



Digitcom Tech #

Home Automation Control HAC user interface software

Programming Guide – Ver.2.5 #

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Appendix A “standard Devices Address List”

- 1- Lighting Channels Address List
- 2- Thermostat/ DLP Address List
- 3- Sockets, appliances, sprinkler, heater Address List
- 4- Sensor Address List
- 5- Shade address list
- 6- Music Source and Zone Address list
- 7- Infrared (TV,DVD....) codes location Address list
- 8- Network IP, meter, security, and other items Address list

Before you begin Programming

Before you begin your software programming, you should have:

- Basic knowledge to use the Windows operating system, and Internet.
- Basic Knowledge about network IP setting.
- List of your home controllable Devices and locations
- List of all the detailed logical address, location, and names of your programmed Devices like(lighting channels, DLP Panels, Security module, sensors, IP camera, DVR, Shades, Meters, Infrared codes location, amplifier, etc...). **See Appendix A**

How this course is organized

Home Automation Control software Programming Guide Organized in Simple and logical way to set your home devices with Example Pictures, ( Notices) , ( Advices) , and Programming Examples to give you the Programming skills in very easy and professional way.

For Training Course Request Please apply online

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www.smart-hdl.com

1- Introduction

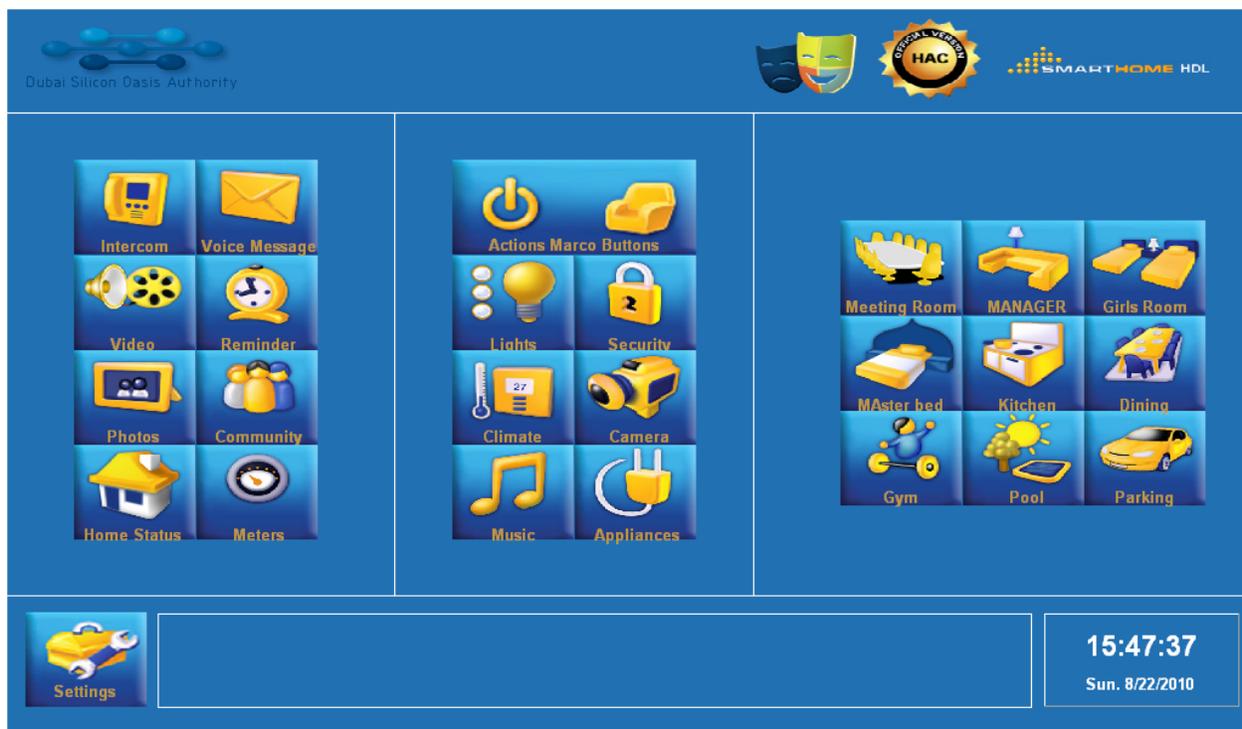
Welcome to HAC, Home Automation Control software that give you as end user or programmer the easiest and simplest way to program your home and enable you to do it yourself..

1-1 Objective:

After this course you will be able to program and control your Lights, shades control, Air condition, Music, and others Devices from your Touch screen or PC.

1-2 About HAC software:

HAC or home automation control software is your friendly user interface that installed in your touch screen, Tablet PC, or Laptop, this user interface allow you to control your home devices, from one interface



This interface consist of 3 main sections beside the settings and alert bar

Right section: the Room by room control

Middle section: the whole home control

Left section: the community and other functions

2- Registration

2-1 Free trial version

When you run your HAC software for the first time it will give you 45 trial days that give you the chance to test the user interface software and get familiar with it.

Once this 45 trial days finish, the software will be expired and it will ask you for registration code, and you will not be able to use any of the software function unless you register it.

2-2 Register your product

Please notice that HAC software has one Registration code “license” for each PC. Laptop or touch screen installed, that mean you can't use the same license for single HAC software in many devices and computers.

To Register your software simply buy your license from your supplier, and provide him with your Machine code that appear on your screen when you run your HAC software.

Once this process passed your supplier will provide you with the license code.

Type your license code in the license field than press **Register button**, if the code is correct the HAC software will open its main home Page, or the Registration will fail if the code is not correct and the HAC Registration Page will remain for 3 trials times and then will exit if this 3 trials is not correct .

Registration

Machine Code:

Licence:

Register

Your trial version of 45 days has already expired!

To buy official software version, please send the machine code to following email :

Email:

3- System basic Setting

3-1 IP setting

You must be aware of the following before you start your HAC software.

- 1- Make sure your computer is connected to the same network of your smart-bus IP port, regardless your connection is wired or wireless.
- 2- You must set your computer or Touch screen IP address to be in the same range of your Smart-bus IP address.

For example if the smart-bus Network Interface IP address is 192.168.10.250,
So you can set your computer or touch screen address as the following example

IP 192.168.10.10
Subnet 255.255.255.0
Gateway 192.168.10.1



*You can use the Line command **Ping** to check your connection.*

On your Computer, Go to start/ Run/ CMD them type “Ping 192.168.10.xxx”

xxx = the last digits of your IP of smart-bus interface module for example 250

If you see the following results similar to this Picture then your connection is successful

```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows XP [Version 5.1.2600]
(C) Copyright 1985-2001 Microsoft Corp.

C:\Documents and Settings\Administrator>
C:\Documents and Settings\Administrator>Ping 192.168.0.1

Pinging 192.168.0.1 with 32 bytes of data:

Reply from 192.168.0.1: bytes=32 time=45ms TTL=64
Reply from 192.168.0.1: bytes=32 time=39ms TTL=64
Reply from 192.168.0.1: bytes=32 time=2ms TTL=64
Reply from 192.168.0.1: bytes=32 time=2ms TTL=64

Ping statistics for 192.168.0.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 2ms, Maximum = 45ms, Average = 22ms

C:\Documents and Settings\Administrator>
```



Make sure you don't have any duplicated IP address in the same network.

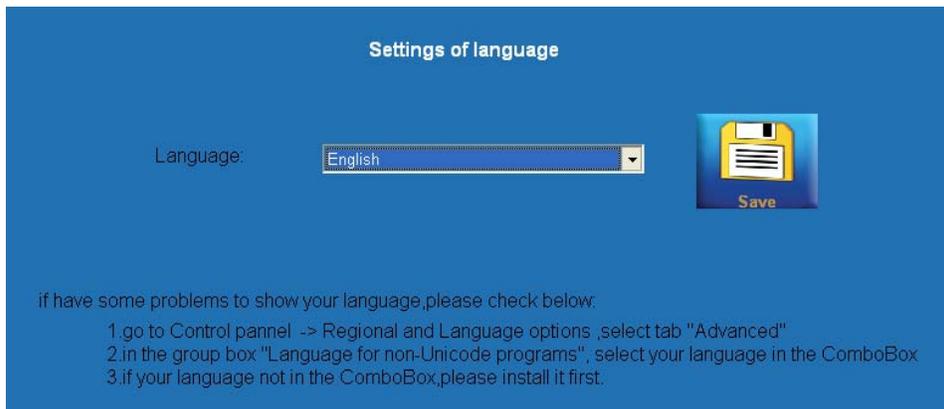
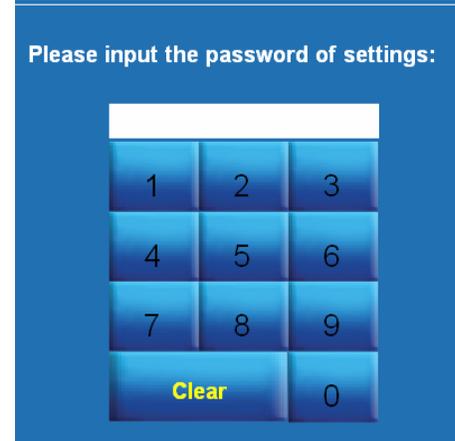
3-2 Language setting

Your HAC user interface Provide you with multi language interface.

You can select from English, French, Norway, Germany, Arabic, Farsi, Tugaloo, Chines and many other new languages that HAC providing it every season.

To select your interface language, you can do the following:

- 1- On the main home Page of the HAC software press on the **Settings Button**
- 2- The Settings Password window will appear and ask you to type your password.
- 3- Type your password, the default password is "8888"
- 4- Once you type the password the **setting page** will appear automatically.
- 5- Press on the **language button**
- 6- Select your language from the **language pop up menu.**
- 7- Press **save button.**



 *the needed language must be installed in your operating system, if your Windows operating system didn't has this needed language, the HAC software interface will show strange characters.*

 *to install new language in your windows operating system, you can do that by going to the control panel, Regional and language option/ select tab advanced in the group box :language for non-Unicode programs" select your language in the combo box, you may need the original Windows CD to continue this language installation.*

3-3 Password setting

If you would like to change your setting password you can do the following

- 1- In the setting page press on **setting of password button**
- 2- Type your **current Password**, the first default password is "8888"



- unless you change it, then you must type the new current one.
- 3- Type your new desired password in the **new password field**
 - 4- Confirm your password by typing it again in the **confirm password field**
 - 5- Press **save button**

3-4 Cursor setting

The cursor setting is the one that can hide the mouse pointer or cursor from your screen or show it.



- 1- In the setting page press on the **cursor button**
- 2- Select or deselect the **show the cursor checking box** to show/hide the cursor.



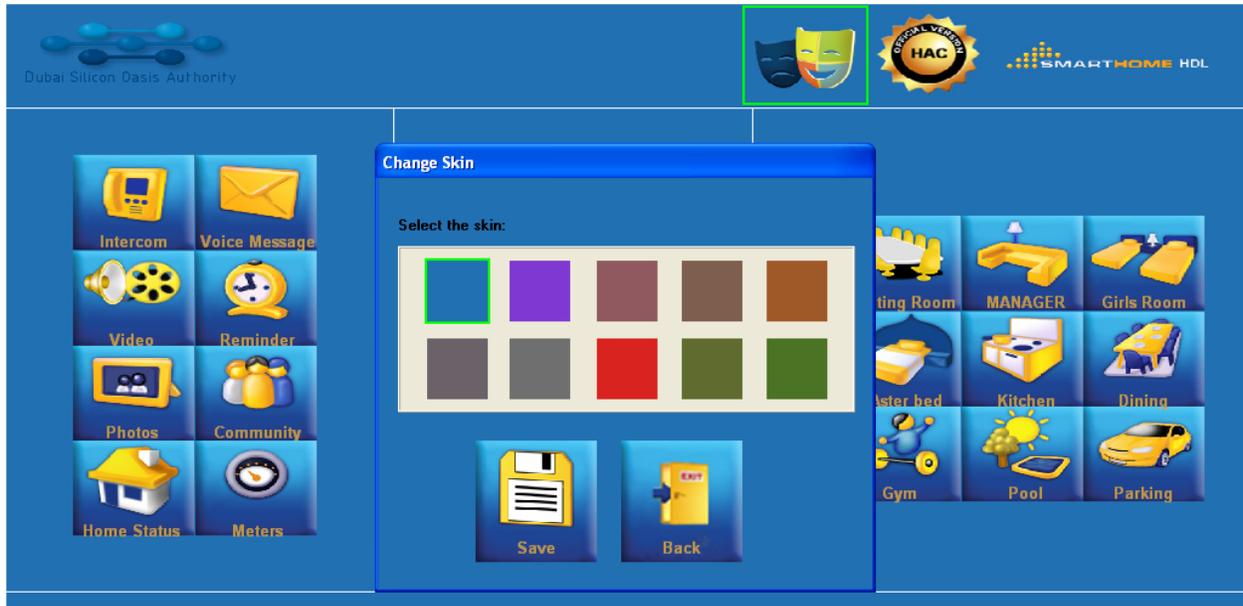
You can hide the cursor if you are using touch screen, so the interface will look more elegant with the finger touch without the annoying mouse cursor.

! *don't hide the cursor if you are using normal PC or laptop without finger touch, if you do that you will not be able to see your mouse cursor and control your software, to solve this problem you must go to your HAC software root directory, open the folder "cursor", open the file **Cursor.ini**, and change the*

showCursor value to 1 as the following line **“ShowCursor=1”**.

3-5 Skins selection

You can change the skins and color of your interface by pressing on the **skins icon** in the main pages, select your favorite color, then press **save button**, then **press back button**.





4- Design your Project (Home)

4-1 Used system Selection

The HAC software has a lot of options and functions with wide range of system and device control, but not all the projects and homes has all this facility that the HAC software offers.

Some time it will be annoying for the user to see some not used functions and icons in the HAC interface that not exist in his home or project.

Customizing the used and unused system is a good option to hide all the unnecessary items. To do that please follow this steps:

- 1- Got to the settings page.



- 2- Press on the **customization button**
- 3- Uncheck the unnecessary system that is not including in your project and check the necessary one.
- 4- Press **save button** than exit by pressing **back button**.

