

# Programming Manual Dimmers & Relays V2.1



Created By Sameh & Basem



#### Contents

#### **1-Introduction**

Objective 1-1 S-bus products 1-2

#### 2- Start Programming

S-Bus Programming Software overview 2-1 S-bus Configuration Software basic setting 2-2 Devices address and Search 2-3 Steps of basic programming 2-4 What is the MAGIC LINE 2-5

#### **3- Relays and Dimmers Programming**

Relays and Dimmers type overview 3-1 Setting Relay and Dimmers Address 3-2 Channels search and Remarks 3-3 **Relay Channel Setting** 3-4 Dimmer Channel Setting 3-5 Area Setting 3-6 Scene Setting 3-7 Scene Restore 3-8 Sequence Setting 3-9 3-10 Motor Setting

# Before you begin this course

Before you begin this course, you should have:

- Understand the basic bus Diagram Connection Topology
- Understand the Lighting and HVAC Connections Diagram
- Basic Knowledge about IP setting. (please see 2-2)
- Basic Knowledge of using Windows operating system.
- Basic Knowledge of using Windows Painter.

# Prerequisites

Either

- Products overview course.
- Installation Course.

# How this course is organized

Lighting and HVAC Programming Guide Course Organized in Simple way of

Product overview, Example Picture, ( Notices), ( School Advices),



For Training Course Request Please apply online www.smarthomebus.com

# 1-Introduction

Welcome to S-BUS manual Programming Guide, you are now a Beginner Programmer who well know soon how the S-bus Programming is simple.

# 1-1 Objective:

After this course you will be able to program the Lights Dimmers ad relays with the switches Panel, Program curtain shades control, program the Air condition setting and DDP panel, create and download different Picture on the LCD, and start with Motion sensor and Automate your Project and many more...

# **1-2 S-Bus products:**

S-BUS Products is vary with its powerful and multi functions, it have the high power dimmer and relay, Curtain, DMX and LED controller, Wall switches and Dynamic Display Panel "DDP", HVAC2 Air condition control and different type of sensors, like Motion sensor, light intensity sensor, Ultrasonic sensor, Dry input sensor, Analog input, current sensor, Power meter, Infrared receivers and transmitter, Security and Automation, Audio Module, Rs232, Programming and integrations Module



# 2- Start Programming

In smart home G4 there are two ways For Programming:

- Manual Way (For Basic Programming).
- Pc /Laptop Way (For Basic and Advanced Programming).

## 2-1 S-Bus Programming Software overview

You need on this lesson: to have your computer with you. Running on windows Operating system, Smart Cloud **G4** software, Programming port SB-DN-1IP, that enable you to search for all the devices that connected to the bus network.

1- Install your S-bus configuration software in your Computer by pressing the **Setup** icon and follow the installation steps windows

2- Plug in your Ethernet cable (Rj45) in your pc and the other end in the **RSIP** module or **Zaduio** module then **Set** your computer IP Address, for example

IP	192.168. <mark>10</mark> .115
Subnet	255.255.255.0
Getaway	192.168. <mark>10</mark> .1

The default address for S-bus Product is **192.168.10.xxx** 



Local Area Connection St		Internet Protocol Version 4 (TCP/	/IPv4) Properties
eneral	Networking Sharing	General	
Connection IPv4 Connectivity:	Connect using:		d automatically if your network supports leed to ask your network administrator
IPv6 Connectivity: Media State: Duration:	Confi This connection uses the following items:	Obtain an IP address autor	
Speed:	<ul> <li>✓ ➡ Hotspot Shield Routing Driver 6</li> <li>✓ ➡ QoS Packet Scheduler</li> </ul>	IP address:	192 . 168 . 10 . 115
Details	File and Printer Sharing for Microsoft Networks	Subnet mask:	255.255.255.0
	Internet Protocol Version 4 (TCP/IPv4)	Default gateway:	192 . 168 . 10 . 1
Activity Sent	Link-Layer Topology Discovery Mappen 70 Divergence     Link-Layer Topology Discovery Responder	Obtain DNS server address     Obtain DNS server address     Output the following DNS server	
Packets:	Install Uninstall Prope	rties Preferred DNS server:	
TOCKED.	Description Transmission Control Protocol/Internet Protocol. The de	Alternate DNS server:	
Properties BDis	wide area network protocol that provides communicatio across diverse interconnected networks.	n	t 7 Advanced
4	ОК	Ca	OK Cancel

