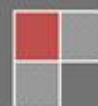


2014

SB-DMX Controller Manual Programming



Written by Adam Toledano



General:

"DMX" Controller - It's a digital network communications Controller support, used for controlling stage lighting and effects.

DMX Controller and lighting fixtures that work in this protocol can perform a variety of control options such as colors, shapes, flickering, dimming and more.

DMX48 Controller = 48 channels. There are lamps that have 4-channels, 8-channels, 16-channelsetc ...

Example A: If we'll connect a lamp with 8 channels to the DMX48Controller so we can connect up to six lighting fixtures .

Example B: If we'll connect lamp with 16 channels to the DMX48Controller so we can connect up to three lighting fixtures .

To contact any separate lamps, the DMX controller divides the number of channels per each lamp.

The division will occur in a simple example, 16 channels lamp application will be total of 3 lamps in one DMX controller.

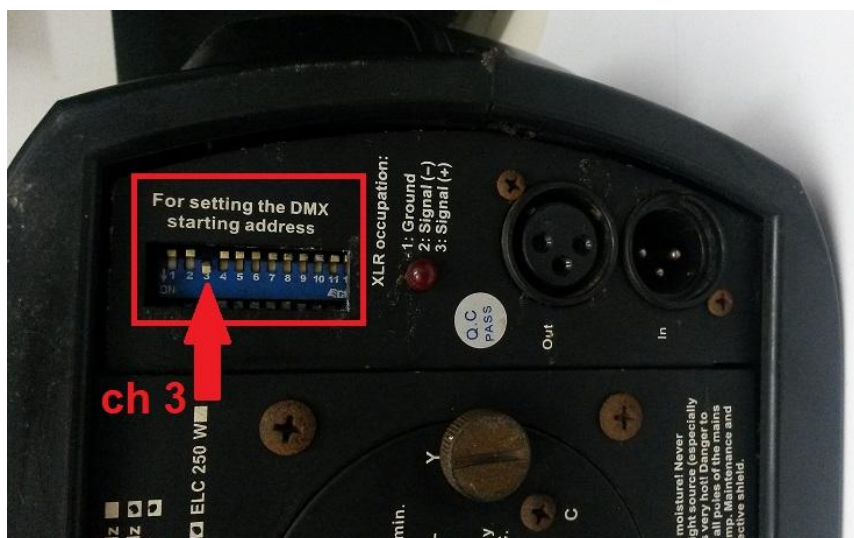
Lamp No. **1** will turn through the channels 1-16 .

Lamp No. **2** will turn through the channels 17-32 .

Lamp No. **3** will turns using channels 33-48.

When we connect number of DMX lamps we will need to give each lamp a different address.

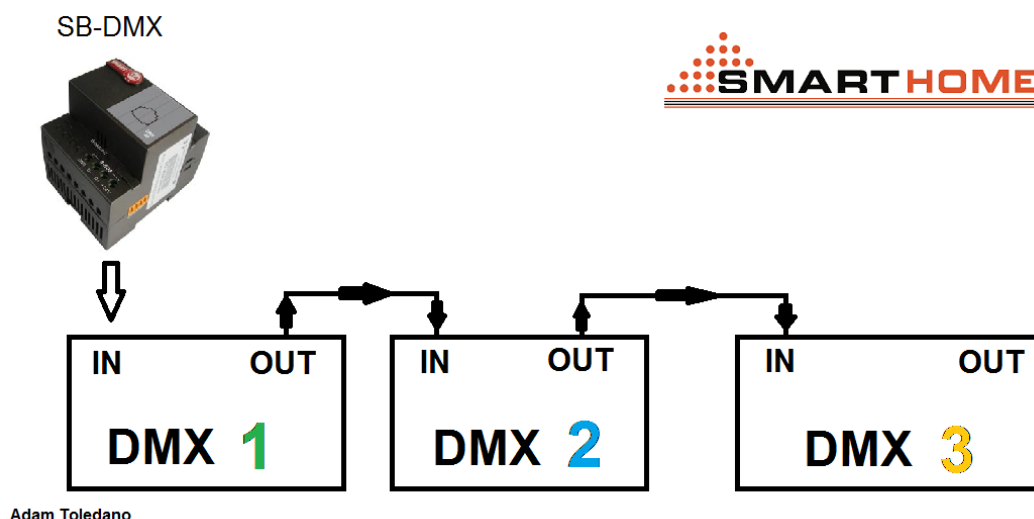
Setting addresses for **analog** form:



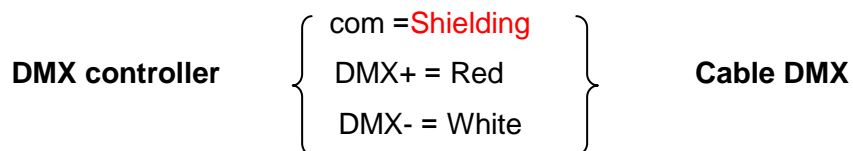
Setting addresses for digital form:



Connecting multiple DMX lamps with different address diagram:



Connecting DMX lamp to SB-DMX controller with a DMX designated cable:



DMX lights bridging is done by using a designated DMX cable:



! When we are working with DMX Controller you must set up your computer in the same network address as SB-DMX controller, exactly like scanning with network controller RS/IP.