Dubai Silicon Oasis Authority **Customize buttons in the Main Page** SMARTHOME HDL

Left section in main page

- Intercom
- Voice Message
- Video
- Reminder
- Photos
- Community
- Home Status
- Meters

Middle section in main page

- Lights
- Security
- Climate
- Camera
- Music
- Appliances

Hint:
Check the items you have and uncheck the items you don't have

 Save

 Back

4-2 Room selection

You can now start adds your rooms in your project, modify them, or delete them.

For example if the project is an apartment of 3 bed room

We must add the following room (Living room, Kitchen, Master bed, Bed room 1, and bed room 2)

To add this room you can do the following:

- 1- Go to the setting page
- 2- Press on **Rooms button**
- 3- The room setting page will open than Press on **Add button**

Room settings

Ordinal ID	ID	Room name	Pic name
1	9	Living Room	Meeting Room.jpg
2	1	Boy room	bedroom.jpg
4	12	Girls Room	bedroom.jpg
5	13	MAster bed	master.jpg
6	14	Kitchen	kitchen.jpg

Current picture:  Kitchen

▲

▼

Add...

Modify...

Delete...

4- Type your room name for example “ Living room” in the **Room name field**

Add room

Ordinal ID: Room name:

Current icon:

Modify icon:

Select existing icon



Upload my icon

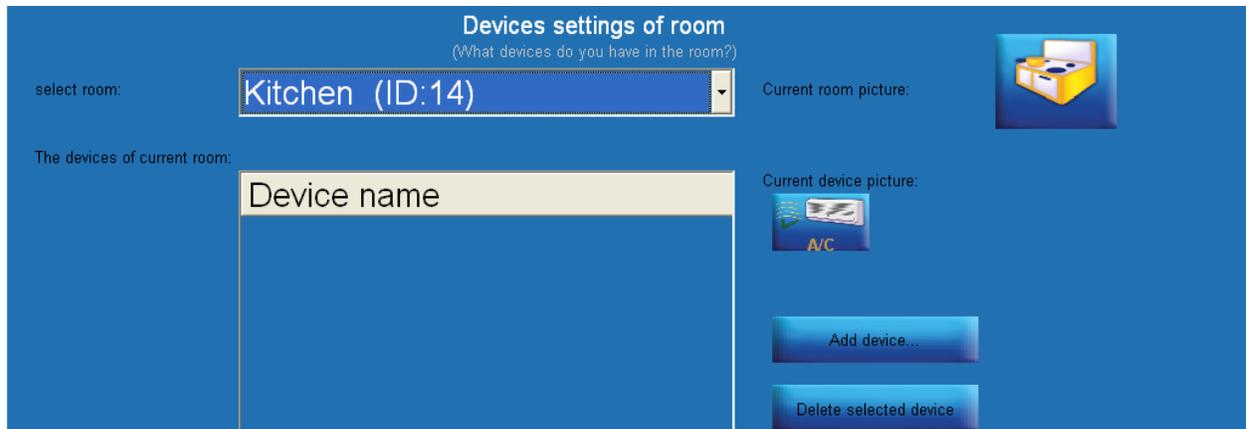
- 5- Type the **ordinal ID**, that responsible to sort the icons location on the main screen, so if you want to make the living room the first icon that appear on the left side set its ordinal ID to 1, each room must have different ordinal ID.
- 6- Select the corresponding Icon from the HAC **existing icons**, or select from your personal room image that saved in your hard disk drive by selecting **upload my icon radio log**, than press Open and select your “JPG, JPEG” format picture file.

Also you can Modify or delete the existing room by selecting the room than pressing on Modify Button, or Delete button

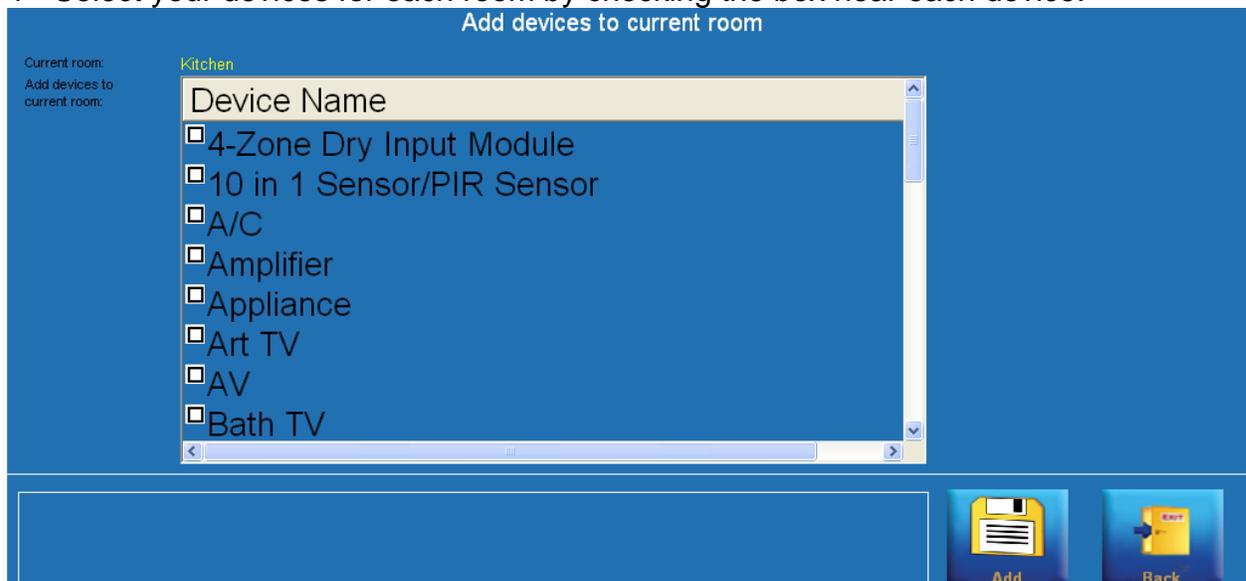
4-3 Device selection

After you had configured your Room names, order and Icons, you are now going to configure the controllable devices in each room.

- 1- In the setting page press on **Devices button**
- 2- Room device setting page will open, select your desired room in the **Select room pop up menu** to add or delete its devices



- 3- Press on **Add device** button
- 4- Select your devices for each room by checking the box near each device.



- 5- After you select all the needed devices, press on **Add button**.
For Delete any device you can simply select it than press on **Delete button**.

5- Room Devices Configuration

In this stage you will start the advanced level of programming that required to set for each room devices its addresses and function.

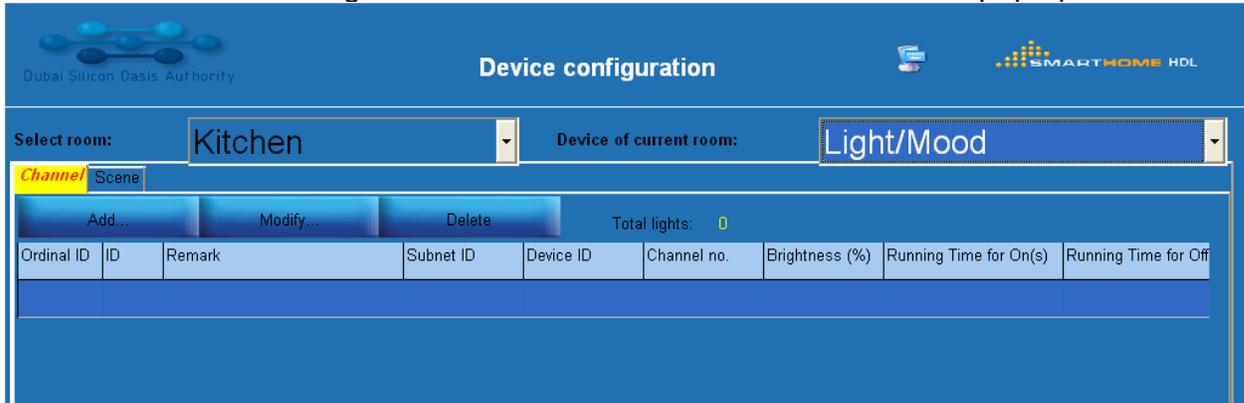
Make sure you have all the addresses list that your installer must provide it to you, please see the **Appendix A** and ask your system installer to give you the similar.

5-1 Lighting configuration

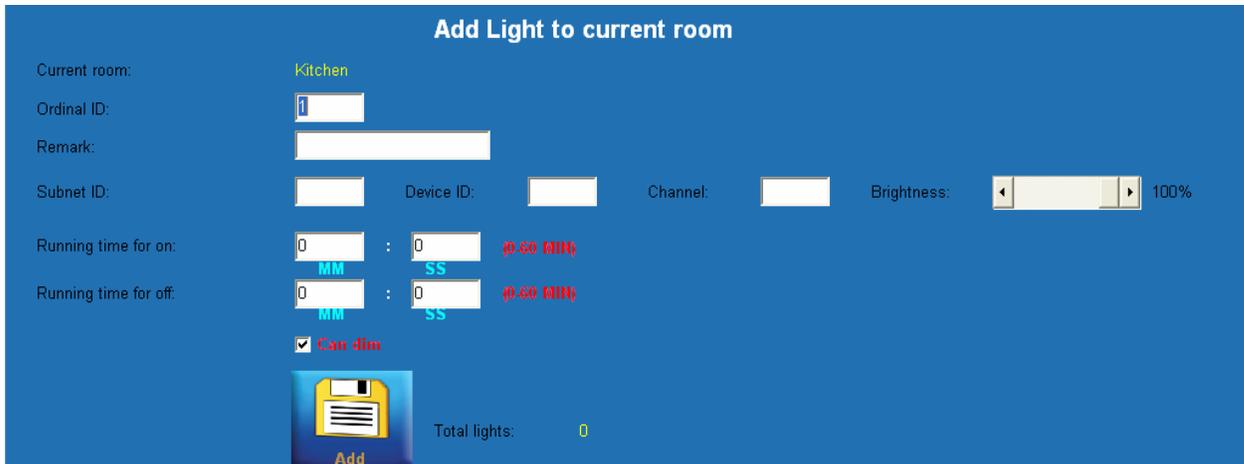
If you have Lighting control in your home (dimmer or relay) than you are able to control it from your HAC software, the next step is to go to the lighting for each room and programmed one by one.

Follow these steps to Add Light Channel:

- 1- Go to the **settings** page.
- 2- Press on **Device configuration** button.
- 3- Select the room you want to program it from the **select room** pop up menu.
- 4- Select the Device “Light/Mood” from the **Device of current room** pop up menu.



- 5- Select **Channel** tap.
- 6- Press on **Add** button.



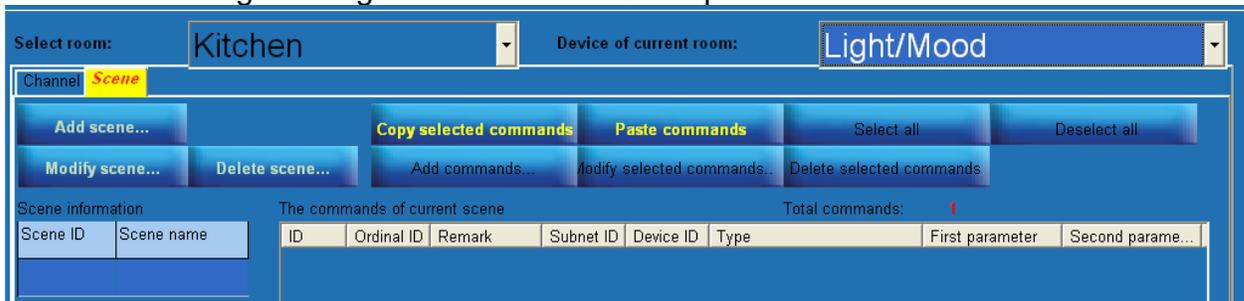
- 7- Put the ordinal ID to give the order for the lights channel appearance order.
- 8- Write inside the **Remark** field the name of this Channel for Example “Spot”.
- 9- Refer to your table of lights channel address, type your channel **Subnet ID, Device ID, Channel no.**
- 10-Modify the **brightness** to what you need this spot light to switch on in this brightness specific level. For example if you make the brightness to 80% than each time you press the light icon it will turn on to 80%.
- 11- **Running time for on and off** is the Fade time that this light channel needs to

- turn ON or turn OFF slowly or fast, it can be from 0 seconds to 60 minutes.
- 12- **Can dim** check box is very important option, you must uncheck the box when your light channel connected to Relay On/Off, while check it if the light channel connect to Dimmer.
- 13-Press Add button.
- 14-Press Back button.
- To add more channels repeat the same steps.

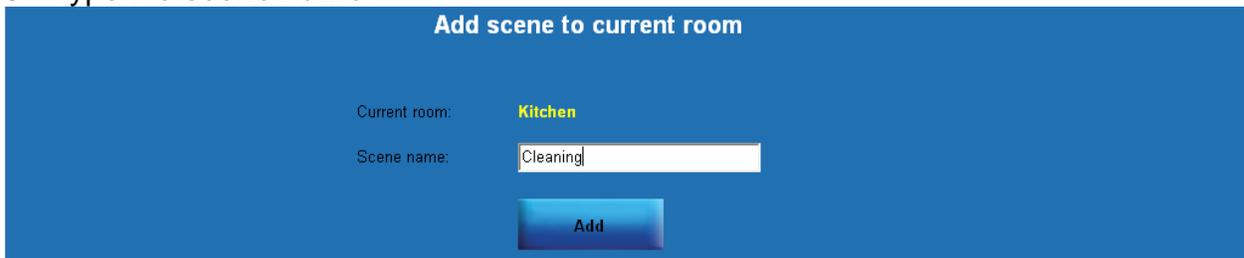
 *The brightness level must be 100% if your light channel connected to Relay, if any other value for brightness is set, the light channel will not turn ON at all.*

Follow these steps to add Scene:

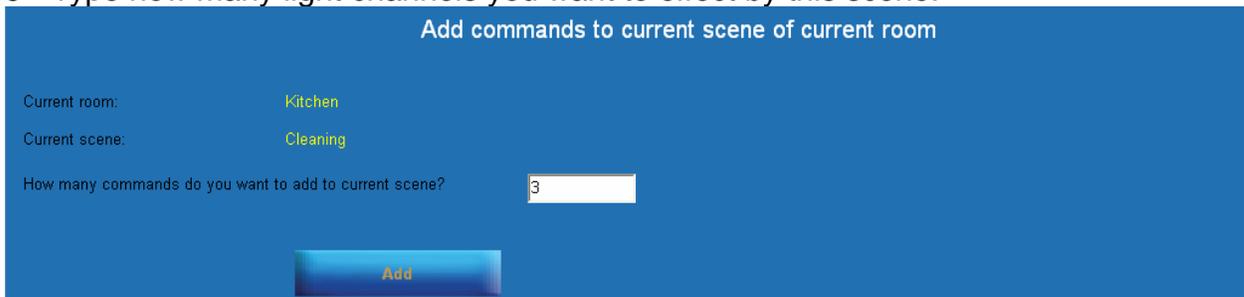
- 1- In the room light configuration select **scene** Tap.