3- Run your S-bus smart cloud Software



4- The Password window will open, type the default password is **user** 

Username	user
Password	****
	t-Cloud (R) Smart-Mesh (R) Smarthome (R) are all inks and Intellectual Property of Smart-Group (R).
	col is patented to Smart-Group(R) Registered under
	3081.0 All Intellectual Properties are copy righted and
must not be claimed i entity except SmartH	nor implied to be otherwise related to any other
	or any of the Hardware that carry
	ptocol is a complete acceptance to ty rights, and copy rights, as well
	ditions set or to be set by
	t liability whatsoever on the
Smart-Group or any	of their partners or subsidiaries.
	erstand and accept, then kindly
Press (Accept) othe	erwise Press (cancel) to exit.
	( <b>5</b> )

5- Your software will start



nfigure (C)	Address(A) F	airing(P) Devi	ces (D) Test(T) Langu	age(L) Backup(B) Developers	(F9) Users(U) Other(O) Hotel Help (H)	
XE	👛 👌 🛛	目 关 /公	🖲 🔒 H: 🚸 🗐	4 🛛 🖓 🕲 🔛 🕹 🖡	: 47 🛛 🖄 🖄 🗰 🐜 🔤	
N-line devices						
UN-line devices	·					
Status	Subnet ID	Device ID	Model	Remark	Description	
					•	
40	tive Link Via:Eth	ernel			Current IP.192.168.10.115 Total Devices:0	Best Viewed at 1024x768 Resolution
AU	ore cark via.eu		0 5 🔫		Current P. 102, 100, 19, 115 Total Devices.0	ل المعادية ا من 11:47 من

6- You can see your current IP on the footer of the software as 192.168.**10**.115 then your IP setting is ok.

•	
Current IP:192.168.10.115	Best Viewed at 1024x768
	EN 🔺 📴 🚮 🐠

A Set your computer IP setting before starting the S-BUS Smart Cloud.

You should always reset your Module every time you change the IP Address in order the new setting to be Active.

After you set your Module IP Address now you should connect the module to Your Computer Network in order to communicate. The connection can be in two ways

 Connect the 1Port IP/RSIP Module to the HUB or Data Switch and connect your Computer to the same data Switch as standard straight cable Network wiring.



2- Without using the HUB or data switch you can use the cross cable to connect your computer directly to the IP Module, see the next cross wiring diagram of TIA/EIA 568B crossed wiring



You can use the Line command **Ping** to check your connection. On your Computer, Go to start/ Run/ CMD then type Ping 192.168.10.xxx If you see the following results similar to this Picture then your connection is successful



Always the Programmer should carry with his programming kit the cross cable for programming without needs of the Data Switch or HUB.



## 2-2 S-bus Smart cloud Software basic setting

#### <u>Configure</u>



#### • 1- Connection

You can change between Ethernet Connection and Serial Port connection,

the Serial Port connection is old, slow and no longer use. Always Keep the setting on Ethernet connection

Connection Type			
🔘 Serial Port	Ø	Ethernet	2
Local IP			
<ul> <li>Automatic</li> </ul>		🔘 Manual	
IP:			•
		Save	Exit

Also you can choose between **obtain Local IP Automatically** (Default), or to **input local IP Manually**.

Input local IP manually you can use it for example, if you are using in your laptop or computer Wireless and wired Network with different IP setting, and you want to choose the right one of it for programming, and don't want your S-bus software to detect your other IP address Automatically.



#### • 2- Software Subnet ID

The S-bus configuration software have fixed Device ID (254), but you can change its subnet ID only, the default software subnet is (Default = 254)

The software default subnet ID address is 254, Device ID 254, this address must be <u>unique</u>, in case other Device has the same address you will not be able to find that Device unless you change the Subnet of the software.

• **3**- Subnet Filter List:

Here you can filter your subnet ID's that mean you can add more ranges if you have more than 254 devicess so you can add another subnet ID

• 4- Devices On-Line test

You can Deactivate or activate the auto test of Online devices (Activate is Default).

• 5- Load type

You can add some Remarks to your Load type to use it as reference and print it out later on the excel sheet.

## <u>Address</u>

Here you can search for the Device Addresses and load the Network and solve any conflict in the address. (For more Information see 3-2)

## <u>Pairing</u>

You can enable pairing or disable either for one device or for all devices, disable meaning you can't program S-bus modules in manual anymore until you enable it again.

## <u>Devices</u>

You can go here directly to Devices setting Categorized by type

## <u>Test</u>

This is important Function to check your Lights Circuit by flashing the lights ON/OFF and then you can give it name (for more information see 3-3 section).

## <u>Language</u>

You can change the Language between English and Chinese, and other Languages

## <u>Backup</u>

Important to backup and restore your Devices address and setting.

- For Backup: put the subnet and device ID for desire device , choose the location for the backup file then click "Start backup" ,
- For Restore: put the subnet and device ID for desire device, choose the backup which you already made then click "Restore".



