

# HDL-MSD04T.40

# 4-Zone Dry Contact Module

User Manual

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4-Zone Dry Contact Module User Manual

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## Update History

The form below contains the information of every update. The latest version contains all the updates of all former versions.

No.	Version	Update Information	Date
1	V1.0.0	Initial release	August 22, 2020

I



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II

### 1 Introduction

4-Zone Dry Contact Module with temperature sensor (See Figure 1) has 4 input channels and 4 output channels. Input signal supports dry contact, temperature signal and dry contact status display via LED indicators.

This manual offers the description of installation, wring and configuration of 4-Zone Dry Contact Module with temperature sensor in Buspro Software Setup Tool 2.



Figure 1. 4-Zone Dry Contact Module with Temp. Sensor

#### 1.1 Function

- (1) 4-channel dry contact input with vandal proof.
- (2) Supports temperature input.
- (3) Status display via LED indicators.
- (4) Supported switch type: Mechanical switch, Single on, Single off, Single on/off, Combination on, Combination off, Combination on/off, Multi-function, Parallel switch, Temperature sensor.
- (5) Supported switch mode: Switch mode, dim up/down, dim up, dim down.
- (6) Control target types: Scene, Sequence, Universal witch, Single channel lighting control, Broadcast scene, Broadcast channel, Curtain control, Panel control, GPRS control, Security module, Music player etc.
- (7) Security function (security module required).
- (8) Temperature alarm: when the temperature exceeds preset range/value, alarm will be triggered.
- (9) Online update via HDL Buspro.

### Important Notes:

# HDL

- (1) Dry contact signal cable Shielded cable (less than 50 meters) recommended.
- (2) Buspro connection Series connection (hand-in-hand recommended).
- (3) Vandal-proof One parallel contacted  $1k\Omega$  resister required.
- (4) LED indicator Only one LED supported.
- (5) The temperature probe cable is up to 2.5 meters.
- 1.2 Production Information
  - 1. Programming button:

Keep pressing for 3s to read and modify the ID in HDL Buspro Setup Tool;

Keep pressing the button when power on to online upgrading firmware from HDL Buspro Setup Tool.

2. CPU indicator:

Flash in green in working mode;

Keeps in red during ID modification;

Flash in red when online upgrading firmware.

- 3. HDL Buspro interface.
- 4. LED output terminal, display dry contact status. 5V or 12V terminal can be set according to the LED types.
- 5. Input terminal, contact to dry contact or thermistor. See Figure 5.
- 1.2.1 Dimensions See Figure 2 3
- 1.2.2 Wiring See Figure 4 6



Figure 2. Dimensions-Front View Figure 3. Dimensions-Side View







### 1.2.3 Installation - See Figure 7-8

Fix the module to the wall box or the desired position with screws.







Figure 7 - 8. Installation

## 2 Configuration

### 2.1 Dry Contact

								- 0 X
Dry conta	ct Security setting	Broadcast temperature	Resistor setting					
ID	Remark	Mode	ON delay (MM:SS)	OFF delay (MM:SS)	Enable/disable	Enable lock	Funciton Description	■ LED indicators setting
1		Single ON/OFF ~	N/A	N/A			Unspecified 🗸	Min. dimming value setting
2		Single ON/OFF	N/A	N/A			Unspecified	Value: < > 50
3		Single ON/OFF	N/A	N/A			Unspecified	Setting
4		Single ON/OFF	N/A	N/A			Unspecified	Targets setting
			ē)				we & Close	Input/output brightness Broadcast temperature

Figure 2.1-1. Dry Contact Remark: The name of channel.

Mode: Mechanical Switch, Single On, Single OFF, Single ON/OFF, Combination ON, Combination OFF, Combination ON/OFF, Multi-function, Parallel Switch, Combination ON & OFF, Temperature Sensor mode can be selected.

ON delay (MM:SS): the delay time of turning on the channel.

OFF delay (MM:SS): the delay time of turning off the channel.

Enable/disable: Enable or disable the channel.

Enable lock: If select enable lock function, other devices can control current dry contact channel.

Function Description: Description of current channel function.

Input/output brightness: Select output type then dry contact channel can provide device with DC 5V or 12V voltage.