Programming using a computer (basic and advanced programming).

Before you can perform basic and advanced programming using a computer, have to have the following :

Computer works with windows xp / 7 / 8 .

Smart Cloud Software. To download the software [click here](#) .

*Install the software after downloading, double click on the printer icon and then follow windows instructions.

In order to find and scan for devices we'll have to connect the network cable (Rj45) to the computer, and the other end to the SB-DMX controller, then you should set the IP address of your computer, for example:

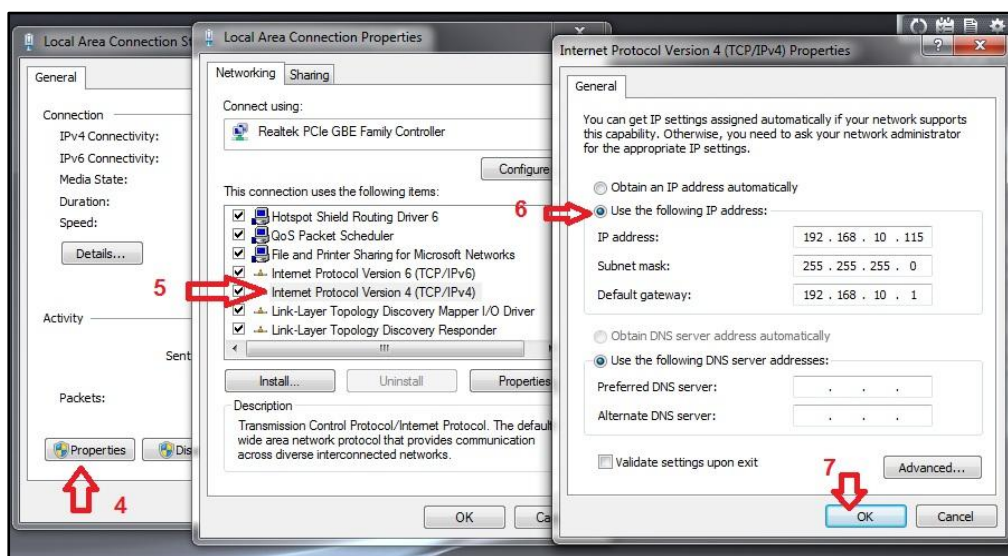
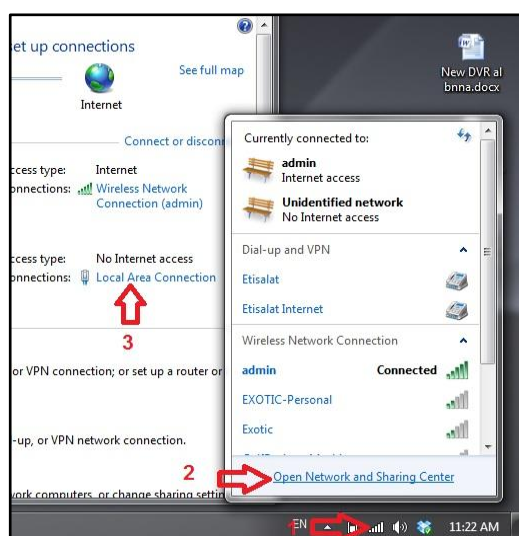
IP 192.168.10.115

Subnet 255.255.255.0

Gateway 192.168.10.1



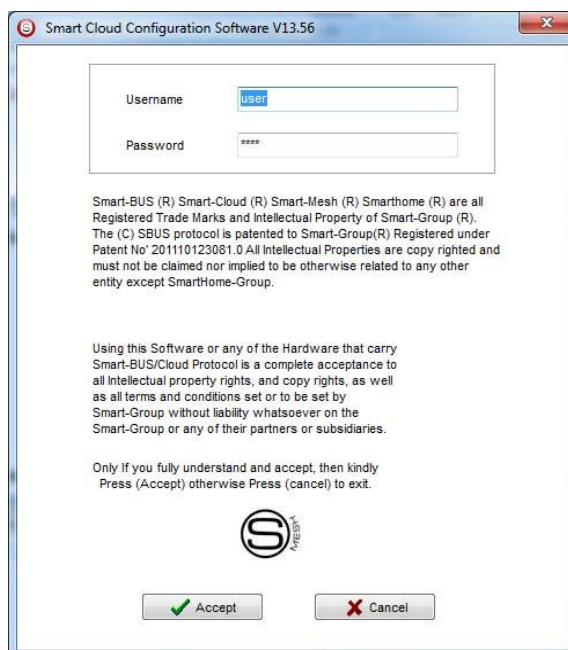
Default address of the S-bus devices is 192.168.10.XXX



