related to IR Port output. User can use the IR Port Mapping function to map the IR port output to Simple AV Channel/AV device.

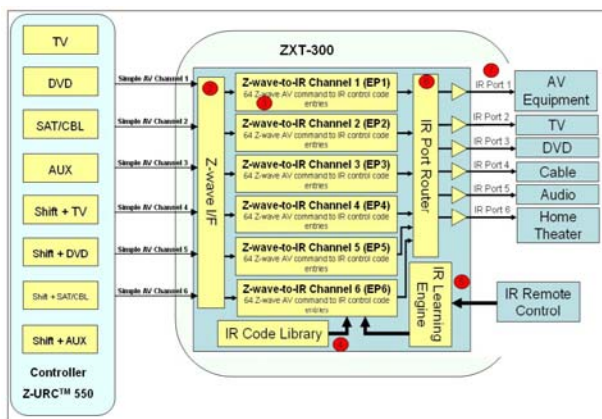




Figure 3 Z-Wave-to-IR Channel (EP) and IR Ports

Device	End-point no.	IR code no.	IR output port no.	IR output power
TV				
DVD				
SAT/CBL				
AUX				
SHIFT + TV				
SHIFT + DVD				

Configuration data in ZXT-300



Adding Device to a Simple AV channel

Step	Setup Key	LED Indication Status on Z-URC™ 550	LED Indication Status on ZXT-300
1	Switch ZXT-300 to your preferred EP no. such as EP1	-	• LED flashes once then keep on
2	Press  in Advance Setup area	• Back “OK” LED and front “OK” LED turns on	-
3	Select a Simple AV Channel by press device key such as 	• Back “OK” LED and front “OK” LED flashes once and stays on • “LED_B” flashes slowly	-
4	Press the PROG button on the ZXT-300 (Now EP1 was ACK to TV device and occupy a Simple AV Channel)	• Back “OK” LED and front “OK” LED flashing then turns off • “LED_B” off • Setup completed	• LED flashes twice then keep on • Setup completed

Note 1: Error LED in front or back on Z-URC™ 550 or ZXT-300 Red LED flashes 6 times means that the setup process is failed. Please redo the process again.

Removing Device from a Simple AV channel





Step	Setup Key	LED Indication Status on Z-URC™ 550	LED Indication Status on ZXT-300
1	Switch ZXT-300 to your target EP no. such as EP1	-	• LED flashes once then keep on

2	Press  in Advance Setup area	<ul style="list-style-type: none"> • Back “OK” LED and front “OK” LED turns on 	-
3	Select a Simple AV Channel by press device key such as 	<ul style="list-style-type: none"> • Back “OK” LED and front “OK” LED flashes once and stays on • “LED_B” flashes slowly 	-
4	Press the PROG button on the ZXT-300 (Now EP1 was ACK to TV device and remove a Simple AV Channel)	<ul style="list-style-type: none"> • Back “OK” LED and front “OK” LED flashing then turns off • “LED_B” off • Setup completed 	<ul style="list-style-type: none"> • LED flashes twice then keep on • Setup completed

Note 1: Error LED in front or back on Z-URC™ 550 or ZXT-300 Red LED flashes 6 times means that the setup process is failed. Please redo the process again.

IR Code Setup

Selecting an IR Device Code in ZXT-300




Step	Setup Key	LED Indication Status on Z-URC™ 550	LED Indication Status on ZXT-300
1	Switch ZXT-300 to your target EP no. such as EP1	-	<ul style="list-style-type: none"> • LED flashes once then keep on
2	Press and hold any device key for 3 seconds (e.g.  ,  ,  or )	<ul style="list-style-type: none"> • Front “OK” LED flashes once and stays on 	-
3	Refer to IR code list of ZXT-300 and enter the code	<ul style="list-style-type: none"> • Front “OK” LED flashes once and stays 	-



	number such as TV. (enter "0" , "0" , "0" , "1" at the front ①-⑨ if it's show 0001)	on for each key press	
4	Press the PROG button on ZXT-300 (The code no. has been assigned to the EP1 as it is ACK by EP1)	<ul style="list-style-type: none"> • Front "OK" LED flashing then turns off • Entering device code successful 	<ul style="list-style-type: none"> • LED flashes twice then keep on • Entering device code successful

Note 1: Error LED in front or back on Z-URC™ 550 or ZXT-300 Red LED flashes 6 times means that the setup process is failed. Please redo the process again.