- 2- Press **Add scene** Button.
- 3- Type the **scene name**.



- 4- Press **Add** button
- 5- Select the scene than press **Add commands** button.
- 6- Type how many light channels you want to effect by this scene.



- 7- Press **Add** Button.

8- Select all the 3 commands by checking its box in the list

Select room: **Kitchen** Device of current room: **Light/Mood**

Channel **Scene**

Add scene... Copy selected commands Paste commands Select all Deselect all

Modify scene... Delete scene... Add commands... Modify selected commands... Delete selected commands

Scene information

Scene ID	Scene name
1	Cleaning

The commands of current scene Total commands: 3

ID	Ordinal ID	Remark	Subnet ID	Device ID	Type	First parameter	Second parame...
<input checked="" type="checkbox"/>	3	0	0	0	Invalid	0	0
<input checked="" type="checkbox"/>	2	0	0	0	Invalid	0	0
<input checked="" type="checkbox"/>	1	0	0	0	Invalid	0	0

9- Press **Modify selected command** button.

10- Type all the information needed to run your scene

Dubai Silicon Oasis Authority SMARTHOME HDL

Modify commands

Current room: **Kitchen** Current scene: **Cleaning**

Modify subnet ID synchronously Modify device ID synchronously

Modify type synchronously Modify parameter 3 synchronously

Modify delay synchronously

ID	Ordinal ID	Remark	Subnet ID	Device ID	Type	First parameter	Second parameter	Third parameter	Delay after send (MS)
3	1	spot	1	51	Single channel lighting control	3(Channel no.)	70(Brightness %)	0:0(Running time mn 0	
2	2	florecent	1	53	Single channel lighting control	1(Channel no.)	0(Brightness %)	0:0(Running time mn 0	
1	3	living	1	51	Single channel lighting control	1	100	0 : 0	0



Always use the **“Single Channel Lighting control”** in the Type, the first Parameter is refer to Chanel number, the second Parameter is refer to Brightness, and the third Parameter is refer to the run Fade time. Delay after send is the time the command will delay before executing and it calculated by milliseconds.

5-2 Air condition Configuration

If you have Air condition controller in your home than you are able to control it from your HAC software, the next step is to go to the Air condition control for each room and programmed one by one.

- 1- Go to the **settings** page.
- 2- Press on **Device configuration** button.
- 3- Select the room you want to program it from the **select room** pop up menu.
- 4- Select the Device “A/C” from the **Device of current room** pop up menu.
- 5- Type your Thermostat/ DLP Panel **Subnet ID and Device ID** for that specified Room. See Appendix A DLP/Thermostat table.

6- Press Save button.

5-3 Shades configuration

If you have controllable Shade in your home than you are able to control it from your HAC software, the next step is to go to the Shades control for each room and programmed one by one.

- 1- Go to the **settings** page.
- 2- Press on **Device configuration** button.
- 3- Select the room you want to program it from the **select room** pop up menu.
- 4- Select the Device “Shades” from the **Device of current room** pop up menu.

5- Press **Add** button

Add shade to current room

Current room: **Kitchen**

Device name: Subnet ID: Device ID:

Settings for opening shade

Control type:

First parameter: (Switch no.)

Second parameter: (Status)

Settings for closing shade

Control type:

First parameter: (Switch no.)

Second parameter: (Status)

Enabled "stop" function



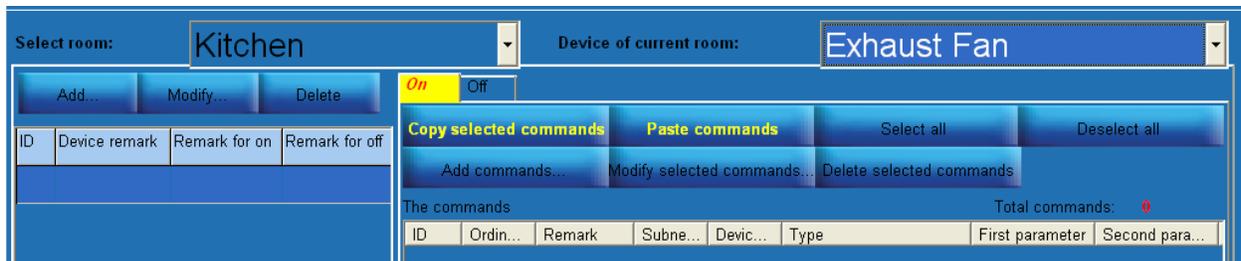
- 6- Type the name of your shade in the **Device name** field.
 - 7- Type the **subnet ID and device ID**.
 - 8- In the **setting for opening shade**, type the same information for (**control type, First parameter switch no, second parameter statues**) of your address list for the shades, and make sure that you type the open command information, see Appendix A, shades address list.
 - 9- Type also the information in the **setting for closing shade**.
 - 10- If your curtain motor has stop function, you can enable it by checking the box of **enable "stop" function** than add its address information.
 - 11- Press Save button.
- You can any time Modify or delete any command after you added by selecting it than press on Modify or Delete button.

5-4 Sockets, Appliances, heater, sprinkler... configuration

Also it is possible in some rooms to have some of controlled Appliances, Fan and others.

We will take an example of an Exhaust Fan in the Kitchen setting

- 1- Go to the **settings** page.
- 2- Press on **Device configuration** button.
- 3- Select the room you want to program it from the **select room** pop up menu.
- 4- Select the Device "Exhaust Fan" from the **Device of current room** pop up menu.



5- Press **Add** button



6- Type the Device name in the **Device remark** field

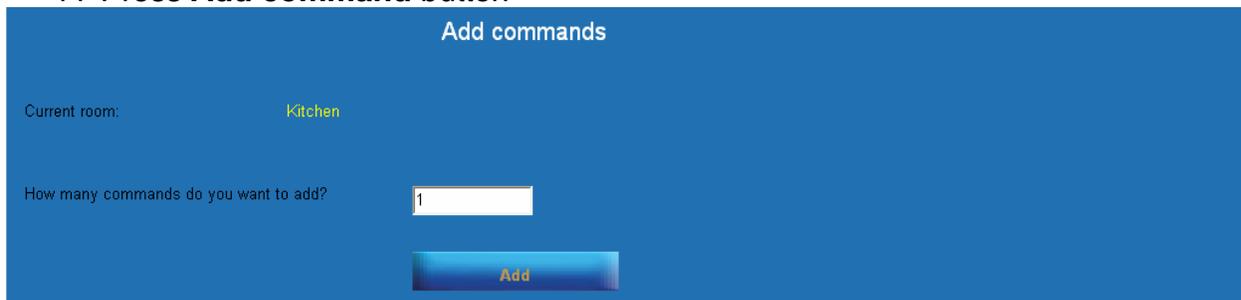
7- Type the text that will show when the device is ON in the **ON remarks**.

8- Type the text that will show when the device is OFF in the **OFF remarks**.

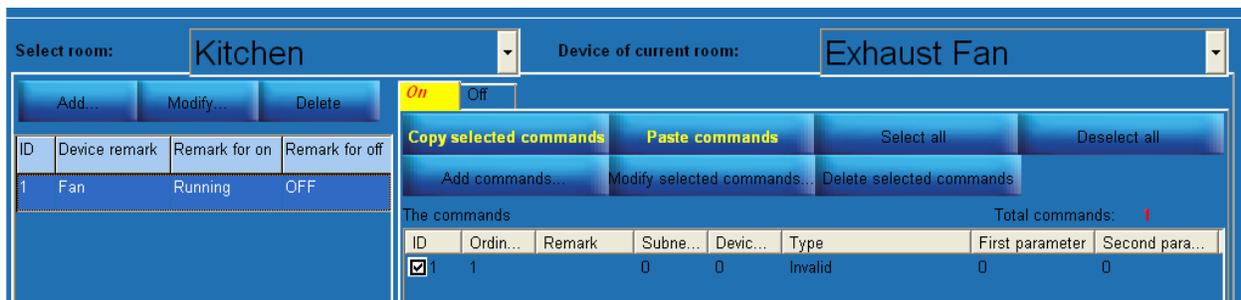
9- Press **Save** button

10-Select the command, then select the **ON** tap.

11-Press **Add command** button



12-Type how many commands you want to run it than press **Add** button.



13- Press **Modify selected commands** button.

14- Type the command and address information of the Fan ON command

15-For the Off command select the **OFF** tab

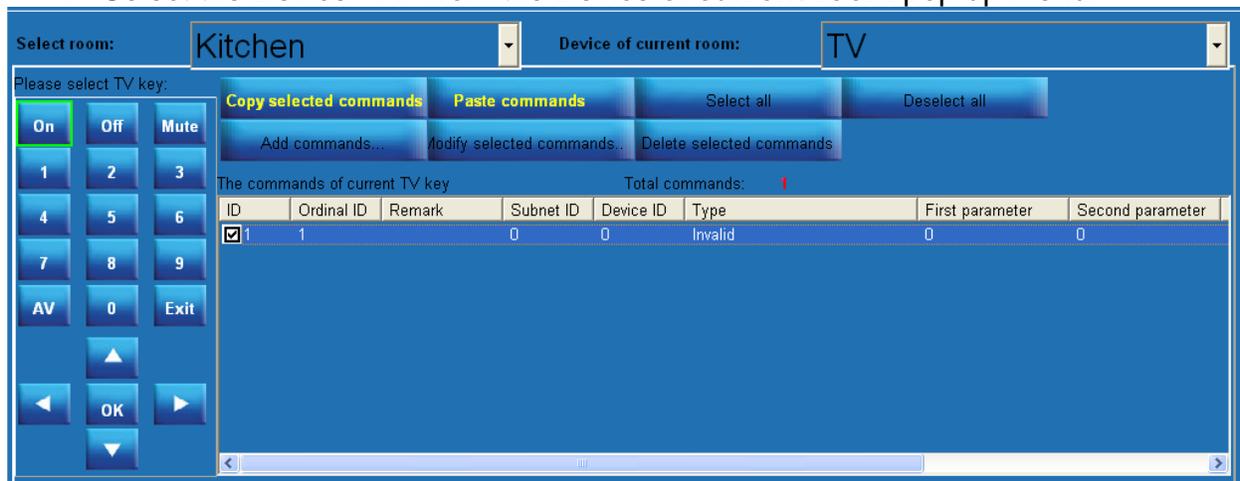
16-Repeat the similar steps in the ON command for the OFF command.

5-5 Infrared (TV, Sat, DVD...) configuration

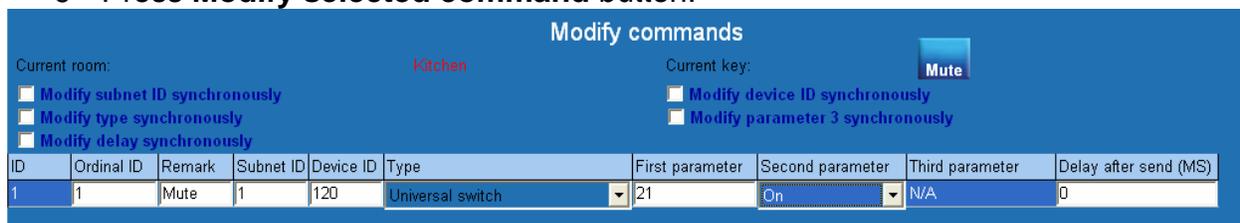
If you have Infrared control installed that can control your TV in your Room than you are able to control it from your HAC software, the next step is to go to the TV, DVD... control for each room and programmed one by one.

In our example we will make the setting for TV control in the Kitchen room:

- 1- Go to the **settings** page.
- 2- Press on **Device configuration** button.
- 3- Select the room you want to program it from the **select room** pop up menu.
- 4- Select the Device "TV" from the Device of **current room** pop up menu.



- 5- Select the Command Infrared button such as (ON, Mute, AV,1,2,3,OK....)
- 6- Press **Add command** button
- 7- Select how many commands you want to control by this button, (usually 1).
- 8- Press **Add** button.
- 9- Press **Modify selected command** button.



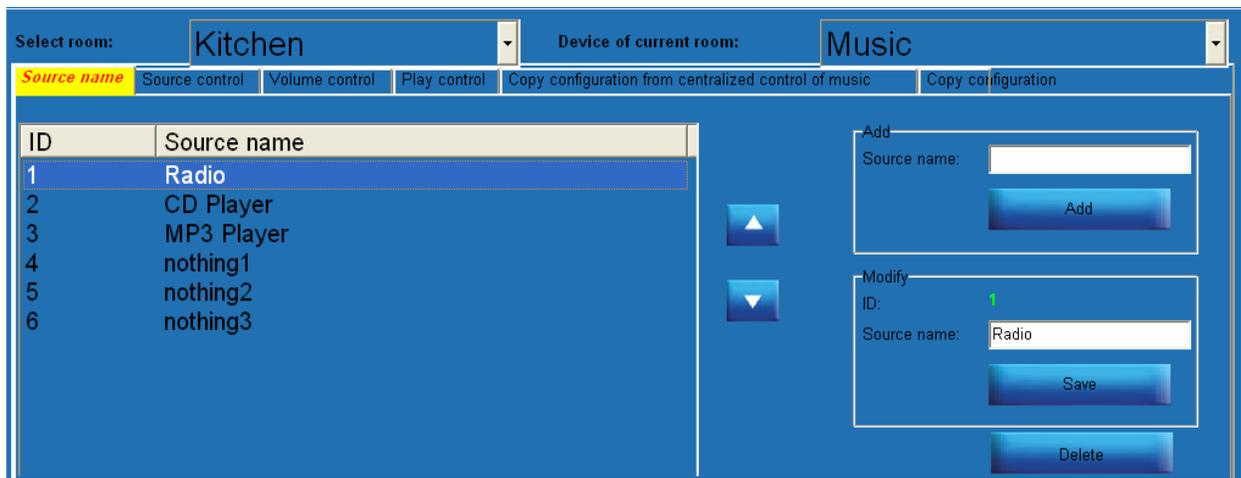
- 10-Type all the needed information for this command, the most used Command type in this information is the "Universal switch" and it used to control most of TV, DVD, Projector Infrared codes and RS232 strings
- 11-Press **Save** button.

