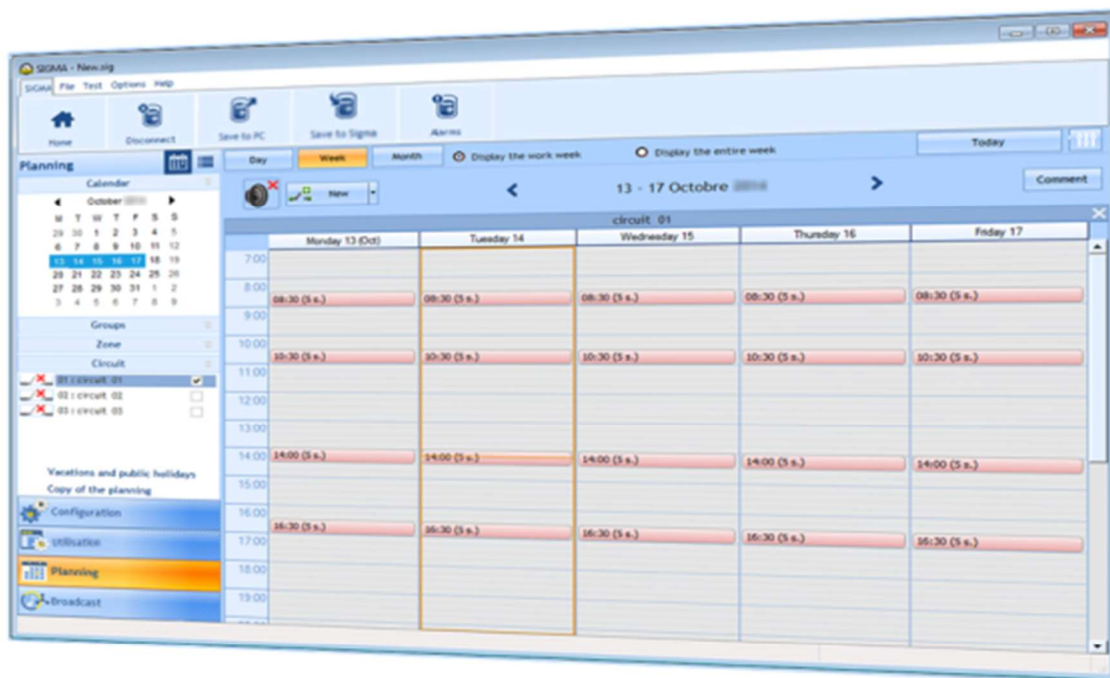




Harmonys

USER MANUAL



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CONTENTS

CONTENTS	2
INTRODUCTION	3
FOREWORD	4
1. INTRODUCTION TO THE SYSTEM.....	4
2. ARCHITECTURE AND CONFIGURATION.....	4
OVERVIEW	5
1. OVERALL OPERATION.....	5
2. STARTING UP THE SOFTWARE.....	5
2.1 Connecting to the Master Clock.....	6
SETUP OF HARMONYS SOUNDERS.....	7
1. IP DEVICES WINDOW.....	7
2. RENAMING OF HARMONYS SOUNDERS.....	7
3. ASSIGNMENT OF ZONES.....	7
4. SETTING THE VOLUME OF EACH HARMONYS SOUNDER.....	8
SETUP OF ZONES AND/OR GROUPS	9
1. SETTING UP ZONES.....	9
2. SETTING UP GROUPS.....	10
SETUP OF SCHEDULE.....	12
1. OVERVIEW OF THE SCHEDULE.....	12
2. SETTING UP THE SCHEDULE.....	13
3. VACATIONS AND HOLIDAYS.....	15
SENDING OF MELODIES TO THE SOUNDERS.....	16
1. SENDING OF MELODIES.....	16
BROADCASTING	18
1. BROADCASTING.....	18
MICROPHONE	19
1. SETTING UP THE MICROPHONE.....	19
2. USING THE MICROPHONE.....	21
IP CONTROL BOX.....	22
1. SETTING UP THE IP CONTROL BOX.....	22

INTRODUCTION

This manual has been designed to optimise the use of Sigma software.

Together, the chapters *Foreword* and *Overview* tell you how Sigma software works.

The chapter proceeding chapters gives a more detailed description of the scope and functions of Sigma software. It provides explanations of screens and procedures and gives examples of some functions. By following these procedures, users will be able to set the system up, simply but effectively, in order to organise the time distribution or plan audio broadcasting.

The chapter *Troubleshooting* will help you maintain your system effectively and solve any problems you might encounter while using the software.



General information

Depending on your installation, you will not necessarily have access to all software options. This will depend on whether or not you have a master clock and what model it is. If there is no master clock, or depending on which model you have, the configuration of your installation will be restricted to the **IP Device** menu only.

This manual describes the software options of the Sigma software. However, depending on your configuration (master clock and other Bodet products), some functions will not be available.

BODET uses MPEG Layer-3 audio encoding technology.

Compatible Windows: Windows Seven (7), Windows 8 and Windows 10.

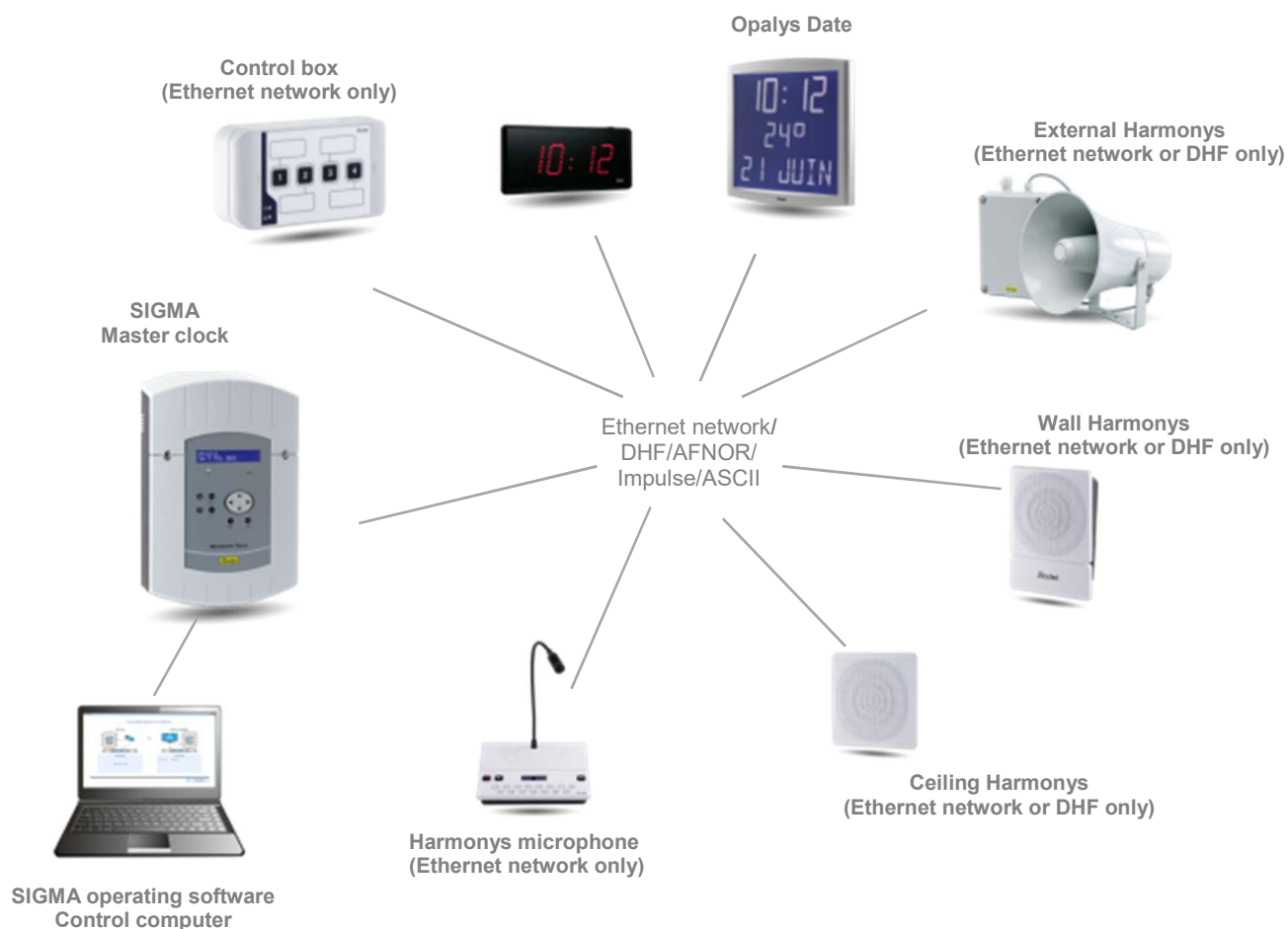
FOREWORD

1. Introduction to the system

With Sigma software, you can:

- configure a Sigma H, Sigma P, Sigma C or Sigma Mod master clock to organise time distribution or plan the broadcasting of bells and melodies using or Harmonys sounders,
- make adjustments to a group of clocks or a bell system on an Ethernet network,
- broadcast to Harmonys sounders sound live, or a playlist launched from the control computer,
- broadcast messages manually from the Control Box to Harmonys sounders.