IR Port Mapping

Mapping individual Channel to individual Port in ZXT-300 by Z-URC™ 550

Step	Setup Key	LED Indication Status on Z-URC™ 550	LED Indication Status on ZXT-300
1	Switch ZXT-300 to your target EP no. such as EP1	-	<ul style="list-style-type: none"> • LED flashes once then keep on
2	Press  in Advance Setup	<ul style="list-style-type: none"> • Back "OK" LED and front "OK" LED turns on 	-
3	Enter the function code "2", "9" in the front ①-⑨	<ul style="list-style-type: none"> • Front "OK" LED flashes once and stays on for each key press 	-
4	Press  if it is Z-URC™ 550US or Press  if it is Z-URC™ 550EU	<ul style="list-style-type: none"> • Front "OK" LED flashes once and stays on 	-


5	Enter the IR port number (1 to 6) in the front ①-⑨ which you want to transmit the IR signal	<ul style="list-style-type: none"> • Front “OK” LED flashes once and stays on for each key press 	-
6	Press  if it is Z-URC™ 550US or Press  if it is Z-URC™ 550EU	<ul style="list-style-type: none"> • Front “OK” LED flashes once and stays on 	-
7	Press the PROG button on ZXT-300 (The IR port number has been assigned to the EP1 as it is ACK by EP1)	<ul style="list-style-type: none"> • Front “OK” LED flashing then turns off • Set IR Port output successful 	<ul style="list-style-type: none"> • LED flashes 2 times then keep on • Set IR Port output successful






Note 1: Error LED in front or back on Z-URC™ 550 or ZXT-300 Red LED flashes 6 times means that the setup process is failed. Please redo the process again.

Note 2: All the Simple AV Channel / Z-Wave-to-IR Channel will map to “IR Port 1” in default if user has not go through the above setup procedure or Z-Wave remote controller does not support “Multi-channel Command Class”.

IR Output Power

Set IR Output Power Level for each IR port (except IR Port 1)

Step	Setup Key	LED Indication Status on Z-URC™ 550	LED Indication Status on ZXT-300
1	Switch ZXT-300 to your target EP no. such as EP1	-	<ul style="list-style-type: none"> • LED flashes once then keep on
2	Press  in Advance Setup	<ul style="list-style-type: none"> • Back “OK” LED and front “OK” LED turns on 	-

3	Enter the function code "2", "8" in the front 	<ul style="list-style-type: none"> • Front "OK" LED flashes once and stays on for each key press 	-
4	Press  if it is Z-URC™ 550US or Press  if it is Z-URC™ 550EU	<ul style="list-style-type: none"> • Front "OK" LED flashes once and stays on 	-
5	Set IR output power level by entering "0" or "1" in the front "0" low power mode "1" high power mode (default is in high power mode)	<ul style="list-style-type: none"> • Front "OK" LED flashes once and stays on for each key press 	-
6	Press  if it is Z-URC™ 550US or Press  if it is Z-URC™ 550EU	<ul style="list-style-type: none"> • Front "OK" LED flashes once and stays on 	-
7	Press the PROG button on ZXT-300 (The IR output power has been assigned to the EP1 as it is ACK by EP1)	<ul style="list-style-type: none"> • Front "OK" LED flashing then turns off • Set IR Power level successful 	<ul style="list-style-type: none"> • LED flashes twice then keep on • Set IR Power level successful

Note 1: Error LED in front or back on Z-URC™ 550 or ZXT-300 Red LED flashes 6 times means that the setup process is failed. Please redo the process again.


Note 2: IR port 1 is a fixed IR output power which is un-configurable and operating in wide angle and long distance coverage.