Device Backup	Device Restore
Target Addess	Device Addess to Restore
Subnet ID: Device ID:	Subnet ID: 1 Device ID: 250
Desired Location to save Backup file	Restore file location Select
Start Backup Stop backup	Restore

## 2-3 Devices address and Search:

Each of S-bus Devices must have its own Address in the Network, the Address for each Device consist of 2 parts:

- Subnet ID
- ✤ Device ID

The subnet ID can be from 0 – 254

And the Device ID can be from 1 - 254

So you can put up to 65024 Deferent Devices in the same network with deferent subnet and device ID Address

For example one of Dimmer Module Address is (Subnet 1, Device ID 5)

#### There is 5 ways to Search for the Devices in the Smart cloud Software

- 1- Fast Search
- 2- Advanced Search
- 3- Manually Search
- 4- Broadcast Address Device Search
- 5- Solve Conflict address search

#### Fast Search

The Fast search is very useful tools to test your communication and search your devices Fast, the Fast search take around 2-15 seconds to finish load the devices information in your network.

9	Smart Cloud
С	onfigure (C) /
C	
C	Scan e devices
	Status

- Click on the Scan button
- Click on the Fast search Button
- Click add all
- Click Exit to exit the Window





Fast search can't load all the Network Devices, it is only load part of the devices, it is only good for small project that contain around 10 devices, and to check the network communication with your PC.

#### Advanced Search

The Advanced Search is a powerful tool for searching your Devices in the network. You can set the Subnet ID you like to search on it and select the range of device ID you want to search for.

Advanced search take 0.3 seconds for each device to load and total of 80 seconds to finish the search and load for 255 devices totally in each subnet.

- Click on the Online Search button
- Go to **advanced search**, put the subnet ID and the range of device ID search

Search on-li Fast Se Advance		Subnet ID:	255 🗸	Device ID	1	То	254	Q	Sut	inet	Add all
Manually	Add:	Subnet ID:	1 2 3 4	Device ID:	1			Add	Stop	Search	Exit
tal Devices: Current on-li			5 255								
Status	Subnet ID	Device ID	Mode	1		Ren	nark		Description		

- Click search ICON
- Click ADD ALL after the search finish
- Click Exit to exit from the window
- click stop to stop the search
- Click subnet to add new subnet to the popup Menu subnet list

Use the Advanced Search Always as your standard way to Load the Devices in the Network to your computer before you program in any new project.



#### Manual Search

Manual Search is a very fast and useful way to add known Device ID and subnet to your network

Manually Add:	Subnet ID:	Device ID:	4 Add
Manually Add.	Subilet ID.	Device ID.	1 400

- Type the subnet and device ID that you know
- Click ADD
- Exit the Menu

#### Broadcast Address Device Search

This tool is important when you add new devices or you start your new Project installation, many devices could have the same Address or the communication is not yet tested, this tool is important to check the communication between your device and the bus network and to change its initial address in the first time installation.

Configure (C	) Address(A)	Pairing(P)	Devices (D)	Test(T)
Q X	🖹 🗎 Manage	device addres	sing(M)	Ctrl+D
ON-line dev		st detection(B)		
ON-line dev	ices			
ON-line dev		Device I		and the second s

- On your software Click Address then broadcast detection
- Go to your device like Dimmer / Relay / sensor or Panel and keep pressing the broadcast Address button for 2 ~ 4seconds until the button LED color change to RED.
- In your software in the Broadcast Detection window click the **Detect** Address Button.
- Your Device ID and Subnet well appear automatically
- To change the address just type the new subnet ID or device ID you want then click **Save Address**
- Click **ADD to online device list** to load your device in the Devices Network List.
- Click Exit to Close the Window

teps:				
1. (On the	Device) Press Boadcast utton (Keep Co	ontinous pressfor 3-4 seconds)	until LED Color Change to RED	
2. (Releas	e your Finger if LED Red) Now you are	in Device Broadcast Mode		
3. Click Or	"Detect Address" Button to locate Devi	ice address		
	evice is Detected, you can Keep Setting After that can "Add to Online Device Li		1 Save	
	Detect Addre	Device ID 250	Save Address	
	Add to Online Devices	List	Exit	

## Solve Conflict address search

This type of search used to solve the conflict address, for example if 2 devices have the same address, then you can easily change the address of it without the need of disconnecting its wires from the network.