2. Architecture and configuration



Sigma software is installed on a computer that is dedicated to configuring the devices found on the network.

The PC and master clock communicate with one another over the network.

The master clock and the devices may communicate in either of two ways:

- Over the Ethernet network,
- In wireless time distribution DHF.

OVERVIEW

1. Overall operation

With Sigma software, you can configure a Bodet master clock. It will then manage the time distribution (DHF, Ethernet network, AFNOR, Impulse, ASCII) of the Bodet clock range (Style, Profil, Cristalys, Opalys), plan the audio broadcasting of Bodet sounder systems (Harmonys, Melodys) and manage relays operation.

4 key software functions are available, depending on the master clock model:

Software menus	SIGMA C	SIGMA Mod
Master clock configuration	✓	✓
Operation of IP devices	✓	✓
Planning bells and melodies broadcasting (programming)	IP	IP
Live audio broadcasting from the computer to Harmonys sounders	✓	✓

2. Starting up the software

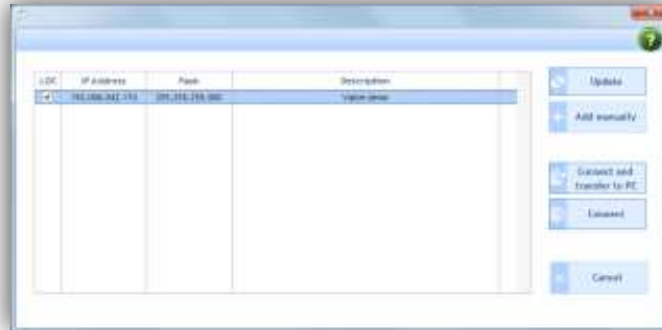
When the software starts up, the welcome screen may be used to:

- Load a backup configuration of a Sigma (C or Mod) from a USB flash drive (depending on age of device),
- Connect to a Sigma (C or Mod) over the Ethernet network.
- Choose the language.



2.1 Connecting to the Master Clock

As the Master Clock is on the local network, the option which will be used is the 'Ethernet Network' option. Once this option has been clicked the software will automatically search the network for the master clock and a window pictured will appear.



To connect to the master clock the tick box next to its name in the list (LOC Column) will need to be ticked. Once this has been ticked, the option 'Connect and transfer to PC' will need to be clicked.

- **Update** may be used to refresh the list of master clocks found on the network.
- **Add manually** may be used to add a master clock manually by typing in its IP address.
- **Connect and transfer to PC** may be used to connect to the selected master clock and transfer the existing configuration which is currently on the master clock to your PC.
- **Connect** may be used to connect the computer to the master clock without downloading its parameters.
- **Cancel** closes the window and may be used to return to the software start up screen.

After the feature 'Connect and transfer to PC' has been selected, the following screen will appear (IP Devices):



This is the IP Devices screen within the configuration part of the Sigma software. You select which part of the software you wish to be in using the 4 options in the bottom left of the screen; Configuration, Utilisation, Planning and Broadcast. Once you have selected which part of the software you need to be in, you use the list on the left hand side of the screen to navigate to different parts of that option in the software. E.g. whilst in Configuration you can navigate to: IP Devices, Option Card, Sounders and Relays etc and each will lead to a different page.

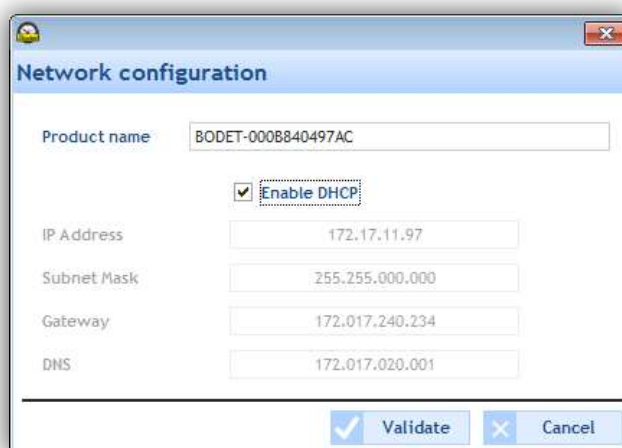
SETUP OF HARMONYS SOUNDERS

1. IP Devices Window

Once the software has started and the default page loads up (IP Devices), the software will automatically scan the network and display a list of Harmonys Sounders it has found. Each sounder will have a name starting with: 'BODET-000884049' (This is a default name given to the sounders by the software and will remain the same unless changed). There are an additional 3 letters at the end of each name which will be different for each sounder. The zone in which each sounder belongs to is also selected from this screen.

2. Renaming of Harmonys Sounders

To change the name of a sounder, simply select a sounder from the list and click the option above the list which states 'Network' and the following window will appear:

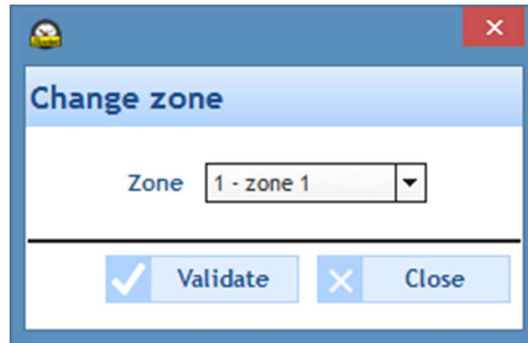
A screenshot of a 'Network configuration' dialog box. The window has a title bar with a yellow icon on the left and a close button on the right. The title 'Network configuration' is in blue. Below the title, there is a 'Product name' field with the text 'BODET-0008840497AC'. Below that is a checkbox labeled 'Enable DHCP' which is checked. Below the checkbox are four text fields: 'IP Address' with '172.17.11.97', 'Subnet Mask' with '255.255.000.000', 'Gateway' with '172.017.240.234', and 'DNS' with '172.017.020.001'. At the bottom right, there are two buttons: 'Validate' with a checkmark icon and 'Cancel' with an 'X' icon.

When this window appears, simply change the field which states 'Product Name'. Once you're happy with the name entered click 'Validate' and the window will close, the list of IP Devices will refresh and will display all of the sounders on the network, along with the one which has just been renamed.

- Sounders can be renamed an unlimited amount of times at the users leisure.

3. Assignment of Zones

At the top of the list of devices you have 9 Column names. The column named 'Zone' states which zone each sounder is in. By default all sounders are assigned to zone 1. To change what zone a sounder is in, you will need to select a sounder in the list and click on the feature which says 'Change Zone'. A window will pop up on the screen with a drop down list. This drop down list will contain all of the zones you can select from (once they have been created). Once the zone has been selected, click 'Validate'.



4. Setting the volume of each Harmonys Sounder

There are two volume levels to be set by the user. One of the volume levels is linked to the melody and is selected when setting up the schedule which is covered in the scheduling section of this manual. Another volume level is on the sounder itself. To access this setting you will need to select a sounder in the list and select the feature 'Web Browser Access'. This will load a page in your PC's web browser. When this loads select 'Parameters' in the left pane and the following screen will load:

Select the drop down list which states 'Volume'. We recommend that you put this to the maximum level of 8 but this can be changed at the user's leisure.

Bodet

Speaker Setting Embedded Web Server

Parameters

Home
Network Configuration
Parameters
System

M-CAST Address: 229.192.55.1

Volume: Level 8 (high)

N° zone: 1 (1 to 100)

Save

☐ Client repeater

☐ Server repeater

Repeater Address: 0.0.0.0

Save and Reboot

SETUP OF ZONES AND/OR GROUPS

1. Setting up Zones

Zones are a way of making it easier to manage a group of sounders within the same area of a building E.g. if you had three sounders within a dining hall, you could create a zone called 'Dining Hall' and assign all three sounders to this zone, so instead of managing each sounder in the dining hall individually, you can manage the zone instead. To create zones within the Sigma software, you will need to navigate to the 'Sounders and Relays' page of the Configuration part of the software and you will see the following screen and will be interacting with the feature which is highlighted in red:

Sigma

Sounders and relays

Main card circuits

Circuit 1 and 2: CHART

Circuit 3: CHART

Solstices

Settings: Setting solstices applies only when setting "Astronomical" event types.

