Comfort, the Intelligent Home System

Programming with Comfigurator 3.9

Comfort Documentation and Resources

Comfort Installation and Programming manuals are organized into several manuals for easy reference. All documentation and manuals as well as software can be downloaded from the Cytech Website at http://www.cytech.biz/downloads.html

Manuals include;

Installation Manual

Specifications and Ordering Information, Installation and Wiring, Testing and Commissioning, Troubleshooting, Frequently Asked Questions

UCM Manuals

- UCM Manual
- UCM/GSM Manual
- UCM/CBUS Manual
- UCM/KNX Manual
- UCM/Zwave Manual
- UCM/Universal Manual
- UCM/Velbus Manual
- UCM/Dupline Manual
- UCM/Heatmiser Manual

Programming with Comfigurator 3.9

This manual shows how to program Comfort using Comfigurator 3.9.x. This covers programming concepts, tools and techniques. It is essential for anyone learning to program Comfort.

Engineer Menu Programming

How to program Comfort using the telephone or Keypad by means of Comfort's Engineer Menu.

Action Codes Reference

A Complete list of Actions and how they are used. Action codes are commands for Comfort. These are assembled into Responses (sometimes called "Macros") to produce multiple operations. Master these and you can make your Comfort system do what no other system can. Action Codes can be specified in Comfigurator's Response Wizard. Action Codes can be downloaded by going to Help > Action Code Reference, which will link to the Cytech Website http://www.cytech.biz/action_codes_reference.html

Training Materials

Download training materials like presentations, tutorials, exercises etc. from the Comfort website at http://www.cytech.biz/training.html

These are updated from time to time.

2 Ways to Program Comfort

Comfort can be programmed in one of the following ways;

1 Comfigurator 3 Software (Windows). This can be downloaded from http://www.cytech.biz/software.html. Always use the latest released version. The software requires Universal Communications Module (UCM) with USB (UCM/USB) or Ethernet (UCM/Ethernet), or the KT03 which has a built-in USB Port see http://www.cytech.biz/pc_interfaces.html

2 Programming in Engineer Menu by Keypad, Local or Remote Telephone. Keypad and telephone programming is convenient when small changes have to be made. Remote telephone programming can be done without having to be on site. Refer to Engineer Menu Programming for Instructions.

This manual will show how to program Comfort using the Comfigurator software tool. To learn about programming via Engineer Menu, refer to the “Engineer Menu Programming” Manual.

Comfigurator 3 Features

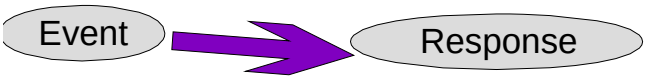
1 Program Comfort’s operation, save as cclx file. Auto back-up file before every Write operation to Comfort.
2 Write configuration to Comfort and Read from Comfort.
3 Select Connections as USB, Ethernet or RS232.
4 Upgrade Firmware in Comfort and other modules (KP06, KT03, UCM, SEM)
5 Upgrade Vocabulary in Comfort.
6 Save and Load Scenarios.
7 Scan (detect) modules and firmware versions.
8 Supports programming of external UCMs (C-Bus, KNX, Z-Wave, Velbus, Universal etc), KT03 and KP06.
9 Track references to Responses, Timers, Counters and other elements. Grphiscl References shows visual map of References.
10 Response Wizard to program Responses.
11 Built-in Bus Monitor to monitor communications on the Comfort RS485 bus.
12 Built-in IR Learner Utility to learn IR signals by UCM.
13 User Mode for operation of Comfort.

Comfort Programming Model

Comfort is a highly programmable system able to perform many tasks in the home. It requires some time and effort to learn how to program Comfort to make use of its full power, but the time spent will be worth while, as Comfort is a powerful tool which is able to handle almost any automation application. The key to understanding the operation and programming of Comfort lies in the concept of Event-triggered Responses, Inputs and Alarms.

Event-Triggered Responses

Comfort is an event-driven system. This means that events monitored by Comfort can be programmed to trigger Responses.



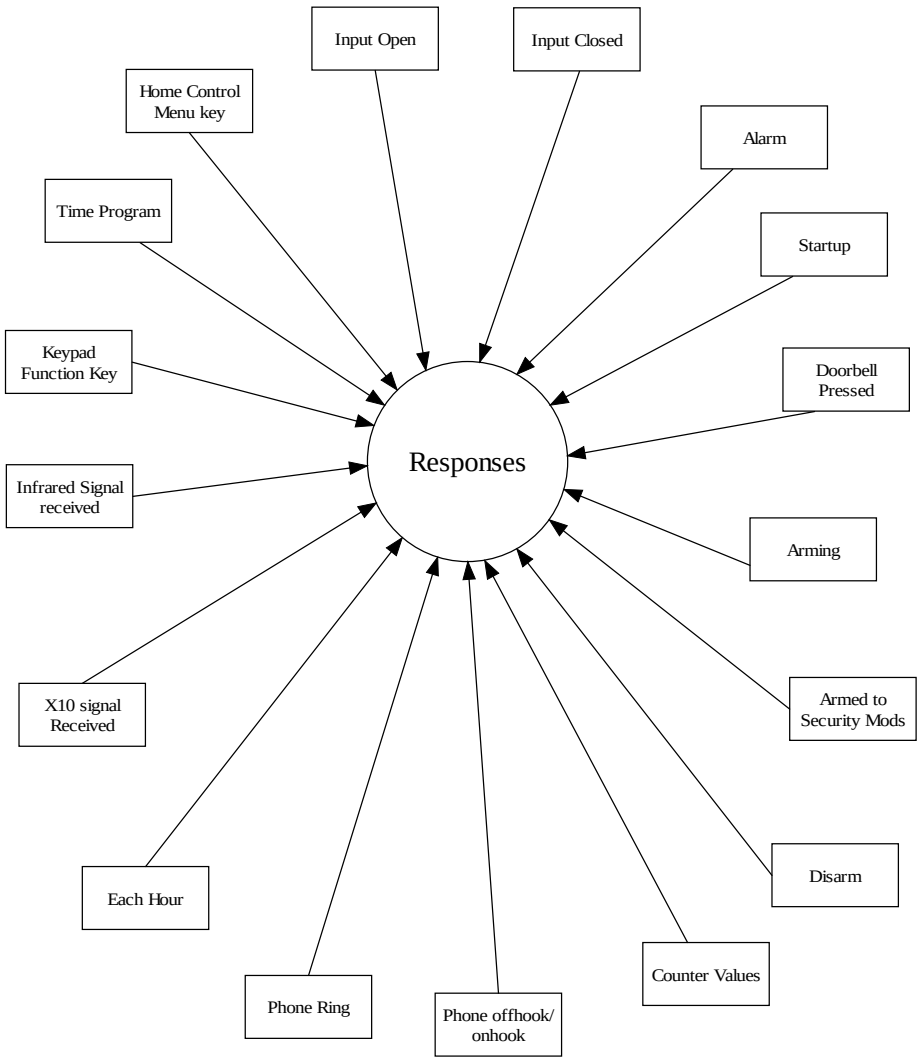
A Response is a program (sometimes called macros by other home automation systems) which performs a series of commands called Actions. An Action can switch on/off a light, draw your curtains, open the garage door, arm the security system, make an announcement, play a recorded message, check the time, turn up the temperature etc... You can combine a series of actions to make up a Response to do what you need to. Actions can be conditional, i.e. they can do different things depending on the conditions, for example, if the front door is opened between 7 PM and 7 AM, then turn on the light for 2 minutes.

An Event is what triggers Responses. Events include Inputs (zones) opening or closing, activation of any of 31 alarm types, Time Programs, arming or disarming of the security system, an X10 signal received from the power line, an infrared signal from a handheld remote, a home control key, a keypad function key, the phone ringing, going offhook or onhook, and many others.

The key to programming Comfort is in knowing what events to monitor, and choosing or creating responses to be activated when these occur. Responses are like programs in a computer and Actions are the commands or statements in the program.

Comfort has a comprehensive list of Actions which may be used for programming. Refer to the booklet "Action Codes reference", for the actions and their descriptions. The Action Codes Reference can be downloaded by going to Help > Action Code Reference, which will link to the Cytech Website http://www.cytech.biz/action_codes_reference.html

There are actions for turning Outputs on and off, or pulsing Outputs, sending Infrared codes from any Output, sending X10 codes, starting Timers, arming and disarming the security system, bypassing zones, activating sirens, and conditional actions which allow different results based on conditions.



Comfort Events

Zone-Activated Responses

Each zone or Input can start a Response when it goes ON (activated), and another Response when it goes off (deactivated). These Responses may be used to turn on and off lights and appliances, cause announcements or do other functions as required. See Worksheet Table 4

Alarm-Activated Responses

Each Alarm Type can start a Response when the alarm is activated. These Responses may be used to perform supplementary functions in the event of alarm activation. See Worksheet Table 19.

Time Programs

32 Time Programs (Comfort II Ultra) enable functions to be activated automatically at programmed times and days of week.

Each Time program consists of an Activation Time, days of the week for activation, and a Response. A Time program can be specified for any combination of days of the week (Monday to Sunday) as well as Holidays. A Time program is activated if the current day of week is selected and the time matches the programmed time (to

the minute). When this happens, the programmed Response is activated. Each Time Program as a setting for “Enabled” which activates the Time Program.

For example, in an office, Time Program 1 may be programmed for 9:00 am on Monday, Tuesday, Wednesday, Thursday, Friday to activate a Response which disarms the security system and turns on the lights, air-conditioning and printer. Time Program 2 may be programmed for 7 PM on the same days to arm the system to Away mode and turn off the lights, printer and air-conditioning. However, on Holidays, Time Program 1 should not take place. The Response for Time Program 1 should check that the day is not a holiday, and if it is, to exit without performing the other actions. Up to 24 Holidays in a year can be defined to handle situations like this.

The Sunrise/Sunset Times and Daylight Saving feature of Comfigurator automatically changes the Comfort time to follow daylight savings which means Time Programs do not have to be changed manually.

Vacation Programs

Comfort has the ability to control lights and home appliances at semi-random times during the day or night in Vacation Mode. This is made possible by Vacation Programs. There are 8 Vacation programs available

Each Vacation Program consists of a Start Time in hours (0-23), a Duration in hours (0-23), an ON Response, and an Output Response.

The Start Time is when the ON Response is activated. Only the Start Hour (0 to 23) is specified in the Vacation program. The actual time within the hour is generated randomly by the system, and is different for each day that it is activated. The duration is specified in hours in the Vacation Program, but the actual duration minutes is also generated randomly, and is different each time that the Vacation program is activated. At the end of the Duration, the Output Response is activated.

For example, Vacation Program 1 is programmed for Start Time of 7 PM, a duration of 1 hour, ON Response to turn on a light, and Output Response to turn off the light. Each day, the light will turn on between 7 PM and 8 PM, for a duration of 1 hour to 1 hour 59 minutes. With this randomized pattern, it will not appear to be a programmed or automatic operation. All Vacation Programs may run simultaneously and overlap in time.

Security Mode Responses

When the system is armed to one of the Security Modes (Away, Night or Day) or Disarmed to Security Off, a Response may be activated. For example, when the system is armed to Away Mode, lights and appliances can be programmed to turn off. For Security Off Mode, heating or air-conditioning may be turned on or set to a comfortable temperature. See Worksheet Table 30A.

Home Control Menu

The Home Control Voice Menu is used to control home appliances as well as perform other home automation and security functions.

The Home Control Menu can be programmed as 1 group for Comfort Optimum, 6 groups for Comfort Ultra, and 8 groups for Logic Engine. Each group consists of 10 Control Keys which may correspond to a light or appliance. Within each Control Key, there are 11 programmable Action Keys, for example: ON, Output, LOUD, SOFT, UP, DOWN, BRIGHT, DIM.

Hence the Control Menu allows access of 6 Groups consisting of 10 appliances per group with 10 actions per appliance for Comfort II Ultra.

Each Appliance (Control Key) consists of a Description which is made up of up to 4 words from the Wordlist and up to 10 Action Keys (0 to 9).

Each Action key for a Control Key is made of a description of up to 3 words which describes the Action (e.g. ON, Output, Channel 1, Channel 2, High, Low), and a Response. It is the Response which performs the function for the Control Menu. Hence any item in the Home Control Menu can perform any function depending on the Response, not only for Home control.

Control Keys may be used for:

- Direct Control of Home appliances via X10, Relays or Infrared signals.
- Activating Scenes which program a combination of lighting, music and mood for various occasions, like Party, Sleep, Work, Movie, etc...

The status of the appliance being controlled can be announced, based on Comfort's Inputs, Outputs, Counters, Sensors, or Flags.

Keypad Responses (for Function keys)

Each key on the Keypad when prefixed by the F key can activate a Response. Thus, each key can be programmed to a wide variety of functions including

- Shortcut to frequently used Menus
- Activate Intercom Function to other Keypads
- Turn on another Keypad microphone as a Baby Monitor
- Change Sign-in code
- Activate home appliances or combinations of appliances
- Arm to any mode
- Trigger sirens and other alarm Outputs
- Play Reminder Messages

The possibilities are almost endless!

Received Infrared Responses

The Comfort keypad (KP03, KP04, KP05, KP06, KT03) with IR receiver is able to receive IR codes from any universal handheld remote control like the Philips Pronto. Each received code is able to activate a Response. See Worksheet Table 36A. The Scene Control Switch SCS/IR and RIO Input is also able to receive Comfort IR codes which can activate the Responses.

SCS/RIO Responses

The Scene Control Switch has 4, 6 or 8 buttons which can activate Responses to set any scene or control any appliance or group of appliances. Each button activates a Response in the location specified in Table 36B, depending on its ID.

Each Remote Input/Output Module (RIO) has 8 Inputs, each of which activates a Response. The corresponding inputs of the RIO and SCS activate the same set of Responses.

Other Event Triggered Responses

Other events which activate Responses are

- Incoming Call / Phone ringing
- Phone Onhook
- Phone Offhook

- Doorbell pressed
- Hourly
- System Reset / Power On
- System Start Arming
- Counter Responses - triggered by a change in counters due to supported 3rd party systems like C-Bus, KNX, Z-Wave, Universal UCMs etc
- Sensor Responses - triggered by a change in counters due to supported 3rd party systems like C-Bus, KNX, Z-Wave, Universal UCMs etc
- Sunrise/Sunset Responses
- X10 received Codes

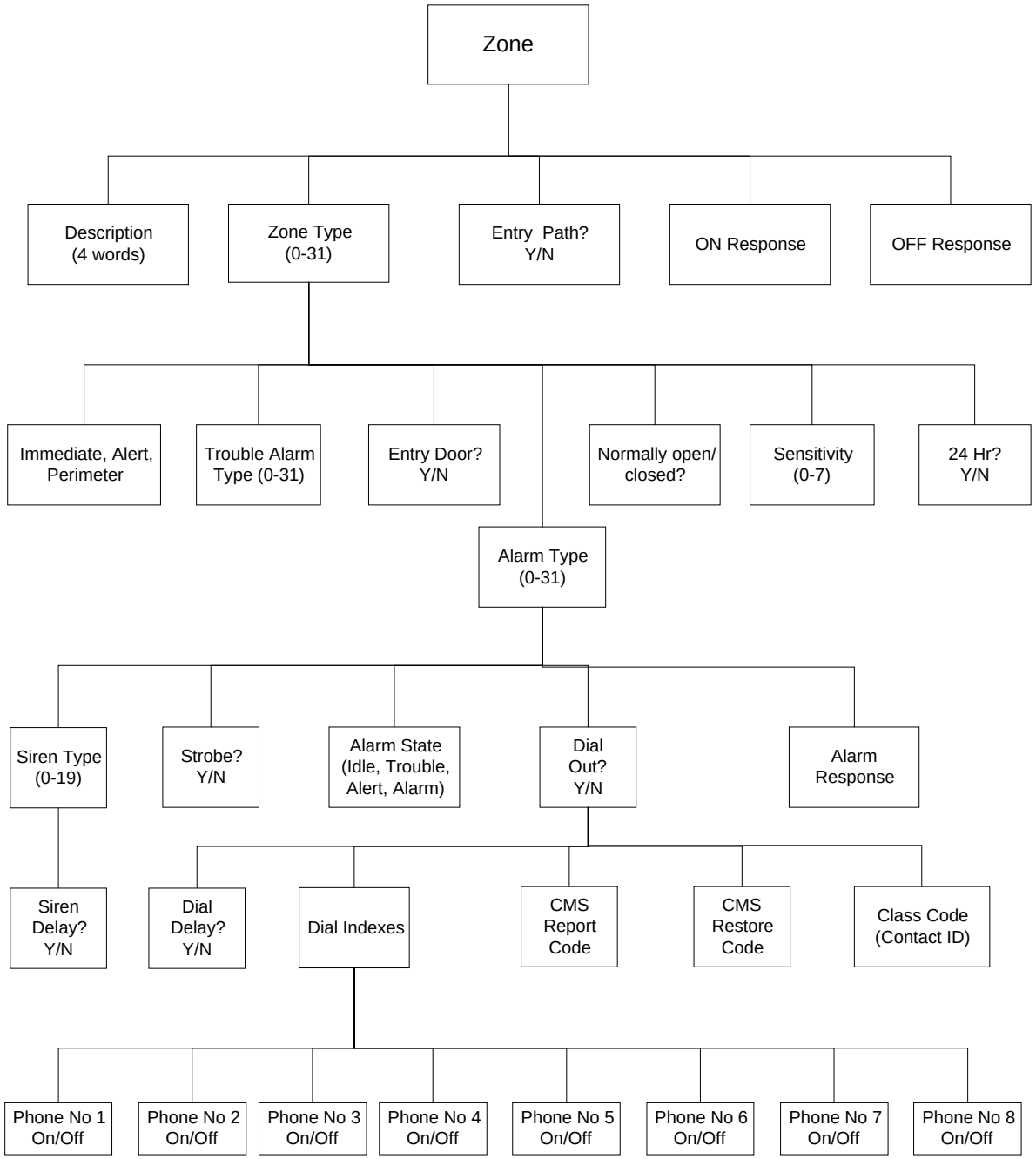
Comfort Zones/Inputs and Alarms

The basic Comfort CP9000 includes 8 Inputs, also called Zones, expandable to 96. Each Input can be programmed as Normally Open or Closed, and it may be an alarm input which can cause alarms, or a switch which does not cause an alarm in the traditional sense, or a Digital Input, which is either On or Off with no Trouble states (short-circuit or open-circuit). Each Input is programmed as a selectable Zone Type. It can be programmed with up to 4 descriptive words, it may activate Responses when it is open and closed. Zone Types are a collection of properties which can be assigned to a zone for easy programming. Each Zone Type is associated with an Alarm Type which determines the behavior of the system during this alarm.