Do the similar steps for all the other commands.

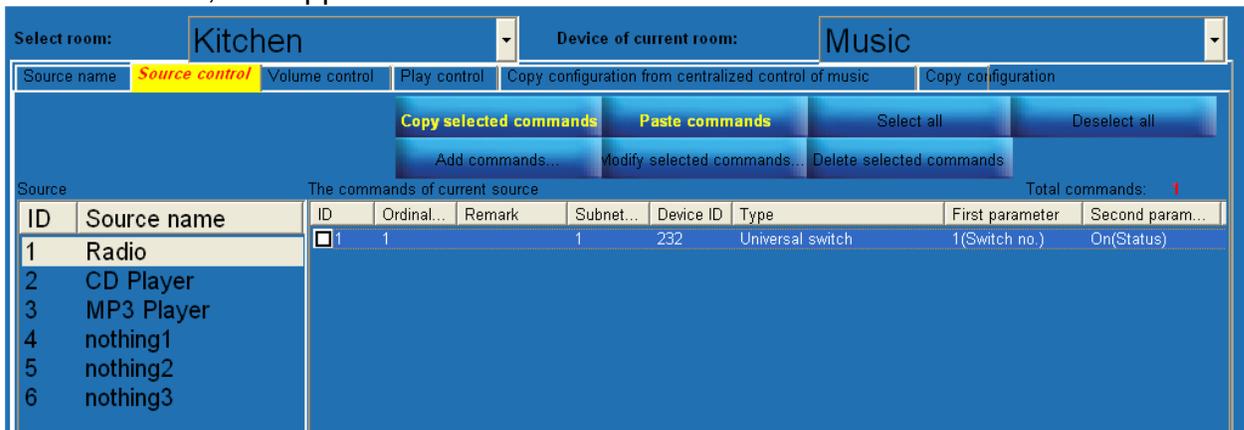
5-6 Music configuration

If you have Z-Audio Music system or if you have (Nuvo amplifier and RS232 interface installed) than you are able to control your music from your HAC software, as the following steps of configuration:

- 1- Go to the **settings** page.
- 2- Press on **Device configuration** button.
- 3- Select the room you want to program it from the **select room** pop up menu.
- 4- Select the Device "Music" from the **Device of current room** pop up menu.



- 5- Add or modify the **source name** of your room, for example Src 1 Radio, src 2 Cd player and so on...
- 6- Press **source control** tab and configure each source with the corresponding command, Press **add** command button and follow the similar steps of adding commands, see Appendix A Music table for the data information of addresses.



- 7- Go to **volume control** tab and add the information and addresses of each

command.

Select room: **Kitchen** Device of current room: **Music**

Source name | Source control | **Volume control** | Play control | Copy configuration from centralized control of music | Copy configuration

Copy selected commands | Paste commands | Select all | Deselect all

Add commands... | Modify selected commands... | Delete selected commands

Volume type

ID	Volume value
1	+
2	-
3	MAX.
4	75%
7	OFF

The commands of current volume type of current zone

ID	Ordinal...	Remark	Subnet...	Device ID	Type	First parameter	Second param...
<input type="checkbox"/>	1		1	232	Universal switch	7(Switch no.)	On(Status)

Total commands: 1

8- Go to **play control** and do the same for adding its command addresses.

Select room: **Kitchen** Device of current room: **Music**

Source name | Source control | Volume control | **Play control** | Copy configuration from centralized control of music | Copy configuration

Copy selected commands | Paste commands | Select all | Deselect all

Add commands... | Modify selected commands... | Delete selected commands

Play control type:

ID	Play control type
1	Last song
2	Next song
3	Play and Pause

The commands of current play control type of current zone

ID	Ordinal...	Remark	Subnet...	Device ID	Type	First parameter	Second param...
<input type="checkbox"/>	1		1	232	Universal switch	11(Switch no.)	On(Status)

Total commands: 1

You can do the similar steps for each room to set the music control from your HAC user interface software.



*if you have Graphical Nuvo music Amplifier , you can use the easy configuration mode for Nuvo and RS232, (see 6-5 Whole home Music configuration section) and then you can copy the configuration of each room from the **copy configuration from centralized control of music** tab by selecting the room and pressing on **copy data** button.*

5-7 Sensor statues configuration

If you have PIR motion sensor, 8in1 sensor, or 4 zone input that connect to window or door sensor, than you are able to monitor your room doors and windows status and any presence or movement in any room, beside the fire and gas sensors detection alert in your HAC software

To make this configuration of your sensors do the following steps:

- 1- Go to the **settings** page.
- 2- Press on **Device configuration** button.
- 3- Select the room you want to program it from the **select room** pop up menu.

- 4- Select one of the following devices that installed in your room Device “4 zone input” or “10 in 1 sensor, PIR sensor” from the **Device of current room** pop up menu.

Select room: Device of current room:

ID	Ordinal	Remark	Remark for OK	Remark for Not OK	Subnet	Device ID	Contact	NC	Enabled MSG Alarm	Enabled VOL Alarm	Alarm VOL File Name

- 5- Press **Add** button

- 6- Fill the needed information for the sensor in the room, in the **Remark** write the name of the sensor, in the **OK Remark** write the text that will show when that sensor is in normal mode for example "no movement, no fire, door closed" , write the alert remarks in the **Not Ok Remark** text box for example "movement, fire, Window open, Gas leakage", write the subnet ID and Device ID and the contact no of your sensor linked to the device, write the type of this sensor if it is normal open or normal close, See [Appendix A sensor table](#) for this information, write the order of appearance of this sensor in the **Ordinal ID** text box.

Settings of 10 in 1 Sensor/PIR sensor

Room: **Kitchen**

Remark: OK Remark: Not OK Remark:

Subnet ID: Device ID: Contact No.:

NC: Ordinal ID:

Hint:
 Contact No. of dry contact 1 is 1
 Contact No. of dry contact 2 is 2
 Contact No. of motion sensor is 4

Enabled Message Alarm

Enabled VOL Alarm

 Save

- 7- Set the **Enable Message Alarm**, if you checked the box, every time the sensor go to not ok remark it will indicate alert text message in the HAC home page. For example if the sensor is installed in the window, every time the window open it will show the text alert in the text section in the main page of the HAC software, so you can read it.
- 8- **Enable VOL Alarm**, if you check this box it will ask you to select the voice file that saved in your computer in order to play it every time this sensor go to not ok mode

Settings of 10 in 1 Sensor/PIR sensor

Room:	Kitchen	OK Remark:	secure	Not OK Remark:	Fire
Remark:	Smoke	Device ID:	101	Contact No.:	1
Subnet ID:	1	Ordinal ID:	2	Hint: Contact No. of dry contact 1 is 1 Contact No. of dry contact 2 is 2 Contact No. of motion sensor is 4	
NC:	no				
<input type="checkbox"/> Enabled Message Alarm					
<input checked="" type="checkbox"/> Enabled VOL Alarm					
			VOL File:	<input type="text"/>	Open...
 Save					



using “**Enabled Message Alarm**” is useful in the main Area and high secure places like main doors and garden doors to alert you on text message, while it is not recommended to enable this option for the motion sensor because it will be annoying to show a lot of useless text messages every time the people moves in the rooms.

The same mater for **Enables VOL Alarm** it is recommended to set it for the high 24 hours active zones like Smoke, gas detector, Panic, emergency buttons and any very sensitive and high security Areas.

7- Whole home Setting

6-1 Action macro buttons configuration

This macro helps you to make the scene and scenario for the whole home with one button.

To do the settings please do the following steps:

- 1- Go to the **settings** page.
- 2- Press on the **Action macro button**

The settings of actions macro buttons

Actions macro buttons			The commands							
ID	Ordinal	Name	ID	Ordinal ID	Remark	Subnet ID	Device ID	Type	First parameter	Second parameter
1	1	Romantic	1	1		9	1	Single channel lighting con...	1(Channel no.)	40(Brightness %)
2	2	Party	2	2		9	1	Single channel lighting con...	1(Channel no.)	40(Brightness %)
3	3	TV Time	3	3		9	1	Single channel lighting con...	1(Channel no.)	40(Brightness %)
4	4	Bed Time	4	4		9	1	Single channel lighting con...	1(Channel no.)	40(Brightness %)
5	5	Manual	5	5		9	1	Single channel lighting con...	1(Channel no.)	40(Brightness %)
6	6	Energy Saving Mod	6	6		0	0	Invalid	0	0
7	7	Visitor Mode								

- 3- To add new macro, press on **ADD** button, to modify existing one press on **Modify** button.
- 4- You can edit the macro name and select its icon from the ready icons of HAC software or you can upload your own icon by selecting **Upload icon** radio log and brows the file location of your icon picture.

Modify Actions Macro button

Name: Ordinal ID: Current icon: 

Icon: Select existing icon

Upload icon

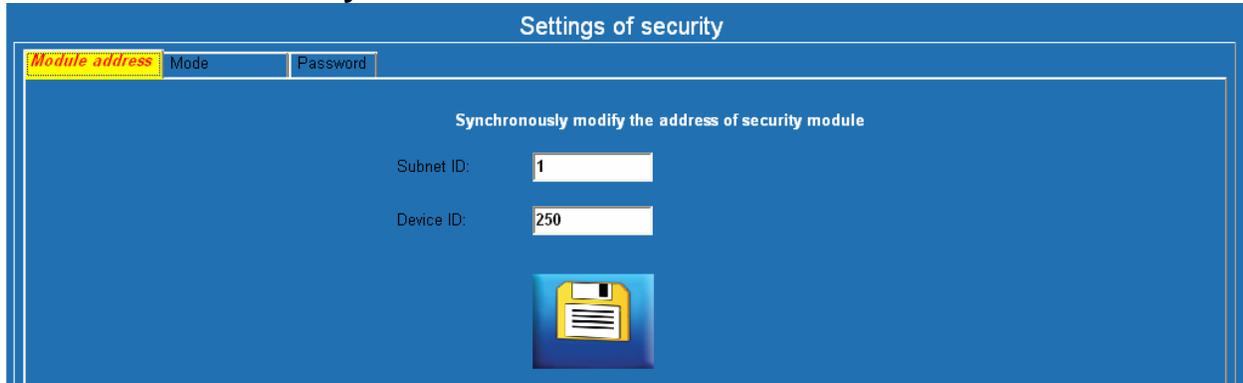
- 5- After you add or modify your macro name and picture, you can assign its command by pressing on **add commands** button, or select the command you want modify it than press on **modify selected command** button.

- 6- Modify the command you want by single channel lights (read the section 5-1 Lighting configuration “scene configuration” for similar configuration).

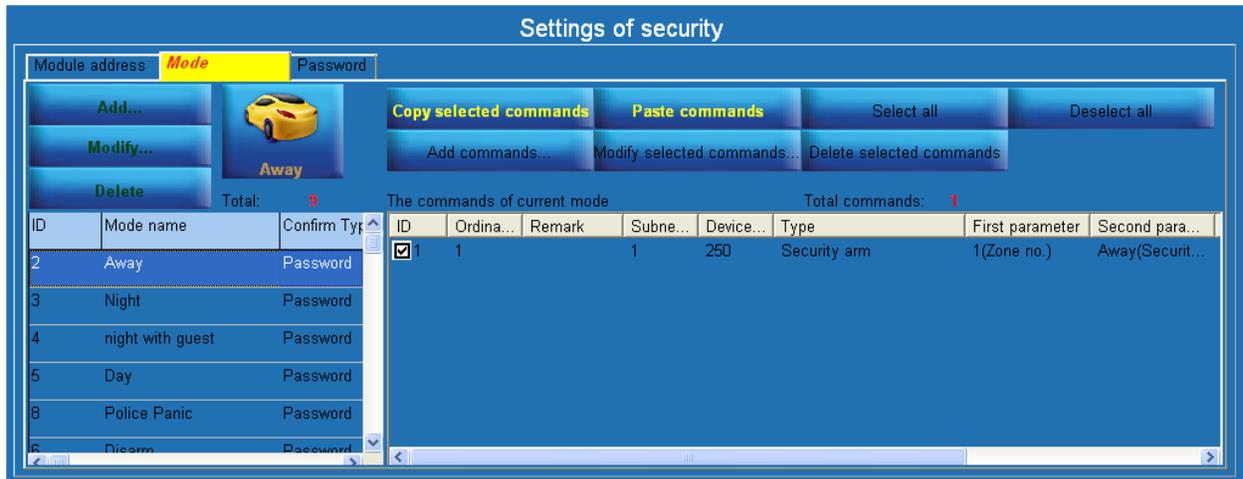
6-2 Security configuration

If you have security module installed than you are able to arm your security system in different level and disarm it.

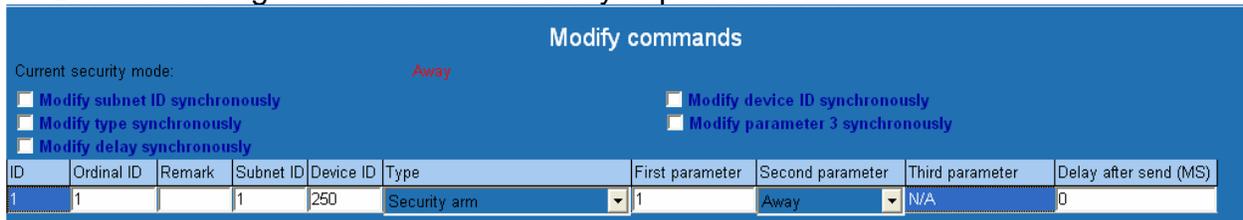
- 1- Go to **settings** page.
- 2- Press on **Security** button.