IR Port Number	IR Output Power Mode	Default value
1	Un-configurable	-
2	Configure as Low or High	High
3	Configure as Low or High	High
4	Configure as Low or High	High
5	Configure as Low or High	High
6	Configure as Low or High	High

IR Port Output Power

AV Command Operation (Z-Wave Simple AV command class)


After added ZXT-300 to Z-URC™ 550 network, add device to Simple AV channel and Selecting an IR Device Code in ZXT-300. You can use the function key on Z-URC™ 550 to control each device that you have been set.








- Press a desired device key (e.g. .
- Press a desired key which you want to transmit the command.
- Z-URC™ 550: Front “OK” LED turns on then off when the key is released.
- ZXT-300: LED flashes if Z-wave Simple A/V command is received and transmits the IR command to your appliances through each IR port emitter.

IR Code Learning

Learning IR Code on ZXT-300

(Learn an IR control code from the original remote control to ZXT-300)

Step	Setup Key	LED Indication Status on Z-URC™ 550	LED Indication Status on ZXT-300
1	Switch ZXT-300 to your target EP no. such as EP1. (The EP is related to your AV device name)	-	<ul style="list-style-type: none"> • LED flashes once then keep on
2	Press  in Advance Setup	<ul style="list-style-type: none"> • Back “OK” LED and front “OK” LED turns on 	-








3	Enter the function code "2", "5" in the front 	<ul style="list-style-type: none"> • Front "OK" LED flashes once and stays on for each key press 	-
4	Press  if it is Z-URC™ 550US or Press  if it is Z-URC™ 550EU	<ul style="list-style-type: none"> • Front "OK" LED flashes once and stays on 	-
5	Press a desired key on Z-URC™ 550 once which you want to learn the command	<ul style="list-style-type: none"> • Front "OK" LED flashes once and stays on 	-
6	Press the PROG button on ZXT-300 (make sure the EP is related to the AV device name on Z-URC™ 550)	-	<ul style="list-style-type: none"> • LED flashes once then keep on
7	Place the ZXT-300 and your original remote on a flat surface, aimed at each other 1-3 inches apart	-	-
8	Press and keep holding the key on your original equipment remote which you want to learn for a few seconds	<ul style="list-style-type: none"> • Front "OK" LED flashing then turns on • Learn a code successful 	<ul style="list-style-type: none"> • LED flashes twice then keep on • Learn a code successful
9	Repeat step 5 to 8 to learn other keys.	-	-
10	Press any device key to exit the learn mode (e.g.  ,  ,  or )	<ul style="list-style-type: none"> • All LEDs off 	-





Note 1: Error LED in front or back on Z-URC™ 550 or ZXT-300 Red LED flashes 6 times means that the setup process is failed. Please redo the process again.

Note 2: On step 8, if no IR signal received for more than 15 seconds, the Error LED in front will flashes six times then all LED turn off, Learning on ZXT-300 mode will exit automatically.

IR Code Learning on Z-URC™ 550

(Learn an IR control code from the original remote control to Z-URC™ 550 then download to ZXT-300)

Step	Setup Key	LED Indication Status on Z-URC™ 550	LED Indication Status on ZXT-300
1	Switch ZXT-300 to your target EP no. such as EP1. (The EP is related to your AV device name)	-	<ul style="list-style-type: none"> LED flashes once then keep on
2	Press and hold the device key (which is related to EP) for 3 seconds (e.g.   ,   or )	<ul style="list-style-type: none"> Front "OK" LED flashes once and stays on 	-
3	Enter the function code "0", "0" "0", "0" in the front  - 	<ul style="list-style-type: none"> Front "OK" LED flashes once and stays on for each key press 	-
4	Press a desired key on Z-URC™ 550 once which you want to learn the command	<ul style="list-style-type: none"> Front "OK" LED flashes once and stays on 	-
5	Place the Z-URC™ 550 and your original remote on a flat surface, aimed at each other 1-3 inches apart	-	-

6	Press and keep holding the key on your original equipment remote which you want to learn for a few seconds	<ul style="list-style-type: none"> • Front “OK” LED flashes 2 times then keep on • Learn a code successful 	<ul style="list-style-type: none"> • LED flashes twice then keep on • Learn a code successful
7	Press the PROG button on ZXT-300 (make sure the EP is related to the AV device name on Z-URC™ 550)	-	<ul style="list-style-type: none"> • LED flashes once then keep on
8	Repeat step 4 to 7 for next key learning	-	-
9	Press any device key to exit the learn mode (e.g.   ,  or )	<ul style="list-style-type: none"> • All LEDs off 	-

Note 1: Error LED in front or back on Z-URC™ 550 or ZXT-300 Red LED flashes 6 times means that the setup process is failed. Please redo the process again.