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#### 2.1.1 Mechanical Switch and Shield Dry Contact Channel

For example, 3rd-party dry contact type motion sensor is connected to dry contact channel 1 and we need to shield it.

1. Select mechanical switch model, turn on the light when channel is connected, turn off the light when channel is disconnected. And set OFF delay time 20s to turn off the light after sensor does not detect any movement.

ID	Remark	Mode		ON	delay (MM:	5S)	OFF delay (MM:SS)	Enable/disable	Enable loc	k Funciton Description	■ LED indicators setting ● 5V ○ 12
		Mechanical Switch	~	0	: 20	C	0:20			Unspecified	Min. dimming value setting
2		Single ON/OFF	~	N/A		N	N/A			Unspecified	Value: < >
3		Single ON/OFF	~	N/A		N	N/A			Unspecified	Setting
1	Subnet ID: 5 De Current selected button: 1	vice ID: 5		Name:	Button na	DN me:	○ OFF				Broadcast temperature
	Targets										
	Targets input target number(1-99)	From 1		То	1		Read	Save		Targets create	
	Targets Input target number(1-99) Index Subnet ID Device ID	From 1		То	1 Param	1	Read Param2	Save Param3		Targets create Param4	1

Figure 2.1.1-1 Mechanical Switch ON

ID	Remark	Mode		ON delay (MM:SS)	OFF delay (MM:SS)	Enable/disable	Enable lock	Fu Des	nciton cription	LED indicators setti	ing () 12
		Mechanical Switch	~	0 : 20	0:20			Unspec	ified	Min. dimming value	e setting
2		Single ON/OFF	~	N/A	N/A			Unspec	ified	Value: <	>
3		Single ON/OFF	~	N/A	N/A			Unspec	cified	Setti	ng
	Basic information										
	Basic information Subnet ID: 5 Dev Current selected button: 1 Button type: Mechanical Su Targets	vice ID: 5	N	lame: V ON Button name:	OFF					Input/output Broadcast te	brightness mperature
	Basic information Subnet ID: 5 Dev Current selected button: 1 Button type: Mechanical Sv Targets Input target number(1-99)	vice ID: 5 vitch From 1	N	lame: ON Button name: To 1	OFF Read	Save		Targets	create	Input/output Broadcast te	brightness
	Basic information Subnet ID: 5 Dev Current selected button: 1 Button type: Mechanical Sv Targets Input target number(1-99) Index Subnet ID Device ID	vice ID: 5 vitch From 1 Type	N	ame: V ON Button name: To 1 Param1	OFF     Read     Param2	Save Param3		Targets Param4	create	Input/output Broadcast te	brightness

Figure 2.1.1-2 Mechanical Switch OFF

- 2. In DLP panel keypad, select panel control type, shield button in param 1, button 1 in param 2(dry contact channel), valid in param 3.
- 3. You will see the dry contact channel 1 is disabled after press this keypad. And this sensor cannot work anymore.



ption	Fast search [	Data backup Data	a restore Ad	Q vance sea	rch Ta	rget -	Function La	inguage Chec	k version T	ool Lock	Help	•
list	6. hu + 10	0	11000		1.			Description/	devidie eliek éhie	1		
s	Subnet ID	Device ID	Model	0110 421		Name		Description	double click this	Version		Ha
	5	3 HDL-MCL		30119.431	U1IR431			IP Gateway-	NUT	Unread		IN//
~	5 3 HDL-MO		HDL-MCL	og.431	1			Logic timer	a selection of	Unread		N/A
~	5	4	HDL-MRO	415.431	L	DOIVI - 4 CH R	ELAY	4 channels 10	DA relay IV	Unread		N/A
×	5	5	HDL-MSD	041.40		Dry Contact		4 zone dry co	4 zone dry contact module wit			N/
Page-1 Hint: 1.Do 2. Clic reading if t	Page-2 Page-3 uble click button i ck the button id to here are three co	Page-4 id to test it; pread its commands ontinuous commands	would stop are invalid.	Curren Targets	t selected pa	age: Page	Current selecte	d button: 1	Mode: Combinat	ion ON/OFF		
Button ID	Name	Mode		Index	Subnet ID	Device ID	Туре	Param1	Param2	Param3		
1		Combina	tion ON/ 🗸	1	5	5	Panel Control	Shield button	Button1	Valid	P	
2		Invalid	~	2	255	255	Invalid	N/A	N/A	N/A	P	
3		Invalid	~	3	255	255	Invalid	N/A	N/A	N/A	N Button	statu