The table below shows the key relationship between Zones, Zone Types, Alarm Types and Siren Types.

Each Zone has settings for Description, Entry Path, Responses, and also belongs to a Zone Type, which determines the basic behaviour of the zone, like whether it is Normally Open or Normally Closed, if it is a 24 hour zone, if it is an Entry Door etc..., and its Alarm Type. The Alarm Type determines the actions taken by the system during alarm activation, like whether it dials out, and if so to which numbers, whether the siren and strobe is turned on etc... The Siren Type determines the pattern and duration of the sound.

This highly configurable system allows great flexibility in programming a system, but it also simplifies programming because of default settings. Programming consists of assigning words and Zone Types to each zone. Zone Types, Alarm Types and Siren Types have defaults which do not need to be changed unless there are special requirements.



Zones, Zone Types, Alarm Types, Siren Types

☎ The RIO/SCS Inputs are not alarm inputs, i.e. their zone type is fixed, as Normally Open Switches.

Using Comfigurator

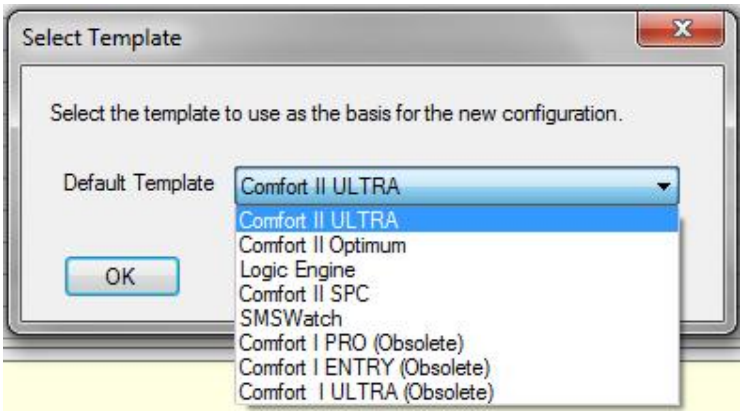
Comfigurator is a software tool for programming Comfort via a PC. The latest version of the software can be downloaded from http://www.cytech.biz/software.html It provides an easy to use interface for configuring all aspects of the system, and includes a Response Wizard to enable Responses to be programmed without the need for low level programming knowledge.

Comfigurator runs on an IBM PC-compatible computer running on Windows NT4, Windows 2000, Windows XP or Windows 7. It requires a UCM (Universal Communication Module) with either a USB, RS232 or Ethernet Interface.

The Comfigurator Reference Manual shows how to use Comfigurator in more detail.

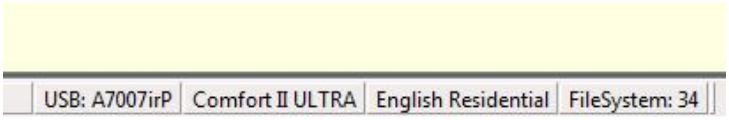
Template

When a new file is opened using File > New, a dialog box will open asking which template is to be used.



Select the Comfort Model being programmed, in most cases, Comfort II Ultra. This opens the main Comfigurator window.

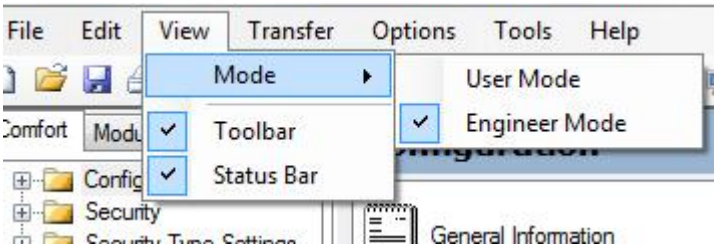
The Comfort connection, Model, Vocabulary and File System are shown on the bottom right corner of any Comfigurator screen, as shown below. The File System refers to the structure of data in the nonvolatile EEPROM memory which stores the configuration data.



You can load and save configurations with the .cclx format. Templates can be created by doing a Save As Template with a cctx extension. Templates can be created for common configurations that are used for several systems.

Engineer Mode/User Mode

User Mode (from Comfigurator 3.8) is for operation of Comfort while Engineer Mode is for Programming of Comfort.

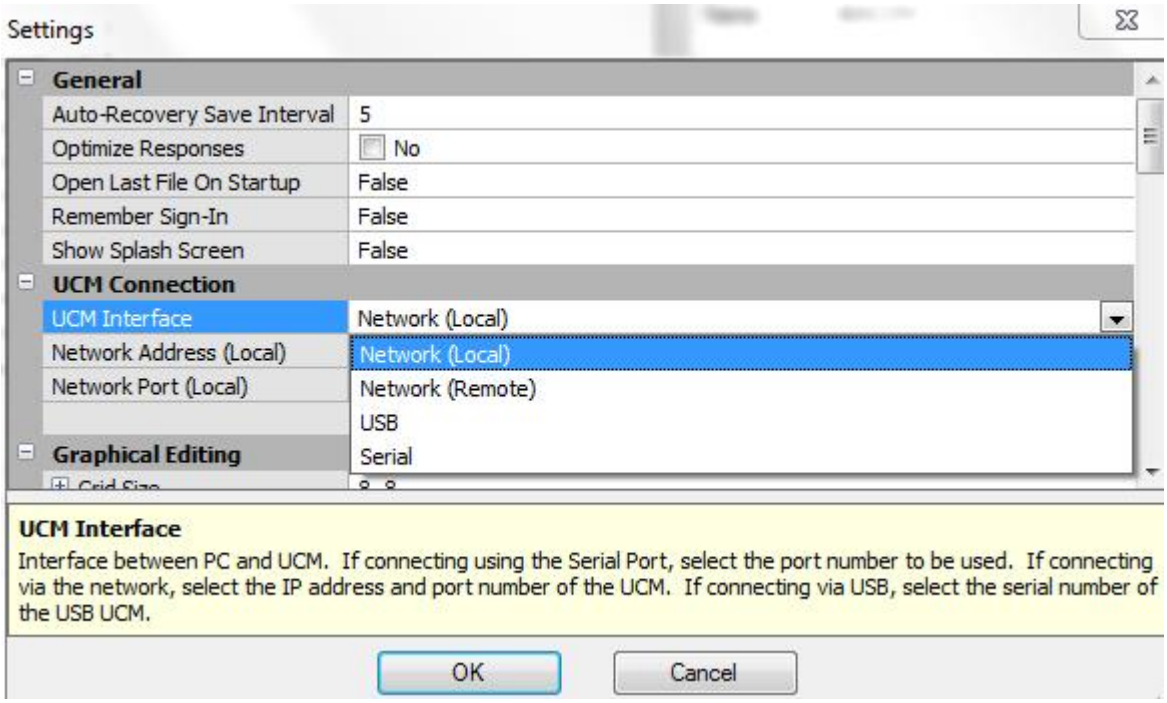


Go to View > Mode to select Engineer or User Mode. Select Engineer Mode for programming of Comfort. User Mode shall be described later.

Connecting to Comfort

You can program Comfort off-line, i.e. without being connected to Comfort. When you wish to transfer the program to Comfort using a UCM/USB, UCM/Ethernet, see http://www.cytech.biz/pc_interfaces.html The UCM Manual shows how to connect to Comfort and the PC for each type, and can be downloaded from http://www.cytech.biz/ucm_manual.html

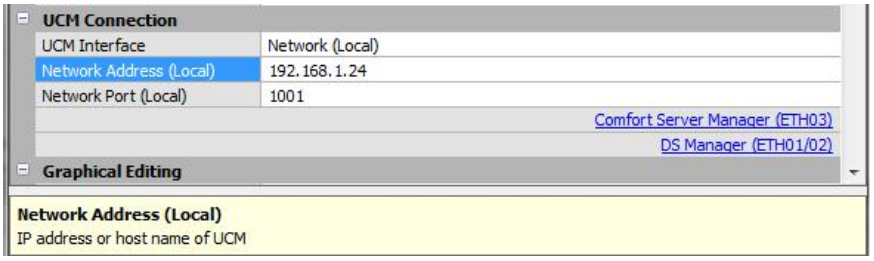
To connect to Comfort, go to menu Options > Settings. Look for UCM Interface in UCM Connection as shown below;



In UCM Interface, select Network (Local or Remote), USB, or Serial (RS232) from the drop-down list depending on which type of UCM you have. (RS232 is seldom used now)

If you select Network (Local), enter the local IP address and Port of the UCM/Ethernet. To assign an IP Address and Port for the UCM/Ethernet in your network, click on Comfort Server Manager (for UCM/ETH03) or DS Manager (for UCM/ETH02 or UCM/ETH01). This allows you to change the default IP address and port. See UCM Manual for more details.

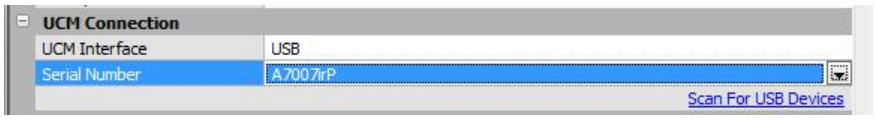
☎ When you run Comfort Server Manager, it will check with the Cytech server if it is the latest version and if not, it will prompt if you want the latest software to be downloaded. This requires an Internet connection.



For UCM/Ethernet, you can enter the Network (Remote) IP address and Port for remote (Internet) access to Comfort.

Click on the Comfort Server Manager or DS Manager link to open the software to set the IP address and Port for UCM/ETH. This IP address and port must correspond to the UCM IP Address and Port in the UCM Connection above. Go to the Forum at http://www.comfortforums.com/forum113/3695.html for Comfort Server Manager instructions or http://www.comfortforums.com/forum113/3402.html for DS Manager instructions.

If you select USB, select the Serial Number in the drop down list. If the USB driver has been installed the serial number of the USB interface will be visible in the list. If the USB serial number is not seen, do Scan for USB Devices and check the USB serial number again.



If the USB serial number is still not seen, there may be a problem with the USB driver. Try uninstallng the USB driver according to instructions at http://www.comfortforums.com/forum73/2431.html

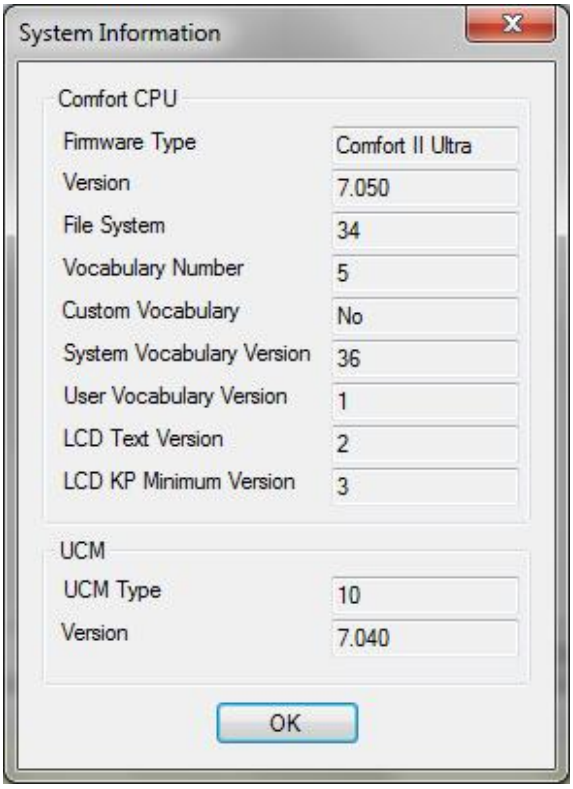
If you select Serial, then select the COM port on the computer.

The connection properties are saved in the Comfigurator cclx file so when the file is loaded, the same connection is used. This is very useful especially if you use the UCM/Ethernet, as the Local and Remote IP address and port are saved so you do not need to enter the numbers every time. The UCM Connection in use is always shown on the status bar. For example: the screen below shows Local Network connection with IP address 192.168.1.87 Port 1001 is active.

It is recommended that UCM I/O Monitor be shown (Show / Hide button is in the same row as UCM I/O Monitor header). The screen shows the data transferred between Comfigurator and the UCM. There is also Event Box (shown in red to display important alarm events occurring). This is shown in the screenshot above.

Transfer > System Information

Once the UCM Interface has been selected, the next step is to go to Transfer Menu > System Information to read the basic system information from Comfort. Enter the sign-in code (default: 1234) when prompted and the System Information screen is shown (typical).



This shows that Comfigurator is successfully connected to Comfort via the UCM.