Note 2: On step 9, if no IR signal received for more than 15 seconds, the Error LED in front will flashes six times then all LED turn off, Learning on ZXT-300 mode will exit automatically.

Note 3: Z-URC™ 550 and ZXT-300 should be placed together within few meters under learning mode.

Download the preset / learned IR code

(Download a device code from Z-URC™ 550 to ZXT-300)

Step	Setup Key	LED Indication Status on Z-URC™ 550	LED Indication Status on ZXT-300
1	Complete the step of “Add Device to Simple AV channel”	-	-

2	Switch ZXT-300 to your target EP no. such as EP1. (The EP is related to your AV device name)	-	<ul style="list-style-type: none"> • LED flashes once then keep on
3	Press  in Advance Setup	<ul style="list-style-type: none"> • Back “OK” LED and front “OK” LED turns on 	-
4	Press the device key (which is related to EP; e.g.  ,  ,  , or )	<ul style="list-style-type: none"> • Front “OK” LED flashes once and stays on 	-
5	Enter the function code "5", "0" "0", "0" in the front 	<ul style="list-style-type: none"> • Front “OK” LED flashes once and stays on for each key press 	-
6	Press  if it is Z-URC™ 550US or Press  if it is Z-URC™ 550EU	<ul style="list-style-type: none"> • Front “OK” LED flashes once and stays on 	-
7	Press the PROG button on ZXT-300 (The EP is related to your AV device name)	<ul style="list-style-type: none"> • Front “OK” LED flashing then turns off • Download a device code successful <p>(It will take around 40 seconds to complete the download)</p>	<ul style="list-style-type: none"> • LED flashes twice then keep on • Download a device code successful

Note 1: Error LED in front or back on Z-URC™ 550 or ZXT-300 Red LED flashes 6 times means that the setup process is failed. Please redo the process again.

Note 2: Z-URC™ 550 and ZXT-300 should be placed together within few meters under download mode.

Reset ZXT-300 to factory default

Press and hold “PROG” button for 10seconds on ZXT-300, LED will flash until reset process is completed.

INSTALLATION

MOUNTING THE ZXT-300 TO A WALL

MOUNTING LOCATION PRECAUTIONS

- Before mounting, check the material and structure of the mounting location. If the location does not have the proper material or structure, the ZXT-300 can fall and cause an injury.
- Use commercial items that best match the wall structure and material for the screws and other fixtures.
- Do not mount near a kitchen counter, humidifier, or other location in which it can be exposed to smoke or steam. Doing so could cause a fire or electrical shock.
- Do not mount in locations with high humidity or large amounts of dust. Doing so could cause a fire or electrical shock.
- Do not mount to locations subject to high temperatures, high humidity, or exposed to water. Doing so could cause a fire or electrical shock.
- Do not mount to locations subject to large amounts of vibration, large jolts, or large forces. These could cause an injury if the ZXT-300 falls and breaks.

MOUNTING PROCEDURE PRECAUTIONS

- Do not modify parts or use the ZXT-300 in ways other than its intended use. Doing so could cause the ZXT-300 to fall and result in an injury.
- Be sure to fully check that there are no electrical wires or pipes inside the wall before mounting.
- If any of the screws are loose, the ZXT-300 can fall and cause an injury. Do not mount the ZXT-300 with the screws still loose.
- Check that the two screws mounted to the wall are fully inserted into the key holes of the ZXT-300. Otherwise, the ZXT-300 can fall and cause an injury.
- Do not mount the ZXT-300 so that it sticks out from the wall edge. It could get hit by people’s bodies or objects and cause an injury.
- Supplier will not be liable for any accidents or injuries that occur due to improper mounting or handling.

- When mounting, be careful not to get your fingers pinched or injure your hands.