Figure 2.1.1-3. Shield Button

Dry contact	Security setting	Broadcast temperature	Resistor setting					
ID	Remar	k	Mode	ON delay (MM:SS)	OFF delay (MM:SS)	Enable/disable	Enable lock	Funciton Description
1		Mechanica	al Switch 🗠	0:0	0:0			Unspecified

Figure 2.1.1-4. Dry Contact Disabled

### 2.2 Security Setting

	A Security retting	Development					
y contac	t Security setting	Broadcast temperat	ture Resistor setting	Linear and the second	11.000 M. 1999	The second	The second second
DI	Enable	Name		SubNet ID	Device ID	Area No.	Self-check
		Gate magnetism		5	16	1	
				255	255	255	
				255	255	255	
				255	255	255	
ielf-checl When When	k n ON: 0 n OFF: 0 Targ	ts	Step 1: if you want to Step 2: close dry conta When ON: Step 3: open dry conta	use this function, plea act, read the value of 0 =	se parallel connect a re: CLOSE many times, press Read Use It DPEN many times, press	sistor (1000 ohm) at dry cont s "Use it" to save the value. : 	act.

Figure 2.2-1. Security Setting

Enable : Enable or Disable channel used to trigger security alarm.

Name: Name of the channel.

Subnet ID, Device ID, Area No.: Use with security module and should fill Security module's Subnet ID, Device ID, Area number.

Self-check: It is used to anti-tamper or check the channel status is connected.

#### 2.2.1 Notification in HDL ON and Dry contact

You can refer to below steps to configure the vacation mode and notification in HDL ON.

Step 1: Connect a dry contact type device to dry contact module channel 1. Set Mechanical Switch mode and turn on gateway universal switch.

ID	Remark	Mode	ON delay (MM:SS)	OFF delay (MM:SS)	Enable/disable	Enable lock	Funciton Description	LED indicators setting	
	Alarm	Mechanical Switch	0:0	0:0			Gate / window magnet		O 12
2		Single ON/OFF	N/A	N/A	M		Unspecified	Min. dimming value settin	g
-							t to an a still a st	value; «	,
	the structure contracts of the second second								
Curre. Buttor	nt selected button: 1 n type: Mechanical Switch		ON Button name:	O OFF				Input/output bright	ness ture
Curre Buttor Target Input	nt selected button: 1 n type: Mechanical Switch ts target number(1-99)	From 1 T	ON Button name:	OFF Alarm Read	Save		Targets create	Input/output bright	ness ture
Curre Buttor Targe Input	nt selected button: 1 n type: Mechanical Switch ts target number(1-99) Subnet Device ID Type	From 1 T	ON Button name:      D     1 Param1	OFF Alarm Read Param2	Save Param3	P	Targets create	Input/output bright Broadcast temperat	ness ture

Step 2: Fill in the dry contact module's subnet ID and device ID. Message ID is the gateway universal switch number which is turned on by dry contact module in step 1.

HDL Cloud	Management	System					<u> 8</u> 9375011	
My Home ; HDL2	Notification							
O Devices	NessageID Message	type 🔻 Search					A	dd Message Delete
Scene Mode	Number	SubnetiD	DeviceID	MessagelD	Message type	Push method:	Message content:	Operation
C' Room	× 🗆 t	5	5	88	Alarm	App push message	Alarm: Door is opened.	Edit
Message	· ·							
Notification								
(2) Unar Information								

Step 3: In dry contact module security setting, enable channel 1, fill in security module's subnet ID, device ID and area number.