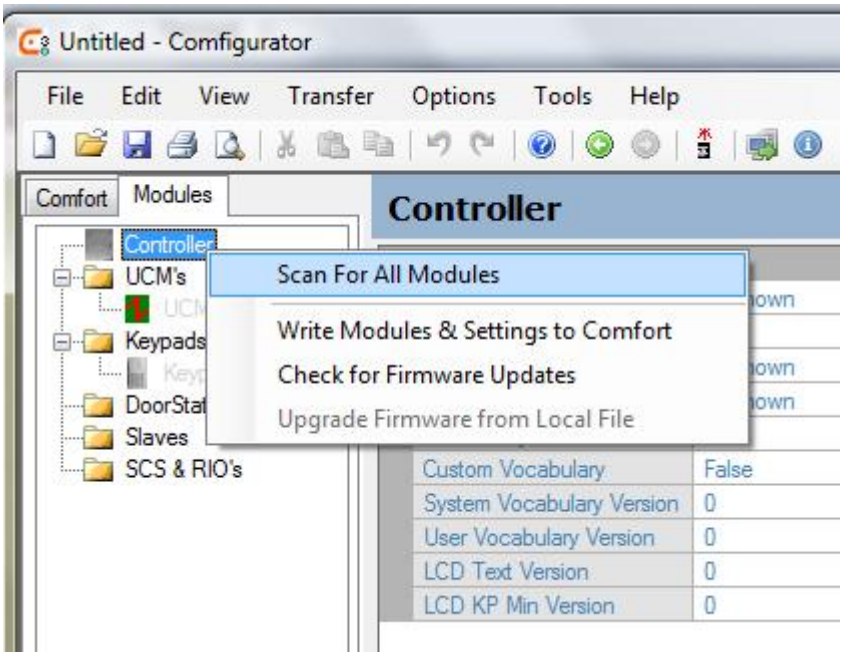
The fields shown have the following meaning:

- Firmware Type: Shows the Comfort Model, Comfort II Ultra in this case
- Version: Firmware version of Comfort, 7.050
- File System: Data structure in the nonvolatile EEPROM memory (U4) which contains the programmed configuration information, 34 in this case
- Vocabulary Number: relates to the Vocabulary in Comfort (English, Spanish etc)
- Custom Vocabulary: Yes if a custom vocabulary is installed
- System Vocabulary Number: The Vocabulary version. May be updated when there are changes to the Voice menu
- User Vocabulary Version: Version of the User word list
- LCD Text Version: The version of the text displayed on the LCD Keypads
- LCD KP Minimum version: shows the KP04 or KP05 minimum firmware version
- UCM Type: the UCM Type used to connect to Comfort. UCM/USB, /232 and /Ethernet all are Type 10

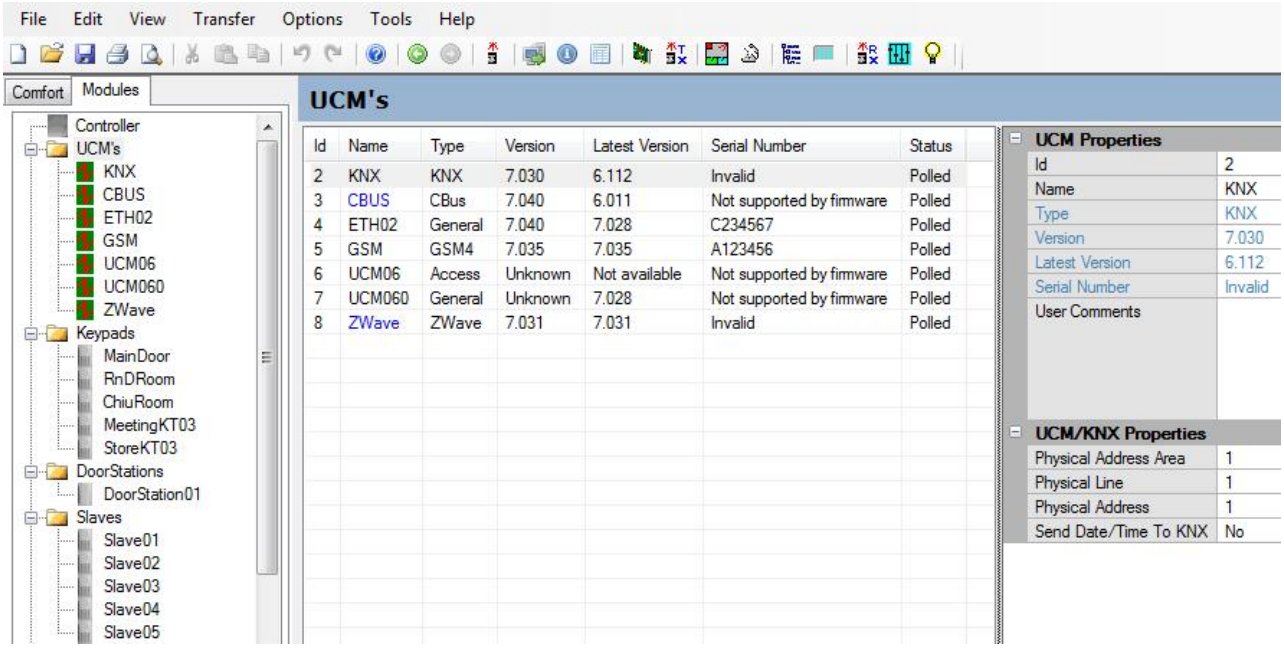
This information is saved with the cclx file in Configuration > System Information, as shown below. This information saved in the file is useful for documentation and history purposes and for troubleshooting.

Scanning for Modules

This allows the Comfort Modules to be detected and the firmware and type displayed. Go to the Modules tab, right click on one of the folders (UCM, Keypad, Door Station, Slaves, RIO/SCS) and select Scan for All Modules.



The scanning process takes less than a minute. The results of the scanning are shown below (example):



This view shows the modules that have been discovered on the Comfort Bus where each of the modules must have its ID set correctly without conflicts with other IDs of the same type. Refer to the individual module instruction manuals on how to set the IDs.

The scanning results shows Type, Version, Latest Version, Serial Number, and Status for each module.

Type means the module type e.g. General, KNX, Cbus etc for UCMs; KP03, KP04, KP05, KP06, KT03 for keypads etc.

Version means the firmware version of the installed module.

Latest Version means the latest released firmware. This information requires an Internet connection. The Firmware can be upgraded as described in the Upgrading Section.

Serial Number is the serial number of the module; minimum firmware version needed.

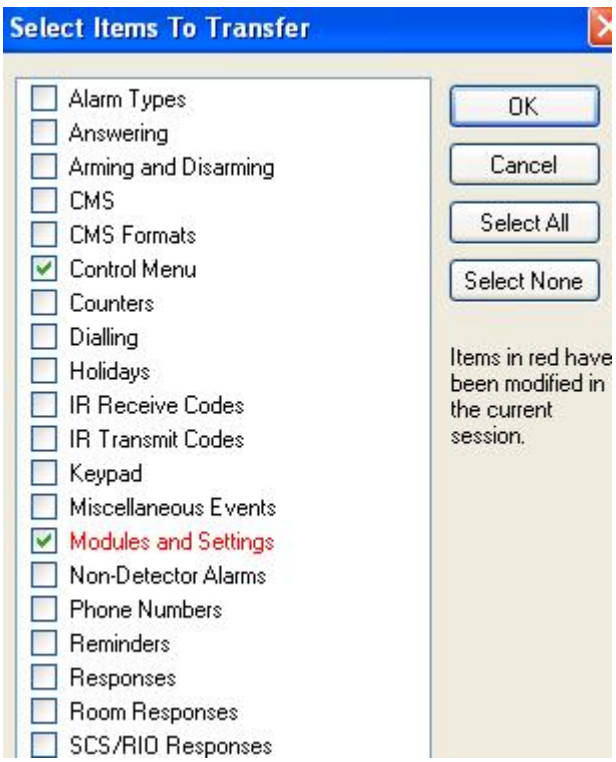
Status means the scanned status, either Polled, Not Found, or Not Polled. Not Found (in red) means no module was found at the id. Not Polled means the ID is on the bus but not polled by Comfort due to its settings. This should be fixed after a write to Comfort.

Write to Comfort (PC -> Comfort)

You are now ready to write the program for the first time to Comfort. Go to Transfer Menu > Write to Comfort. There will be a dialog box which asks whether to synchronise date / time with Comfort and whether to write user codes. Check the date/time and start the write. Do not select Write User Codes. See the section below on Write and Read User codes for a better way to write user codes. This takes about 30 seconds with a progress bar visible. After the write process completes, Comfort is automatically reset, and you will hear “Security Off” on the keypads. You are now ready for testing and debugging. You will probably require several rounds of testing, modification and writing before you get it completely right. Make sure that you test everything as thoroughly as possible on the bench and on site before leaving the customers premises.

Selective Write

Transfer > Write Selective... writes only changed items to Comfort instead of writing the whole configuration and resets Comfort if necessary. The screen below appears. Note that the first time you do it in a session, it takes longer, about 20 seconds for the screen to appear. This saves time over a full write as a selective write may take only a few seconds.

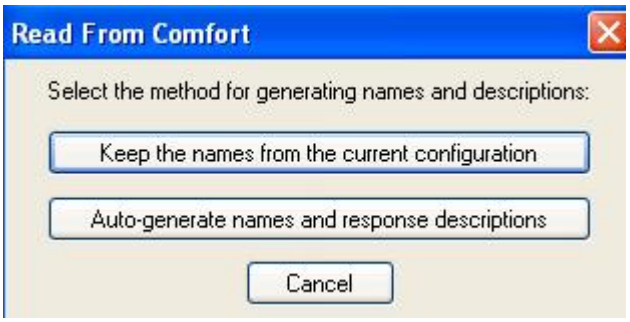


Write/Read User Codes

In the Security > Sign In Codes screen below, there is a button to Write User Codes and Read User Codes. Use this screen when you want to write and read user codes.

Read from Comfort (Comfort -> PC)

Reading from Comfort transfers the configuration from Comfort's nonvolatile EEPROM (U4) to Comfigurator. When Reading a program from Comfort to PC, the names and descriptions of the Responses are be lost, as these names are not stored in Comfort. The Response names and descriptions are only stored in the Comfigurator file.



The options "Keep Names from the current configuration" and "Autogenerate names and Response Descriptions". It is recommended to use the 2nd option as this will generate reasonable Response Descriptions and names from the Actions for each Response. This is useful when taking over a Comfort installation and the original configuration file is not available.

The "Keep Names" option should be selected only when the original cclx file is available where the Responses have not changed.

Programming Strategy

For those who are new to programming Comfort, the prospect of having so many things which can be programmed may seem daunting, but in practice, most

settings can be left as default and need to be changed unless necessary, normally in very big jobs. To help the newcomer, the following sequence is recommended.

Modules and Settings

In Configuration > Modules and Settings, the numbers of Keypads, Door Stations, Slave Expansions, Scene Control Switches or RIOs and UCMs are shown. It is recommended to Scan for Modules to discover all the modules connected on the Comfort Bus as described below.

Zones/Inputs

Zones/Inputs is in Security Settings > Zones/Inputs. For each Zone, determine the Zone Type, the Phrase (words), and if the zone is on the Entry/Exit path. The Phrase or Description is assigned to the zone for any announcements during alarm or in the event log. If some of the Zones require an On or OFF Response, ie a behaviour which is triggered by activation of restoral of the input, note it down for later programming.

Control Menu

Determine the structure of the Control Menu. This is found in Control > Control menu. For Ultra 2, the Control menu can be ordered into 6 Groups (depending on your firmware version), like Lights, Heating/Airconditioning, and Entertainment. Each group has 10 Control keys e.g. Living Room Lights, Master Bedroom Lights etc.. Each Control key has up to 10 actions, e.g. On, Off, dim, bright, open, close, up, down etc.. For now enter the words for each Control group, control menus for each group and the actions in each control menu. List the Responses which will be needed for each action, to be programmed later.

Events

Determine which events need to activate Responses. Such events (apart from Zone Responses) which can trigger Responses include Alarm types, IR Received Codes, X10 received Codes, SCS/RIO (SCS) buttons, and the Events in the Miscellaneous Events Page. List the Responses which need to be programmed.

Time Programs

Determine the Time Programs needed and the Responses which need to be programmed.

Responses

Much of Comfort's behaviour is determined by Responses which are triggered by Events. From the list of required Responses that you have compiled from the screens mentioned earlier, determine which default Responses can be used. You can also refer to the handy Programming Worksheet for your firmware version for a list of default Responses. Many of the default Responses can be applied directly for your application. Use the Response Wizard to create your Responses. Have a copy of the booklet "Action Codes Reference" (Help > Action Code Reference, which will link to the Cytech Website http://www.cytech.biz/action_codes_reference.html)

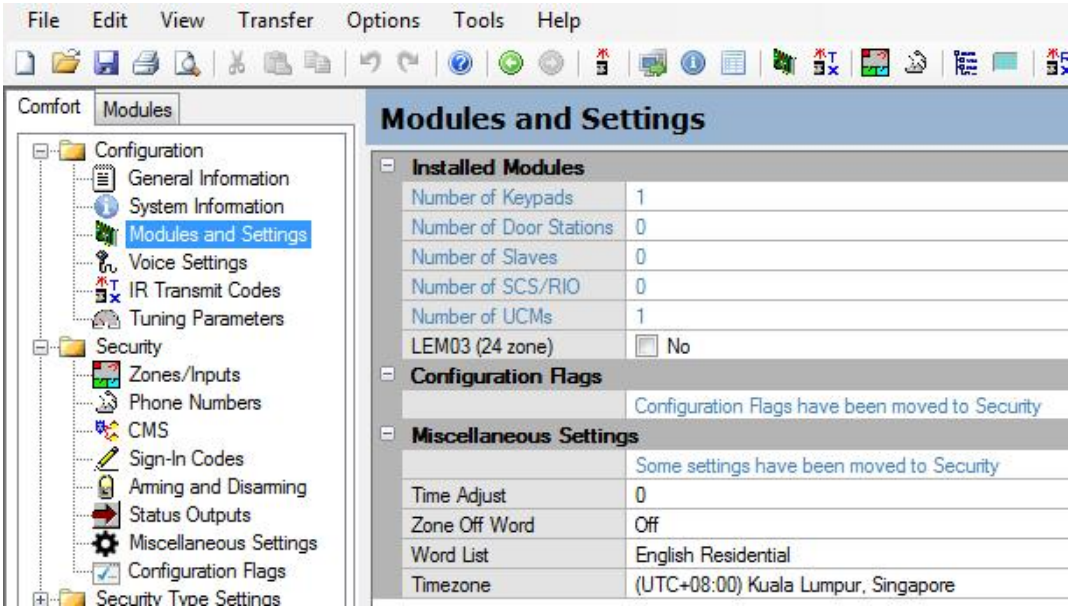
Phone Numbers

Do not program the telephone numbers for alarm dialout until you have done a Write to Comfort and tested the operation of the system. It can be annoying for dialouts to be occurring when you are trying to test the system. However you can devise the assignment of the phone numbers for the 8 slots, and program the Alarm Types dialout behaviour in Security Types > Alarm types. Check the Dial box

if the alarm is required to dialout and the indexes 1 to 8 to dial to for each alarm. As long as the actual phone numbers are not entered in Security > Phone Numbers, there will be no dialout when alarms occur.

Modules & Settings

In Comfigurator, go to Configuration > Modules and Settings. The screen below will appear.



In this screen, the Number of Keypads, Door Stations, Slaves (SEM01 or SEM02), UCMs, and SCS/RIO are shown. This screen is read only and the numbers are automatically obtained by Scanning the Modules as described in the last section. SCS (Scene Control Switches) and RIO (Remote Input/Output Modules) are equivalent in terms of function, so should be counted together. For example, if you have 2 SCS and 3 RIO, then the Number of SCS/RIO should be 5. The Ids of the SCS and RIO should be unique and consecutive with no missing Ids.

Check the LEM03 box if your system has a LEM03 (Local Expansion Module with 16 inputs and 0 Outputs). If a LEM03 is used, there can be no slaves (SEMs) in the system. The system will be limited to 24 inputs and 8 Outputs.

Time Adjust

This specifies a daily adjustment to be applied to the time maintained by Comfort to compensate for a slow- or fast-running clock.

The time in seconds is added to or subtracted from the current time at 3:00 AM each day to correct for inaccuracy in the clock. Positive values are 1 to 29, negative values are 30 to 59. A value of 59 is equivalent to -1 second, and 30 is equivalent to -30 seconds. Default is 0. This was implemented in Firmware 6.020.

In Engineer Menu this is programmed in Location 1846.

☎ This feature is not required if the UCM/ETH03 Internet Time synchornisation function is enabled

Zone Off Word

This specifies the word to be used as Zone announcement OFF in the Control Menu. This word is used by Action 1, announce zone when applied to the Zone OFF

Response. For example, when you assign a Response with action 1,255 to the Zone Off Response of a zone "Curtain", when the zone is closed (restored), the keypads will announce "Curtains Closed". The word "Closed" is taken from the OFF word Default is “Off”

In Engineer Menu this is programmed in Location 1689.

Word Lists

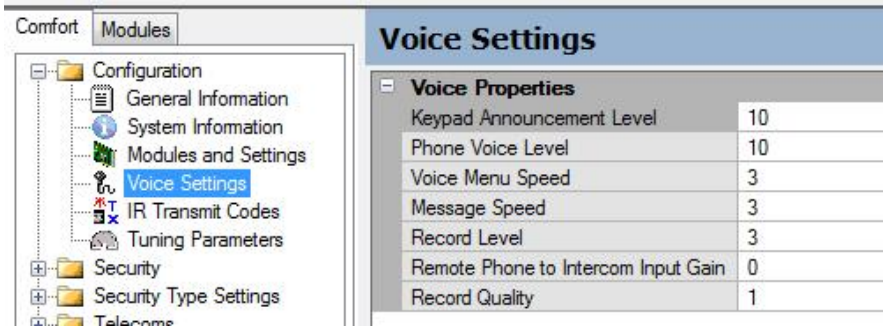
This specifies the word lists (Vocabulary) to be used for specifying zone, alarm type and control menu phrases. Note that if you change the Word List for the current configuration, any words used in existing zone and control menu phrases which are not defined in the new Word List will be cleared.

This is not a programmed feature in Comfort and is not programmed in Comfort- it is an attribute of the Comfigurator file only.