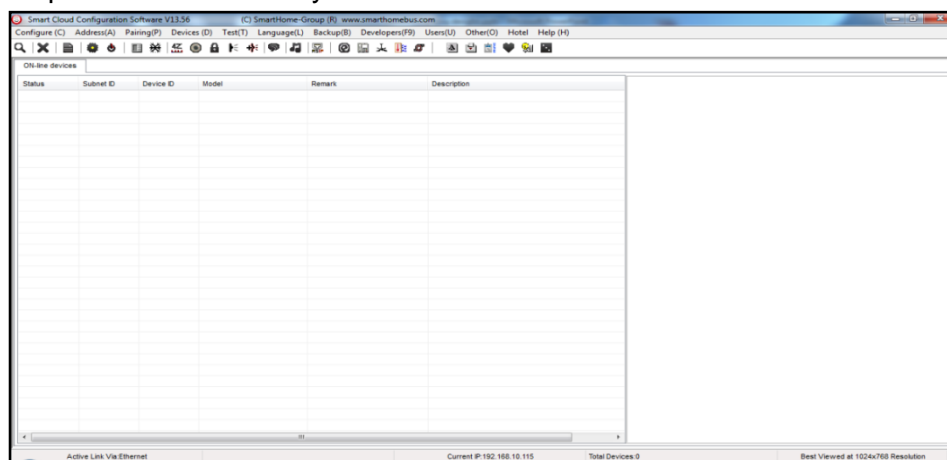
After configuring the IP address on your computer.

Run the smart cloud software.

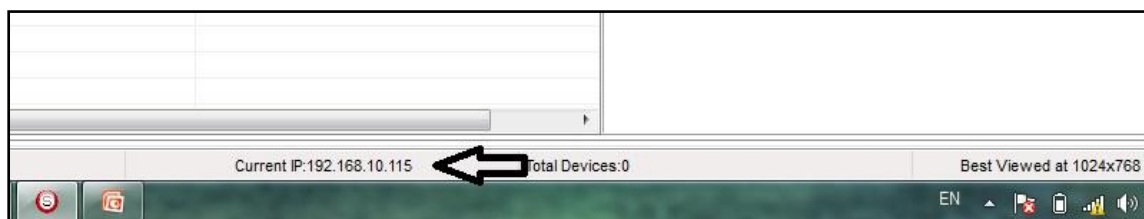
Password window will open do not touch the username or password, and just press "Accept"!



The software will open and will be ready for use.



You can see your current IP software as 192.168.10.115 so you'll know that your definition-IP is normal.



You must set the IP address before you run smart cloud software

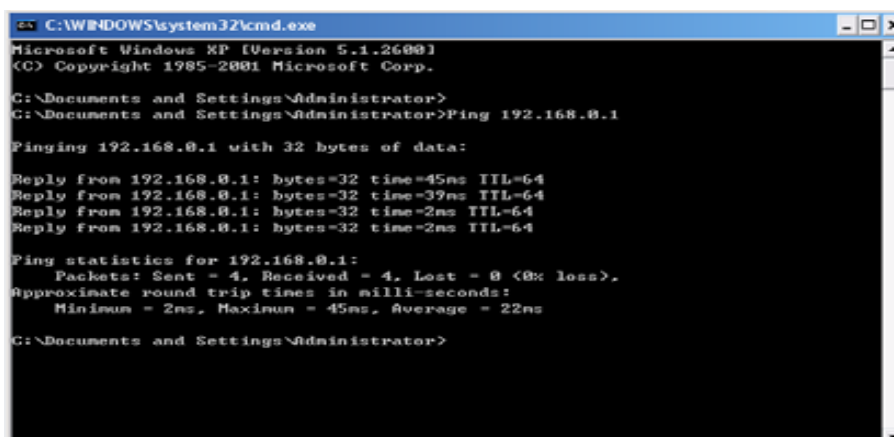
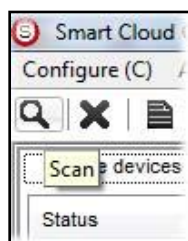
Another way to check if your connection to the S-bus is good it's by using the Ping command.