-5\							- 0
ry conta	act Security setting	Broadcast ter	mperature Resistor setting				
ID	Enable	Name		SubNet ID	Device ID	Area No.	Self-check
1		Gate magneti	sm	5	16	1	
2				255	255	255	
				255	255	255	
				255	255	255	
Self-che	2Ck						
Whe	en ON: 0		Step 1: if you want to	use this function, p	lease parallel conr	nect a resistor (1000 ohm	n) at dry contact.
Whe	en OFF: 0	÷	Step 2: close dry conta	act, read the value	of CLOSE many tin	mes, press "Use it" to save	e the value.
	Targ	jets	When ON:	0	Read	Use It	
			Step 3: open dry conta	act, read the value	of OPEN many tim	es,press ""Use it"" to say	ve the value.
			When OFF:	0	Read	Use It	

Step 4: In security module arming setting vacation arm, fill in the device that is executed simultaneously when the vacation mode is triggered. The alarm music is from Homeplay (HDLMZBOX.A50B.30) USB flash disk. If use special music to alarm, change the file suffix MP3 to VOC format directly.

5-16\ Basic information Basic setting Arn	ning setting	Alarm com	mands Va	cation setting ByPass	setting			- 0
Area No. 1 Different types of arming can set d	<ul> <li>Enable</li> <li>lifferont goals</li> </ul>	.Each type	can be set	up to 32 targets.				
Туре		Trigger wh	en leaving	Targets from(1-32)	1	To 8	3	Read
AWAY ARM	Index	Subnet ID	Device ID	Туре		Param1	Param2	Param3
	1	5	4	Broadcast Channel		All Channels	0(Intensity)	0:0(Running time[N
NIGHT_G ARM	2	5	22	Broadcast Channel		All Channels	O(Intensity)	0:0(Running time[N
DAY AKM	3	5	33	Broadcast Channel		All Channels	O(Intensity)	0:0(Running time[N
DISARM ARM	4	5	59	Broadcast Channel		All Channels	O(Intensity)	0:0(Running time[N
	5	120	1	Music Control		Source Play	Specify List	2(Song no.)
	6	255	255	Invalid		N/A	N/A	N/A
	7	255	255	Invalid		N/A	N/A	N/A
	8	255	255	Invalid		N/A	N/A	N/A
Mode Auto Arming ~	A	uto Arminį uto Arminį uto Arminį	3 0 3 0 3 0		<ul> <li>Away</li> <li>Night</li> <li>Away</li> <li>Night</li> <li>Away</li> <li>Night</li> <li>Away</li> <li>Night</li> </ul>	<ul> <li>Night with</li> <li>Day</li> <li>Night with</li> <li>Day</li> <li>Night with</li> <li>Day</li> <li>Night with</li> <li>Day</li> </ul>	guests guests guests	
		¢				Save & Close		

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	Kingston >	special	ٽ ~	搜索"special
^	名称	修改日期	类型	大小
	001.voc	2012/1/12 16:26	VOC 文件	2
	002.voc USB flash disk	2012/1/12 16:26	VOC 文件	9
	003.voc	2012/1/11 13:24	VOC 文件	2
	004.voc	2012/1/9 16:37	VOC 文件	2
	005.voc	2011/12/17 15:39	VOC 文件	
	006.voc	2012/1/11 16:12	VOC 文件	
	007.voc	2012/1/9 16:35	VOC 文件	19
	008.voc	2012/1/10 10:18	VOC 文件	
	009.voc	2012/1/12 15:36	VOC 文件	

Step 5: In security module arming setting disarm arm, fill in the device that is executed simultaneously when the disarm mode is triggered.

													Ō	
Basic information	Basic setting	Arming se	etting	Alarm com	mands	Vacation setting	ByPass sett	ng						
Area No.	1	~ 6	Enable											
Different types o	of arming can s	et differer	nt goals	s.Each type	can be s	et up to 32 targe	ets.							
Туре				/		Targets from	n(1-32)	1		To 8	1	Read	1	
VACATION ARM			_/	<u> </u>		in gets in o	11(1 52)	-		10				
AWAY ARM			Index	Subnet	Device	Type			Param	1	Param2	Para	m3	
NIGHT ARM				ID	IU	Description			All char	-	100/1-1	0.0/0		-10.4
NIGHT G ARM			1	5	4	Broadcast C	nannei		All Char	neis	100(Intensity)	U:U(R	unning tim	elivi
			2	120	1	Music Contr	rol		Source	Play	Specify List	18(Sc	ong no.)	
			3	5	33	Single Chan	nel Control		1(Chan	nel no.)	O(Intensity)	0:0(R	unning tim	ie[M
DISARM ARM			4	255	255	Invalid			N/A		N/A	N/A		
			5	255	255	Invalid			N/A		N/A	N/A		