Choice of the environment

IP environment

Multicast address

Harmonys and IP relays

Zone	Group	Relay
Name and location		

Add

Remove

Refresh

Underneath the title 'Harmonys and IP relays' you have 3 tabs labelled Zone, Group, and Relay. To create a zone you will need to have the Zone tab selected. Once you have the tab selected you will simply need to click the button 'Add' located next to the table displayed, you will see the following screen when creating a zone:



Select the zone you want to create from the drop down list and then give the zone an appropriate name and click 'Validate'. Repeat this process for all other zones.

Please refer back to Page 7 for information on how to assign different sounders to different zones.

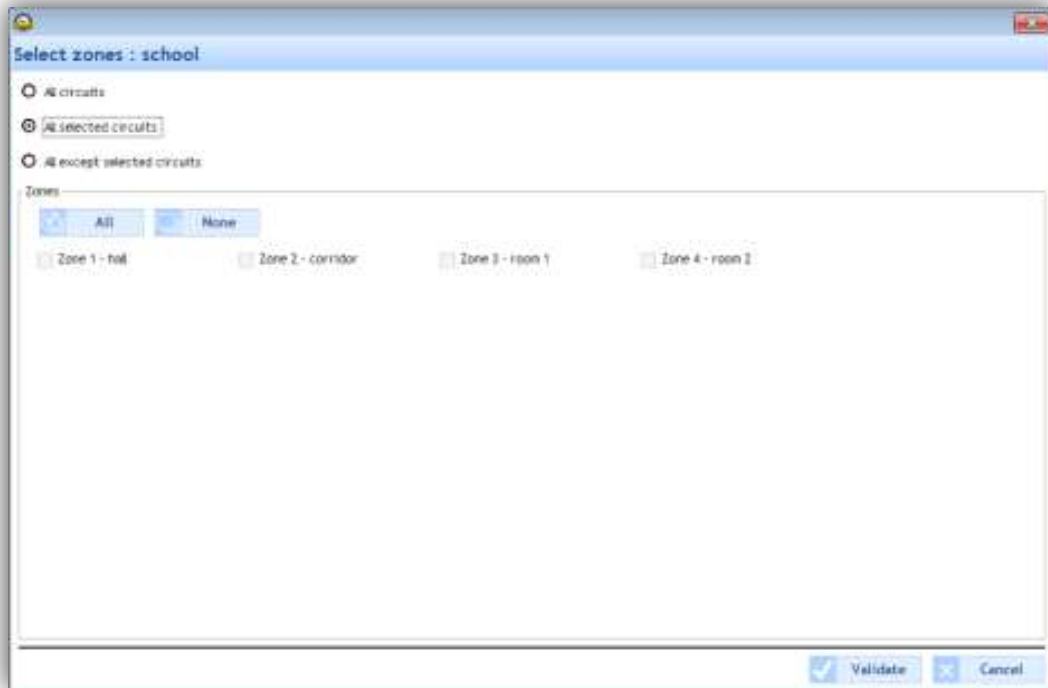
2. Setting up Groups

A group is a group of zones. Each sounder can only be a part of one zone but they can be a part of several groups. E.g. if there is a bell to be sounded at the same time on every sounder in the building, rather than managing this by each zone, you can create a Group which will include all zones. When a sound is scheduled to play for this group, it will play to all zones included in the group. To create a group you will need to navigate to the 'Group' tab and select 'Add'. You will see the following screen:



In this screen, select the group from the dropdown list you wish to create, enter a suitable name for the group and finish by clicking 'Validate'. This group will now show in the table.

You will now need to select which zones are included in this group. To perform this action, you will need to click on the group in the list and then click on 'Select Zones' which will bring the following screen up:

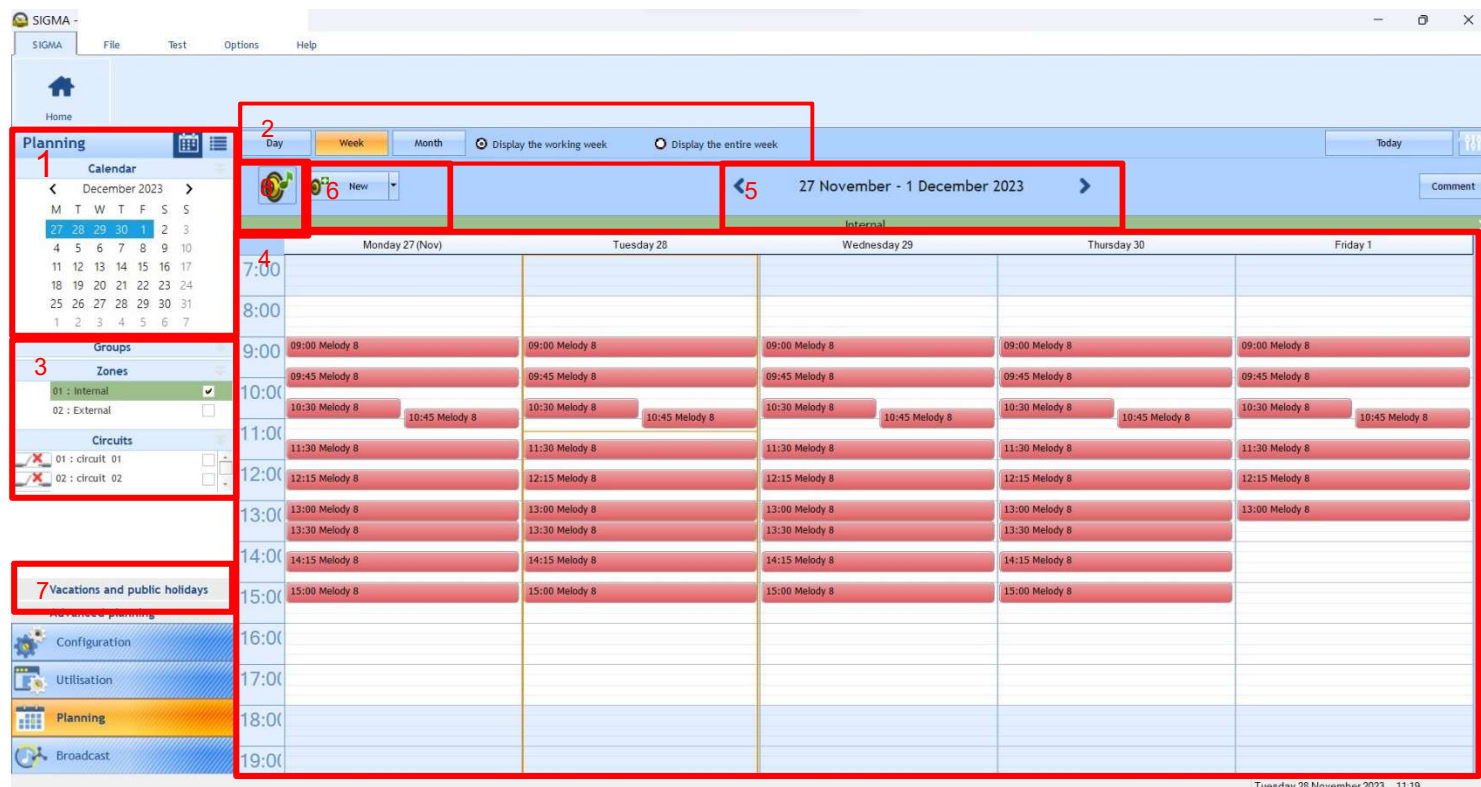


From this screen you can select: 'All Circuits' which will tell the group to include **All Zones** that have been created within the software. Or you can select 'All Selected Circuits' which will then display all zones which have been created in the software and you will need to tick which zones you wish to be controlled by that group. Finally you can select 'All Except Selected Circuits' which will tick all zones created in the software and you will need to un-tick each zone which you **do not** want included in the group.