To test your connection by Ping:

Click on Start / Run / CMD then the black window will open (DOS)

Write: Ping 192.168.10.xxx

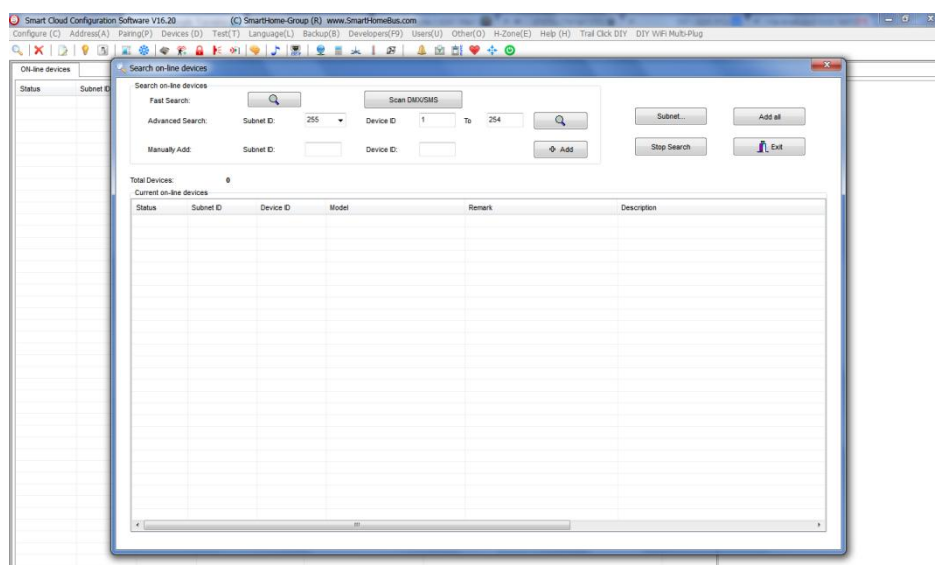
If you see the following results similar to this picture your connection is successful.



After we opened the software you'll need to scan the controls that on the S-BUS.

On the top left side you can see the icon of a magnifying glass

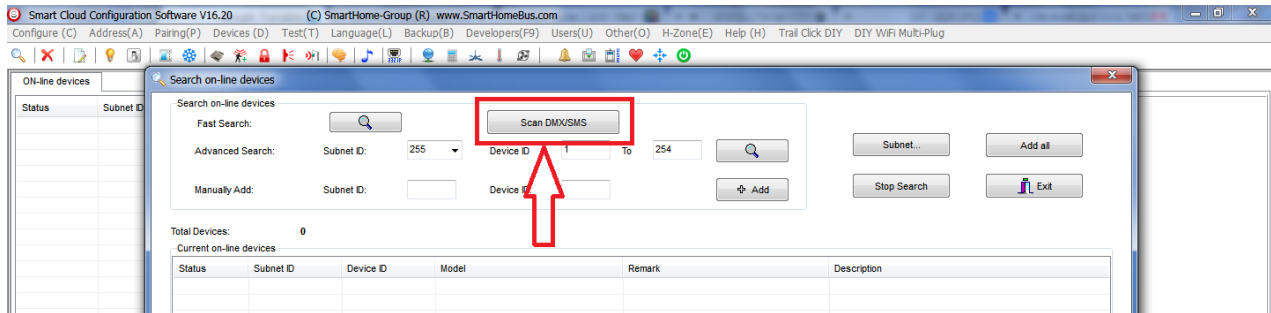
Double click and opens us to the next window:



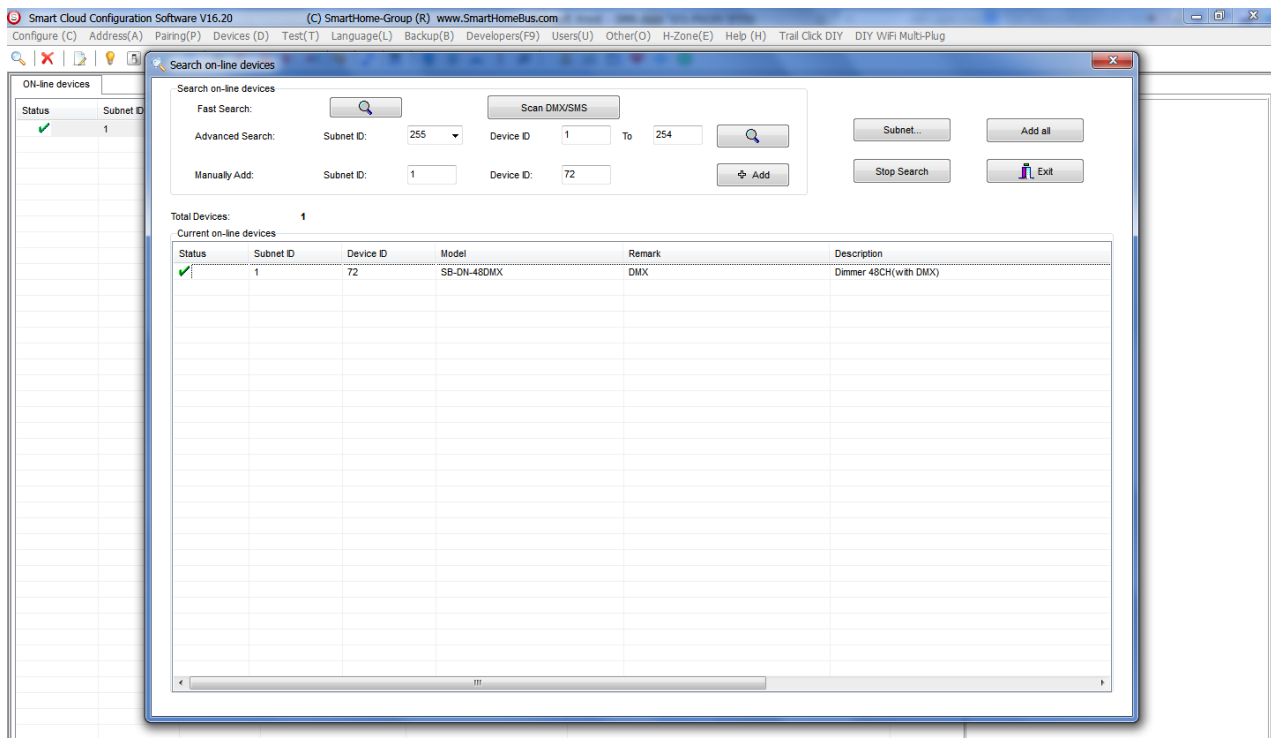
Other than scanning with RS/IP network controller, now we'll scan via DMX.



Make sure the cable is connected to the network!



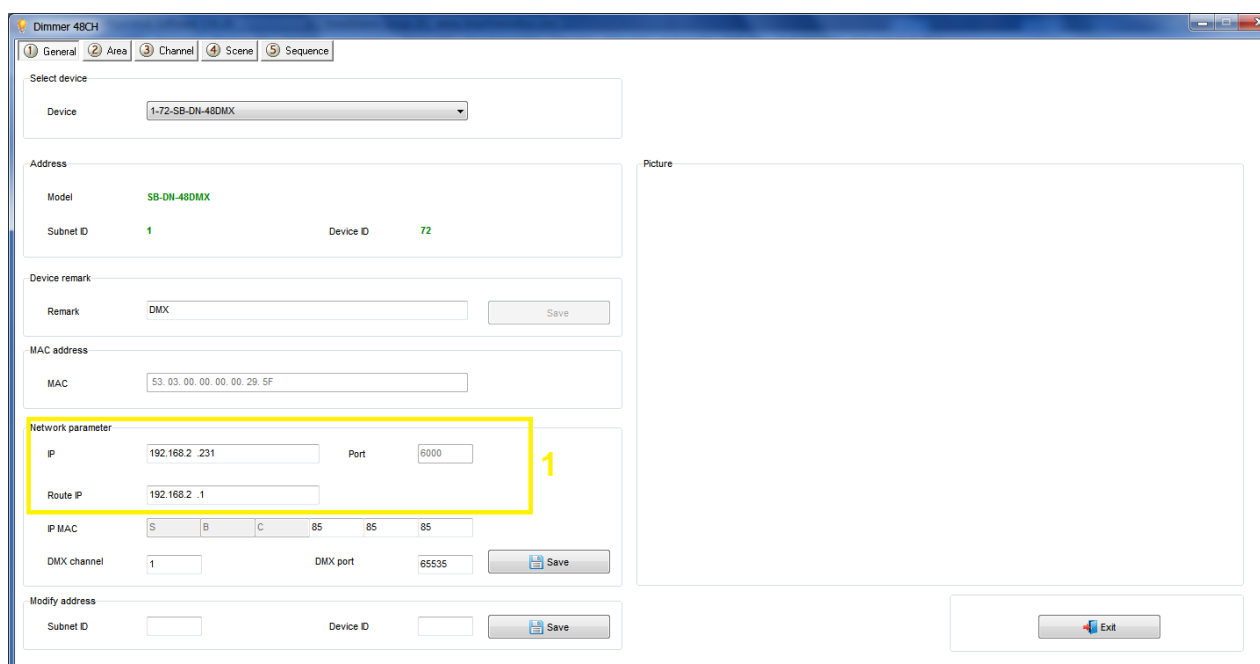
When the scan is done we'll see the next picture.



Add all the controllers to the desktop by clicking "Add all"



After we added all the controllers, pressed double click on the DMX controller line, and we'll get the following screen:



The yellow square shows the IP address of the controller and the IP address Rout.