- Manage device addressing Search online devices by subnet ID Setup 255 -Q Cancel Subnet Filter... Search Result NO Subnet ID Device ID Model Description MAC 1 SB-ZAudio2-DN Zone-Audio 2 53.08.00.00.00.00.00.2F 200 Hybird Integration Link with IP 53.01.00.00.00.00.00.CC 100 SB-RSIP-DN ¥ 3 ¥ 4 IR Emitter with Current Sensor Relay 8CH 16A/CH,DIN-Rail Mount 56 SB-IR-UN 53.05.00.00.00.00.00.2A SB-RLY8c16A-DN 53.02.00.00.00.00.00.65 99 × 5 × 6 × 7 × 8 88 SB-DIM6c2A-DN Dimmer 6CH 2A/CH, DIN-Rail Mount 53.02.00.00.00.00.00.AF 113 SB-HVAC2-DN HVAC2.Air Condition Control Module AC.AC.AC.AC.AD.AD.AD Aotomation Logic Module 2 203 SB-Logic2-DN 53.06.00.00.00.00.00.2C 78 SB-6BS 6 B 53.06.00.00.00.00.00.0B ✓ 9 ✓ 10 30 SB-4Z-UN 4-Zone Dry Input Module 53.03.00.00.00.00.00.0F 1 SB-DDP DDP 53.14.00.00.00.00.00.32 1 Total device 10 Modify address. Nexit
- Click Address or click the Address Shortcut icon

- Select Subnet **255 (recommended)** or any desired subnet then click the search icon.
- Select the device you want to modify its address then click modify
   Address or double click on

   it
- New window will open, and then type the new Subnet ID and Device ID, then Click **Save**

General				
Subnet ID:	1	Device ID:	200	
Model:	SB-ZAudio2-DN			
MAC:	53.08.00.00.00.00.2F			
Modify device addr	ess by MAC			
Subnet ID:		Device ID:		
		Save	Exit	

## 2-4 Steps of Basic Programming

The Basic Programming for Lighting Motor and HVAC of S-bus Products has procedure of Basic Steps as following

- A- Check the communication between your computer and the Bus
- B- Broadcast each Dimmer, Relay, Motor curtain HVAC control++ initial Address

C- Change the initial addresses to the desired one (kindly check 2.5 for addresses range).

- D- Give name of each Dimmer, Relay Module (Remark).
- E- Check each Lighting channel circuit if working and connected good
- F- Give name for each channel (remark).
- G- Make an excel sheet for all your Dimmers, relays, other module address and circuit name.
- H- Make Area for each Dimmer, Relay module if required .
- I- Make Scene and Sequence for each Module if required .
- J- Make safety power restore and delay time for scenes and safety as required.
- K- Check the curtain module gives it address and name.
- L- Set the channel name, the running time open and close running time.
- M- Give the switch (6 gangs) and panel (DDP) its addresses and Name.
- N- Assign the panel button to the corresponding scene or channel.
- O- Set the button graphic picture for the DDP for each button.
- P- Check the HVAC address give it address and name.

Q-Set on off relay sequence.

R- Set the VAV Voltage output if required.

S- Set the safety HVAC running sequence T- assign the DDP Panel to its HVAC unit.

- U- Set the FAN speed, cool set point, type, adjust temperature sensor on the panel setting.
- V- Set the required graphic for AC, and panel basic setting
- W- Search for PIR motion sensor and give it address and name
- X- Set the sensitivity, way of triggering, motion, no movement delay and commands
- Y-connect the Z-audio 2 to the s-bus And address it
- Z-Test and enhance your programming.

Following the basic Programming steps procedure will save the programmers time and effort.



## 2-5 What is The Magic Line In our software ? :

In programming in all S-bus Modules you will find the same line with same fields that's why we called it "Magic Line ".

If you want to send any command you have to use this magic line.

Function no.	Subnet ID	Device ID	Туре	Parameter 1	Parameter 2	Parameter 3
1	1	50	Invalid switch 👻	1	2	N/A
2	10	11	Invalid switch	12	13	N/A
3	255	255	Invalid switch	255	255	N/A
4	255	255	Invalid switch	255	255	N/A
5	255	255	Invalid switch	255	255	N/A

If you notice the Command Line is contained of :

**Function No.** : indicated to Order/Function Number , the maximum order you can put is depend of the module .

**Subnet ID** : each device has subnet ID in our software you can put up to 254 subnet ID.

**Device ID** : additional to the Subnet ID also each device must has uniqe ID to avoid the conflict . and the range is 254.

Each Subnet ID can cover 254 devices and we have 254 subnet ID that means the total Number is 64516 devices.