Step 6: In security module alarm commands vacation alarm, fill in the alarm devices executed after triggering dry contact in vacation mode

Basic information Basic s	etting Armin	g setting	larm comman	ds Vacation setting ByPass setting			
Area No. 1 Once alarm. the device to	✓ E riggers differe	inable nt goals ac	coring to the	type of alarm.Each type can be set			
Туре		largets from	n(1-32)	1 To	8	Read	
AWAY ALARM	Index	Subnet ID	Device ID	Туре	Param1	Param2	Param3
NIGHT ALARM	1	5	33	Single Channel Control	1(Channel no.)	100(Intensity)	0:0(Running time[M:S
NIGHT_G ALARM	2	120	1	Music Control	Source Play	Specify List	7(Song no.)
DAY ALARM	3	255	255	Invalid	N/A	N/A	N/A
SILEN ALARM	4	255	255	Invalid	N/A	N/A	N/A
POWER ALARM	5	255	255	Invalid	N/A	N/A	N/A
TEMPE ALARM	6	255	255	Invalid	N/A	N/A	N/A
FIRE ALARM	7	255	255	Invalid	N/A	N/A	N/A
GAS ALARM	8	255	255	Invalid	N/A	N/A	N/A
PANIC ALARM		0.002.00			1204010		3.5 <b>4</b> .5150

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Step 7: Fill in the dry contact module channel 1. Select connect option which means when security module is in vacation mode, change dry contact channel status disconnected to connect, system will execute the devices in alarm commands vacation alarm.

and mile	ormation Ba	sic setting Ar	ming setting	Alarm commands	Vacation setting	ByPass setting					
Area N	D. 1	~	Enable								
When a	bout to arm.	this module w	ill be check if e	vervone is OK.For	example, if window	ws are closed.You	can select up t	0.32	devices for che	ecking.	
lf you v	ersions is 201	1/06/21 or ab	ove. If now the	door is opened, it	can output 8 com	mands.Only 1-16	this function.			connig.	
larm+B	yPass Armi	ng settings									
Index	1-32) from	1		То 4	4	Read					
Index	Al	arm	Subnet ID	Device ID	Channel	Bypass	Trigger		Status	Mode	Remark
							Connect	~	OFF	Normal	
2			255	255	255		Disconnect	~	Not online	Normal	
3			255	255	255		Disconnect	~	Not online	Normal	
4			255	255	255		Disconnect	~	Not online	Normal	
Currer	t selected in	dex Targets									
Currer	t selected in Subnet ID	dex Targets Device ID	Туре			Param1	Para	m2		Param3	
Currer Index	t selected in Subnet ID 255	dex Targets Device ID 255	Type Invalid			Param1 N/A	Paran N/A	m2		Param3 N/A	
Currer Index 1 2	t selected in Subnet ID 255 255	dex Targets Device ID 255 255	Type Invalid Invalid			Param1 N/A N/A	Parai N/A N/A	m2		Param3 N/A N/A	
Currer Index 1 2 3	t selected ind Subnet ID 255 255 255	dex Targets Device ID 255 255 255	Type Invalid Invalid Invalid			Param1 N/A N/A N/A	Parat N/A N/A N/A	m2		Param3 N/A N/A N/A	
Currer Index 1 2 3 4	t selected in Subnet ID 255 255 255 255	dex Targets Device ID 255 255 255 255 255	Type Invalid Invalid Invalid Invalid			Param1 N/A N/A N/A N/A	Parat N/A N/A N/A N/A	m2		Param3 N/A N/A N/A N/A	
Currer Index 1 2 3 4 5	subnet ID 255 255 255 255 255 255	dex Targets Device ID 255 255 255 255 255 255	Type Invalid Invalid Invalid Invalid Invalid			Param1 N/A N/A N/A N/A N/A	Para N/A N/A N/A N/A N/A	m2		Param3 N/A N/A N/A N/A N/A	
Curren Index 1 2 3 4 5 6	subnet ID 255 255 255 255 255 255 255 255	dex Targets Device ID 255 255 255 255 255 255 255 25	Type Invalid Invalid Invalid Invalid Invalid Invalid			Param1 N/A N/A N/A N/A N/A N/A	Para N/A N/A N/A N/A N/A N/A	m2		Param3 N/A N/A N/A N/A N/A N/A	
Currer Index 1 2 3 4 5 5 6 7	t selected in Subnet ID 255 255 255 255 255 255 255 25	dex Targets Device ID 255 255 255 255 255 255 255 25	Type Invalid Invalid Invalid Invalid Invalid Invalid Invalid			Param1 N/A N/A N/A N/A N/A N/A N/A	Parat N/A N/A N/A N/A N/A N/A N/A	m2		Param3 N/A N/A N/A N/A N/A N/A N/A	