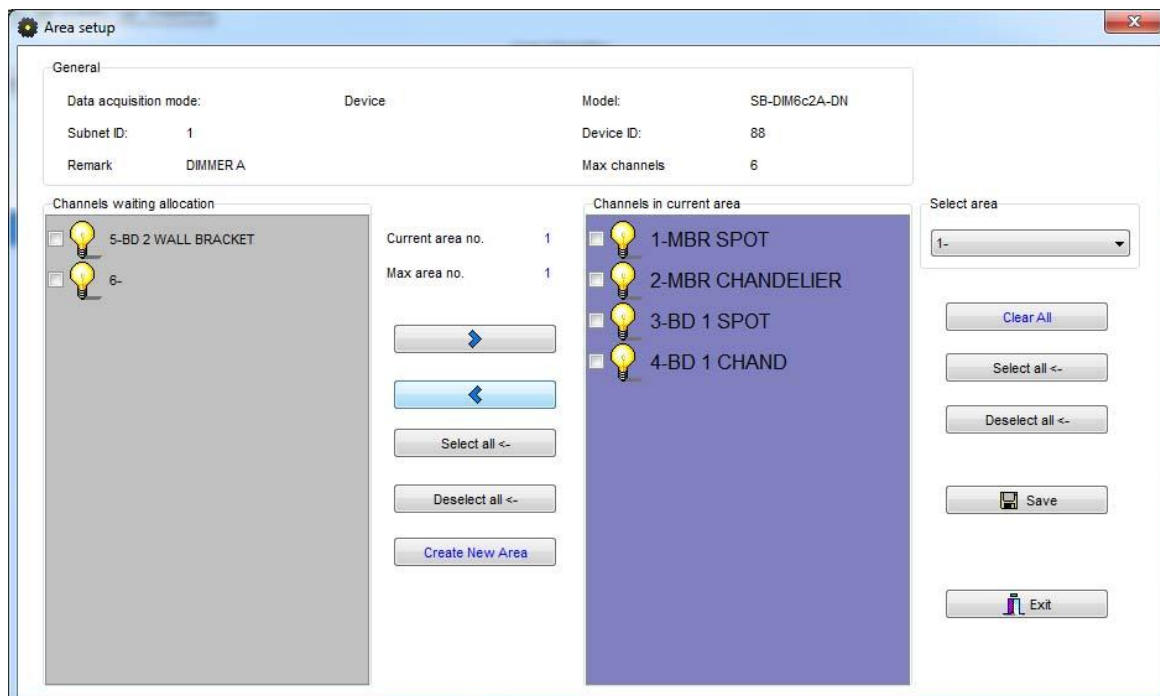
Now you can create a sense sequence in the same way we do it in the Relay and Dimmer controller.

Area Setting

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

For example: if you have a 2 bed rooms apartment, all channels will connect to the same dimmer, that means you can divide the dimmer channels into 2 areas , type a 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 Area1, Remove the channel that not belong to this area by checking them and click the **Left Arrow**.



- Click **Create Area** to add new Area.
- Insert the remaining channels on this Area by pressing him **Right Arrow**.
- When you create all your areas 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**.