SETUP OF SCHEDULE

1. Overview of the Schedule

The schedule is where you will configure the times and days each zone/group will play a melody. You will also choose what melody is play and what volume the melody will play too. To begin with you will need to go to the 'Planning' part of the software using the buttons in the bottom left of the software. Please refer to the image below:



1. This is the calendar. From here you can select dates throughout the year.
2. These are 3 options on how you wish to view the schedule. By selecting 'Day' you will see the schedule one day at a time. By selecting 'Week' you will see the schedule week by week and by selecting 'Month' you will see the schedule month by month.
3. These are drop down menus which contain the zones, groups and circuits which have been created.
4. This is the schedule and this is where you will see and create each instance a sounder will play a melody.
5. This displays the day, week or month you're currently viewing. Using the arrows will either navigate you to the next day, week or month or navigate you to the previous day, week or month.
6. This is used to create a new instance of when the selected sounders will play.
7. This is used to add holiday dates which you do not wish for the sounders to play throughout the year.
8. This is used to turn the planned schedule on and off. When icon is displayed



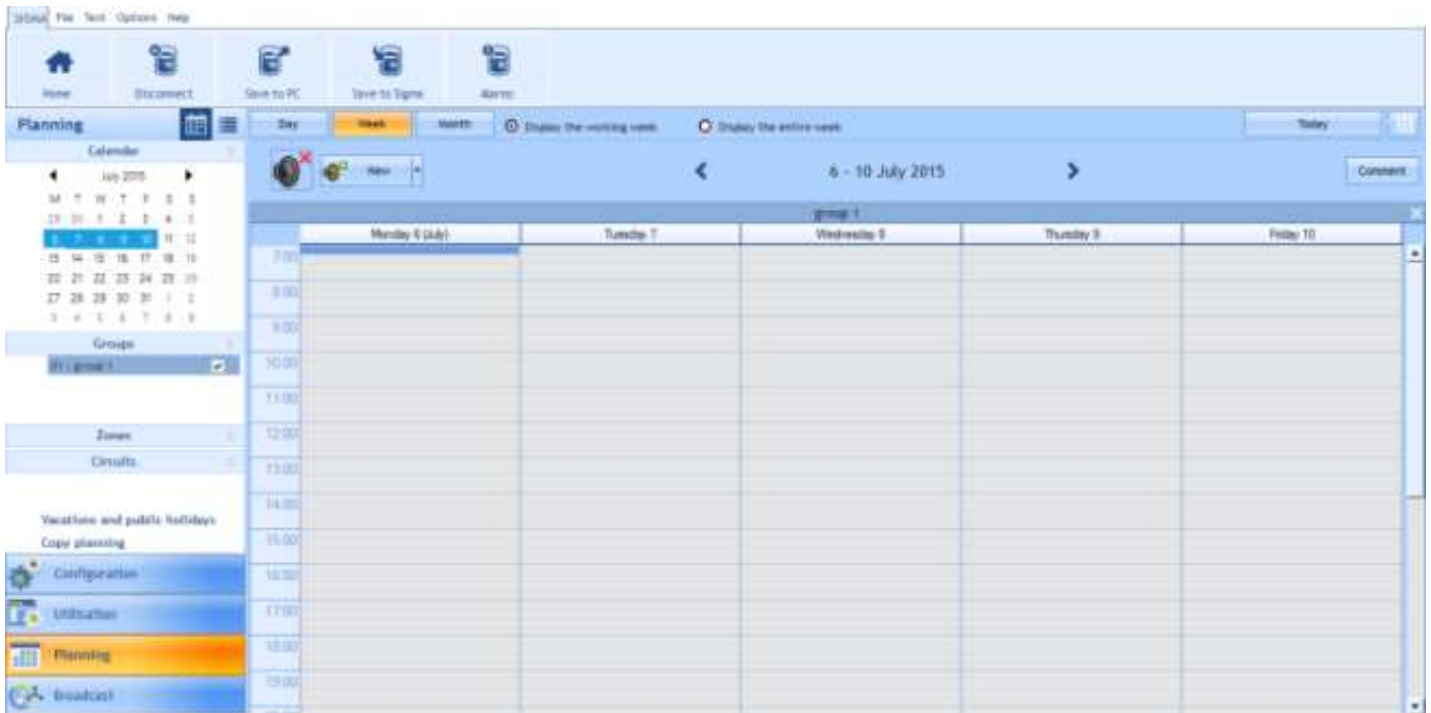
as, this means schedule is on. When icon is displayed as,



this means schedule is off.

2. Setting up the schedule

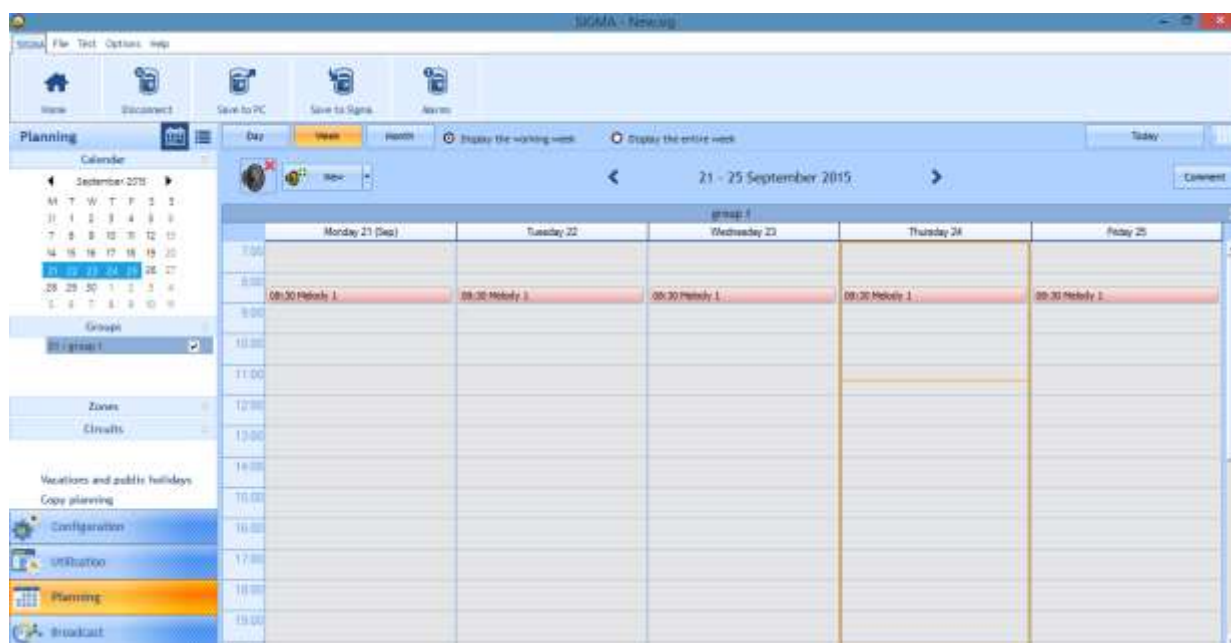
By default when you navigate to the planning part of the software it will open the schedule of a circuit. This schedule currently has 01:Circuit 01 ticked and that is the schedule which you can see on the screen. You will first of all need to un-tick this circuit on the left hand side of the screen and then click on groups and tick the group which has all of the zones you created included in it (just to be used for this example). You should now see the following screen:



As the group including all zones within the software has been selected for this example, you should schedule in a time ALL bells are required to sound e.g. all bells may need to sound in the morning to initiate the start of the day. Click on the feature used to create a new instance and the following screen will appear:



Within this screen you will need to select No. Which you wish to play (You can use the icon with the green play symbol to preview the melody). You will then need to state how many times you wish for that melody to repeat, if you only wish for the melody to place once leave it at 'x 1'. Then you will need to state the volume of the melody. 8 is the maximum it can be set to. You have now stated what melody will be played, how many times and the volume of the melody. You will now need to proceed on to when it will be played. To do this, you will need to type in the time which you wish for it to be played e.g. 8:30. You will now select which days this instance will play on and you will select the type as 'Weekly' so that this instance will sound at the same time, on the same days, each week. Your schedule should now look something like this:



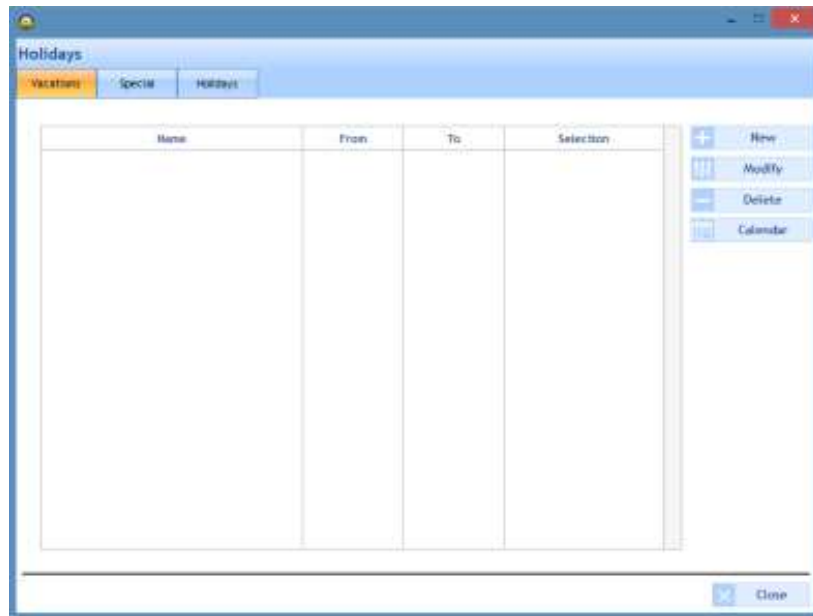
As you can see, the instance is playing at 8:30, everyday of the week and this will repeat for every week of the year. This is how you add an instance. You can now go ahead and add any instances to this group. You can also repeat the same process for individual zones by using the selection on the left hand pane like you used to select the group.