**Type :** What type of order you want to send, if you notice in the following pic the system has many types depend on the module

Function	no. Subnet ID	Device ID	Туре	Parameter 1	Parameter 2	Parameter 3
1	1	50	Scene switch 👻	1	2	N/A
2	10	11	Invalid switch	12	13	N/A
3	255	255		255	255	N/A
4	255	255		255	255	N/A
5	255	255 Single channel lightir Curtain switch		255	255	N/A
			SMS control Panel control Broadcast scene Broadcast channel Security module Zone-Audio 2			

Parameter 1 ,Parameter 2 and Parameter 3 are related to "TYPE" field like this Table :

Function type	Parameter 1	Parameter 2	Parameter 3
Invalid	N/A	N/A	N/A
Scene Switch	Area Number	Scene Number	N/A
Sequence Switch	Area Number	Sequence Number	N/A
Universal Switch	Switch Number	ON / OFF	N/A
Single channel	Channel Number	Brightness 0-100%	Fade time 0S - 60 M
Curtain Switch	Switch Number	Stop / ON/ OFF	N/A
SMS	Message	Message SMS Number	N/A
Panel	Invalid	N/A	N/A
Panel	IR Receiver	ON / OFF	N/A
Panel	Lock	ON / OFF	N/A
Panel	AC Power	ON / OFF	N/A
Panel	AC Cooling	0-30 C , 32- 86F	N/A
Panel	ACFan Speed	Auto/high/med/slow	N/A
Panel	AC Mode	Auto/Cooling/Heating/FA	N/A
Panel	AC Heating	0-30 C , 32- 86F	N/A
Panel	Rise temp	0-30 C , 32- 86F	N/A
Panel	Reduse temp	1-5 C/F	N/A
Panel	LCD Backlit	ON / OFF	N/A
Panel	LCD status ligh	1~100	N/A
Panel	Floor heating power	ON / OFF	N/A
Panel	Floor heating mode	Normal-day-night -away	N/A
Panel	Goto page	1~7	N/A

Function type	Parameter 1	Parameter 2	Parameter 3
Broadcast scene	All Areas	Scene Number	N/A
Broadcast Channel	ALL Channel	Brightness 0-100%	Fade time 0S - 60 M
Security Module	Area Number	Arming Mode	N/A
Zone-audio 2	Source Control	SD Card/Audio In/FTP Server/FM Radio	N/A
Zone-audio 2	Play Mode	No Repeat/ Repeat Song/ Continued/ Repeat all	N/A
Zone-audio 2	Play List/Radio Channel	PREV Play List/Next Play ListSpecify Play List No/PREV	N/A
Zone-audio 2	Play Control	PREV Song/Next Song/Play/Stop	N/A
Zone-audio 2	Volume	VOL	0-100
Zone-audio 2	Volume	TREBLE	Reduce/increase
Zone-audio 2	Volume	BASS	Reduce/increase
Zone-audio 2	Play Specify Song	Folder No.	Song No.



# **3- Relays and Dimmers Programming**

Relays and Dimmers are the main modules for every lighting control system, the Leading Edge Dimmer, and smart relay save 30-70% of your lighting Energy consumption.

## **3-1** Relays and Dimmers type overview

S-bus Dimmers and Relay have many types that you can install in any project 1- Dimmers

- DIN-Rail Mount Dimmer 2ch 6A
- DIN-Rail Mount Dimmer 4ch 3A
- DIN-Rail Mount Dimmer 6ch 2A
- DIN-Rail Mount Dimmer 8ch ~ 1.5A
- DIN-Rail Mount Dimmer 12ch 1A
- 2- Relay ON/OFF controller
  - DIN-Rail Mount, Relay Module 3CH, 1A
  - DIN-Rail Mount, Relay Module 4CH, 20A
  - DIN-Rail Mount, Relay Module 4CH, 16A
  - DIN-Rail Mount, Relay Module 6CH, 16A
  - DIN-Rail Mount, Relay Module 8CH, 10A
  - DIN-Rail Mount, Relay Module 12CH, 10A

## 3-2 Setting Relay and Dimmers Address

When you install the Dimmer or relay first time, it takes default address as Subnet ID 1, Device ID 6. To change the address and check the communication you should use the *Broadcast Address Device Search as you see in the section 2-5 before*)

Every Din rail Module have Broadcast button as you can see in this Picture

	• ст
0° -	-
	4

- On your software Click Address





- Go to your device like Dimmer or Relay then keep pressing the broadcast Address button for 3-4 seconds until LED color change to RED.
- In your software in the Broadcast Detection window click the **Detect Address** Button.

s:	Davias) Davas Da					D Calas Chasses	- 050	
	Device) Press Bo				as) until Lt	D Color Change	IO RED	
	e your Finger if LE			oadcast Mode				
3. Click On	"Detect Address"	Button to locate	Device address					
	evice is Detected,			dify as Needed 1	then Save			
Address. (	After that can "Ae	dd to Online Devi	ce List")					
		Detect A	ddress					
		L						
	Subnet ID	1	Device ID	250		Save Address		
		Add to Online Dev	ince Link			Exit		
		tud to Online Dev	ICCS LIST			Link		

- Your Device ID and Subnet well appear Automatically
- To change the address just type the new subnet ID or device ID you want, then click **Save Address**
- Click Add to Online Devices list to load your device in the Devices Network List.
- Click Exit to Close the Window

## 3-3 Channels search and Remarks

After you finish editing the initial Address for each Dimmer and Relay, Search for all Modules in the network using the Advanced Search, after that you can start giving different Name in the remarks for each Module.