Timezone

This specifies the time zone of Comfort’s location. This is used when writing the current date and time to Comfort, and is useful if you are accessing Comfort remotely from a different time zone (via UCM/Ethernet)

Voice Settings



Configuration > Voice Settings gives the Voice Settings screen, shown above.

This screen is used to specify settings associated with voice Output or recording.

☎ It is normally not necessary to change these default settings.

Keypad Announcement Level

The slider determines the volume of voice on the keypad speaker. It is independent of the voice menu volume on the telephone (see below) and the volume of the siren sounds from the speaker.

Phone Voice Level

The volume of voice menu over the telephone can be adjusted independent of the keypad voice menu to compensate for telephone line conditions.

Voice Menu Speed

The speed at which the Voice Menu is spoken may be adjusted using this slider. This does not change the pitch of the voice. The existing recorded messages in memory are NOT affected by this change

Message Speed

The speed at which the messages are played may be adjusted using this slider. This does not change the pitch of the voice.

Record Level

This specifies the level at which voice messages are recorded. Increase the slider to increase the volume of the recording.

Remote Phone to Intercom Input Gain

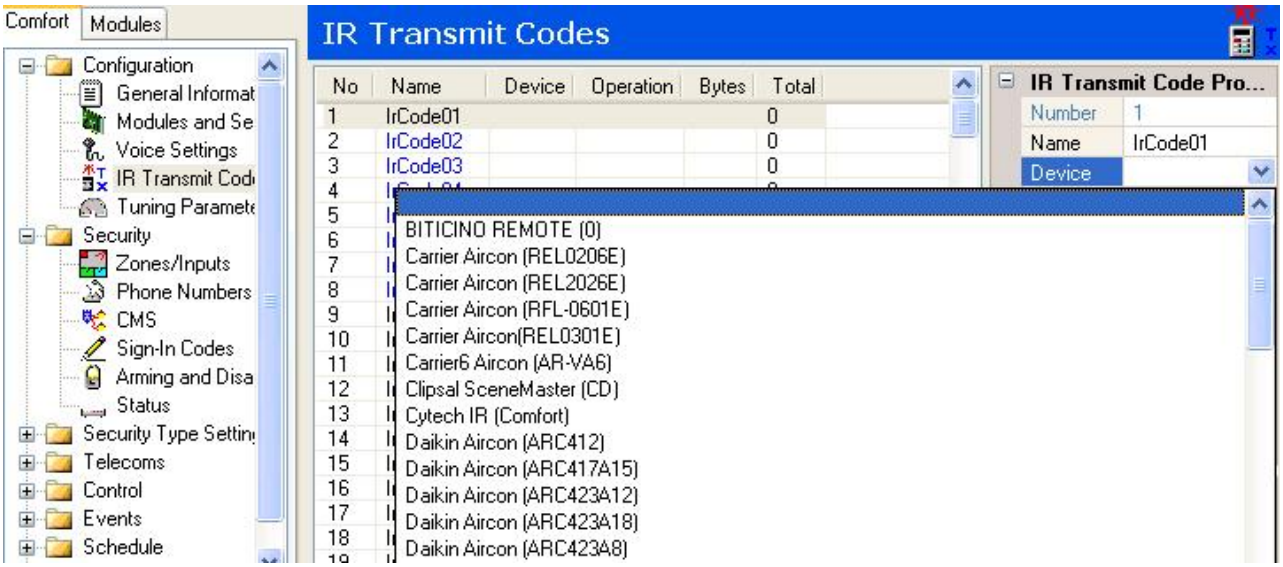
The slider determines the gain from telephone to keypad or door station.

Record Quality

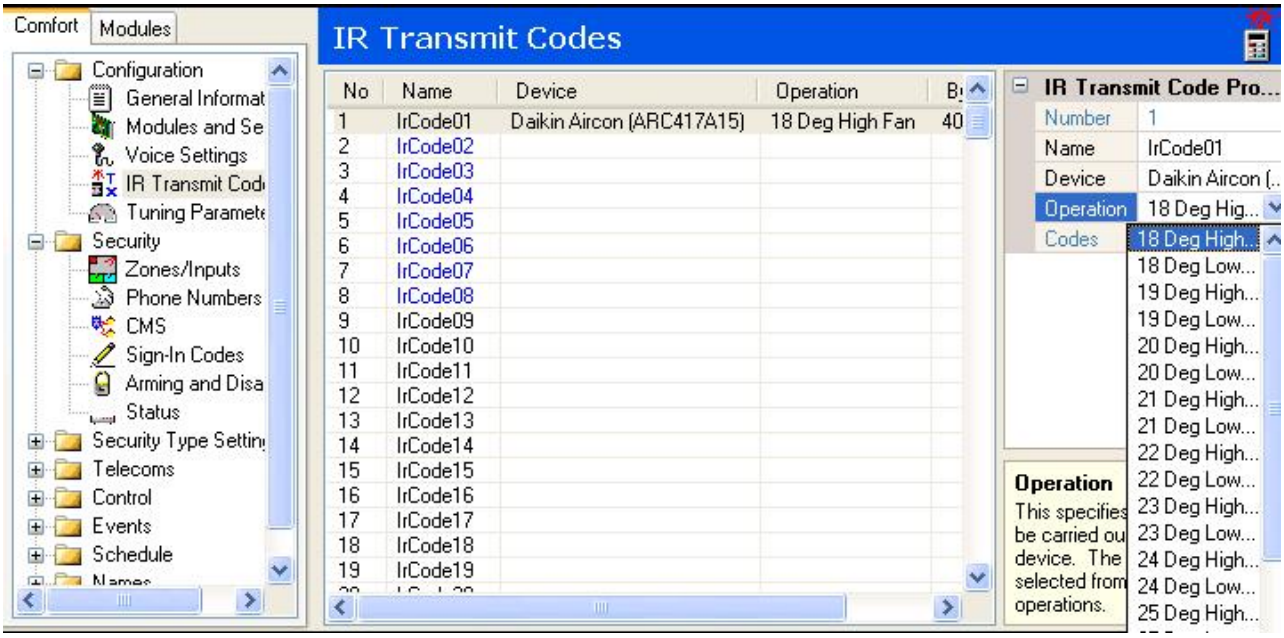
This specifies the quality at which the messages are recorded. High record quality also means less recording time and vice versa. At the highest quality, the recording time is 4 minutes and at lowest quality, the recording time is about 8 minutes

IR Transmit Codes

The IR Transmit codes screen selects the infrared codes which are to be used by Comfort to send through its Outputs. Go to Configuration > IR Transmit Codes.



Each IR code can be assigned to one of the infrared signals in the Comfort IR Library. Select an IR Code number and click on the “Device” box to reveal a drop-down list of available devices, as shown above. Select a device from the list. Next click on the “Operation” box to show a list of operations available for this device.



Select an operation from this list. Each of the IR codes can select 1 infrared signal.

Do not leave unused IR codes in the middle of IR codes that are defined. For example, you should not leave IR Code 2 blank if IR codes 1 and 3 are defined, as IR codes after the undefined code will be ignored.

The “Bytes” column shows how many bytes of data required for the IR signal. The “Total” column shows how many bytes are used for all the IR codes assigned so far.

Once the IR codes are defined, they can be sent from any Output using the Infrared action code. An Infrared Transmitter (IRM01 or IR03W) is connected to the output to allow infrared signals to be transmitted.

Tuning Parameters

This screen displays the settings for Tuning Parameters. These settings are not to be changed, unless advised by Cytech Technology.

The first and most basic thing which needs to be programmed in any Comfort Installation are the Zones, or Inputs. The term zone and input will be used interchangeably. Comfort starts with 8 inputs on the main control panel, expandable to 96.

The numbering of Zones are according to the table below

Zone Input	Location
1 to 8	Comfort Main Panel
9 to 16	LEM on Main Panel
17 to 24	Slave SEM ID 1
25 to 32	LEM on SEM ID 1
33 to 40	Slave SEM ID 2
41 to 48	LEM on SEM ID 2
49 to 56	Slave SEM ID 3
57 to 64	LEM on SEM ID 3
65 to 72	Slave SEM ID 4
73 to 80	LEM on SEM ID 4
81 to 88	Slave SEM ID 5
89 to 96	LEM on SEM ID 5

Zone Settings in Comfigurator

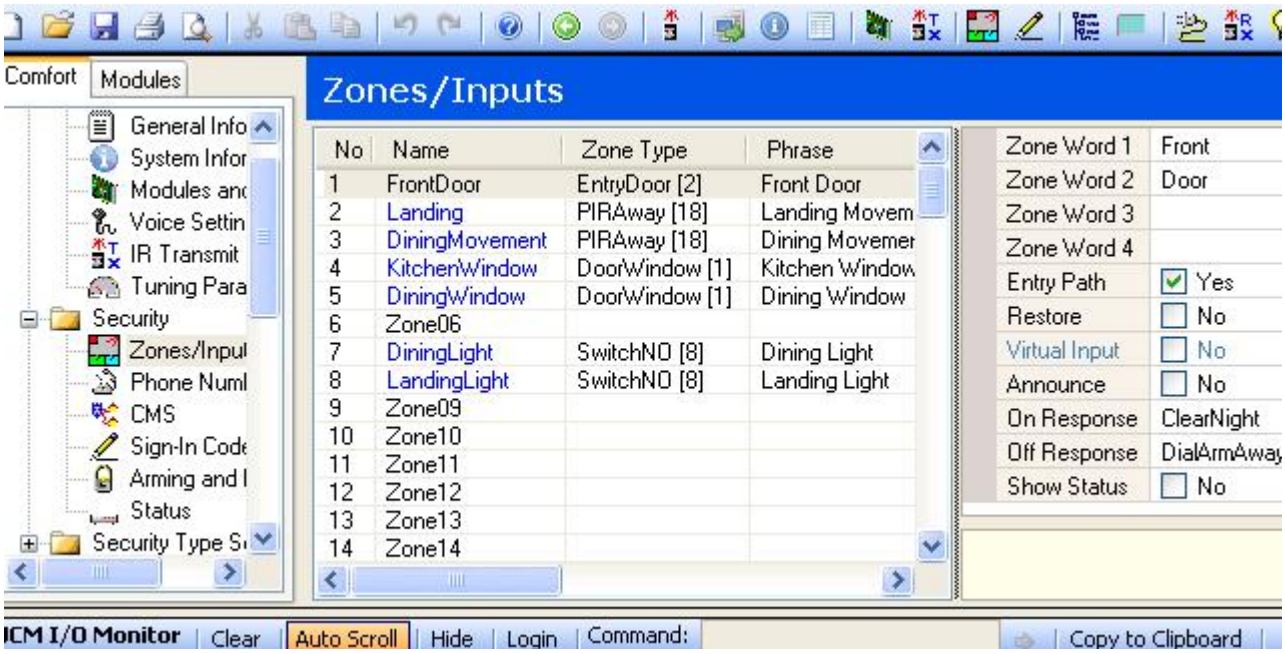
In Comfigurator, select Security > Zones/Inputs.

Each zone has the following characteristics;

- Description, up to 4 words from the Wordlist. If no description is entered for a zone, the Zone number is used as the default description.
- The Zone Type, which defines the type of detector or input. This is the only mandatory setting for a zone. Unused zones are set to Zone Type 0.
- The Entry path setting (on/off). When the system is armed, a zone on the Entry path does not cause an alarm when it is triggered after the Entry Door is opened when the system is armed. The Entry Path setting is not to be confused with the Entry Door Zone Type. An Entry Door starts an entry delay when the system is armed to allow the user to disarm the system. It also arms the system in Away Mode when the user leaves the premises and closes it.
- Restore - This determines whether a message is sent to an SMS Phone type when the zone is restored after an alarm, e.g. when a window is closed. This applies only when a GSM Module is installed.
- The On Response (the optional Response or program which is activated when the Zone goes on). ON means open for a normally closed zone type and closed for a normally open zone type.
- The Off Response (the optional Response or program which is activated when the Zone goes off). OFF means closed for a normally closed zone type and open for a normally open zone type.

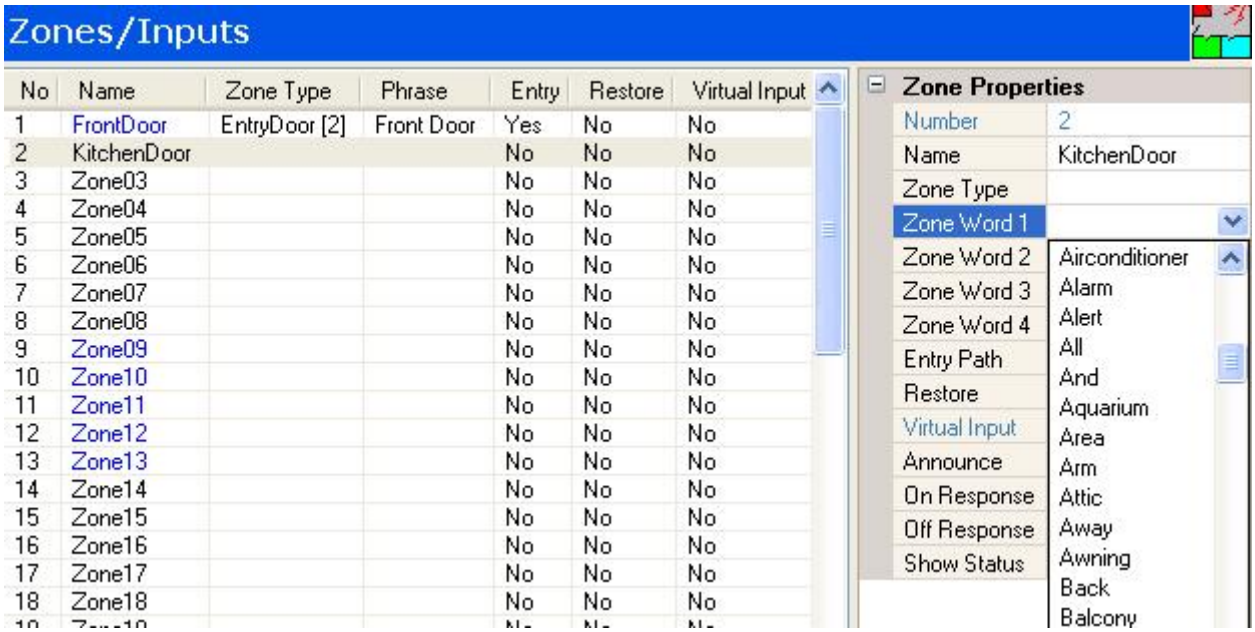
☎ Only the Zone Type is mandatory for every input that is used in the system.

The zone settings screen is shown below.



Select a zone to program. The Number (1st column) is the Zone Number. The Name is a label used to identify the Zone.

Click on the Zone Type column of the zone to be programmed. Click again to show the drop-down list of zone types, as shown below.



Click to select a zone type.

Common Zone Types

The list of standard or default zone types are given below. If none of the standard zone types are suitable, Zone Types can be customized using the Security Type Settings > Zone Types screen but these should not normally be changed.

0 Not Used

Zone Type 0 is for unused inputs. It cannot be used to activate responses or activate alarms. Zones programmed as Zone Type 0 do not need to be terminated.

1 - Door / Window (NC, Intruder Alarm)

A circuit that will generate an immediate alarm in Away, Night and Day modes and is intended for perimeter protection.

2 - Entry Door (NC, Intruder Alarm)

This type of circuit must be the first detector triggered when entering the protected area whilst the system is set. Once set, activation of the circuit will start the entry timer. When the system is being armed, if Away Arming Method is “Final Door” (Security > Arming & Disarming) then the system will not complete arming until the door is closed on the way out and all other protected circuits are not active. If Away Arming Method is “After Entry Delay”, the system will arm after the Exit delay if all zones are not active.

3 - Alert Night/Away (NC, Alert)

A circuit that will not cause an immediate Intruder alarm if activated during Night, Away Modes. Activation of an Alert Zone causes an Alert Alarm (type 6). A full alarm will be generated only when another alert zone, perimeter or immediate zone is activated within the next 10 minutes (programmable in Security > Miscellaneous Settings).

4 - Alert Away (NC, Alert)

This circuit is the same as zone type 3 except it is active during Away Mode only and not in Night and Day Mode.

5 - PIR Night/Away (NC, Intruder Alarm)

A circuit that will generate a full alarm during Night and Away Modes and not Day Mode. It is intended for PIRs in interior zones.

6 - Alert Vibration (NC, Alert Alarm)

This circuit is similar with zone type 3 except it has an operating sensitivity of 50ms and is suitable for use with non-electronic (mechanical) inertia shock detectors. A zone response may be needed to act as an analyser.