Step 8: Configure HDL ON and DLP panel subnet ID and device ID to control arm or disarm.

sic information Basic setting	Arming setting Alarm commands	Vacation setting ByPass set	ing		
rea No. 1	✓ Enable				
When about to arm, this module	will be check if everyone is OK.Fo	r example, if windows are close	d.You can select up to 32 devic	ces for checking.	
f you versions is 2011/06/21 or	above. If now the door is opened, it	t can output 8 commands.Only	1-16 this function.		
larm+ByPass Arming settings					
Targets Num from(1-16)	1 To	10 F	lead		
Index	Subnet ID	Device II	)	Remark	
1	252	252		HDL ON Vacation Mode	
2	5	101		DLP	
3	255	255			
4	255	255			

Step 9: Upload security module, area 1, dry contact channel to HDL ON.



O biy conder													
Dry contact Room list	Room	Scene	🔄 Add de	evice	Open other p	project						Save	Upload Downlo
4 Channel relay 2 Channel Curtain module IP Gateway-MQTT	Manual mode Room informat	ion						BUS	er Relay	DMX	Music	Curtaim	Dry contact
Security module	Room name:	Security r	module Fl	loor:					5-0-IP Gatew 5-3-Logic tim 5-4-4 channe 5-5-4 zone di	ay-MQTT// er//logic els 16A rela ry contact r	nodule w	DM - 4 CH ith temp.	RELAY sensor//
	Subnet ID	Device	ID Chn.		Status	Remark	Display		5-8-Infrared	signal emi:	ssion,ren	note receiv	ring module//IR
	5	16	N/A		N/A	Security mo		-0:	5-12-PIR,tem	p & lux ser	sor//7in	1	
Dev contact		1						 99	5-16-Advanc 5-22-4ch 3A	ed security leading ed;	ge dimmi	ng module	//0403
Dry contact Dry contact Room list	Room	Scene	互 Add de	evice	Open other	project			5-16-Advanc 5-22-4ch 3A	ed security leading ed	ge dimmi	ng module Save	//0403 — 🗆 Upload Downle
<ul> <li>⑦ Dry contact</li> <li>⑦ Dry contact Room list</li> <li>□ 10 HDL Room</li> <li>□ 0 4 Channel relay</li> </ul>	Room	Scene	🔄 Add de	evice	Open other	project		BUS	5-16-Advanc 5-22-4ch 3A	ed security leading edj	ge dimmi	ng module Save	//0403 — 🗆 Upload Downle
Dry contact Dry contact Room list HDL Room HDL Room C 4 Channel relay C 2 Channel Curtain module S 1P Gateway-MQTT	Room Manual mode Room informati	Scene	Add de	evice	Open other	project		BUS Dimm	5-16-Advanc 5-22-4ch 3A	ed security leading edg	Music	Save	//0403 — Upload Downle Dry contact
Dry contact Dry contact Room list HDL Room  HDL Room  A Channel relay  I C channel Curtain module  I Gateway-MQTT  Security module  C Security module  C Area 1	Room Manual mode - Room informati Room name:	Scene Ion Security r	Add de	evice	Open other p	project		BUS	5-16-Advanc 5-22-4ch 3A her Relay 5-0-1P Gatev 5-3-Logic tin 5-4-4 chann	DMX DMX ray-MQTT/, her//logic els 16A rel v contact	Music / ay IV//D	Save Curtaim OM - 4 CH	//0403 Upload Downli Dry contact RELAY RELAY
Dry contact Dry contact Room list HDL Room HDL Room C 4 Channel relay F 1P Gateway-MQTT F Security module F Security module F Security module F Security module1 F F Security mo	Room Manual mode - Room informati Room name: - Device informati	Scene ion Security r	Add de	evice	Open other	project		BUS Dimm 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5-16-Advanc 5-22-4ch 3A her Relay 5-0-IP Gatev 5-3-Logic tin 5-3-Logic tin 5-5-4 zone d 5-7-2ch win	DMX point for the second secon	Music / ay IV//D n control	Save Curtaim OM - 4 CH vith temp. ler//curta	//0403 Upload Downli Dry contact RELAY sensor// in
Dry contact Dry contact Room list HDL Room HDL Room C 4 Channel relay F 1P Gateway-MQTT F 2 Security module F 2 Security module F 2 Security module F 2 Dry contact	Room Manual mode Room informati Room name: Device informati	Scene Ion Security r tion Subnet ID	Todule Fi	evice	Open other p	project s Remark	Display	BUS Dimm 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5-16-Advanc 5-22-4ch 3A her Relay 5-0-IP Gatev 5-3-Logic til 5-3-Logic til 5-4-4 chann 5-5-4 zone d 5-7-2ch win 5-8-Infrared 5-8-Infrared	DMX DMX vay-MQTT/ her//logic els 16A rel ry contact dow curtai signal emin p & lux se	Music / ay IV//Di module v n control ssion,rein ssor//Til	Save Curtaim OM - 4 CH vith temp. ler//curta mote recei	V/0403 Upload Downli Dry contact RELAY sensor// in ving module//IR