- Double click on the Module that you see on the List after searching to open it for editing
- In the Remarks field type the name of the Module
- Click save after you type the name

1) General 🙆 A	rea 3 Channel 4 Scene 5 Sequence
Select device	
Device	1-88-SB-DIM6c2A-DN
Address	
Model	SB-DIM6c2A-DN
Subnet ID	1 Device ID 88
Device remark	
Remark	DIMMERA
MAC address	

Without giving name to the Dimmers or Relays in your Project, the program will be hard for any programmer to understand, troubleshoot, and enhance the program in the future; name and remarks always will help every programmer to do the programming

Always Give the Dimmers and Relay name that refer to its Location, for example if the Dimmer install in the floor 10 Apartment 20 then you can give it name for example DIM-10-20-A the next Dimmer in the same apartment can be DIM-10-20-B and so on and sticker Labeling can be stick on the dimmer Module itself with the same name

#### Testing Channels online:

After we gave Address and name to the Dimmer, now we must test it channel and gave it name.

- In your software Menu go to Test
- set the Interval of seconds that will be flash the Light channel ON/OFF within this time (2 seconds is Default) after Editing it Click Save
- Edit the Subnet ID, Device ID of your Dimmer or Relay and Its Light Channel you want to test then click save



iterval of load test					
Interval (2-60s)	2 Save				
ease input device addr	ss and channel no.				
Subnet ID	Device ID 88	Channel no.	255	Read channel remark	Save address
	(If Channel no.is 255,the meaning is broadca	st channels)			
Channel remark				Modify channel remark	
Channel remark Current status	Ready			Modify channel remark	
	Ready		Start		Stop test (S)

- Click start test button, than light icon will start Flashing ON/OFF
- Go to the channel light in your project that connect to this channel and see if the light is flashing or not.
- If the light channel is flashing ON/OFF that mean your connection is fine, then you can click stop test.
- Give the name of this Light channel in the channel remarks field then click save
- Go for the next light channel test, click save and follow the same steps for each module channels in your project.

Channel Remarks is very important for any programming, Programmer should edit all the remarks in simple and clear way to refer to the lights Channel name.



# 3-4 Relay Channels Setting

Relay channel setting will allow you to edit the channel remarks in faster way if you have the List of your connected channels on your relay before testing it, also you can edit for each channel the load type remarks, Switch On Delay (Seconds), and Protection ON Delay (Minutes)

) General ( 2) /	Area ③ Channel 🕘 Scene	(5) Sequence (6) M	lotors					
Select device								Area information
Device	1-99-SB-RLY8c16A-DN	•						Total areas:
irrent area Area	1-	(	Current channel Channels of curre	1-				Channel modification
Area no.	Remark	QTY of Channels	Channel no.	Remark	Load type	Switching on delay(s)	Protection delay (min)	Remark
1		8	3	MBR CFL	Undefined	0.0	0	
_			2	MBR TUBE	Undefined	0.0	0	
			3	BD 1 INDIRECT	Undefined	0.0	0	
			4	BD 2 CFL	Undefined	0.0	0	
			5		Undefined	0.0	0	
			6		Undefined	0.0	0	
			7		Undefined	0.0	0	
			8		Undefined	0.0	0	

Double click on any relay Module on the List the relay setting window will appear go to the Channel tab, and start editing

**<u>Channel Remarks</u>**: it is another fast way to type your channels of your module in simple way.

*Load type:* to edit every channel load type as reference remarks

<u>Switching On Delay:</u> for industry and some motors connection needs to delay the Relay to be ON from (0 to 25 seconds) for each channel

**Protection Delay:** is used for industry use mainly and some heavy duty

Machines for safety ON by long time delay range from (0 - 60 Minutes)

## 3-5 Dimmer Channel Setting

In the Dimmer channel setting you can edit your Dimmer Lighting channel Remarks, Load type remarks, Lower Limit, Higher Limit. Double click on any Dimmer Module on the List then the Dimmer setting window will appear go to the Channel tab, and start editing



General (2) Select device	Area 3 Channel 3 S	icene (5) Sequence						Area information
Device	1-88-58-DM6c2A-DN	•						Total areas: 1
urrent area	1.		Current channel	1-				
Area			Channels of curr	rent area				Channel modification
Area no.	Remark	QTY of Channels	Channel no.	Remark	Load type	Lower limit	Higher limit	Remark
\$.		6	1. I	MBR SPOT	Undefined			
			2	MBR CHANDELIER	Undefined	0	100	
			3	BD 1 SPOT	Undefined	0	100	
			4	BD 1 CHAND	Undefined	0	100	
			5	BD 2 WALL BRACKET	Undefined	0	100	
			6		Undefined	0	100	-

**<u>Channel Remarks</u>**: it is another fast way to type your channels of your module in simple way.

**Load type:** to edit every channel load type as reference remarks **Lower Limit:** in this setting you can sit the lower Limit that you can dim to, beyond this level the Light will turn off totally.