7 - Armed Vibration (NC, Intruder Alarm)

A circuit that has an operating sensitivity of 50 ms which is suitable for use with non-electronic (mechanical) inertia shock detectors and will generate a full alarm in Day, Night, and Away Modes.

8 - Switch (N.O, Null Alarm)

A normally open circuit which will not activate an alarm but is used to activate a response.

9 - Monitor (N.O, Family Care Alarm)

This can used to dial out to programmed phones whenever the zone is triggered. It can be used either to check detectors which cause false alarms (“soak test”) or to monitor machinery breakdown. It activates FamilyCare Alarm, which must have the appropriate dialout settings. A similar N.C zone type is Zone Type 17.

10 - Fire (N.O. Fire Alarm)

A normally open 24-Hr circuit which is usually connected to a smoke or heat detector. When activated it will generate a fire alarm sound from the speakers and pulse the external siren. A programmed response may be triggered in the zone setting or fire alarm type to switch lights on aiding an escape or to open an automatic gate to enable easier access for the fire services. Ensure that the “24 Hour” box in Security Types > Zone Types is checked if the zone is not allowed to be bypassed.

11 - Gas (N.C, Gas Alarm)

A 24-Hour circuit which will generate a gas alarm sound on the speakers. A programmed response may be triggered in the zone setting or gas alarm type to switch the gas supply OFF or open doors and windows. Ensure that the “24 Hour” box in Security Types > Zone Types is checked if the zone is not allowed to be bypassed.

12 - Panic Alarm (N.C, Panic Alarm)

A 24-Hr circuit that will generate a full audible alarm condition when activated. Ensure that the “24 Hour” box in Security Types > Zone Types is checked if the zone is not allowed to be bypassed.

Panic Silent

(Siren Type 0 in Alarm Type 9) To select a silent Panic alarm type that will just remotely signal to the Central Monitoring Station and other phone numbers, change the siren type in alarm type 9 to 0 (no siren sound). This is found in Eng Menu 2, 9, 5. Ensure that the “24 Hour” box in Security Types > Zone Types is checked if the zone is not allowed to be bypassed.

13 - Armed Tamper (N.C, Tamper Alarm)

A circuit that will generate a full tamper alarm only when the system is armed. Ensure that the “24 Hour” box in Security Types > Zone Types is checked if the zone is not allowed to be bypassed.

14 - Perimeter Night Away (N.C, Perimeter Alarm)

A circuit that can be used to dial-out silently if activated during Night and Away Modes generating a perimeter alert ’Alarm Type 15’. A full alarm will be generated only when an alert zone, or immediate zone is activated within the next 10 minutes (programmable in Security > Miscellaneous Settings). A perimeter circuit response may be programmed to operate lighting sequences, camera switching, video recording or voice announcements.

15 - GlassBreak (N.C, Intruder Alarm)

A 24-Hour circuit which is connected to a glassbreak detector. Ensure that the “24 Hour” box in Security Types > Zone Types is checked if the zone is not allowed to be bypassed.

16 - Perimeter Vibration (N.C, Perimeter Alarm)

This circuit is the same as zone type 14 being active only while the system is armed except it has an operating sensitivity of 50 ms and is suitable for use with non-electronic (mechanical) inertia shock detectors. A zone response may be needed to act as an analyser.

17 - Monitor (N.C, Alarm Type 14)

Similar to Zone Type 9, except it is Normally Closed

18 - PIR Away (NC, Intruder Alarm)

A circuit that will generate a full alarm during Away Mode only. It is commonly used where access is required to areas during night time such as a bedroom or landing.

19 - 24-Hr Vibration (NC, Intruder Alarm)

A circuit that has an operating sensitivity of 50 ms which is suitable for use with non-electronic (mechanical) inertia shock detectors and will generate a full alarm in all Modes. A zone response may be needed to act as an analyser. Ensure that the “24 Hour” box in Security Types > Zone Types is checked if the zone is not allowed to be bypassed.

20 - 24-Hr Tamper (N.C, Tamper Alarm)

A circuit that will generate a full tamper during all modes. Ensure that the "24 Hour" box in Security Types > Zone Types is checked if the zone is not allowed to be bypassed.

21 Doorbell (N.O, Door Station)

This zone type is no longer used.

22 - NotAssigned (Spare)

23 - Fire (N.C, Fire Alarm)

Same as Zone Type 10, except the zone is Normally Closed.

24 - Switch (N.C., Null Alarm Type 0)

This zone type is the same as type 8 except the switch is normally closed.

25 Vibration Armed (N.C, Intruder Alarm)

Similar to Zone Type 7, except that sensitivity is 100 ms

26 - 24 Hour Zone (N.C Intruder Alarm)

A Normally Closed circuit which will cause an Intruder Alarm in all modes. Ensure that the "24 Hour" box in Security Types > Zone Types is checked if the zone is not allowed to be bypassed.

27 24-hour (N.O., Intruder Alarm)

Same as Zone Type 26 except the circuit is Normally Open.

28 - Vibration Away/Night (N.C. Intruder Alarm)

Similar to Zone Type 7, except it is inactive in Day Mode.

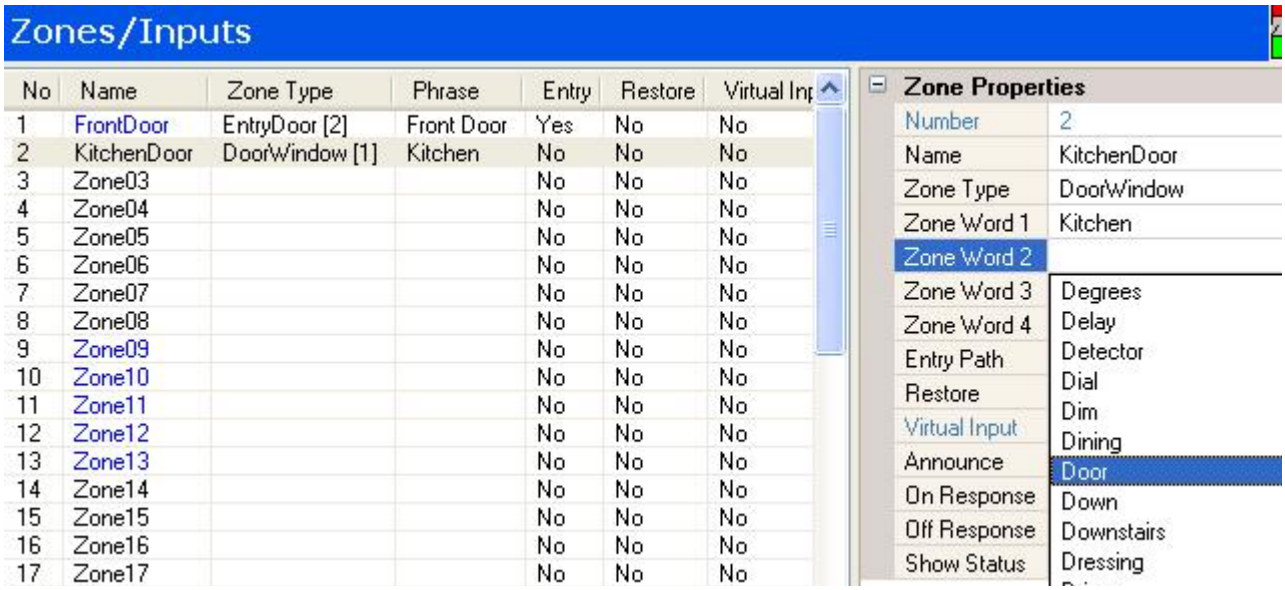
29 - Vibration Away (N.C. Intruder Alarm)

Similar to Zone Type 7, except sensitivity is 20 ms and it is inactive in Day Mode.

30,31 - Digital (Digital, Null Alarm))

The Digital Zone type is either Normally Closed or Normally Open. It does not cause any alarm when triggered. EOL shunts on the zone shield be set to Double End-of-line. No Trouble alarm is activated if there is an open circuit or short circuit. An open/close contact can be connected.

Up to 4 words can be assigned to the zone. Select each word from the drop-down list for Zone Words 1 to 4. The words are from the built-in vocabulary.



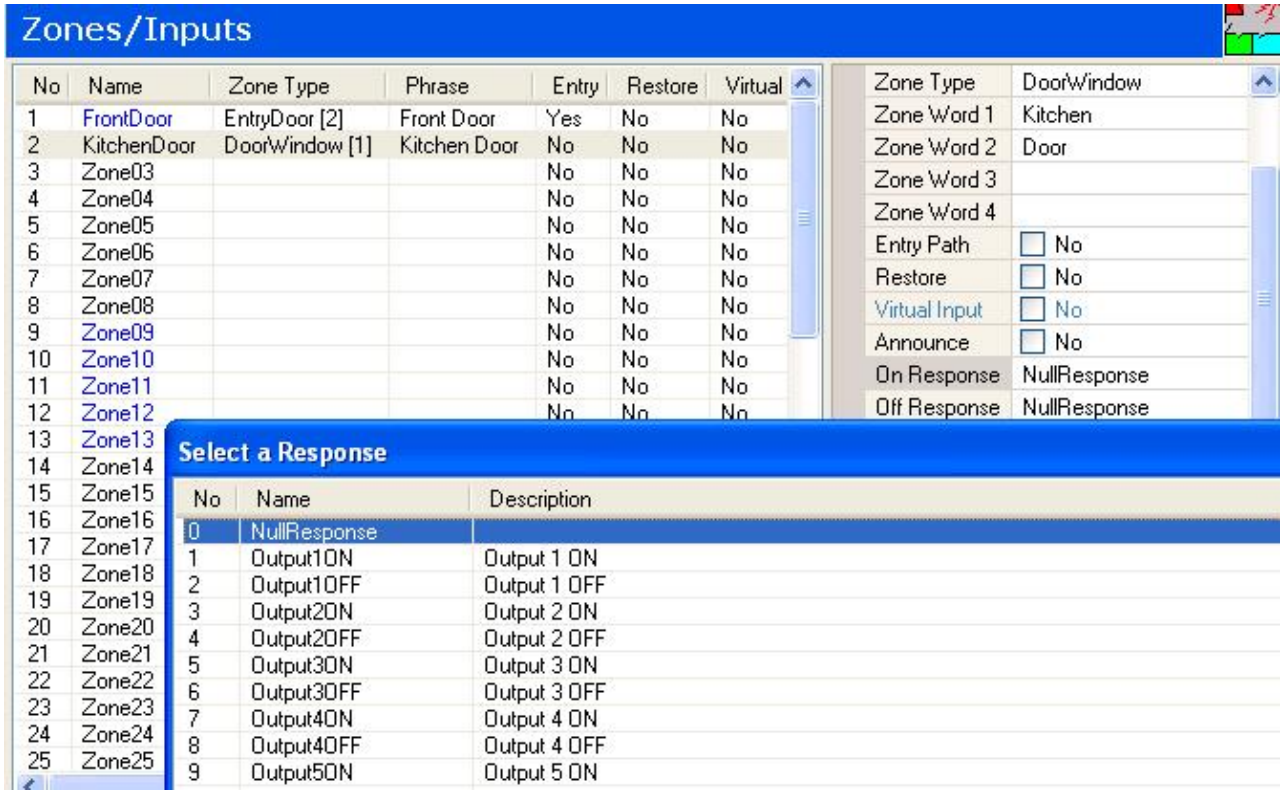
It is not mandatory to assign words to zones, although it would be very useful. A zone which has no words would be announced as the zone number in the event log, zone announcement and security check mode.

The Zone Name can be automatically generated from the Zone Phrase by right-clicking on the zone and clicking on Auto-generate Name. To auto-generate all Zone Names from their phrases, go to Edit menu > Auto-generate Names.

If the zone is on the Entry Path, select YES in the ENTRY column. A zone on the Entry Path will not cause an alarm when it follows an Entry Door when the system is armed. Entry Path zones will not be announced as not ready when the system is being armed to Away Mode. These are normally Motion Detectors which cover the area between the entry door and the keypad.

For a simple Intruder Alarm system, this is all that is required; Zone type, Description and Entry Path.

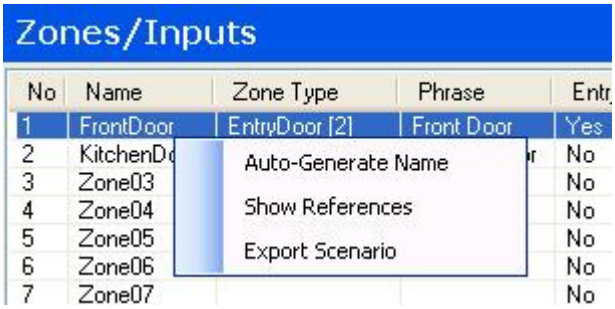
The Zone Response selects the Response to be activated when the zone becomes active (i.e. Open for a Normally Closed input or Closed for a normally Open Input). Leave this at Null Response if no response is required. To select a Response, you can click on the On Response field for the zone to open Select a Response window.



Select the Response required. If the desired Response is not available from the standard set of default Responses, a new Response can be created by pressing the NEW Tab at the bottom of the Select Response window and using the Response Wizard which shall be described later. Do the same for Off Response. The Off Response is activated when the Zone is restored, e.g. door or window is closed.

References to Zones

Zones which are referenced by Responses are shown in Blue. To show where they are referenced, right click on the referenced zone and select Show References.

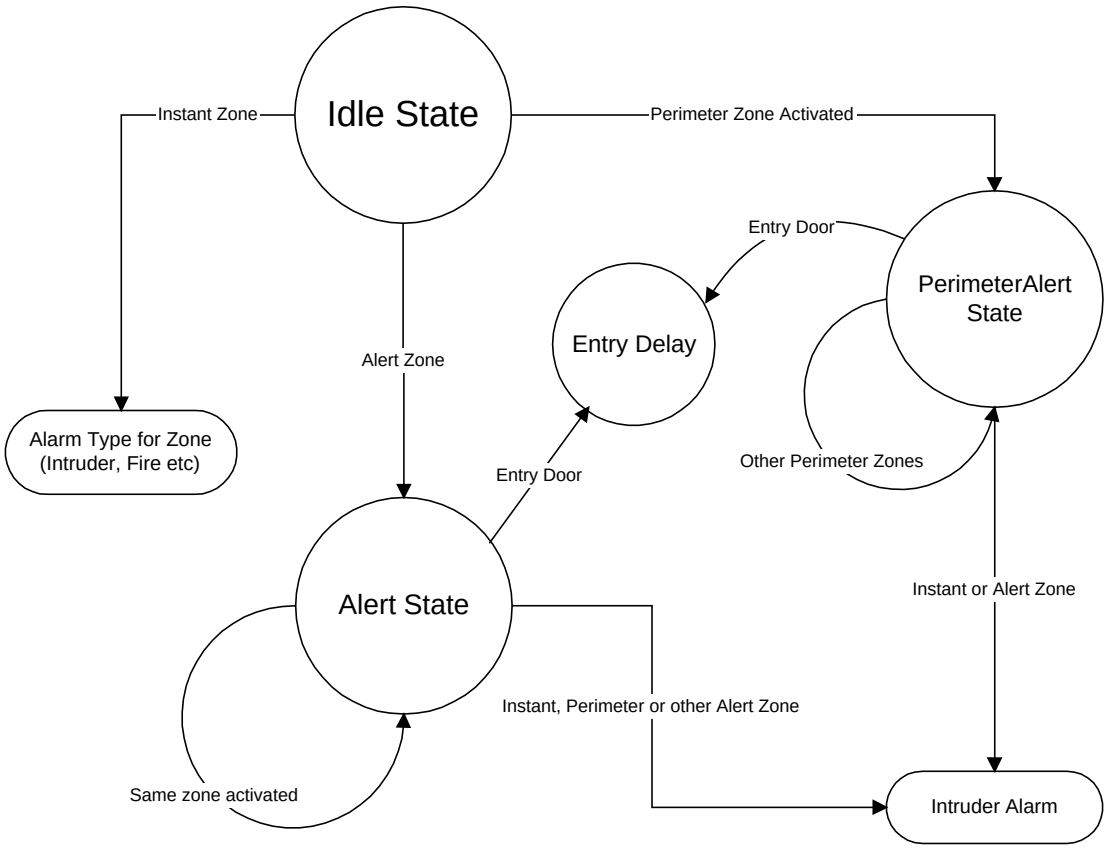


Changing Zone Numbers

You can change the Zone Number of any Zone by Dragging/Dropping the zone to another slot. Position the mouse on the selected zone and drag it to the new slot. This is useful when the electricians have connected the wires from a sensor to the wrong zone number.