	Monday 21 (Sep)	Tuesday 22	Wednesday 23	Thursday 24	Friday 25
7:00					
8:00	08:30 Melody 1	08:30 Melody 1	08:30 Melody 1	08:30 Melody 1	08:30 Melody 1
9:00					
10:00					
11:00					
12:00					
13:00					
14:00					
15:00					
16:00					
17:00					
18:00					
19:00					

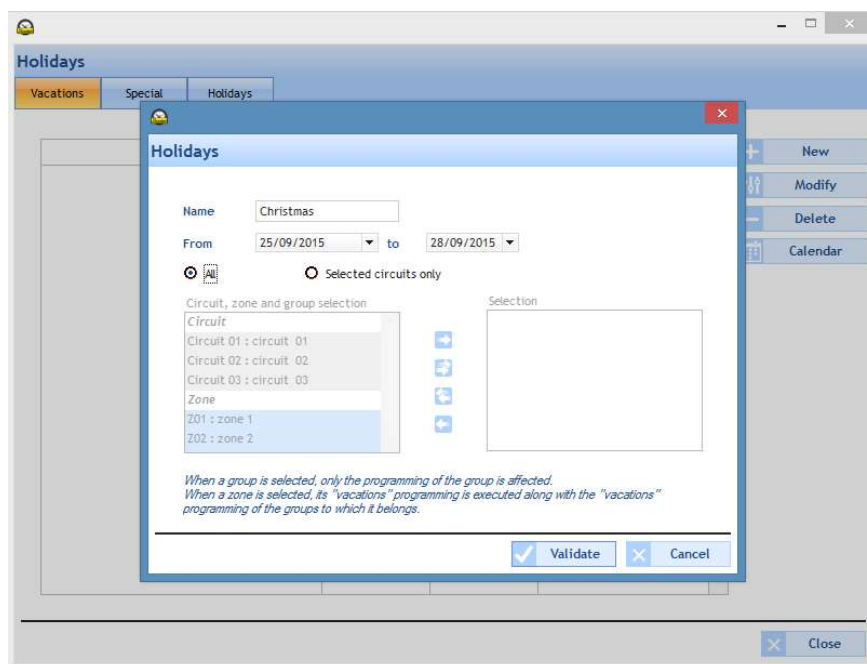
Please note: When you come to setting up the schedule for individual zones, you will see there is already an instance in the schedule and it will contain the symbol of two people at the beginning of the instance. When you see this symbol it means that this instance has been added to the zone you have selected via an instance which has been made within a group which the zone belongs to. Remember to use the 'Save to Sigma' feature to upload the schedule to the master clock to allow it to come into effect.

3. Vacations and Holidays

Throughout the year there may be times when you do not want the sounders to play at all e.g. School holidays. You can input the dates you do not wish for the sounders to play within the software and this will stop the schedule for those selected dates. You can select groups and/or zones which you do not want to play To do this you will need to click on the vacations and public holidays feature on the left hand pane and the following screen will appear:



Now you're in this screen, click on 'New'. This will open a new window. In this window you will give the holiday period a name, a start and end date and you will select the groups and zones which the holiday will apply to. Please note: the start date of the holiday is when the sounders will stop playing e.g. if you start a holiday on 25/12, the sounders will not play on 25/12 and will start playing again on the end date of the holiday. Please see the following example:

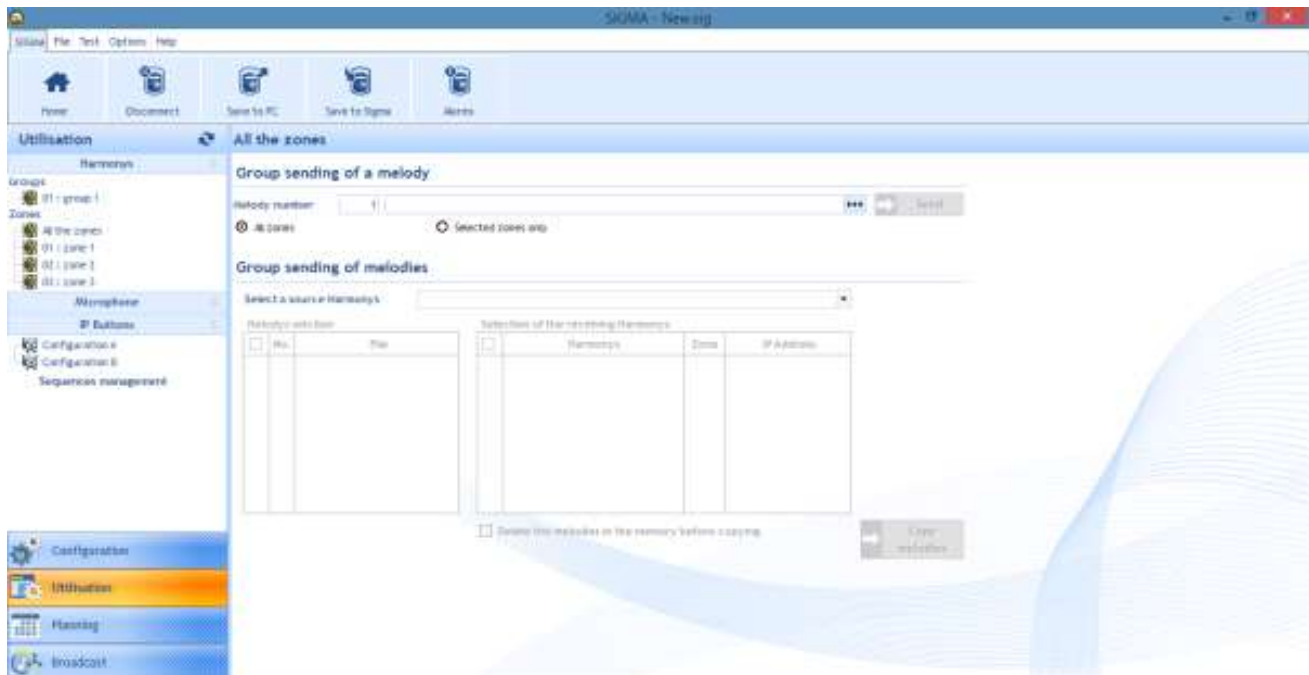


SENDING OF MELODIES TO THE SOUNDERS

1. Sending of Melodies

This feature allows you to send an MP3 file of your own to each sounder, which will then allow the sounder to play it when an instance is created with that melody number. This means you can go online, download any sound which you would like the sounders to play and then upload it to the sounders and use this sound when creating an instance. Please note: the file has to be an MP3, other formats will not work.