MOUNTING PROCEDURE

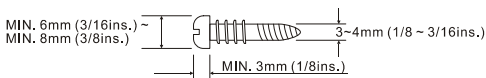
The ZXT-300 can be mounted to a wall or wooden racks using the two key holes in the bottom case. The ZXT-300 can be oriented horizontally or vertically. Mount in the best way for your installation conditions.

Note 1: The reception sensitivity varies depending on the antenna direction. Find the direction providing the best reception by adjusting the antenna direction before mounting the ZXT-300.

Note 2: No screws are provided for mounting to a wall.

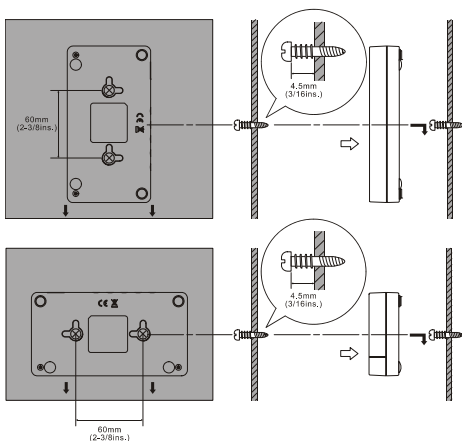
Note 3: Before mounting to a wall, be sure to fully read the precautions.

1. Obtain two screws suitable for the wall strength and material. The screw size is shown in the figure below.



2. The positional relationship between the ZXT-300 key holes and the screw mounting positions are shown in the figure below.

Note 1: When mounting the screws to the wall, leave a space between the wall and screw cap as shown in the figure.



3. Insert the ZXT-300 key holes onto the two screws mounted to the wall, and then slide downward to secure in place.
4. After securing the ZXT-300 to the wall, connect the AC/DC adaptor and cables to the ZXT-300.

Note 1: Check that the ZXT-300 is firmly secured to the wall.

Note 2: Insert the AC/DC adaptor and IR emitter cable so that they are firmly connected to the ZXT-300.

5. When removing the ZXT-300 from the wall, lift up the ZXT-300, then pull it towards you.

WIRELESS INFORMATION

Wireless range:

This device has an open air line of sight transmission distance of 100 feet which complies with the Z-Wave standards. Performance can vary depending on the amount of objects in between Z-Wave devices such as walls and furniture. Every Z-Wave device set up in your house will act as a signal repeater allowing devices to talk to each other and find alternate routes in the case of a reception dead spot.

Radio frequency limitations:

1. Each wall or object (i.e.: refrigerator, bookshelf, large TV, etc) can reduce the maximum range of 65 feet by up to 25 to 30%.
2. Plasterboard and wooden walls block less of the radio signal than concrete, brick or tile walls which will have more of an effect on signal strength.
3. Wall mounted Z-Wave devices will also suffer a loss of range as they are housed in metal junction boxes which could reduce the range by up to 25 to 30%.

MAINTENANCE

- 1 Do not expose your unit to dust, strong sunlight, humidity, high temperatures or mechanical shocks.
- 2 Do not use corrosive or abrasive cleansers on your unit.
- 3 Keep the unit dust free by wiping it with a soft, dry cloth.
- 4 Do not disassemble your unit; it contains no user-serviceable parts.

FREQUENTLY ASKED QUESTIONS

Z-Wave Frequently Asked Questions

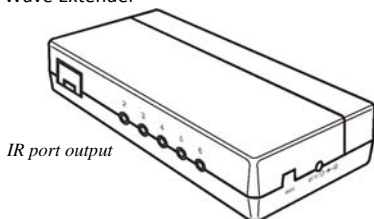
- Q Why won't my unit work with the Z-Wave devices I purchased from another country?**
- A** Due to different countries regulations Z-Wave products from different regions are set to different frequencies. Before purchasing new devices make sure you have checked to see that the device is compatible in your region.

Q What is multi-channel device?

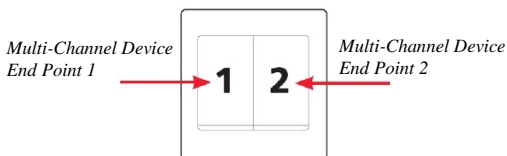
A The multi-channel command class used to control one or more end points in a given device that supports this command class.