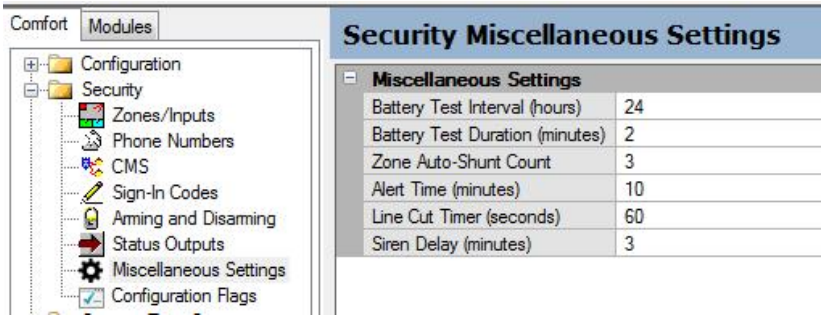
Instant/Alert/Perimeter Zones

Comfort has an advanced mechanism to help filter false alarms. Each Zone Type has one of 4 zone activation modes - Inactive, Instant, Alert and Perimeter. An Inactive Zone setting does not cause any alarm when tripped. An Instant Zone activates its assigned Alarm Type when it is tripped. An Alert Zone causes the system to go into Alert State when tripped. If another non-Inactive zone is tripped (but not the same zone) within the next 10 minutes, an Intruder Alarm is activated. A Perimeter Zone causes the system to also go into Alert State. Tripping of an Alert or Instant zone, but not another Perimeter zone within the next 10 minutes (the duration of the alert time is programmable in Security > Miscellaneous Settings from firmware 4.170 onwards) will cause an Intruder Alarm to be activated. Each zone type can be assigned to any one of these filter settings for each security mode (Security off, Night, and Away/Vacation). The use of Alert and Perimeter Zones is a useful tool in preventing false alarms, but requires careful planning and design on the part of the installer. Refer to the table below for the flowchart which explains the sequence of zone activation to trigger an alarm.



Flowchart for Instant, Alert and Perimeter Zone Activation

Miscellaneous Settings



☎ It is normally not necessary to change these default settings.

Battery Test Interval (hours)

This is the interval in hours between Battery checks from the last time the test was done or from Reset. If this value is 0 or 255, the automatic timed battery test is disabled. Default is 24 hours.

In Engineer Menu this is programmed in Location 720.

Battery Test Duration (minutes)

This is the time in minutes when the mains power to the system is disconnected in order to do a Battery test. During this time, if a low battery condition is detected, the system will reconnect the mains power and generate a Low Battery Alarm. Battery test is activated in Engineer Test menu (8,1). Default is 2 minutes.

In Engineer Menu this is programmed in Location 721.

Zone Auto-Shunt Count

This is also known as "swinger shunt", to help prevent false alarms. The number programmed here is the number of successive triggers at the same zone which causes the zone to be automatically bypassed until the system is disarmed. This minimizes calls to a central station or phone if a zone continuously gets triggered, due to a fault or swinging door. Default is 3.

In Engineer Menu this is programmed in Location 1690.

Alert Time (minutes)

This is the window of the alert time started by the activation of an Alert or Perimeter zone type. During this time window another zone activation may cause an Intruder Alarm (see the flowchart for Alert and Perimeter zone activation in the Programming Manual). Prior to firmware 4.170, the alert time was fixed at 10 minutes, but after 4.170, the Alert time was made programmable up to 60 minutes. Any number greater than 60 minutes will cause a 60 minute alert time. Default is 10 minutes.

In Engineer Menu this is programmed in Location 1703.

Line Cut Timer (seconds)

This determines how long a telephone line cut is detected before Comfort reports it as a line cut alarm. Setting too short a time could cause false line cut detection due to momentary telephone line problems or tests performed by the telephone company. Default is 60 seconds.

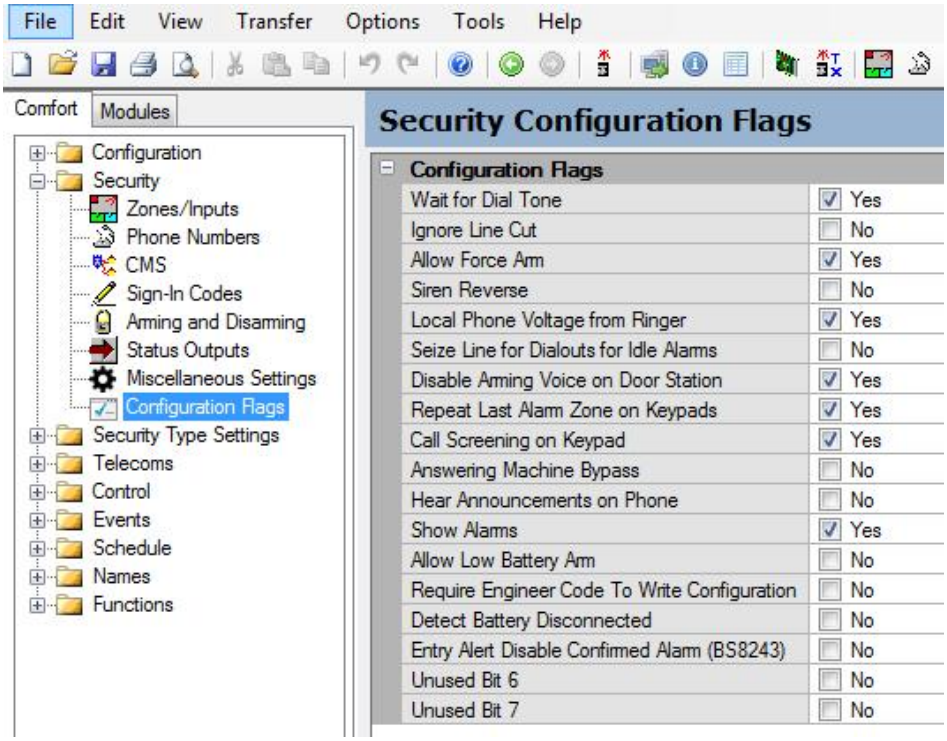
In Engineer Menu this is programmed in Location 1684.

Siren Delay (minutes)

This is the delay time in minutes before the siren starts when an alarm is triggered. Setting a value here does not cause a siren delay. Each Alarm Type has a setting for Siren Delay on or off, i.e. you can decide which alarm should have a siren delay. The Siren delay will be the same for all Alarm Types which have the Siren Delay setting on. If the telephone line is cut during the Siren Delay, the siren is turned on immediately. Default is 3 minutes.

In Engineer Menu this is programmed in Location 51.

Configuration Flags



The section of the Security screen called Configuration Flags are for various general settings.

☎ In most cases these default settings do not need to be changed. Skip this section unless you need to make changes.

Wait for Dial Tone (Default On)

Check this box to force the system to wait for a continuous dial tone before dialing out in the event of an alarm. If selected, the system will not dial out when there is no dial tone. If the box is unchecked, the system will commence dialing after 5 seconds if there is no dial tone, but will also dial immediately if there is a dial tone. When the dial tone is not continuous e.g. broken tone, uncheck this box. For phones on Call Forwarding, when a broken tone is provided, uncheck the box. Warning: if this setting is off, Comfort will not be able to dial out when an incoming caller is holding the line. See Incoming Call Release Time.

Ignore Line Cut (Default Off)

Check this box if the telephone line is in parallel with other telephones. Comfort will not check for telephone line cut. Use this option only if it is not possible to remove parallel phones from the phone line, as it results in a loss of security; Comfort is not able to cut off the line for parallel phones.

Allow Force Arm (Default On)

If the box is checked, it allows the user to force-arm the system when zones are open. Force arming automatically bypasses all open zones until the system is disarmed or until the zones are subsequently closed. If zones with intermittent faults are force-armed, false alarms may be generated due to the zone restoring itself and faulting. If the box is unchecked, the user will not be able to force-arm

the system. 24 hour zones cannot be force armed. To allow force arming a 24 hour zone, define the zone type as non 24 hour, but set the settings for all modes as Immediate.

This can also be done in Engineer Menu 4,3,1.

Siren Reverse (Default Off)

If this box is unchecked (default), the 12V is applied across the 12VF/SRN- terminals to sound the siren. If the box is checked, the 12V is applied across the 12VF/SRN- terminals when the siren is not activated, and voltage is removed from the siren to sound it. This setting is used for self-actuated sirens which have a backup battery onboard.

This can also be done in Engineer Menu 4,3,3.

Local Phone Voltage from Ringer

This is no longer in use for Comfort II

Seize Line for Dialouts for Idle Alarms (Default Off)

Normally, Comfort does not “seize” the telephone line (i.e. disconnect local telephones) when dialing out in the event of Idle or Trouble state alarms. This allows users to use their telephones unless the state is of a higher priority. Check this box to allow Comfort to seize the line even for idle state alarms, i.e. whenever it needs to dial out.

Disable Voice on Door Station (Default On)

Check this box if the Door Station is not to make any announcements at all, i.e. to be used only for Door Station intercom. Otherwise, the open zones during arming will be announced on the Door Station to tell the user which zones are still open.

Repeat Last Alarm Zone on Keypads (Default On)

Check this box if in the event of an alarm, the last zone violated shall be repeated on the keypads. If another zone is violated, the new zone name will be announced repeatedly, e.g. “Kitchen window, Kitchen window, Kitchen window,..., Hall Movement, Hall Movement,...” This tells the occupants where the intruder is at all times.

Call Screening on Keypad (Default On)

Check this box to monitor on the first keypad incoming voice messages which are being recorded on the answering machine. To answer the call and stop recording, pick up the telephone handset.

This can also be done in User Menu 2,6,6.

Answering Machine Bypass (Default Off)

Check this box to activate the Answering Machine Bypass feature. This allows external answering machines and facsimile machines to be connected to TEL OUT. The external equipment will normally answer the phone call before Comfort if Comfort’s number of rings is programmed to be more than that of the external device. In order to access Comfort, dial to Comfort’s telephone number and let the phone ring exactly once (i.e. hang up as soon as you hear the ringback tone). Then wait for 10 to 25 seconds and call the same number again. Comfort will answer the

telephone on the first ring, bypassing the external device. To disable this feature, uncheck the box. This can also be done in Program Menu 1,0.

Hear Announcements on Phone (Default Off)

Check this box if alarm and other announcements are to be heard while the phone is being used. The announcement will temporarily interrupt the phone conversation.

Show Alarms (Default On)

Uncheck this box to prevent display and indication of alarms on keypads until a sign in code is used, to comply with EN50131. When an alarm occurs and the system is armed, the keypad display and indications will not show the alarm. It is advised that this function should NOT be unchecked unless absolutely required as it leads to a reduction in functionality and convenience for the user. Alarm systems are a balance between security and convenience and functionality and in our opinion the EN50131 standards lean towards loss of convenience and functionality without a real increase in security.

☎ If this box is unchecked there will be a warning to confirm the action is really needed.

Allow Low Battery to Arm (Default Off)

Check this to allow arming even when there is a low battery condition in Comfort. This is not advisable, but may be needed for testing purposes.

Require Engineer Code to Write to Comfigurator (Default Off)

If this is checked, a user code cannot be used as a sign in code to write to Comfigurator. Instead the engineer code (default 6789) is needed, but the engineer code must be authorised by pressing F, 0 on the keypad beforehand.

Detect Battery Disconnected (Default Off)

If checked Comfort will report Low Battery alarm when a backup battery is not connected for 10 seconds.

Entry Alert Disable Confirmed Alarm BS8243 (Default Off)

If checked an entry alert leading to an intruder alarm due to the entry delay timer expiry will not turn on the Confirmed Alarm Output.

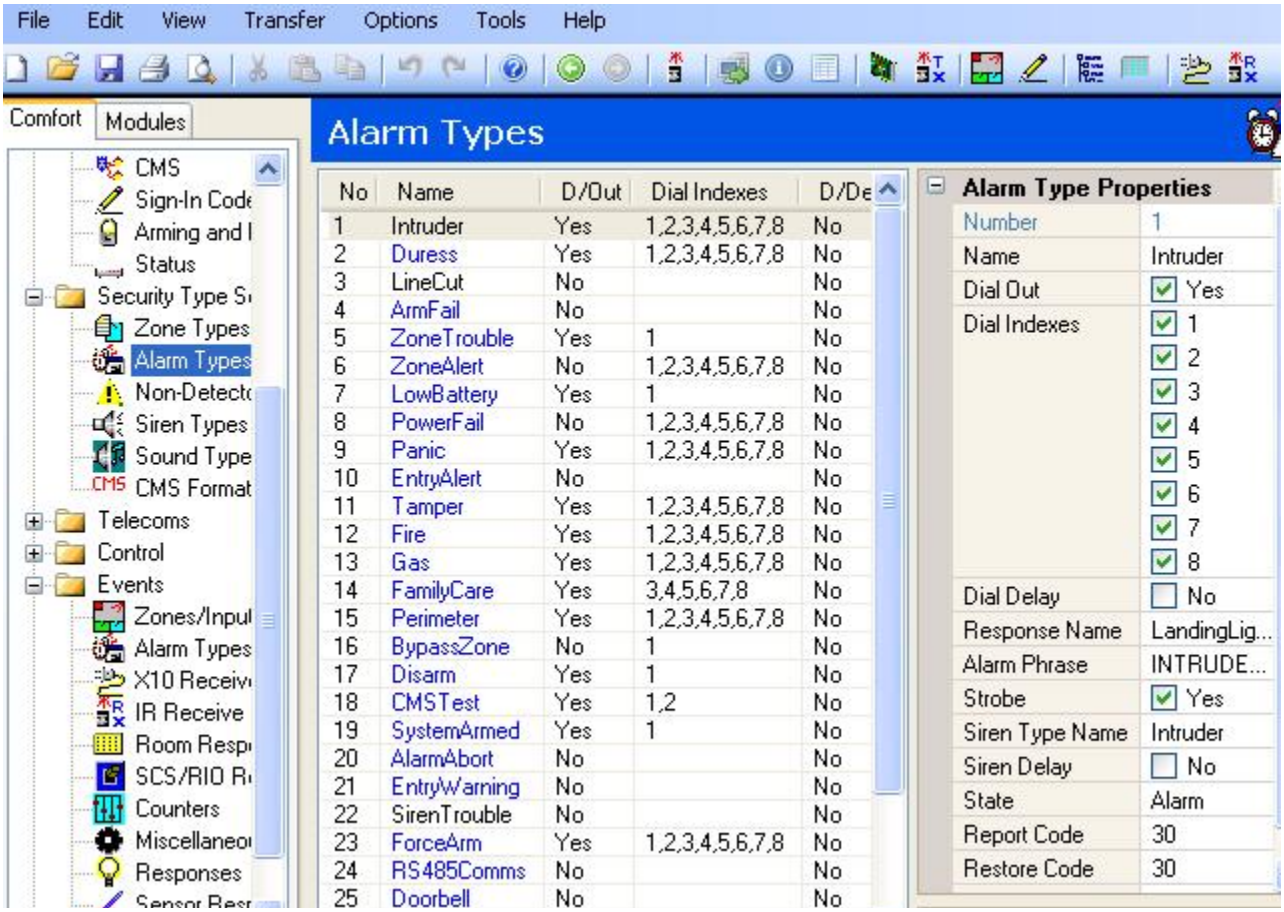
Unused Bits 6 and 7

These are reserved for future use.

Alarm Types

There are 32 Alarm Types in the Comfort System, numbered 0 to 31. Each Alarm Type is triggered by activation of a Zone or other events like low battery, Power Failure, New message etc... The Alarm Type settings determine the behaviour of the Alarm, like whether the system dials out, and to what combination of the 8 phone numbers, whether the strobe turns on, which of the 4 alarm states the alarm is in, one of 20 siren types, the alarm phrase, the Alarm Response (to trigger lights and appliances), whether there is a Dial Delay or Siren Delay, and the CMS Report codes.

In Comfigurator, go to Security Type Settings > Alarm Types.



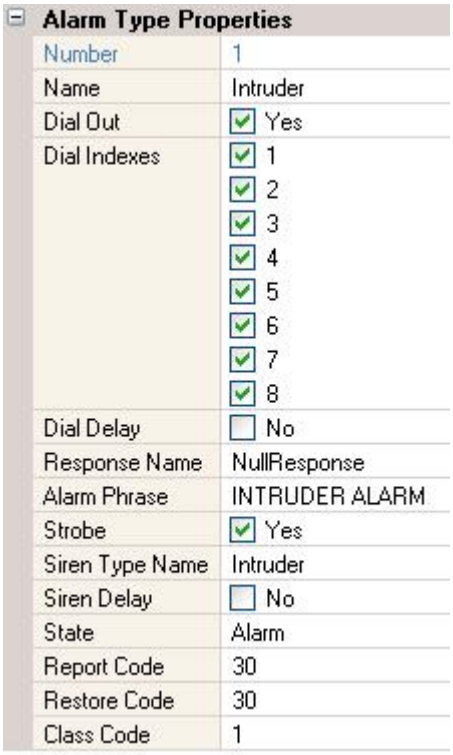
The Alarm Types screen (partial) is shown above.