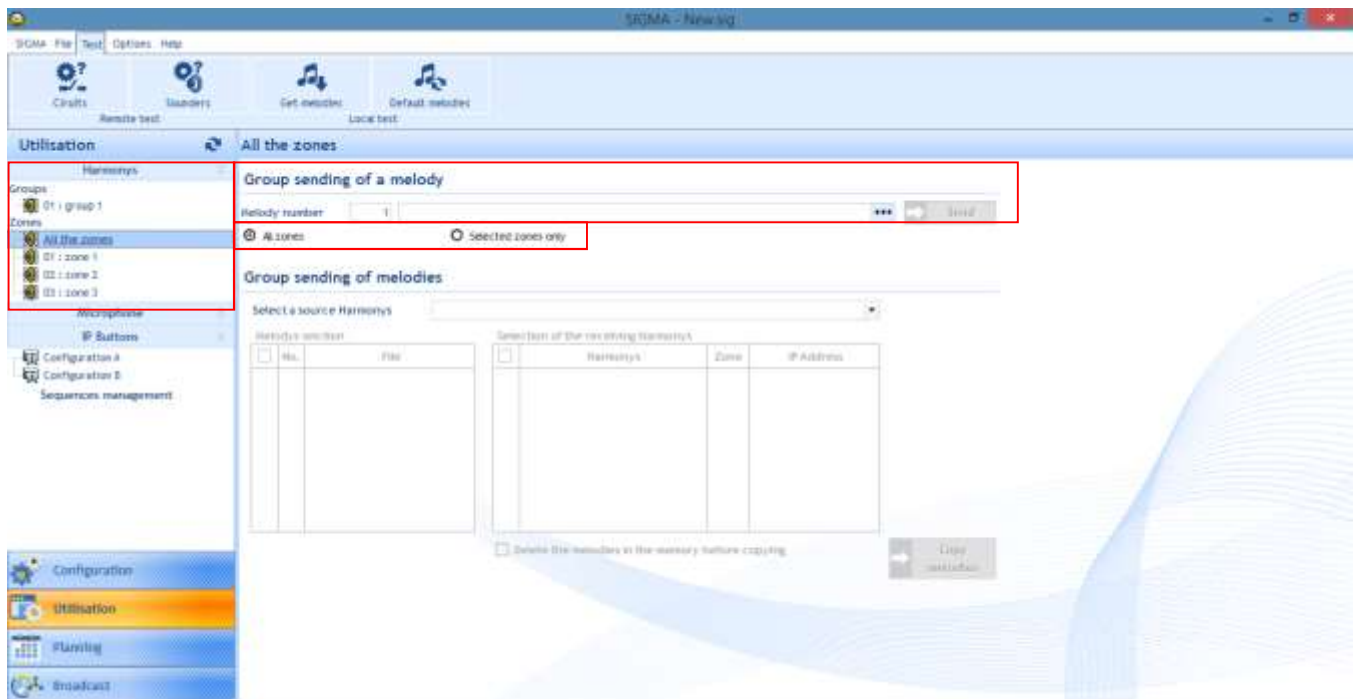
To start this process, you will need to go to the Utilisation part of the software and the following screen will appear:



First of all, you will need to select which sounders you wish to send the melody to. To do this, locate your mouse to the pane on the left hand side of the screen. Under 'Harmonys' you will see your Groups, Zones and each sounder within their designated zones. This means, you can send a melody to a group you have created which will include several zones, all zones together or an individual sounder, this is so that you can have different melodies on different sounders, although we recommend that you keep the melodies on all sounders the same to save confusion in the future.



To send a melody to ALL sounders, select 'All the zones' from the Harmonys list within the pane on the left hand side of the screen.



Now locate back to the centre of the screen where it states 'Group sending of a melody'. As you will see there are two options which you can tick: 'All zones' or 'Selected zones only', in this case you will leave the option 'All zones' selected. Now you will need to select a melody number which you are going to replace, by default there are 16 different melodies on each sounder, to save memory on each sounder, find a melody you do not wish to keep and insert the number of it here and that melody number will be the number of the new melody when creating new instances within the schedule. Then you will need to browse and select the melody you wish to upload. To do this you will need to click on the three dots located next to the 'Send' button. This will bring up windows explorer where you will find and select the file you wish to upload. Finally click on send and the software will confirm when the melody has been uploaded.

BROADCASTING

1. Broadcasting

The broadcasting part of the software allows you to play any music/video which your computer is playing to the sounders. This can be music from live radio from a website, a video from YouTube, music from any application/website etc.

To broadcast this to the sounders, you will need to locate to the broadcast section of the software and the following screen will appear:



From here, you will need to select which zone(s) / group(s) which you wish to broadcast to. Once you have made your selection, you will need to click on the play icon in the centre of the screen. Lastly, locate to a music file on your PC or a media player on the internet (YouTube, Radio etc) and play it on your computer. The sound will now start to play through the zone(s) / group(s) which you have selected. You can stop the broadcast by using the stop button in the centre of the screen.



MICROPHONE

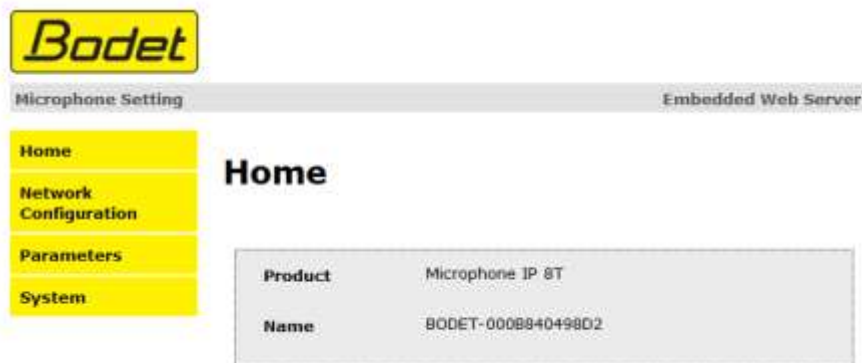
1. Setting up the Microphone

The Microphone can be used to broadcast a live message to the desired Zones/Groups which have been created in the software. Messages can also be pre-recorded with the Microphone before being broadcasted. The Microphone has eight or fifteen buttons depending on which one has been purchased. Each button can be assigned to a specific Zone/Group.

Firstly you will need to locate to the configuration part of the software. Once in here, you then need to go to the sounders and relays section. Then you will need to use the tabs at the top of the list of devices and click on the one which states 'Microphone'. Once in here, you will see the microphone within the list similar to this:



Firstly, you will need to set the language on the small digital screen of the microphone. To do this, you will need to click on the microphone which has appeared in the list and select the option 'Web browser access' and the following screen will appear:



You will now need to locate to the 'Parameters' page which can be selected from the pane on the left hand side of page and within this page, you will see a drop down list which is labelled 'Language', within this list, select 'English' and finally click 'Save and Reboot'.

Bodet

Microphone Setting Embedded Web Server

Home
Network Configuration
Parameters
System

Parameters

Multicast Address: 239.192.55.1

Priority: Normal

Speaker volume: Level 3

Microphone gain: Normal

User language: English

Save

Now you will need to assign a Zone or Group to each button on the Microphone. To do this, you will need to go back to the Sounders and Relays section within the Configuration part of the software. Now you will need to select the Microphone in the list and select the button which states 'Assign Keys'. This will bring up the following screen:

Keys assignment

1 2.1 - hall
None
Zone
2.1 - hall
2.2 - corridor
2.3 - room 1
2.4 - room 2
Group
G.1 - school

2 None

3 None

4 2.4 - room 2

5 None

6 None

7 None

8 None

9 All

10 None

11 None

12 None

13 None

14 None

15 None

Validate Cancel

This screen is displaying the fifteen buttons which you have on your microphone and each one has a drop down list. Simply click on the drop down list associated to one of the buttons and the list will display all of the Zones and Groups which you have created in the software. Then you will need to select which Zone or Group you would like that button to associate to and then click 'Validate'. Once you have saved the configuration to the master clock (Save to Sigma), that number button will be associated with the Group or Zone you designated it to.

2. Using the microphone

Now the microphone has been configured it is now ready to be used to broadcast a live message to selected zones/groups.

To start you will need to select the zone(s)/group(s) which you wish to broadcast the message to. To do this you will need to remember what zone/group you have assigned to which button and tap it, the small digital screen will confirm which zone/group you have selected (more than one zone/group can be selected at one time).

Now the zones/groups have been selected, if you wish to speak through the microphone, you will need to hold down the speaker symbol on the microphone and wait for it to finish playing the tone to state there is a broadcast. Once this tone has finished, you can freely speak into the microphone and this will be instantly broadcasted to all sounders which have been selected. To end the broadcast, simply release the speaker button.

If you wish to broadcast a pre-recorded message, you will need to make sure no zones/groups are selected first of all. Now you will need to hold down the record button on the microphone. The small digital screen will start a three second countdown. Once the countdown has finished you will need to speak into the microphone with the record button held down. To stop recording, simply release the record button. The message can be played back at anytime using the play button. To broadcast this message to the sounders, you will again need to select which zones/groups you wish to broadcast too. Once these have been selected, simply hold down the speaker button again, once the starting tone finishes, simply click on the play button and the pre-recorded message will start to broadcast.