Ever Limit Option is useful when you connect a florescent Light that can't be dimmable to Dimmer module channel and you don't want it to be flickering when low voltage supply the florescent

*if you don't want the florescent light to be ON while you make diming with fade time for all your channels than you can set the channel Lower Limit as 90% if connected to florescent or not dimmable light* 

<u>Higher Limit:</u> in this setting you can sit the Higher Limit that you can Ramp to, Beyond this level the Light will turn ON to the maximum level.



## 3-6 Area Setting

In the Area setting you will divide your dimmer or Relay channels to different Area according to your project installation, each Area will have its scenes and sequences.

For example: if you have an apartment of 2 bed rooms, all its channels connected to the same dimmer, that mean you can divide the dimmer channels into 2 areas, type name for each area and later you can set the scenes and sequences of each Area separately.

- Double click on any Dimmer or relay on the List
- Got to Area Tab
- Click Area Setup
- By default all channels is included in Area 1, Remove the channel that not belong to this area by checking them and click the **Left Arrow**.

General Data acquisition mode: Subnet ID: 1 Remark DIMMER A	Device	Model: Device ID: Max channels	SB-DIM6c2A-DN 88 6	
Channels waiting allocation 5-BD 2 WALL BRACKET 6-	Current area no. Max area no. Select all <- Deselect all <- Create New Area	1 Q 2-MBF	t area R SPOT R CHANDELIER 1 SPOT 1 CHAND	Select area          1-         Clear All         Select all <-

- Click Create Area to Add new Area
- Insert the remaining channels on this Area by pressing the Right Arrow
- When you create all you Area and assign Channels to it, Click **Save** and Click **Exit** to close your Area Setting
- Click **Area Remarks** and edit your Area names, then Click **Save** then **Exit**.

🔪 C RIIC - Smart Home Drogramming Guide Ver 🤉 1

## 3-7 Scene Setting

After you complete your Area setting, then you can assign Different Scenes for Each Area you create

- Click on the scene tab
- Select the Area on the select Area section
- Input the scene number you want to edit From ... To then click **confirm**
- Click scene setup to edit your scenes

General 2 Area			Select area	Scene Resume		
Device 1-88-SB-DIM6c2A-DN V			Area			
put scene no. from Scene information		Confirm	Current channel Channels informati	Area information		
Scene no.	Remark	Running time(mm:ss)	Channel no.	Remark	Intensity %	
acono no.	1 CONDITION	Running une(min.ss)	Channel IIU.	Trendra.	Intensity %	Total areas:
0		0:0		MBR SPOT	0	Total areas:
0 1			1		0 0 0	Total areas:
0 1 2		0:0	2 3	MBR SPOT	0 0 0 0	
0 1 2 3		0:0 0:0	2 3 4	MBR SPOT MBR CHANDELIER	0 0 0 0 0	Scene information
0 1 2 3		0:0	2 3 4 5	MBR SPOT MBR CHANDELER BD 1 SPOT	0 0 0 0 0 0	Scene information
0 1 2 3		0:0	- 1 - 2 - 3 - 4 - 5 - 6	MBR SPOT MBR CHANDELER BD 1 SPOT BD 1 CHAND	0 0 0 0 0 0	Scene information Current scene no. 0

- Edit the scene by modifying the output brightness and then click the next scene on the right list to edit it.
- Edit the scene running fade time on Minutes and seconds
- After you finish editing your scenes, click **save** and **exit**.
- Click **Remarks** to give the hint name for your scenes, click **save** and **exit**

#### You have many tools to help you editing the scenes

Modify running time synchronously

- Modify scene intensity synchronously
- ON-site run scene
- **Modify Running time Synchronously** to apply the change effect for all the scenes running time together
- **Modify scene intensity Synchronously**, to modify all channels output level together
- **On-site Output scene**, to see the effect Live on your room before saving the scene.

Creating Area and scenes in the Modules is recommended for faster respond that control many channels in the same command.

Every area has Scene 0 and it is not modifiable, and always Pre-Programmed as scene Off that set all the channels Lights of the area to 0%.