There is normally no need to change the default settings of Alarm Types unless there are special requirements which are not met by the default alarm type settings. The only change required in most cases is the Dialout setting for the alarms.

☎ The names of the Alarm Types in Blue cannot be changed. This is because Alarm Types normally have a fixed purpose or usage once it is referenced, and changing the name may cause confusion

Dialout, Dial Indexes, Dial Delay

The D/Out (Dialout) column is either Yes or No. Yes means that Alarm Type will dial out when activated. The dial indexes 1 to 8 show the combination of the 8 programmable phone numbers which the system will dial to when the alarm is activated. Each Alarm Type can dial to any combination of the 8 telephone numbers. To select the telephone numbers to dial to, click on the Dial Indexes column.



Alarm Type Properties	
Number	1
Name	Intruder
Dial Out	☑ Yes
Dial Indexes	☑ 1 ☑ 2 ☑ 3 ☑ 4 ☑ 5 ☑ 6 ☑ 7 ☑ 8
Dial Delay	☐ No
Response Name	NullResponse
Alarm Phrase	INTRUDER ALARM
Strobe	☑ Yes
Siren Type Name	Intruder
Siren Delay	☐ No
State	Alarm
Report Code	30
Restore Code	30
Class Code	1

Check the boxes for the phone indexes to dial for this alarm. The phone indexes 1 to 8 correspond to the telephone numbers programmed in the screen Security > Phone Numbers. This will be explained in more detail later in this chapter.

Dial Delay is the Dial delay for the alarm type. If this box is checked, the dial-out will occur after the dial delay. The actual Dial Delay value in seconds is programmed in the Telecoms > Dialing screen. The Dial Delay value is common for all alarm types which require Dial Delay.

Response

The Response column shows the Response which is activated when this alarm type is triggered. Each Alarm Type can activate its own Response to perform additional functions, like switching on Lights and relays. To select a Response, right-click in the Response column to open a Response window. Select a Response from those listed. If the Response required is not found among the default Responses, create it by choosing the New button at the bottom of the Select a Response screen.

Phrase

The “Phrase” column is to select the alarm sentence which is assigned to this alarm when dialing out and in the event log and alarm history. Do not change this setting.

☎ The default setting normally does not need to be changed

Strobe

This specifies whether the Strobe is to be turned on during this alarm.

☎ The default setting normally does not need to be changed

Siren Type

This specifies the type of siren to be activated, and is selected from a list of available siren types. Siren Types are defined on the Security Type Settings > Siren Types screen.

☎ The default setting normally does not need to be changed

Siren Delay

This specifies whether there is to be a delay before the siren is activated. The actual Siren Delay value in minutes is programmed in the Security screen. The Siren Delay value is common for all alarm types which require Siren Delay.

☎ The default setting normally does not need to be changed

State

This specifies the state for this alarm type. Each alarm is in one of the 4 states; Idle, Trouble, Alert, or Alarm, which are also in ascending order or priority. Idle state is a non-alarm condition. Trouble state is when there are system trouble conditions like phone line cut, power failure or low battery. Alert State is when the system is waiting for some event to turn it into a full Alarm, like when the entry door starts the Entry Time when the system is armed. Alarm state is a full alarm, and has the highest priority. A new alarm will take priority over an existing alarm of the same or lower priority. For example, a Trouble alarm will not be activated if an Alert Alarm is active.

☎ The default setting normally does not need to be changed

Report and Restore Codes

This specifies the Report Codes to be transmitted to the Central Monitoring Station when this alarm type is activated and restored. The Report code depends on the Monitoring Station Format selected. Consult with your Monitoring Station for the Report codes available. There are 1 or 2 digits in the Report code, depending on the format selected but 2 digits should be entered. For formats which only require 1 digit, only the first digit of the code is sent. Each digit is in the range 0 to 9 and A to F, representing a hexadecimal digit. For 2 digit codes, if the 2nd digit is 0, the system will substitute the Zone or User Number for the second digit. For example if 30 is entered for Intruder Alarm, if Zone 5 causes the alarm, the Report Code sent will be 35. If FF is entered, no Report Code is sent at all -- this alarm type will not dial to a Central Monitoring Station.

☎ The default setting normally does not need to be changed

Class Code

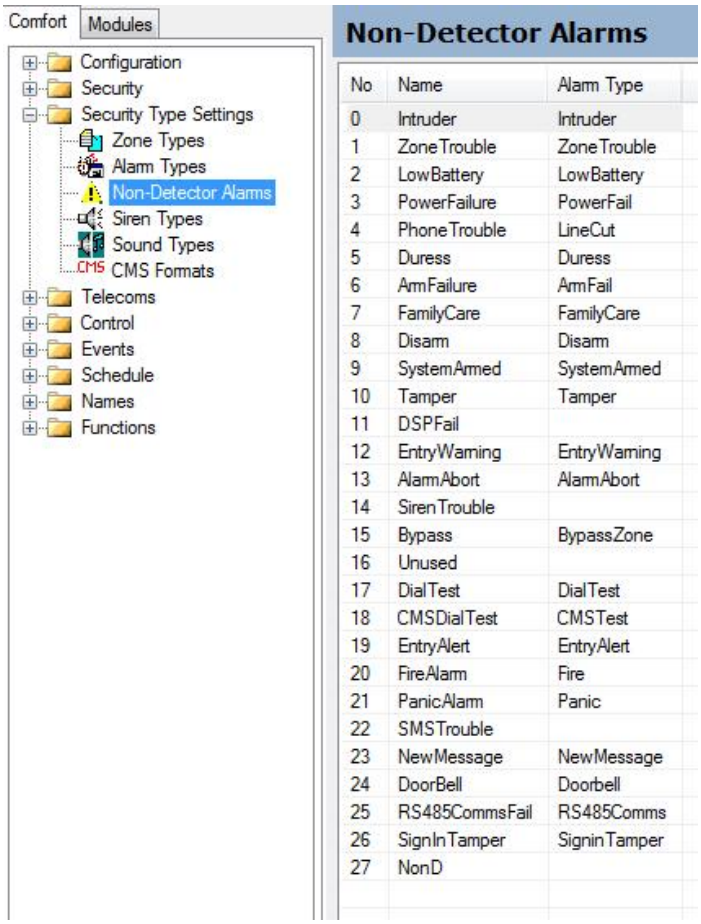
This is used for Contact ID CMS reporting format only. Leave this unchanged at the default values.

As mentioned, most of the Alarm Types settings can be left at their default values. Only the Dial settings and Response may need to be changed,

☎ The default setting normally does not need to be changed

Non-Detector Alarms

Each Zone Type has an assigned Alarm Type. There are also other alarms which are not related to zones, e.g. Power Failure, Low Battery, New Message, RS485 Comms failure etc.. These are called Non-detector Alarms. Go to Security Type Settings > Non-Detector Alarms to see the list of Non-detector Alarms and the Alarm Type that is assigned to each of them.



Non-Detector Alarms

No	Name	Alarm Type
0	Intruder	Intruder
1	ZoneTrouble	ZoneTrouble
2	LowBattery	LowBattery
3	PowerFailure	PowerFail
4	PhoneTrouble	LineCut
5	Duress	Duress
6	ArmFailure	ArmFail
7	FamilyCare	FamilyCare
8	Disarm	Disarm
9	SystemArmed	SystemArmed
10	Tamper	Tamper
11	DSPFail	
12	EntryWarning	EntryWarning
13	AlarmAbort	AlarmAbort
14	SirenTrouble	
15	Bypass	BypassZone
16	Unused	
17	DialTest	DialTest
18	CMSDialTest	CMSTest
19	EntryAlert	EntryAlert
20	FireAlarm	Fire
21	PanicAlarm	Panic
22	SMSTrouble	
23	NewMessage	NewMessage
24	DoorBell	Doorbell
25	RS485CommsFail	RS485Comms
26	SignInTamper	SigninTamper
27	NonD	

The items on the left under the heading “Name” is the Non-Detector alarm, and the item on the right is the Alarm Type which is assigned to it. For example, the “LowBattery” Non-detector alarm has an Alarm Type also called “LowBattery”. This means that when a Low Battery condition is detected, Comfort activates the LowBattery alarm type defined in the Security Type Settings > Alarm Types screen.

This tells Comfort what to do in the event of a Low Battery; whether to dial out, and to which numbers, the Response to be activated if any, what Siren to activate if any, whether to turn on the strobe etc..

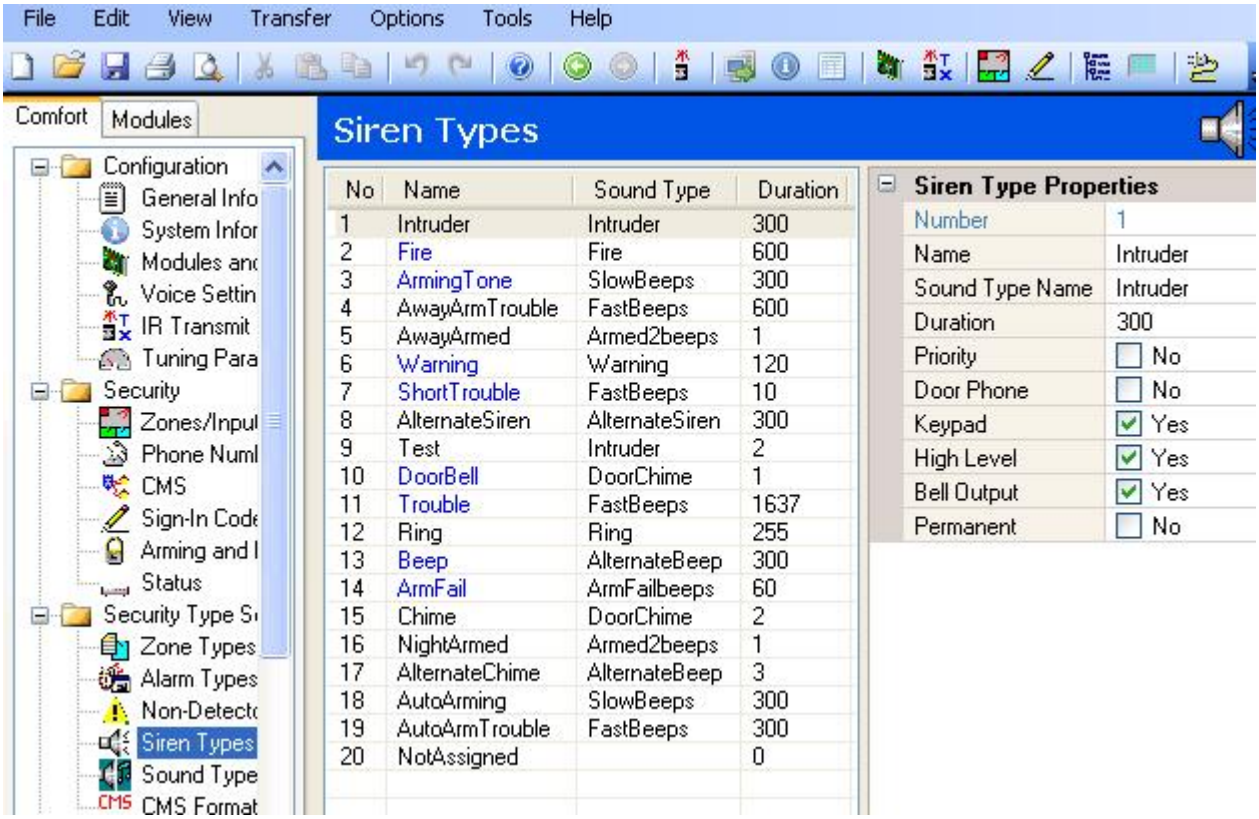
If the Non-Detector Alarm is not to have any alarm behaviour, the Alarm Type is to be Null or blank Alarm Type.

The INTRUDER non-detector alarm is activated when the Entry Delay expires. By default this causes the Intruder Alarm to be triggered.

☎ These default settings should not normally be changed

Siren Types

The system has 20 programmable Siren Types which can be assigned to Alarm Types. To see the Siren Types screen go to Security Types > Siren Types.



This screen allows the Siren Types to be defined. This allows for example, Intruder and Fire alarms to have different siren sounds to distinguish the audible alarms from each other. The Fire alarm consists of 3 pulses followed by a pause while the Intruder Siren is a fluctuating wailing sound on the keypad and speaker.

The system has 20 programmable Siren Types which can be assigned to Alarm Types. This screen allows the Siren Types to be defined.

☎ The Siren Type defaults should normaly npt be changed.

The meaning of the parameters are;

Name

This is a name which may be assigned to the siren type to provide a meaningful description. It may be up to 16 characters (A-Z, a-z, 0-9, - or _), e.g. ShortTrouble.

Sound Type

This specifies the type of sound to be produced for this Siren Type, and is selected from a list of available sound types. Sound Types are defined on the Sound Types screen (Security Type Settings > Sound Types).

Duration

This specifies the duration in seconds for the siren type. The resolution of the value is 0.05 seconds or 50 milliseconds.

Priority

This should be set to Yes if this siren is not to be interrupted by another siren produced by a new Alarm type which may be of equal or higher priority. For example, The Fire alarm siren may be required to have priority over other sirens, and may not be interrupted by an Intruder alarm siren.

Door Phone

This specifies whether the siren is to be heard on the Door Station.

Keypad

This specifies whether the siren is to be heard on the Keypad.

High Level

This specifies whether the siren is to be produced at the maximum level.

Bell

This specifies whether the bellbox (12V) is to be activated via the 12VF/SRN- terminals. How the voltage is applied (voltage when siren or no siren) depends on the Siren Reverse Setting on the Configuration Flags screen.

Siren Type References

Siren Types which are used by Alarm Types are shown in blue, while unused Siren Types are shown in black. To see which Alarm Types use the Siren Type, right-click on the Siren Type and select Show References.

☎ These default settings should not normally be changed

Sound Types

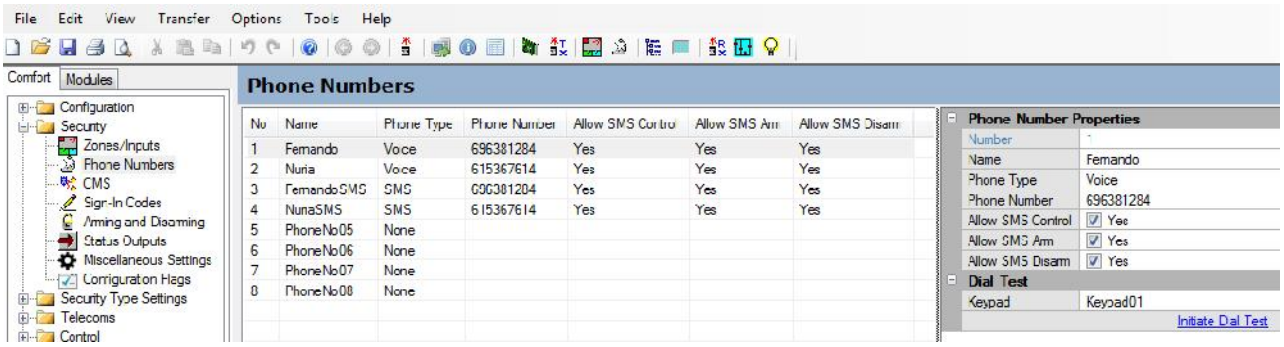
12 Sound Types are available to produce a variety of tones used in Siren Types.

☎ These default settings should not normally be changed

Phone Numbers

To program the telephone numbers to dial out when alarms occur, go to Security > Phone Numbers. Up to 8 telephone numbers can be programmed. Each alarm type can select any combination of the 8 numbers to dial out to.

Select one of the 8 telephone numbers. Click on the Phone Types column.



The drop-down list shows the phone types that can be assigned; None (no dialout), Voice (for mobile or landline phones), Pager (No longer used), CMS (Central Monitoring Station), SMS. The SMS Phone Type is only applicable if the GSM Module is installed. This sends a SMS message to a GSM mobile phone.