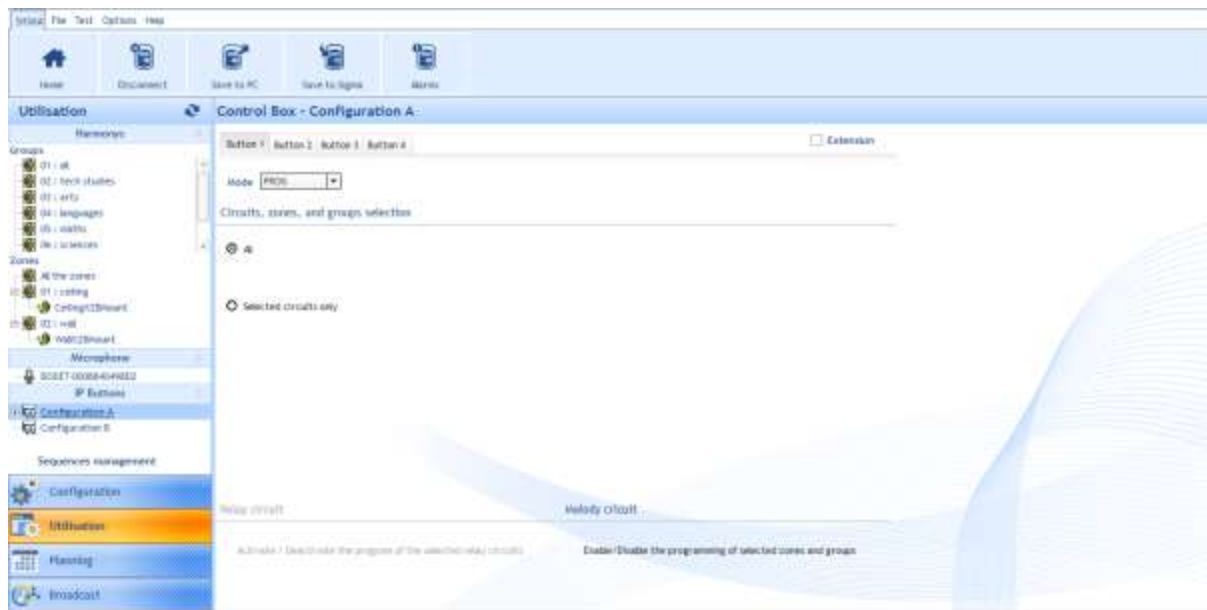
Please note: when speaking through the microphone or playing a pre-recorded message, the speaker button needs to be held down at all times. Once the speaker button is released, the broadcast is terminated.

IP CONTROL BOX

1. Setting up the IP Control Box

The control box is used to play melodies, pre-recorded messages and activate/deactivate certain zones/groups with the touch of a button.

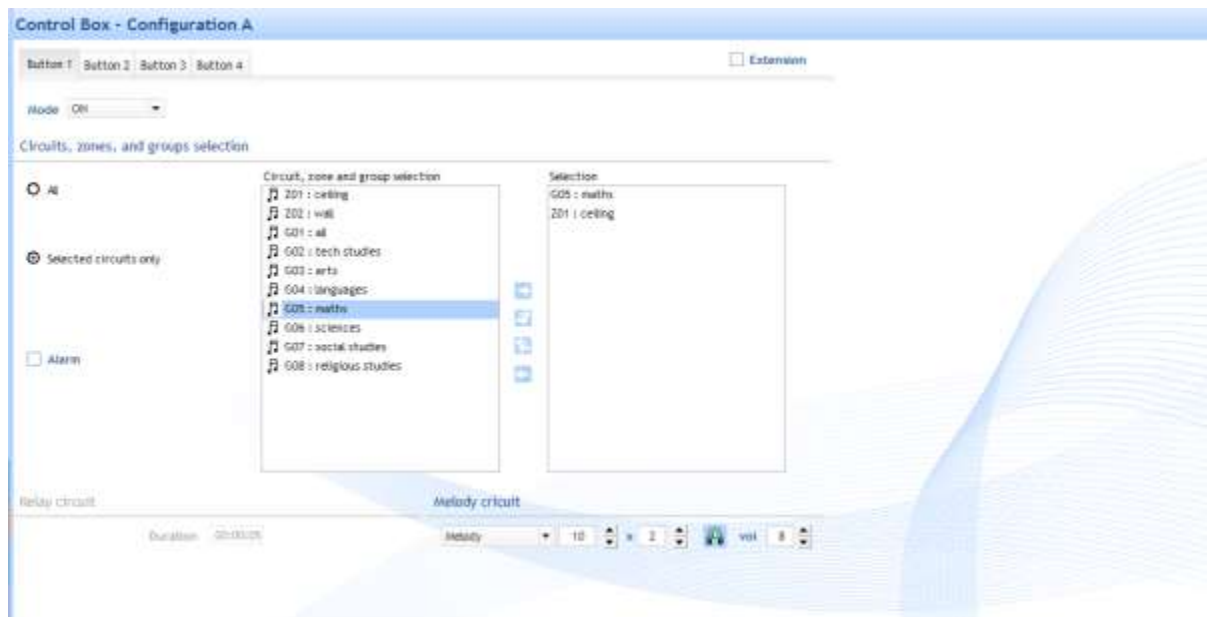
To start, you will need to go to the 'Utilisation' section of the software again. Once here, on the left hand pane of the screen you will see a section which says 'IP Buttons' and you will have two options: configuration A and configuration B. There are two configurations as the software allows you to have two configurations configured at once but only one can be assigned to the control box at a single time. Please use configuration A for this example. Once you have completed these steps, you will see the following screen:



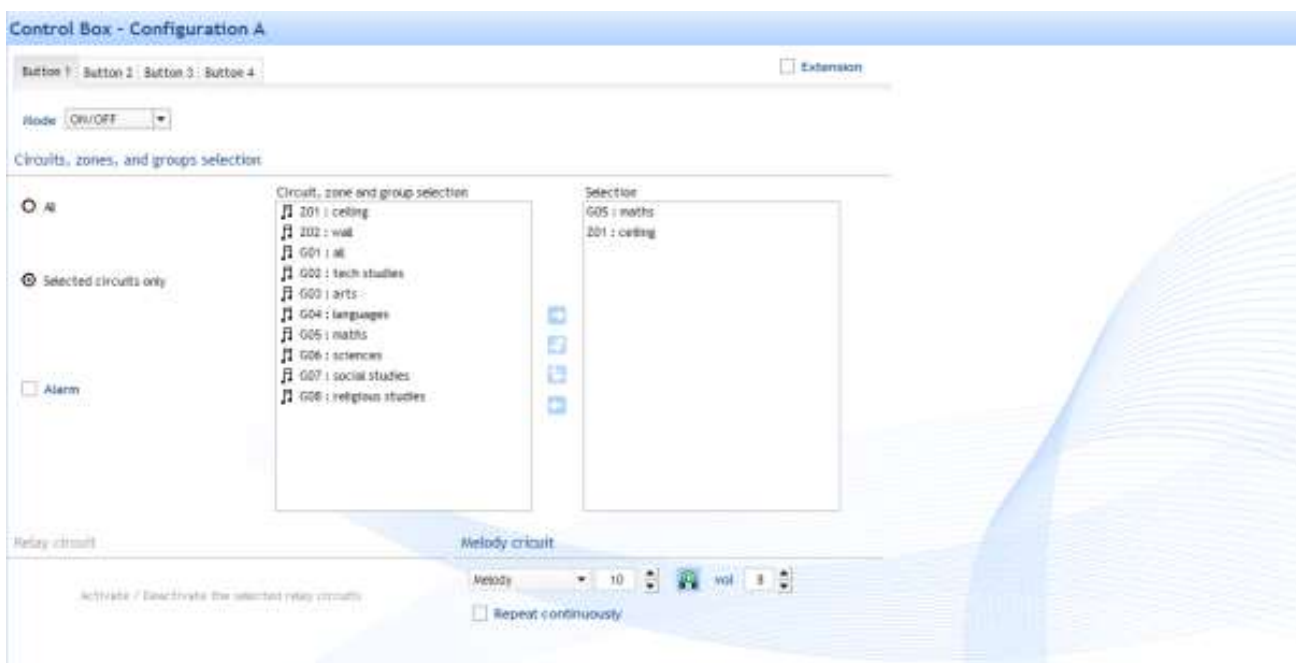
As you can see, you have 4 tabs which allow you to navigate between buttons 1 – 4. Then you will need to select the mode of that button, there are 4 different modes which you can select from. PROG is a mode which will activate/deactivate selected zones, select this in the drop down menu and then pick whether you want it to apply to all zones/groups or a selected amount of zones/groups below.