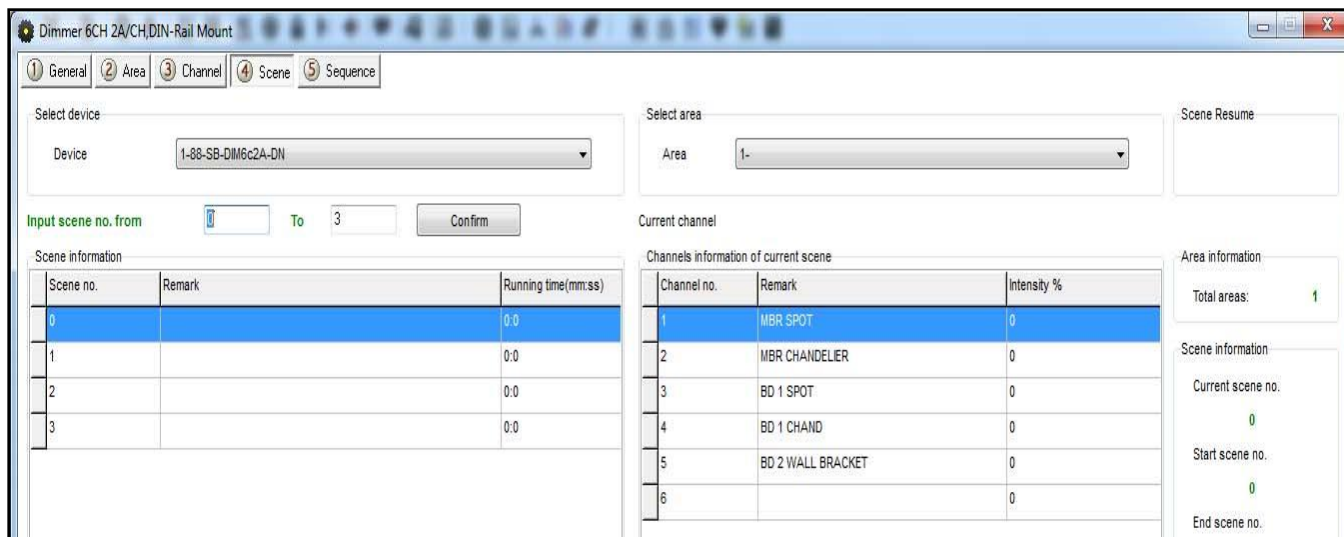
Scene Setting

After you complete your setting area, 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



- 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 to get her
- **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.



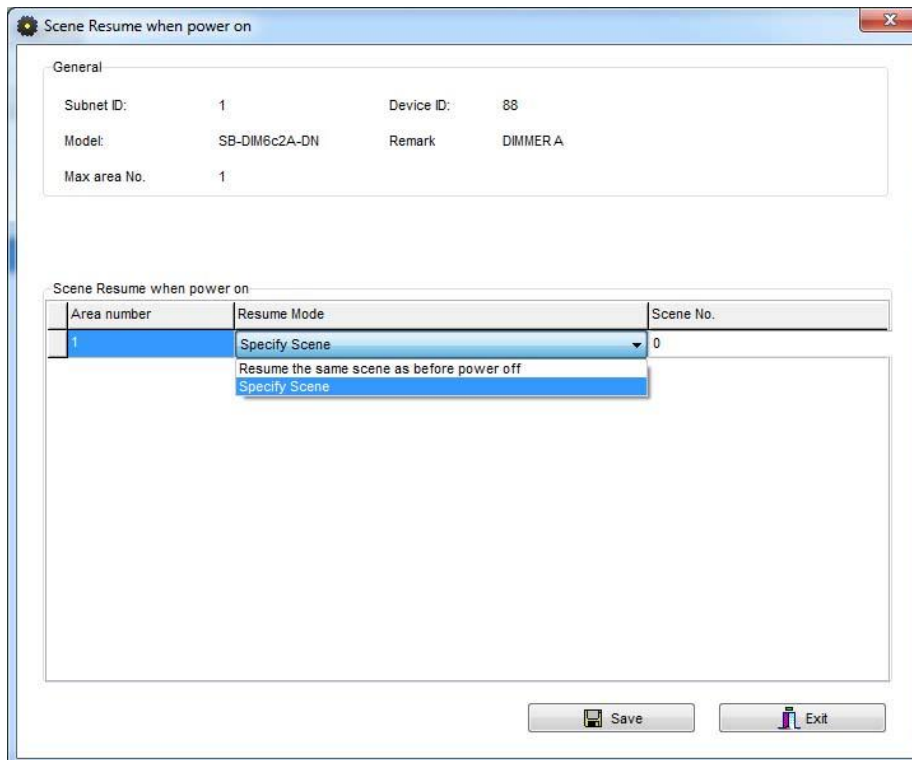
Every area has Scene 0 and it is not modifiable, always Pre-Programmed as scene Off the test all the channels Lights to 0%.

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 or the DMX 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**