## 3-8 Scene Resume

This setting is very important for the dimmer in case of Power failure. The scene restore is the specified scene that the dimmer module will run it once the Power restore after the electricity down.

- Click scene tab then click on scene Resume
- Select one of 2 options,
- 1- Resume the same scene before power off,
- 2- specify scene

General					
Subnet ID:	1	Device ID:	88		
Model:	SB-DIM6c2A-DN	Remark	DIMMER A		
Max area No.	1				
Scene Resume when Area number	power on Resume Mode Specify Scene			Scene No.	
	Resume the same	scene as before po	wer off		
	Specify Scene				

- Remember Scene **0** it mean all Lights on the Area will be OFF when the Power restores.

Restore to scene 0 is useful for many applications to save the Electrical parts when the power came in higher load from the main usually.

## 3-9 Sequence Setting

Sequence setting is used to make Lights show and some other needed application in industry, security and others.

- Click on the Sequence tap

Relay 8CH 16A/CH, DIN-Rail Mount				4.814					×
🕽 General 🙋 Area  3 Channel 👍 9	Scene (5) Se	equence 🙆 Mo	otors						
Select device					Select area			Run sequence	
Device 1-9-SB-RLY8c16A-	-DN			•	Area	1-	•	Sequence no. 1	
urrent Sequence 1-		Mode In	valid		Current step	1		Run Now	
urrent Sequence 1- Sequences		Mode In	valid		Steps of current st			Area information	
Sequences Remark	Mode	Times	Step totality	Status	Steps of current se	Scene no.	Step time (mm:ss)		1
1	Invalid	Unlimited	8	useabl	1	0-	60:0.0	Sequences	-
2	Invalid	Unlimited	8	useabl	2	0-	60:0.0		2
					3	0-	60:0.0	QTY of Steps	8
					4	0-	60:0.0		
					5	0-	60:0.0	-	
					6	0-	60:0.0		
					7	0-	60:0.0		
					8	0-	60:0.0	_	
								Modify Sequence	
								Remark	
								Sequence	
								Modify steps	
								Steps	
								SI rua	
quence									

- Click on sequence Button to edit the sequence
  - Select the mode you want Invalid: not used Random: well run the sequence scenes in random way Forward, and backward: will run the scenes from first scene to last one then from last to first



**Backward:** will run the sequence scene from last to first **Forward:** will run the sequence scene from first to Last

**Times**: the sequence can be **Unlimited** forever running, or will run from

1 time to 99 times.

**Step totally**: is the sequence scenes steps number that want to be include it in the Sequence

After you finish editing your sequence setting, Click save and exit.

eneral			
Data acquisition	mode: Devic	e Model:	SB-RLY4c20A-DN
Subnet ID:	1	Device ID:	16
Remark	SMART RELAY4	20	
Current area	1-	Current seque	nce 1-
odify step informa	ation		Modify step time
Step no.	Scene no.	Step time (mm:ss)	synchronously
1	0	60:0.0	
2	0	60 🕃 : 0 🚔 . 0	Save
3	0	60:0.0	Save
4	0	60:0.0	
			Exit
			Hint
			minimal step time is 1.6 S

- Click Remarks to edit your Sequence name
- Click **Steps** to edit your sequence steps
- Edit your scene number in each step
- Edit your step time **interval on** Minutes, seconds and part of seconds
- Click Save and exit

Relay Module that support the sequence like SB-DN-R0816 and

## 3-10 Motor Setting

#### 1. Version Needed

Firmware version of relays: V2.17 or above Smart-Cloud configuration software version: V13.61 or above

#### 2. Motor Max. Time Settings

Max. Time is the time that motor fully open or close

oupl	Channe	Is For Mol	tors Control			
11	<b>~</b>	CH2	Max. time:	30	Seconds	
13		CH4	Max. time:	10	Seconds	
15		CH6	Max. time:	10 🖨	Seconds	

#### 3. Running time

Command Type: Single Channel Control

Parameter 1: it's the channel No

Parameter 2: it's always be 100 Parameter 3: it is running time of motor, the scope of running time is 0 ~ MAX. Time

If running time equal 0, it means MAX. time. If you set the running time 5 seconds, the motor will run only 5 seconds then stop.

Data acquisitio	n mode:	Device	Model:	SB	-DDP			
Subnet ID: 1		Device ID:	20	20				
Remark demo kit			Current butto	n 1	1			
Mode Single on/off			Current page:	1	1			
Modify button fu	synchronous	ly ration	-		y parameter 3 syncl			
Function no.	Subnet ID	Device ID	Туре	Parameter 1	Parameter 2	Parameter 3		
	4	99	Single channel ligh 🗸	1	100 <	> 0 🔄 : 5		