#### 2.3 Broadcast Temperature

Dry contact only supports NTC type thermistor. NTC means the phenomenon and materials of thermistor with negative temperature coefficient and the resistance decreases exponentially with the increase of temperature.



5-5\						- O >
Dry contact Seco	urity setting Broadcast tempera	ature P	Resistor setting			
Channel	Valid/invalid		SubNet ID	Device ID	Adjust temperature	Current temperature
1	Invalid	~	255	255	0	OC
2	Invalid	~	255	255	0	0C
3	Invalid	~	255	255	0	OC
4	Invalid	~	255	255	0	OC
			¢		🔚 Save & Close	]

Figure 2.3-1 Broadcast Temperature

- 1. Valid/Invalid: Channel can be enabled or disabled to broadcast temperature.
- 2. Subnet ID & Device ID: Fill in the device's subnet ID and device ID where the broadcast temperature is required.
- 3. Adjust temperature: It's used to adjust temperature compensation (range is between -8°C and +8°C) when there is big difference between the detected temperature and the actual temperature.
- 4. Current temperature: The detected temperature.

You can also configure broadcast temperature settings in dry contact->broadcast temperature interface. It will display current temperature in "Now" row. Refer to Figure 2-3-1. Broadcast Temperature-1.



ID	Remark	Mode	ON delay (MM:SS)	OFF delay (MM:SS)	Enable/disable	Enable lock	Funciton Description	LED indicator	rs setting	2V
		Temperature 🗠	N/A	N/A			Unspecified	Min. dimmin	g value setting	
2		Single ON/OFF	N/A	N/A			Unspecified	Value: <	>	5
3		Single ON/OFF	N/A	N/A			Unspecified		Setting	
4		Single ON/OFF	N/A	N/A			Unspecified	Ta	rante cotting	
								Broade	act temperature	_
Desedese								- Droduc	ast temperature	7
Broadcas	t temperature	Broadcast enable	Destination su	bnet ID Destina	tion device ID C	Compensation v	alue Alarm A	Alarm low limit	Alarm Higt limit	
Broadcas Remark	t temperature Mode Temperature sensor	Broadcast enable	Destination sul	bnet ID Destina	tion device ID 0	Compensation v	alue Alarm A	Alarm low limit	Alarm Higt limit	N
Broadcas Remark	t temperature Mode Temperature sensor Single ON/OFF	Broadcast enable	Destination sul 255 N/A	bnet ID Destina 255 N/A	tion device ID C 0 N	Compensation v	alue Alarm A	Alarm low limit 127	Alarm Higt limit -127 N/A	Ne OC N/
Broadcas Remark	t temperature Mode Temperature sensor Single ON/OFF Single ON/OFF	Broadcast enable	Destination sul 255 N/A N/A	bnet ID Destina 255 N/A N/A	tion device ID C 0 N N	Compensation v I/A I/A	value Alarm 4	Alarm low limit 127 1/A	Alarm Higt limit -127 N/A N/A	N/ 0C N/