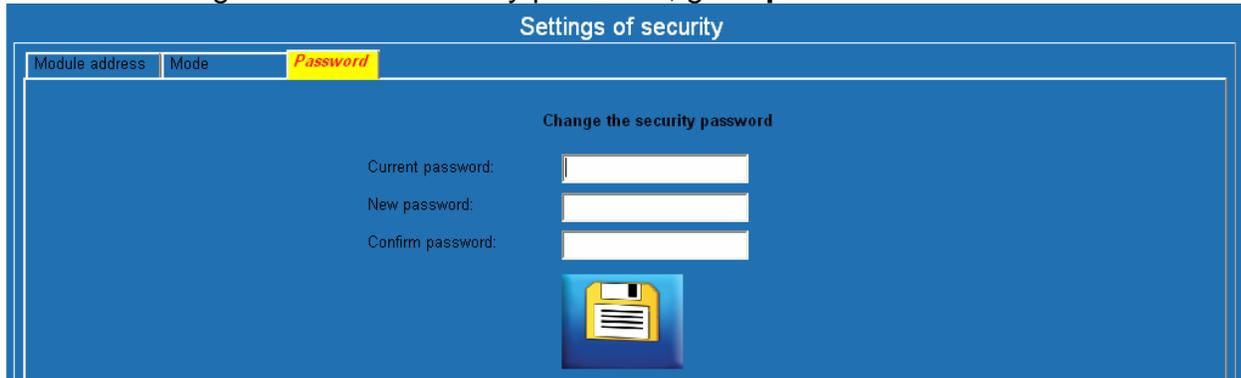
- 3- Type your security Module **subnet ID and Device ID**, see Appendix A (Network IP, meter, security, and other items Address list)
- 4- Go to **Mode** tab



- 5- Make sure all the security level of arming address and configuration is correct, make sure you are selecting the “Security arm command type” and selecting the correct zone according to the addresses table you provided with.



- 6- After you modify your settings press **save** button, then **back** button.
- 7- To change the default security password, go to **password** tab.



- 8- Type the **current** password, the initial default password is “8888” unless you had changed it.
- 9- Type the **New password** and then confirm it by re-writing it in the **Confirm Password**.
- 10- Press **save** button.

6-3 Whole home lights configuration

This function is helping you to control all your home light level by single button

- 1- Go to **settings** page
- 2- Press on **lighting** button



- 3- For each command like (All on, 75%, 50%....) make its configuration.
- 4- Press **add** command and type the number of the command equal to your (Dimmers, and relays in the home or project) see appendix A lighting address table and see how many different dimmer and relay you have, then press on **ADD** button.
- 5- Select those commands and press **modify selected commands** button

- 6- Modify the information by using: “broadcast channel button” and type the subnet ID and device ID of all your dimmers and relays, also select the percentage of lights for your dimmer lighting channels.

Modify commands

Current brightness value: All on

Modify subnet ID synchronously Modify device ID synchronously
 Modify type synchronously Modify parameter 3 synchronously
 Modify delay synchronously

ID	Ordinal ID	Remark	Subnet ID	Device ID	Type	First parameter	Second parameter	Third parameter	Delay after send (MS)
1	1		1	51	Broadcast channel	All channels	100(Brightness %)	0.0(Running time mn0	
2	2		1	52	Broadcast channel	All channels	100(Brightness %)	0.0(Running time mn0	
3	3		1	53	Broadcast channel	All channels	100(Brightness %)	0.0(Running time mn0	
4	4		1	54	Broadcast channel	All channels	100(Brightness %)	0.0(Running time mn0	
5	5		1	55	Broadcast channel	All channels	100	0 : 0	0

 *for all Relay be careful not to give it brightness to any value between (1-99) this values it will be considered as OFF, only 100% brightness level will turn the Relay channels ON.*

6-4 Whole home Air conditions configuration

In this section you can set the macro of (ALL AC off, Cool, hot, cold, warm) to control all your Air conditions in the home by single press.

- 1- Go to **settings** page.
- 2- Press on **climate** button.

Settings of air condition(for centralized control)

Please add all the address of DLP that you want to control

Subnet ID	Device ID
1	2
1	5

Add address

Subnet ID:

Device ID:

Add

Modify address

Subnet ID:

Device ID:

Save

Delete

Temperature:

Unit:

Cool: (The temperature range depend on your A/C settings of DLP)

Cold:

Warm:

Hot:

Save

- 3- According to appendix A DLP/thermostat table, add the **subnet ID and device ID** in the **ADD address** section of all your DLP in the home then press **ADD** button.
- 4- In the Temperature section select the temp **Unit** (C= Celcius F=Fahrenheit) than set the desired Temp for each mode you would like for (**cool, cold, Warm, hot**) than press **Save** button.
- 5- You can modify or delete any Thermostat/DLP address in the list by selecting it

than pressing on **Delete** button, or modify it in the **Modify address** section.

6-5 Whole home Music configuration

This function is designed to help the user to control the whole home audio from one page.

To make this page configuration:

- 1- Go to **settings** page
- 2- Press on **Music** button.
- 3- In the **zone name** tab, add and type your entire Music zones name.

The screenshot shows the 'Settings of music(for centralized control)' interface with the 'Zone name' tab selected. The interface includes a table of zones, an 'Add' form, a 'Modify' form, and a 'Delete' button.

ID	Zone name
1	Meeting room
2	Reception
3	Manager
4	Sales
5	Kitchen
6	Bed room

Add
Zone name:
Add

Modify
ID:
Zone name:
Save

Delete

- 4- Go to **source name** then add and type your entire music sources name.

The screenshot shows the 'Settings of music(for centralized control)' interface with the 'Source name' tab selected. The interface includes a table of sources, an 'Add' form, a 'Modify' form, and a 'Delete' button.

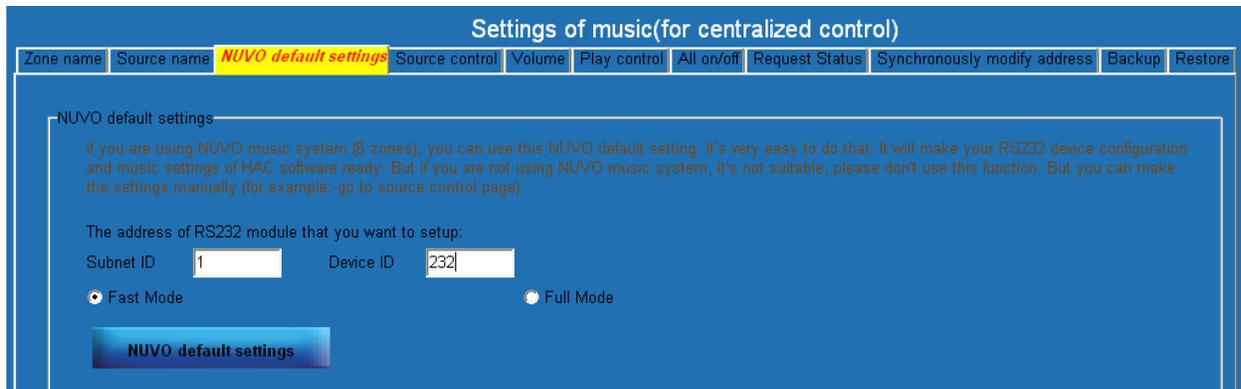
ID	Source name
1	Radio
2	CD Player
3	MP3 Player
4	nothing1
5	nothing2
6	nothing3

Add
Source name:
Add

Modify
ID:
Source name:
Save

Delete

- 5- If you have Nuvo Amplifier connect to your system than you can make Auto configuration for all your zones commands. Go to **Nuvo default setting**, type the **Subnet ID** and **Device ID** of your RS232 that connect to Nuvo amplifier.

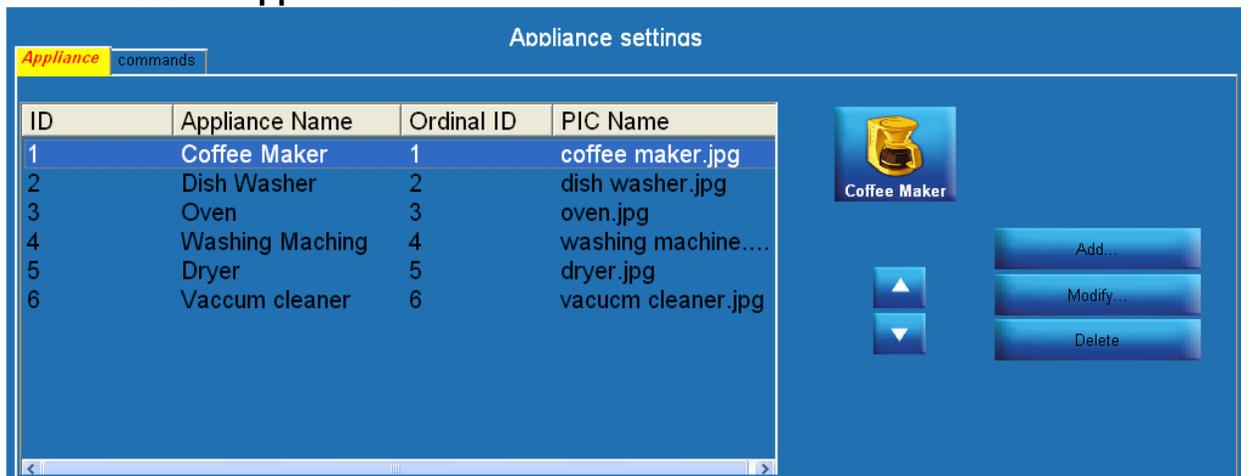


- 6- Press on **Nuvo default setting** button, then it will automatically configure your RS232 command, and you didn't need any more to go for the next setting steps.
- 7- If you don't have Nuvo Music system you must configure the source command for each zone manually Please check "appendix A Music address" and read the previous section (**5-6 Music configuration**) to set all the needed value in the **source control, Volume, Play control** tabs.

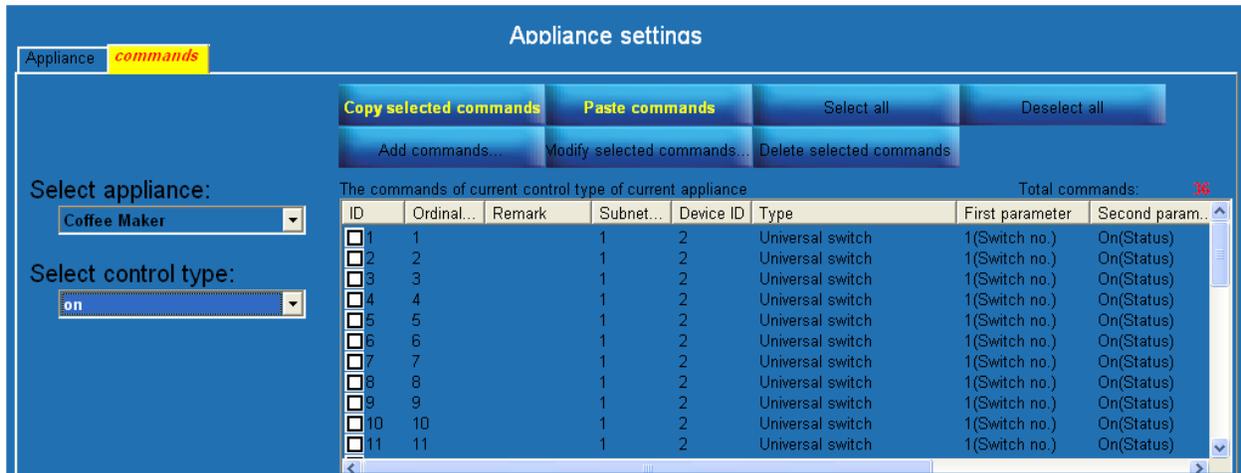
6-6 Whole home Appliances configuration

Here you can make the setting for all your home appliances to turn it ON/OFF and later to make a schedule for it.

- 1- Go to **settings** page
- 2- Press on **Appliances** button.



- 3- On the **Appliance** tab you can modify and add new appliances, type its name, select its icon picture, and change the order of its appearance.
- 4- After you modify and add your home appliances name and icons go to **commands** tab.



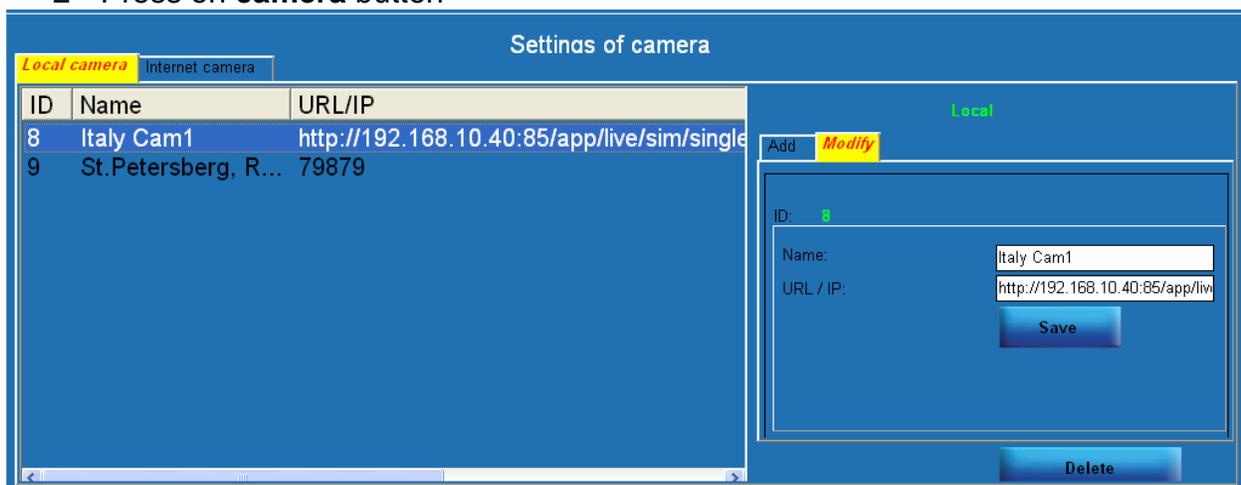
- 5- Select the appliance you want to program its address from the pop up menu of the **select appliance**.
- 6- From the **control type** pop up menu select its action (ON or OFF).
- 7- Modify or add command of this command by selecting the commands and pressing on **modify selected command**. See [appendix A appliances table](#) for more info about this configuration values.