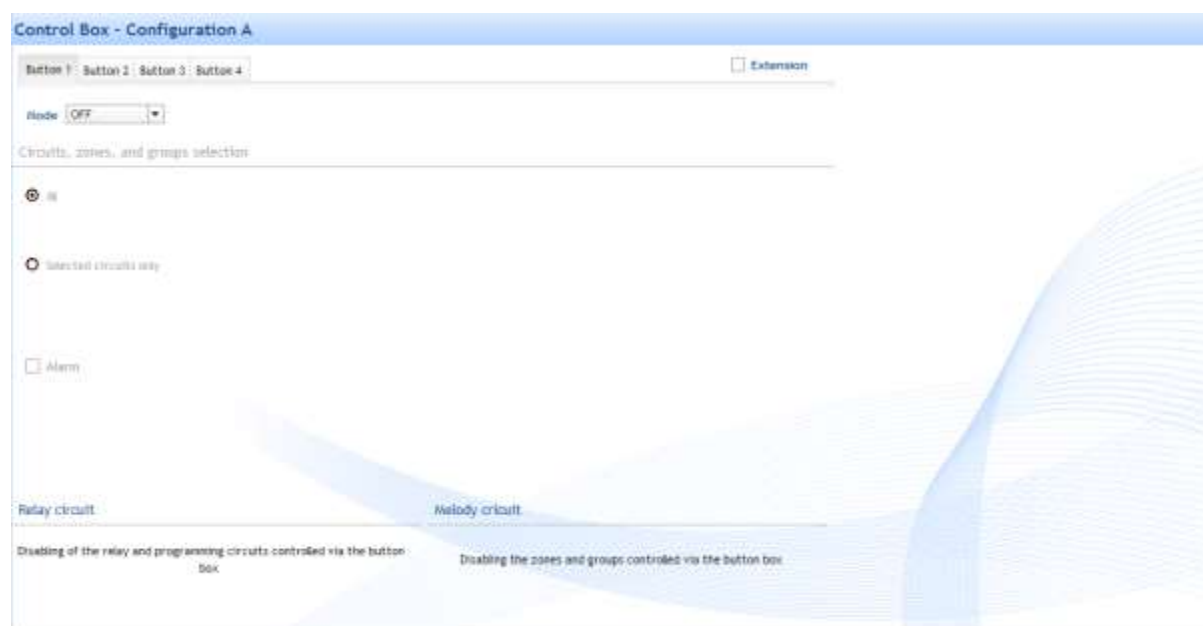
Another mode which can be used is ON. This mode will play a melody or pre-recorded message when the button is clicked. To configure this, you will need to select this mode, select which zones/groups it will apply to and last select which number melody you wish to play, how many times you wish it to repeat and what volume the melody will be played at.



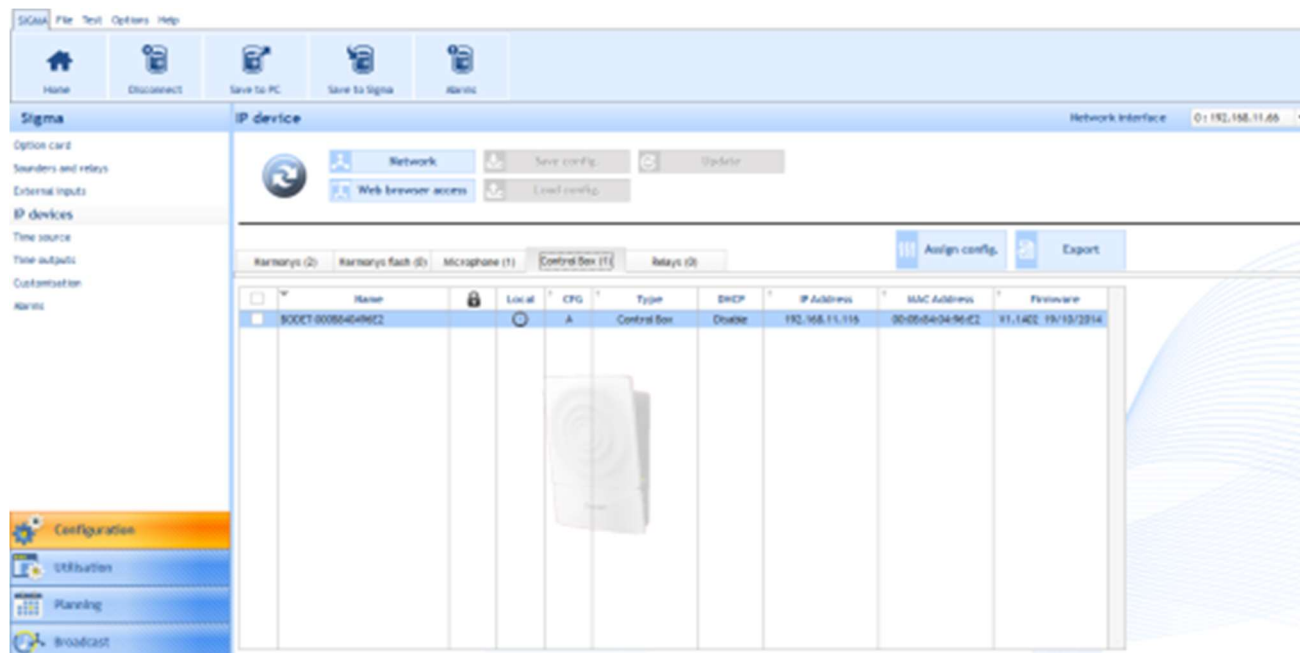
A third mode which can be used on the buttons is ON/OFF. This mode allows you to play a melody/pre-recorded message but have to ability to turn it off during the broadcast. E.g. if you play the melody/message and half way through decide you want to stop it, you will simply press the button again and the broadcast will stop. You will need to select this mode in the drop down list, select which zones/groups you wish to apply it to and lastly select which melody you wish play, how many times and what volume you wish it to come out at.



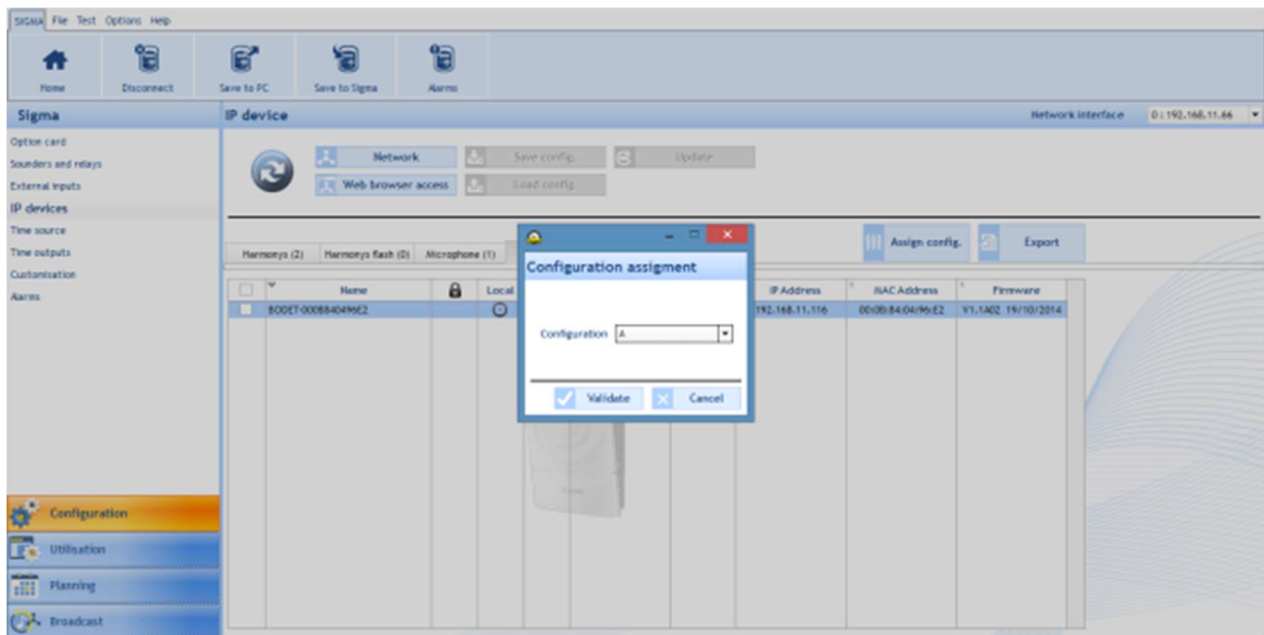
The last option which can be used is OFF. This option is used to turn the button off. This means that when the button is pressed, nothing will happen, the button will be inactive. To do this, simply select OFF in the drop down list.



Now the configuration for the control box has been setup we need to assign that configuration to the control box. To do this you will need to navigate back to the 'Configuration' section of the software again. Go to IP devices and using the tabs you will need to navigate to the control box. You will see the following screen:



To assign the configuration, you will need to select the control box in the list, click on the button which says 'Assign config.' And a drop down will appear. You will select Configuration A and then click validate. Once this has been done, you will need to use the 'Save to Sigma' feature again and the control box is now configured.



Please note: to assign a pre-recorded message to the control box, you will need to go to the section of the manual which explains group sending of a melody. The message will need to be recorded on your PC and saved as an MP3 file. Once you have this MP3 file, you will need to send it to all sounders and give it a melody number. Once this has been done, refer back to these steps.