There are several kinds of multi-channel products in the market such as Z-Wave Extender™, Z-Wave wall switch / dimmer and power strip. It can control the end-point individually.

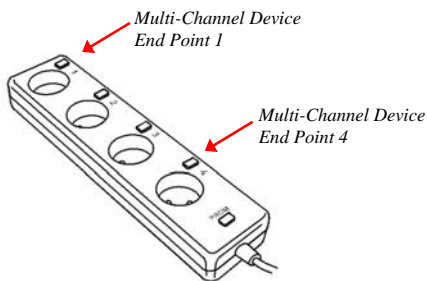
- Z-Wave Extender™



- Z-Wave wall switch / dimmer



- Z-Wave power strip



Please refer to the target device user manual for more information such as Inclusion / Exclusion and add End Point to a Scene / Group.

- Q How to select my AV equipment IR code from ZXT-300?**
- A You should refer to the code list and look into the Device + Brand and try the code no. sequentially until you find the right code. You can record down your device code under the table for future reference after setting up the ZXT-300 correctly.
- Q ZXT-300 supports external IR emitters, but there is no response on the IR emitter socket, why?**
- A You should make sure your selected IR port output is same as your configuration; please refer to “IR Port Mapping” section. ZXT-100 supports two IR power levels for the external IR emitter to avoid saturation of the IR receiver. You can set the IR output power level by the Parameter Table value (normal or high power mode) or adjust the position of your external IR emitter.
- Q Can I use 2 or more ZXT-300 in my house? What is the max. units if yes?**
- A Yes and it is very depend on the capability of gateway / controller. For example, gateway can supports up to 1, 6 or more ZXT-300 in a network.
- Q Where can I keep up to date with the latest Z-Wave products for my house?**
- A You can keep up to date by visiting the www.remotec.com.hk website where we will have information and ideas for using Z-Wave technology.

TECHNICAL SPECIFICATIONS

Model No.	BW8370US (ZXT-300US) BW8370EU (ZXT-300EU) BW8370AU (ZXT-300AU)
RF Frequency	908.42MHz (US) (ZXT-300US) 868.42MHz (EU) (ZXT-300EU) 921.42MHz (AU) (ZXT-300AU)
RF operating distance	up to 80ft outdoor line of sight, in unobstructed environment
IR operating distance	up to 25ft line of sight, in unobstructed environment
IR Frequency	Up to 455kHz
IR Learning	Max 100 commands
Temperature	operation: 0~40°C storage: -20~60°C
Powered by	DC 5V 100mA
Dimension (LxWxT)	139 x 75 x 28.5 mm
Weight	90g

Z-Wave device type		
Basic Device Class: BASIC_TYPE_SLAVE		
Generic Device Class: GENERIC_TYPE_AV_CONTROL_POINT		
Specific Device Class: SPECIFIC_TYPE_NOT_USED		
Z-Wave Command Class	Controlled	Supported
COMMAND_CLASS_CONFIGURATION	NO	YES
COMMAND_CLASS_CONFIGURATION_V2	NO	YES
COMMAND_CLASS_VERSION	NO	YES
COMMAND_CLASS_MANUFACTURER_SPECIFIC	NO	YES
COMMAND_CLASS_SIMPLE_AV_CONTROL	NO	YES
COMMAND_CLASS_BASIC	NO	YES
COMMAND_CLASS_POWERLEVEL	NO	YES
COMMAND_CLASS_MULTI_CHANNEL_V2	NO	YES
COMMAND_CLASS_WAKE_UP_V1	NO	YES

CHECKING ACCESSORIES

After opening the cover of the packing box, check that the following accessories are included.

- ZXT-300: Z-Wave-to-AV IR Extender
- Power adaptor: 100~240Vac input, 5Vdc 1000mA (for ZXT-300)
- IR Emitting Cable: 3.5mm Mono plug cable x 3pcs (for ZXT-300)
- User Manual (download from our website)
- Code List (download from our website)

FCC NOTICE

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

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

WARNINGS

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

- **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.

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