6-7 Camera configurations

You can see your entire IP cameras that installed in your home from your HAC software.

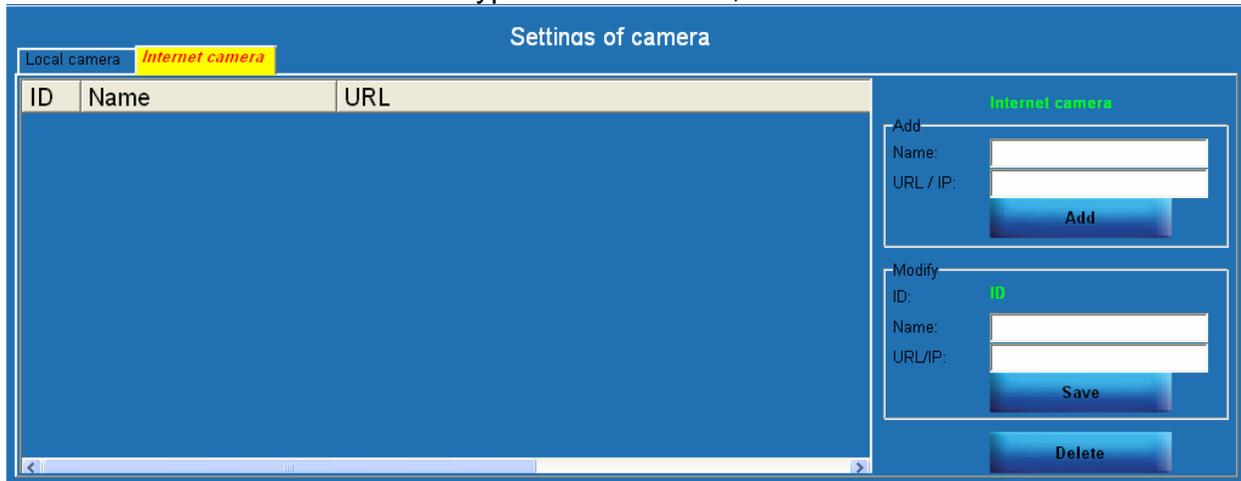
First you must configure its IP addresses

- 1- Go to **settings** page.
- 2- Press on **camera** button



- 3- You can Add new camera or modify existing one by changing between **ADD/modify** tabs.

- 4- Type the **name** of the camera, and its **URL/IP** address, see Appendix A Network IP, meter, security, and other items Address list
- 5- You can see live internet camera also from your HAC software, you can go to the **internet Camera** tab and type the **name** of it, and the **URL** Link.

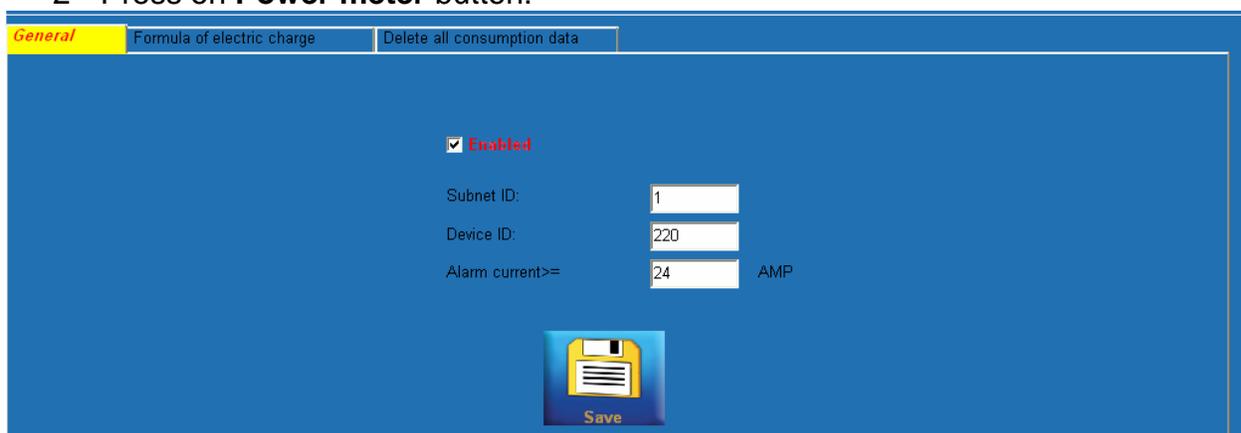


6-8 Meters configuration

If you have electrical power meter installed in your system, than from HAC software you will be able to read the statistics and Information of your consumption and electricity bill, also the software will alert you when there is high consumption in your home.

To set the power meter configuration:

- 1- Go to **settings** page.
- 2- Press on **Power meter** button.



- 3- Check the **enable** box, than type your power mete **subnet ID** and **Device ID**. See appendix A table for its address.
- 4- in the **Alarm Current** Type the maximum AMP consumption you want your software to alert you if your consumption go above this Value.

- 5- Press **Save** button.
- 6- Go to **Formula of electric charge** tab.

General | **Formula of electric charge** | Delete all consumption data

Currency:  Save

Base Charge:

Formula

ID	Start KWH	End KWH	Unit Price
1	1	2000	0.2
2	2001	4000	0.24
3	4001	6000	0.28
4	6001	1000000000	0.33

Add...
Modify...
Delete

- 7- Type your country **Currency** for example “AED” for Emirate Dirham , “USD” for united state Dollar “RLS” for Iranian Real.
- 8- In the **Base Charge** write the Fixed Monthly Payment of electricity bill even there is no consumption.
- 9- Edit you electricity charge **Formula** that set with your country, for example: if the consumption monthly is between 1-2000 KW/H than each KW/H will cost you 0.2 AED Dirham and id it is between 2001 – 4000 KW/H each KW/H will cost you 0.24 AED and so on...
- 10-If you want to clear all the old data base of your old consumption go to **delete all consumption data** tab.

General | Formula of electric charge | **Delete all consumption data**

Delete all the consumption data from database.

Delete

- 11- Press on **Delete** button to clear all old consumption information.

If you have high consumption the HAC software will alert you on its home page Text box Messages area by text Message indicating that you have high consumption.

7- DIY simple setting

This setting is set to give the end user a very simple interface to do some configuration by himself without knowing the addresses of the devices.

Mood configuration 7-1

This Mood is a macro the end user can set it for himself and run it every time he would like.

To program this mood:

- 1- In the home main page go to any room you would like to program the mood on it.
- 2- Go to **mood** tab



- 3- Go to your DLP in the room and change the lights according to your mood, than change the Air condition mood and temperature from your DLP, also you can close the shade or open it, and select your favorite music source.
- 4- After you had set your favorite lights scene, Air condition temp, Shades, and music, Press on **Record Mood** button.
- 5- On the check box select what you want to record from (lighting, Air condition, Nuvo Music, Curtain).
- 6- In the **Mood name**, type the name of your mood.
- 7- Press on **Record** button.

Now your mood is ready to use.

Any time you go to mood you can see a button with the name that you had selected for your mood. You can press it, and your mood will trigger.

Select the systems of this room that you want to record as new mood:

- lighting
- Air Condition
- NUVO Music

- Curtain

Mood name:

 Record

You can edit your mode by pressing on **Edit Mood** button to change its name or delete it.

7-2 Reminder configuration

You can set your reminder to remind you about your Meeting, bills, birthday dates and so on.

1- In the home page press on **Reminders**

Reminder				
ID	Subject	Alarm date time		Remark
2	test	22/08/2010	16:56	Pay your bill
1	TEST	11/06/2009	6:0	

2- You can add Remainder by pressing on **Add** button.

Add reminder Sun 08/16 14:32:11

Subject:

Alarm date:

Alarm time: :

Remark:

3- Type your reminder **subject**, the **Alarm Date** and **Alarm Time** this Reminder will trigger, and the **Remarks** that indicate the Text that will show on the HAC Alert

text section.

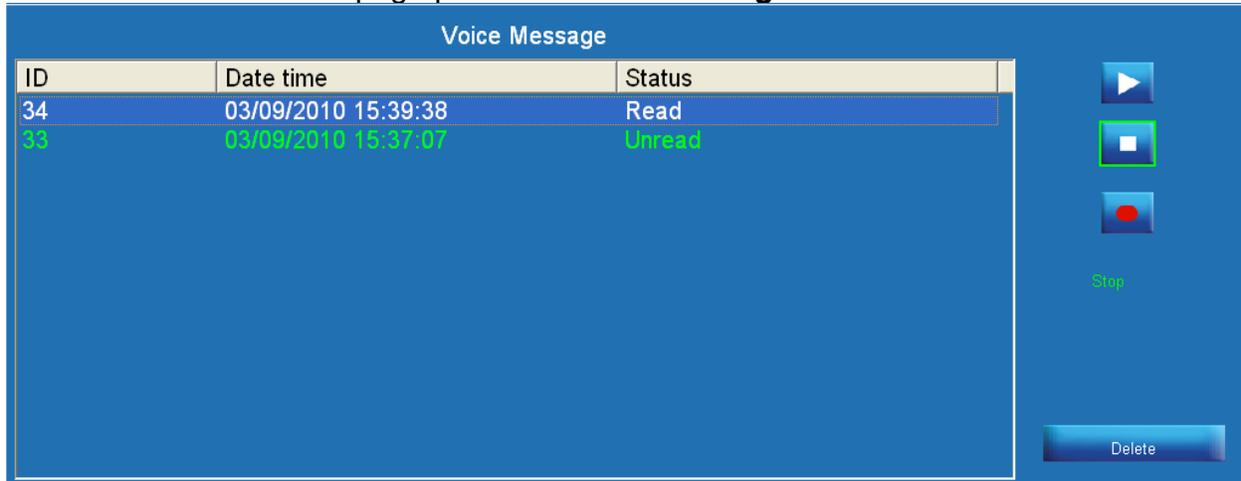
- 4- Press **save** button.

7-3 Voice Message configuration

Voice message is the message that the family member can leave it for the other member in the family to listen to it later.

To Record or to read this message:

- 1- In the main home page press on **Voice Message** button.



- 2- You can see full list of the messages that had been recorded, and the status of it, if the statuses showing "Read" it mean some member of the family had listen to it, if it show "unread" it mean still no one hear it.
- 3- You can hear the message by selecting it than press on **play** button.
- 4- To delete any message you can select it than press on **Delete** Button
- 5- To record new message Press on **record** than start speaking, when you finish your voice recording press on **Stop** button.

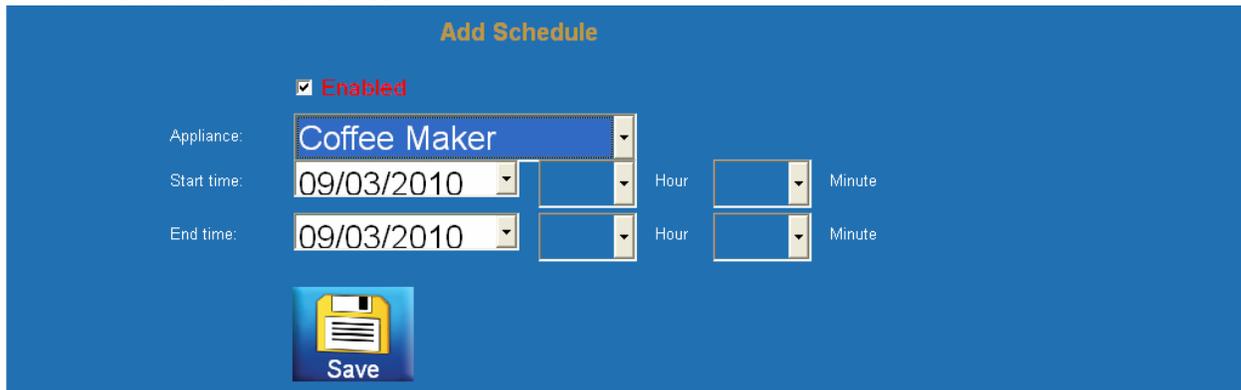
7-4 Appliances schedule configuration

You can make a schedule to turn your appliances ON/OFF.

- 1- In the main page go to **appliances**



- 2- Press on **schedule** button
- 3- Press on **add** button



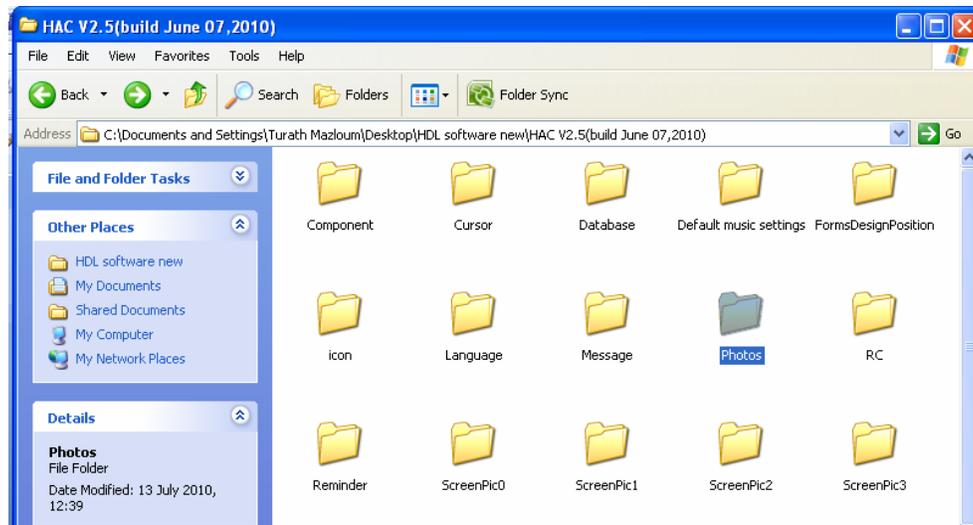
- 4- Select your appliance you want to control from the **appliance** pop up menu.
- 5- Select the Time and date you want your appliance to start working. And the End time you want your appliance to stop working
- 6- Press **Save** button
- 7- Do the same schedule for other needed appliances.
- 8- You can disable this schedule by uncheck the **Enabled** check box

7-5 Photo Frame

You can also use your HAC software as your photo frame

To add your family and favorite photos to be played on the photo frame

- 1- Copy all your photo file
- 2- Open the HAC software main folder.
- 3- Open the Photo folder.
- 4- Paste all your photo in the photo folder



- 5- Run your HAC software
- 6- In the main page press on **Photos** button.
- 7- The photo frame will start playing your photo one by one
- 8- To Exit **double click** on any area on the photo, or single click than press **exit** button
- 9- Also you can pause or restart playing your picture by pressing on the **play/pause** button.