Figure 2.3-2. Broadcast Temperature-1

#### 2.4 Resistor Setting

	Туре	R1(customize Ω)	R2(customize Ω)	R3(customize Ω)
	Disable	<ul> <li>✓ 0</li> </ul>	0	0
	Disable	0	0	0
	Default(HDL) Specified(NTC 12k)	0	0	0
	Customize	0	0	0
	L			
the resistan	ce when temperature is 0 C			
the resistan	ce when temperature is 0 C			
the resistan	ice when temperature is 0 C ice when temperature is 10 C			
the resistan :he resistan :he resistan	ice when temperature is 0 C ice when temperature is 10 C ice when temperature is 25 C			

Figure 2.4-1 Resistor Setting Type:

Default (HDL), Specified(NTC12k), Customize can be selected.

How to detect temperature (Only the NTC type resistance can be used):

1. Select temperature sensor mode in dry contact channel. And connect a thermistor to dry contact channel.



- 2. Select customize type resistance.
- 3. Separately fill in the corresponding resistance value to R1、R2、R3 when detecting 0 Celsius degree、 10 Celsius degree、 25 Celsius degree.

### 3 Device Upgrade

#### 3.1 Automatic Upgrade

Automatic upgrade is applicable for the devices searched out. Automatic upgrade page is as shown in 错误!未找到引用源。.

option	Fast	search Data backup	Data resto	re Advance search	Target Funct	ion Language Ch	eck version Tool	LOCK He	alp
e list								· · · ·	
tus	Su	Firmware Upgrade					- 🗆 ×	sion	Hardware version
	5	Automatic Upgrade Manu	ally Upgrade					ead	N/A
1	5	Select Device						ead	N/A
~	5	Select Device:	5-5\			~	Get Device List	ead	N/A
~	5	Manually SubNet ID:	5		Device ID: 5		0	ead	N/A
1	5					Ŀ	Read Device Type	ead	N/A
~	5	Select File:	C:\Users\w	wwhw\Desktop\FW_M	ASD04T.40_V04.03U_2018-07-	25_ATSAMD20G17.bin	3 Add Device	ead	N/A
1	5	Device Model: ATN	IEL-SAMD20	G17			J	ead	N/A
1	5							ead	N/A
~	5	Upgrade List						ead	N/A
1	5	SubNet ID Dev	/ice ID	Name	Status	Path setting		ead	N/A
~	5	5 5			Wait for the upgrade	C:\Users\wwwhw\Deskt	top\FW MSD04T.40	ead	N/A
~	5				10			ead	N/A
1	5							ead	N/A
~	5							ead	N/A
1	5							ead	N/A
1	5							ead	N/A
1	10							ead	N/A
1	12							ead	N/A

Figure 3-1. Automatic Upgrade

- 1. Select the device to upgrade.
- 2. Read device type.
- 3. Select the device firmware.
- 4. Add to upgrade list.
- 5. Begin the upgrade.



#### 3.2 Manually Upgrade

If upgrade failure, select manually upgrade page, Refer to Figure 3-2.

Automatic Upgrade	Manually Upgrade		
Select Device			
Device:	5-5	∽ Rea	d Device Type
Select File:	C:\Users\wwwhw\Desktop\FW_MSD04T.40_V04.03U_2018-07	7-25_ATSAMD20G17.bin	Upgrade
Device Model:	ATSAMD20G17_MS04T		



shows dry contact address and type, select the firmware.

- 2. Manually upgrade it.
- 3.3 Access in Manually Upgrade Mode

How to access in the manually upgrade mode:

- 1. Open the manually upgrade page.
- 2. Power off dry contact, then hold its Prog button and power on it. See Figure 3-3.



Figure 3-3

3. In the manually upgrade page, you can see dry contact address and model, select the firmware and upgrade.