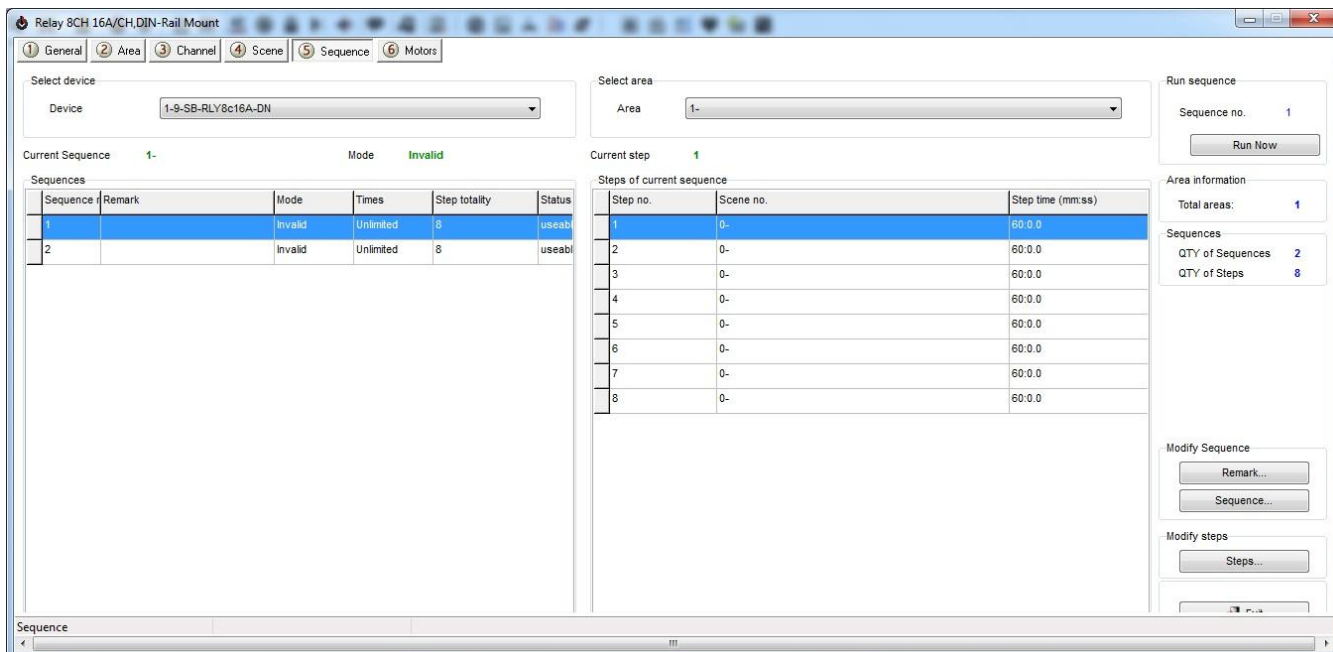
- Remember Scene **0** it mean all Lights in the Area will be OFF when the power restores.

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

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

General Area Channel Scene **Sequence** Motors

Select device: 1-9-SB-RLY8c16A-DN

Current Sequence: 1- Mode: Invalid

Select area: Area: 1-

Run sequence: Sequence no. 1 Run Now

Area information: Total areas: 1

Sequences: QTY of Sequences: 2 QTY of Steps: 8

Sequence	Remark	Mode	Times	Step totally	Status
1		Invalid	Unlimited	8	useabl
2		Invalid	Unlimited	8	useabl

Step no.	Scene no.	Step time (mm:ss)
1	0-	60:0.0
2	0-	60:0.0
3	0-	60:0.0
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...

- Click on **sequence** Button to edit the sequence
- Select the mode you want

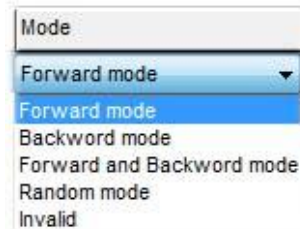
Invalid: not used.

Random: will 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.



Mode

Forward mode

Forward mode

Backward mode

Forward and Backward mode

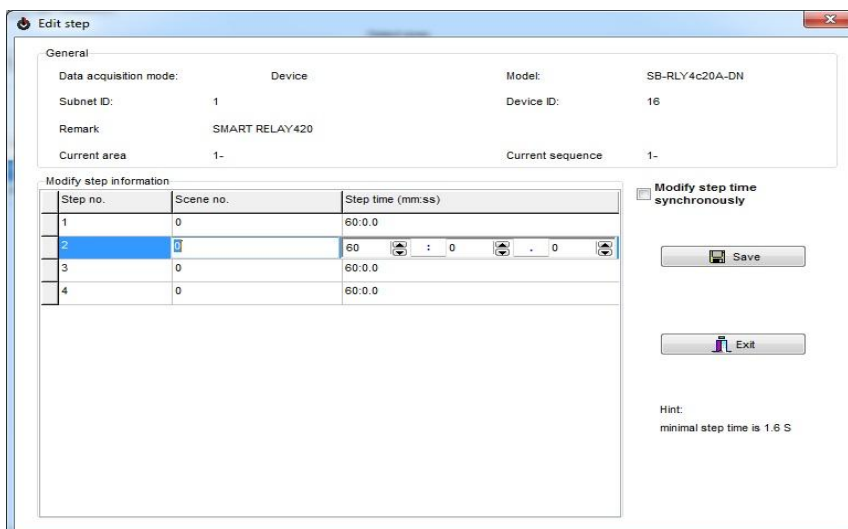
Random mode

Invalid

Times: the sequence can be **Unlimited** for ever running, or will run from 1-time up to 99-times.

Step totally: is the sequence scenes steps number that wants to be include in the Sequence

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



Edit step

General

Data acquisition mode: Device: SB-RLY4c20A-DN

Subnet ID: 1 Device ID: 16

Remark: SMART RELAY420

Current area: 1- Current sequence: 1-

Modify step information

Step no.	Scene no.	Step time (mm:ss)
1	0	60:0.0
2	0	60:0.0
3	0	60:0.0
4	0	60:0.0

Modify step time synchronously

Save

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 **in teravolt** Minutes, seconds and part of seconds
- Click **Save** and **exit**