8- Community setting

The community is a function to give you a shortcut to the most important information you may need, this community function is divided by 2 sections, an Internet depended and non internet one.

Internet depended and non internet function 8-1

The internet depend function is the function need connection to the internet, while the other function may belong to the community complex you live in.



Community configuration 8-2

Most of community functions is available for setting for the Internet dependant one while the other function can't be set by the end user.

To set the community internet dependant functions:

- 1- Go to **settings** page
- 2- Press on **community** button.

Select type:

Ordinal ID	Name	URL
1	Electricity & Water	http://www.dewa.g
2	Telephone Bills	http://www.etalat
3	Traffic	http://etraffic.rta.ae
4	Cards	https://login.bankne

Add

Name:

URL:

Ordinal ID:

Add

Modify

Name:

URL:

Ordinal ID:

Save

- 3- Select the **community type** such as (bill, shopping, whether)..
- 4- Add or modify the existing link for each community
- 5- Press **ADD** or **Save** button in Modifying section
- 6- Select another community type and do the same steps


Dubai Silicon Oasis Authority

Community settings



Select type:

Ordinal ID	Name	URL
1	Iran, Shiraz	http://weather.msn
2	Iran, Tehran	http://weather.msn
3	Dubai, UAE	http://weather.msn
4	London, UK	http://weather.msn
5	New york, USA	http://weather.msn
6	Vancouver, Canada	http://weather.msn
7	GuangZhou, China	http://weather.msn

Add

Name:

URL:

Ordinal ID:

Add

Modify

Name:

URL:

Ordinal ID:

Save

Delete



9- Video Play setting

The video Play function in the HAC software is used to share and Play the videos and films between all the connected computers in the same network.

9-1 Video Play Requirements

In order to run the video Play correctly it need this basic requirements:

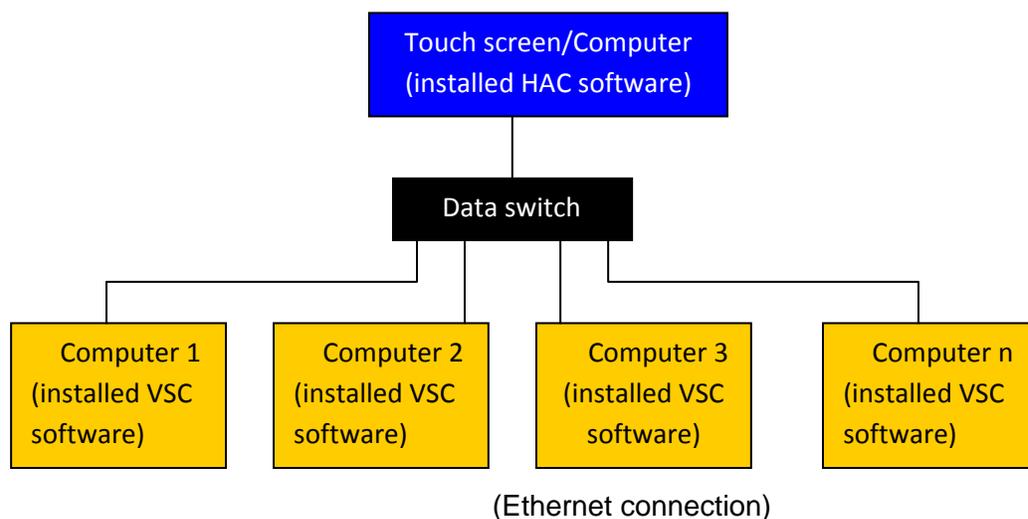
- 1- At least 2 computers connected in the same network, one of them can be a touch screen computer.
- 2- Windows XP or windows 7 installed in this computers.
- 3- Media Player Version 11 installed in both computers.
- 4- Streaming client software (VSC) installed in the destination computer.
- 5- Home Automation Control (HAC) installed in the controlling computer.

How it work?

The HAC software can add the videos from any computer in the LAN, after that it can send those videos to any computer which has installed the VSC software.

Ask your supplier to provide you with the HAC and VSC software

The Following Diagram showing the distention and HAC control computer connection



9-2 Destination PC Video configuration

To make your setting for your Destination PC in order to be able to receive the films from your HAC Software you must follow this steps:

- 1- Assign your Computer IP address to fit with the same range of your HAC software computer IP address.

 *don't obtain an IP address automatically, you must set a fixed IP address for each computer, because the Dynamic IP will be change from time to time and that will cause fail in the communication for the Video configuration.*

- 2- Make sure the computer that installed HAC and computers that installed VSC are connected by pinging the IP address of the other computer to test it.

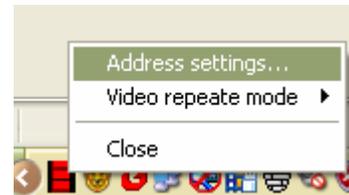
Start menu->Run,

Type the following for example `ping 192.168.10.101 -t` , OK and check the results.

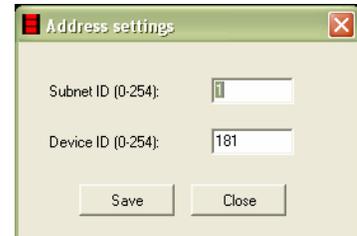
- 3- If you don't have the Windows media player Version 11 or above, kindly upgrade your version to the latest one.

To upgrade your Windows media player do the following steps:

- a- Download windows media player (WMP) 11 from internet.
- b- Uncompress the WMP 11 zip file.
- c- After you uncompress the file you will find 4 exe files, please install it one by one in the following order (umdf.exe, wmdbexport.exe, wmfdist11.exe, wmp11.exe)
- d- Run the windows media player when you finished installation.
- e- Copy VSC software the Video Streaming Client software files to the destination computer that you want to receive and play videos on it.
- f- Open your VSC software and set the software address setting (**subnet ID and Device ID**), each computer must has different Address, to do that you must do the following
 - Right click the VSC icon in the task bar
 - Select **address setting**



- Type your subnet and device ID Value



4- Video folder sharing Configuration

You must Share your videos folder before start video Configuration of HAC even if the videos locate in the local computer; you need to share the folder first.

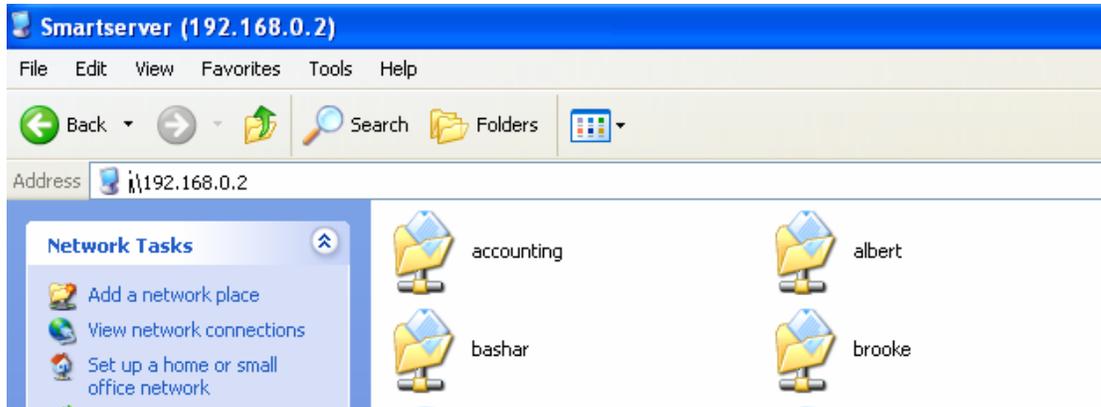
To share your folder in the network, please do the following steps

- 1- Write click on the Films folder that have all the needed movies and films you want to share.
- 2- Select **properties**.
- 3- Got to **sharing** tab.
- 4- Check on the **share this folder on the network**.



Make sure the computers and touch screen can access shared folder each other, For example, the IP address of computer has installed VSC software is 192.168.10.198,

and the IP address of touch screen is 192.168.10.2
in the Touch screen open “my computer”,
type \\192.168.10.2 in the address bar, and then press Enter.



If you can't access the shared files on folder Film then you need to turn on some permission

Permission configuration

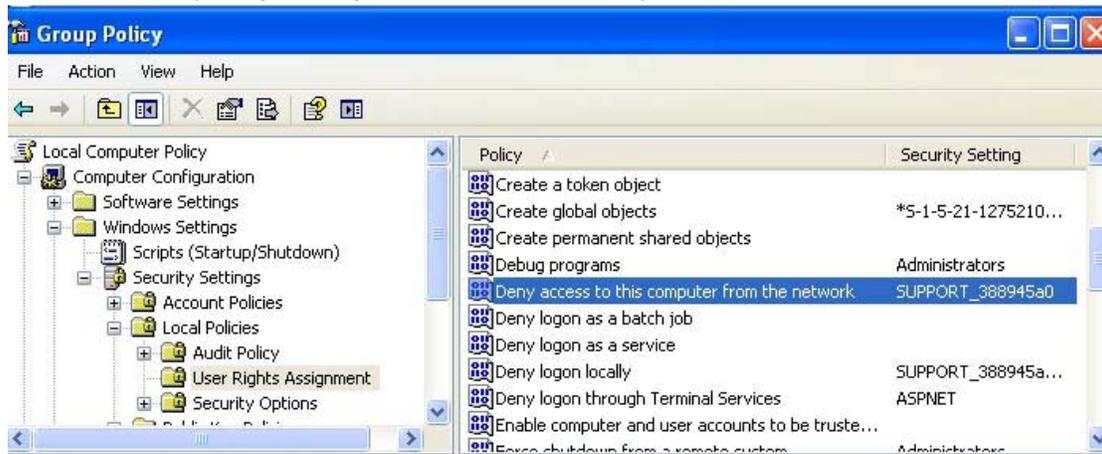
A. Check the guest account

Go to control panel ->user accounts, set the guest account is **ON**

B. Check GPEDIT.MSC

Start menu → run → input “GPEDIT.MSC”, OK → Computer Configuration → Windows settings → Security settings → Local Policies → User Rights assignment

You can find the policy “Deny access to this computer from the network” on the Right.



Click it, and will show the following window:



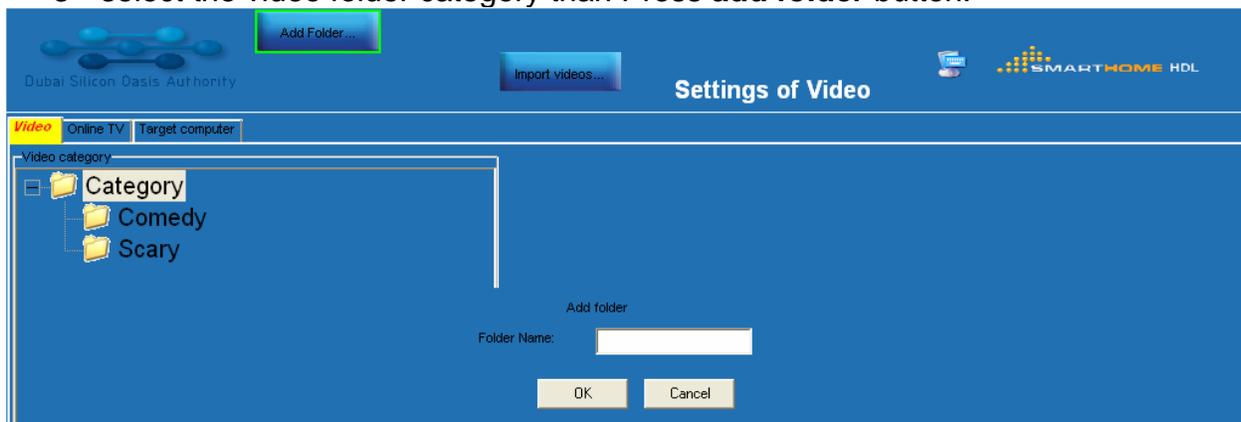
If guest exist in the list, remove it.

9-3 Video Local Configuration

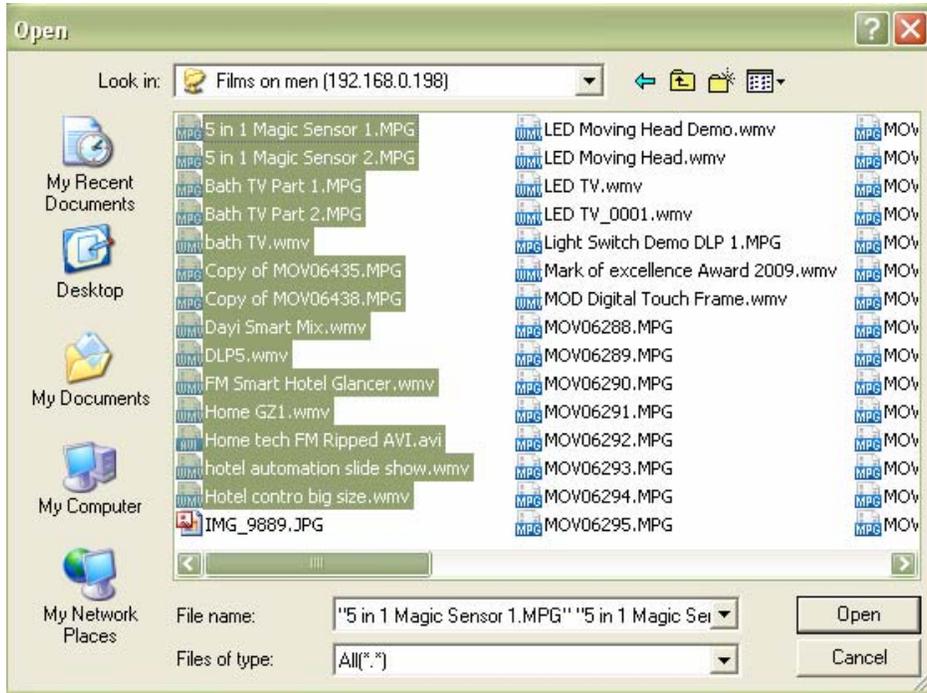
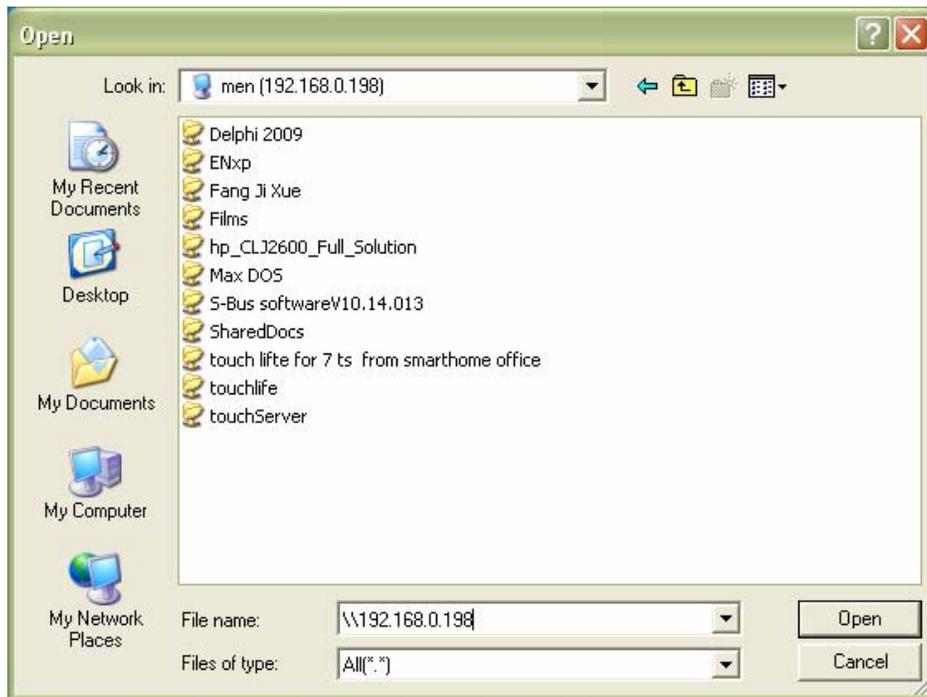
This configuration will be set on the HAC software that installed in the controlling computer or touch screen.

To make this configuration

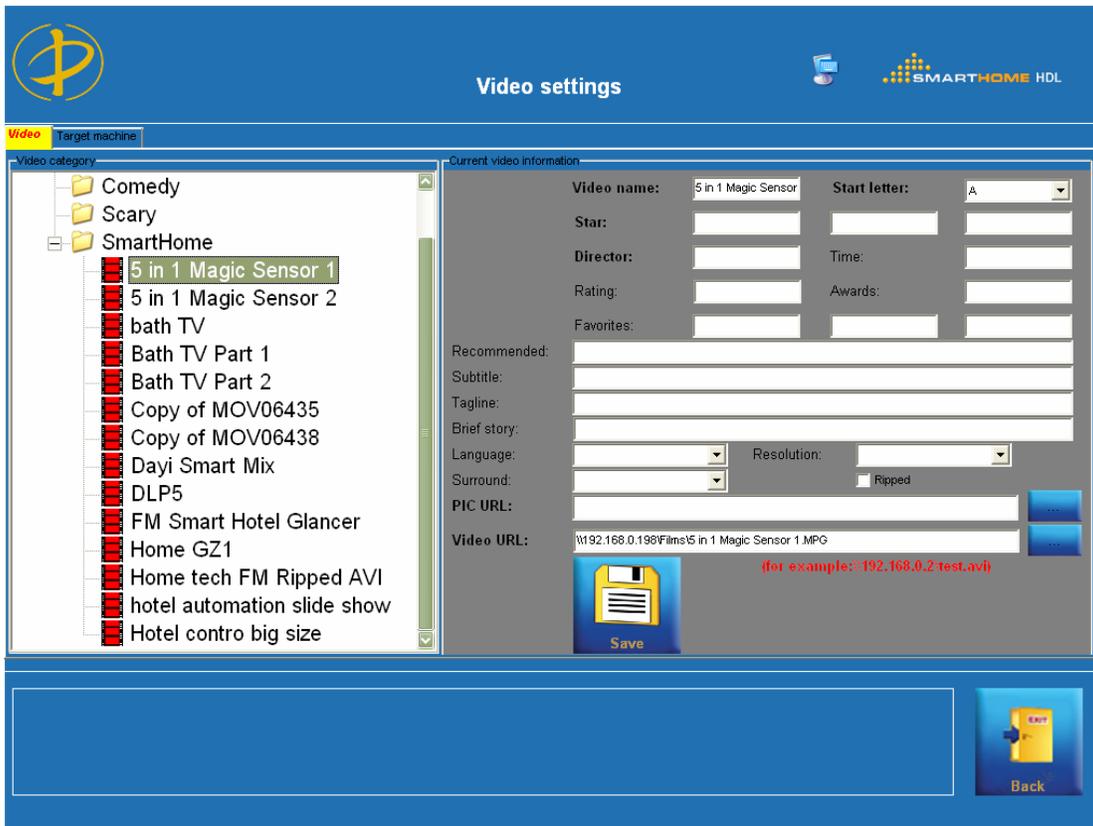
- 1- Run HAC software, then go to **settings** page.
- 2- Press on to **video** button.
- 3- select the video folder category than Press **add folder** button.



- 4- in the **Folder name**, write the folder name for example "romantic" than press **Ok** button
- 5- Add video under "romantic" folder by selecting it than pressing on **Add videos** button
- 6- Select the videos you want to share and control (the files must be in shared folder either in the same computer or in the target computer)

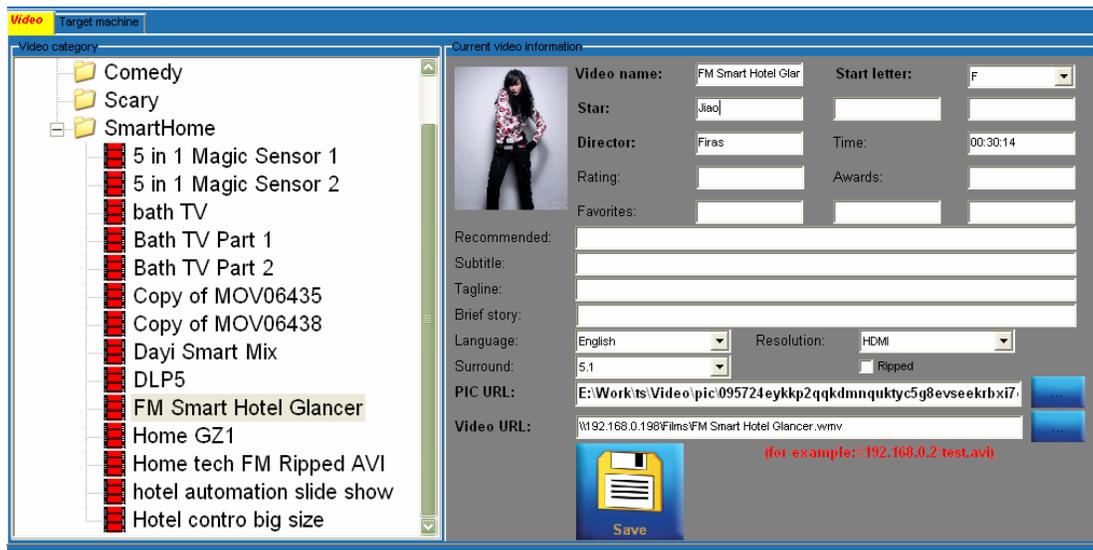


Press the **Open** button; then you will see the videos that you added.



Editing video information

Select the video in left side, you can choose the cover of video, input star , director and so on.



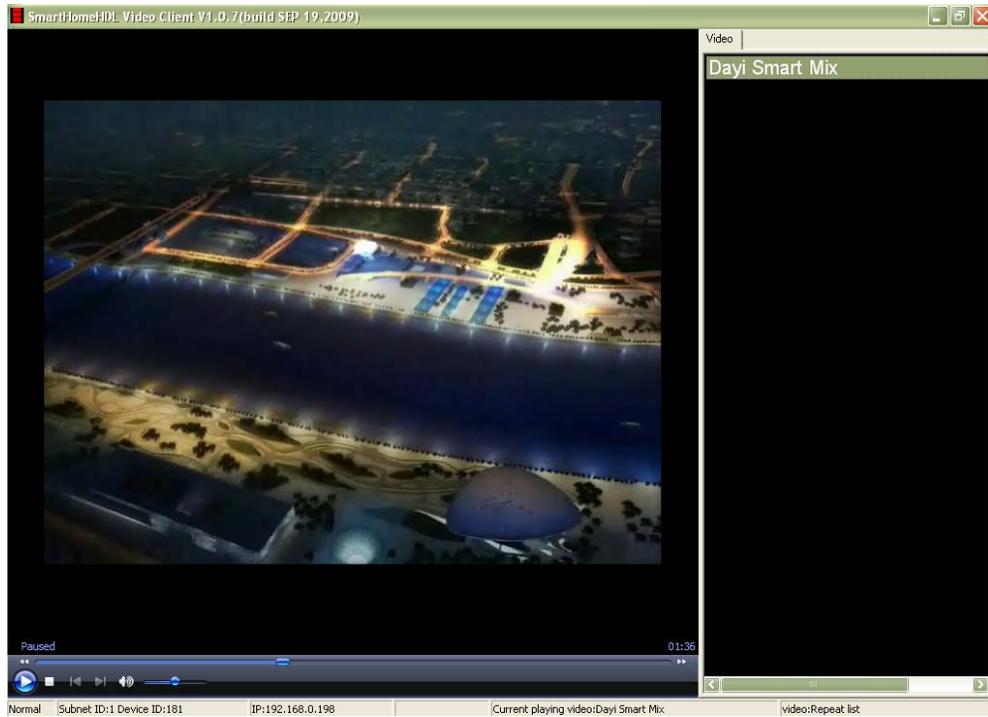
Run your Video

To Send out the video to the destination computer you have to run the Video Streaming Client software before you send out video using HAC software.

Select the **video**, select the **target machine**, Press **Send and Play** button.

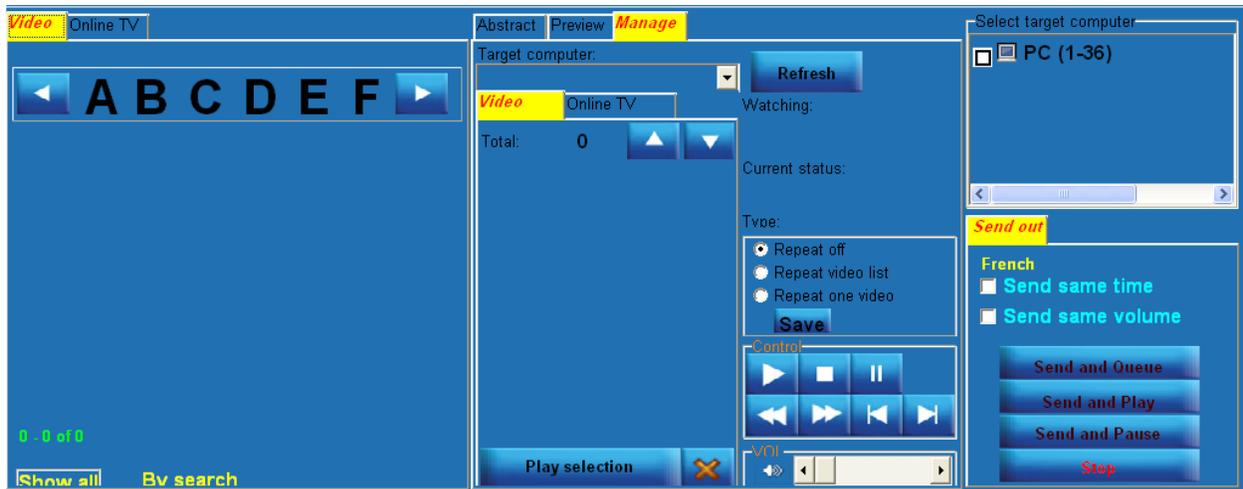


If you successfully sent the video, you will see the VSC is playing the same video as HAC.



Monitoring

in the HAC software, you can monitor what video that now watching in the target machine, also can control the video from the manage tab in the video play page



Sensor Address List

Room	Sensor name	OK remark	Not OK remark	Device	Subnet ID	Device ID	Contact	NC
Kitchen	Motion	No movment	Movement	10in1	1	101	4	---
Kitchen	Window	Closed	Opened	10in1	1	101	1	Yes
Kitchen	Smoke	Secure	Fire	4z input	1	102	1	No
.....

Shade Address List

Room	Subnet ID	Device ID	Command	Control type	Switch no	Statuses
Kitchen	1	101	Open	Universal Switch	50	ON
Kitchen	1	101	Close	Universal Switch	51	ON
Living	1	102	Open	Curtain	1	Open
Living	1	102	Close	Curtain	1	close
Living	1	102	Stop	Curtain	1	Stop
....
....

Music Source and Zone Address List

Room	Command	Subnet ID	Device ID	Control type	Switch no
Kitchen	Source Radio	1	232	Universal switch	1
Kitchen	Source Cd Player	1	232	Universal switch	2
.....
Kitchen	Volume +	1	232	Universal switch	7
Kitchen	Next track	1	232	Universal switch	11

Infrared (TV,DVD....) codes location Address List

Room Kitchen, Subnet (1), Device ID (120)			
Equipment	Command	Switch	Statuses
TV	On/Off	20	ON
TV	Mute	21	ON
....
DVD	On/Off	61	ON
DVD	Play	62	ON
.....

Network IP, Meters, Security, and other items Address List

Device	Subnet ID/name	Device ID	Other
Security Module	1	250	Zone 1
Power meter	1	220
IP Port	1	251	IP 192.168.10.250
Show control	1	222	Switch 1- 10
Refrigerator	1	58	Channel 2
Washing machine	1	58	Channel 3
IP Camera	Kitchen	IP 192.168.10.99
....