Only Phones 1 and 2 can be assigned to CMS (Central Monitoring Station) Phone Type. If the system is not required to dial to CMS, phones and 1 and 2 may be assigned to the other phone types. Phones 3 to 8 can be assigned to Voice Phone or SMS, but not CMS. The possibility of assigning two CMS numbers allows for one of them to be a backup number in case the first number is unavailable.

Next, click on the Phone Numbers column and type the telephone number, up to 20 digits.

The fields “Allow SMS Control”, “Allow SMS Arm”, “Allow SMS Disarm” appear only when UCM/GSM4 is present in the configuration. These are permissions for the mobile phones to access the stated functions.

The “Initiate Dial Test” button starts a dial test to dial to all the programmed phone numbers according to the Phone Type. The dialing tones and progress tones are heard on keypad 1.

☎ There is a programmable delay of default 3 minutes after a kissoff from a Monitoring Station in an alarm state before the other phone numbers are dialed, to allow time for the Central Station to call the premises to verify the alarm. This delay in minutes is in Location 1687.

☎ Once phone 1 or 2 is set to a Monitoring Station, the user will not be able to change the phone setting to other phone types or make any other changes to the programmed phone in the Program Menu.

Dialout Grouping

The 8 phone numbers are divided into 2 dial out groups. These are phones 1 and 2 in the first (Monitoring station group) and phones 3 to 8 (Normal phones group). In the normal phones group, a valid sign-in from a Voice Station will stop further dial outs in that group. In the Monitoring Stations group, a kissoff from a Monitoring Station or a valid sign-in from a Voice Phone will stop further dial outs in the group.

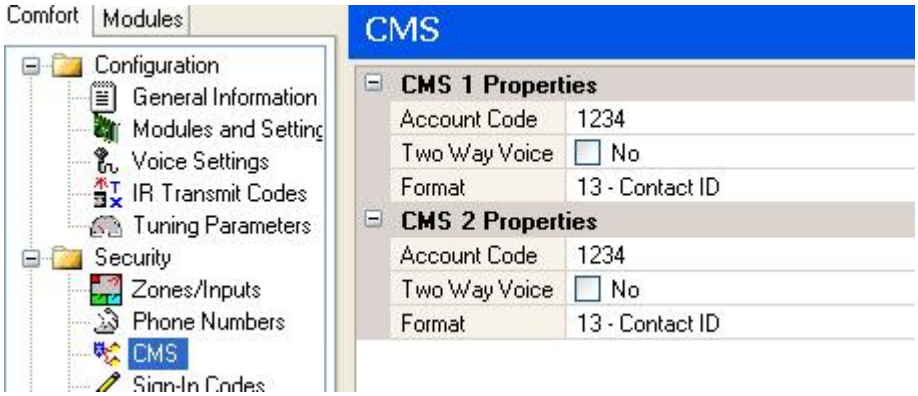
If the called Voice Phone acknowledges the dialout by pressing # instead of signing in, this does not end dialouts to the whole group - it stops further dialouts to that number only. Similarly, dial outs to Pagers do not stop dial outs to other phones, but end dial outs only to that particular number. The sequence of dial outs is from phone 1 to 8. If a dial out is not acknowledged or if the called number is busy or does not answer, the system dials to the next number in the list, and returns to the failed number in the next cycle.

This organization of phones into 2 Dialout groupings provides maximum flexibility in the management of dialouts.

CMS (Central Monitoring System) Dialout

Comfort can dial to most standard Central Monitoring Station formats including Contact ID (preferred), as well as the “Pulse” formats 4x2, 4x1, 3x2, 3X1 in several speeds.

To select a CMS Format go to Security > CMS.

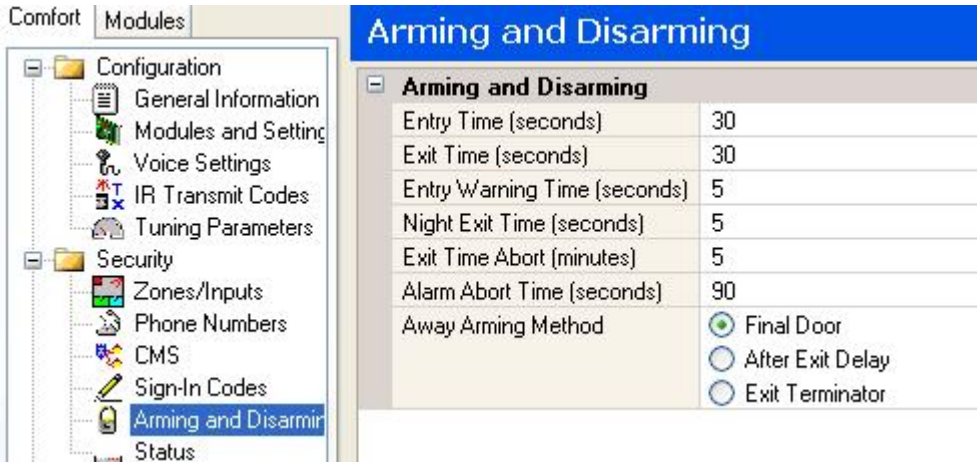


Two CMS formats may be specified for two telephone numbers. CMS 1 is for Phone 1 and CMS 2 is for Phone 2.

Each CMS number can be assigned an Account Code consisting of 4 digits, as well as a Format. The Account number is assigned by the Central Monitoring Station management to identify the system. The Format can be chosen from the drop-down list shown above.

Arming & Disarming

In Comfigurator, go to Security > Arming & Disarming. The screen is shown below, with the default values. Normally, there is no need to change the default values.



Entry and Exit Times

Entry Time

The time in seconds allowed to enter the premises to disarm the system. When the Entry time expires, the Entry Warning Time is started.

Exit Time

The time in seconds to leave the premises via the Entry Door when arming to Away or Vacation Mode when all protected zones are clear. At the expiry of Exit time, the system will be disarmed and will generate an Arm Fail Alarm, which by default activates the strobe and gives a series of tones on the speaker.

Entry Warning Time

The time in seconds after the expiry of Entry Time during which a local alarm occurs (speaker but no dialout), allowing the user to disarm before a full Intruder alarm is generated. To disable this warning and go to a full alarm after expiry of Entry Time, set Entry Warning Time to 0.

Night Exit Time

The time in seconds to leave the protected area when arming to Night Mode. Set to a longer time if the user needs to walk a distance from the point where the system is armed to Night Mode past the protected area. If a protected zone is activated during the Night Exit Time, the delay is restarted. After the expiry of Night Exit Time, the system is armed to Night Mode.

Exit Time Abort

The time in minutes for the system to exit arming when protected zones are open announced by Security Check. This is the time given to users to close the doors or windows which are announced during Security Check.

Alarm Abort Time

The time in seconds after an alarm is activated during which a disarm will cause an Abort. Abort is usually used for Central Station reporting to indicate that the alarm was due to misoperation, and that no further action should be taken. To disable the Abort Alarm, go to Non-detector alarms and set the Alarm type to 0.

Away Arming Methods

There are 3 Away Arming Methods which can be programmed in Comfigurator > Arming & Disarming. This applies to local arming only, not remote arming by telephone.

Final Door Arm

The system will complete arming to Away Mode when the Entry Door (Zone Type 2) is closed on the way out. After 6 seconds, the Exit Delay is terminated, the system will be armed, and the keypad will announce “Away Mode”. If the Exit Delay completes before the Entry Door is closed, there will be an Arm Failure alarm. The user must enter the user sign in code to clear the alarm before the system can be armed.

This only applies to Local arming. If Away Arming via remote telephone, exit is not needed, as Comfort is intelligent enough to know that the user is not on the premises. This is the default setting. It is more secure and convenient than “After Exit Delay” as the user does not have to wait for the expiration of the Exit Delay.

☎ This is the preferred method of arming to Away Mode

After Exit Delay

The system will arm after the Exit Delay if all zones are not active. This setting should be used only when an Entry Door zone is not available due to wiring and connection restrictions.

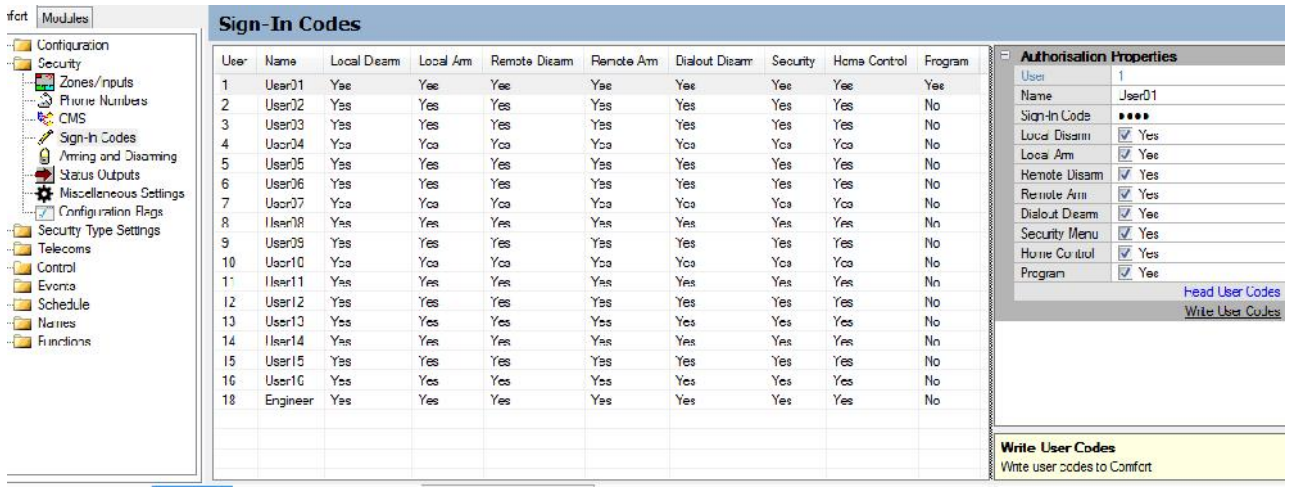
☎ This should be avoided unless an Entry Door contact cannot be fitted

Exit Terminator (UK Only)

This is a requirement for some UK installations. After the Entry Door is closed, the Doorbell on the Door Station must be pressed to complete arming the system

Sign-In Codes

16 Users with their own sign-in codes can be specified. The first 8 users have mailboxes for Voicemail. Users 9 to 16 do not have mailboxes, but can access other functions, like arming/disarming and home control. Each user has their own set of user authorizations. User 18 is the Engineer. The user codes are not written to Comfort if the “Write User Codes to Comfort” is unchecked.



User

This is the user number 1 to 16

Name

An optional name may be assigned to the sign-in to provide a meaningful description. It may be up to 16 characters (A-Z, a-z, 0-9, - or _).

Sign-In

This is the sign-in code, which may be up to 6 digits.

User Authorization

The 8 boxes for each sign-in code specify individual user authorizations or permissions for each user. The users are able to change their own sign-in codes via the keypad, so normally, the installer will set the user authorizations for the users in this screen.

Local Disarm

Check this field if the user is allowed to disarm the system using the local phone.

Local Arm

Check this field if the user is allowed to arm the system using the local phone.

Remote Disarm

Check this field if the user is allowed to disarm the system remotely.

Remote Arm

Check this field if the user is allowed to arm the system remotely.

Dialout Disarm

Check this field if the user is allowed to disarm the system only when the system is in alarm. This security feature can be used for guards who are not allowed to disarm the system unless an alarm has occurred.

Security

Check this field if the user is allowed to access the Security Menu (User Menu 3) to bypass zones, change sign-in codes, and hear Log.

Home Control

Check this field if the user is allowed to access the Home Control Menu (User Menu 4 or Keypad F, 2).

Program

Check this field if the user is allowed to go to Program Menu from User Menu by pressing 9. By default only user 1 is allowed into the Program Menu. Program Menu is also accessible from Engineer Menu by pressing 9.

Read User Codes

Click this to read the existing user codes from the Comfort system.

Write User Codes

Click this to write the changes on user codes to the Comfort system.

Responses and Actions

A Response consists of a series of Action Codes, each of which performs a specific function, like turning an output on or off, sending an Infrared code to an output, or arming and disarming the security system. Responses may be assigned to Zone Trigger and Restore, Time Programs, Alarm Types, Control Menu, Security Mode Responses, Keypad Responses, etc. Comfort II Optimum has a maximum of 128 Responses, while Comfort II Ultra has 1023 Responses.

Action Codes are commands in Comfort's programing language which tell Comfort what to do. For example, Output Output001 On is a command for Output 1 ON. Other examples of action codes:

AutoArm AwayMode - Auto-arm security to Away Mode

IR Code IrCode01 To Output004 - Send IR Code 1 to Output 4

The list of Action Codes and their meaning and usage can be found in the booklet "Action Codes Reference" in Help > Action Code Reference, which will link to the Cytech Website (http://www.cytech.biz/action_codes_reference.html)

A Response consists of one or more action codes. For example a Response to turn on Outputs 1, 2 and 3 would be:

Output Output001 On

Output Output002 On

Output Output003 On

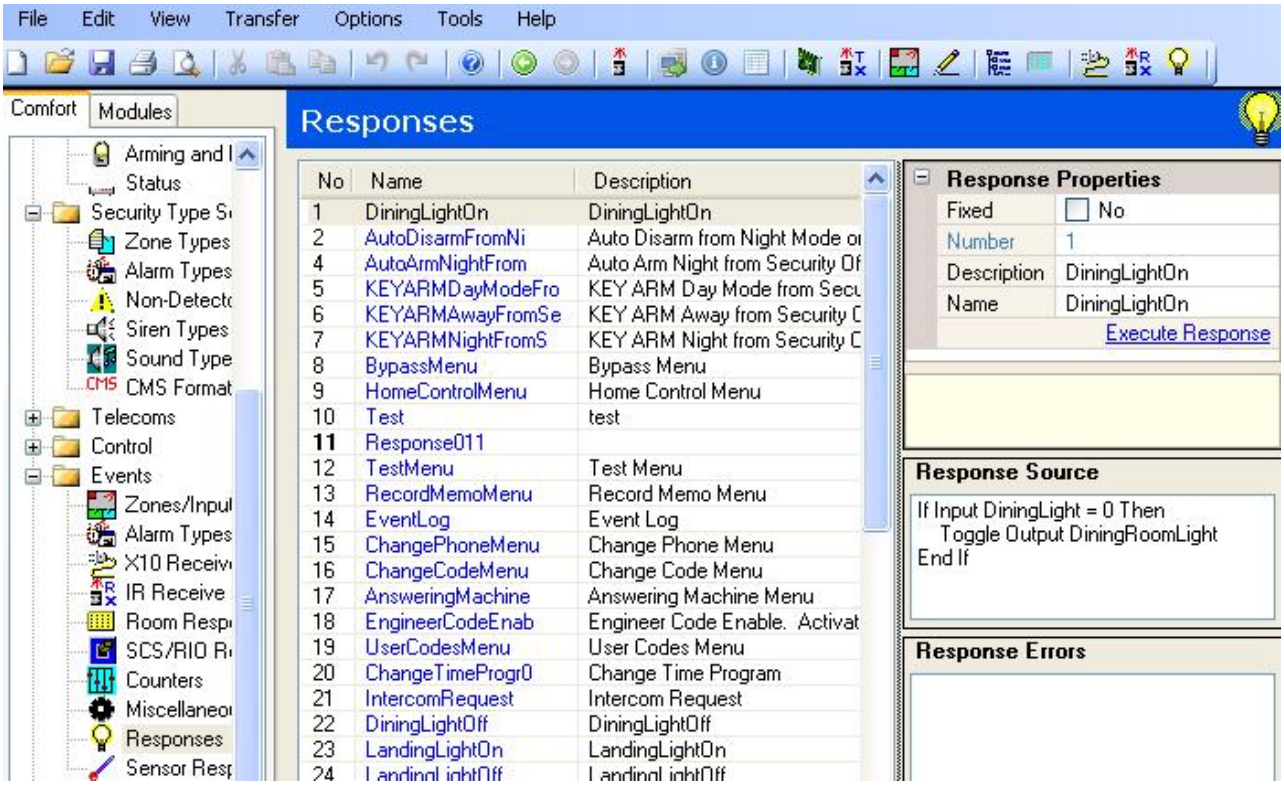
This Response switches on 3 outputs

Although Comfort II Ultra has a maximum of 1023 Response numbers, in practice the maximum Responses will be less than 1023 Responses because if Responses exceed 8 bytes of action codes, the next Response Number is used. Comfigurator will automatically handle the numbering of Responses as they are created or edited.

Using the Response Wizard

Comfigurator has a Response Wizard which helps to design Responses by allowing you to select Actions and their parameters in an easy way.

In Comfigurator, select Events > Responses to open the Responses screen as shown below.

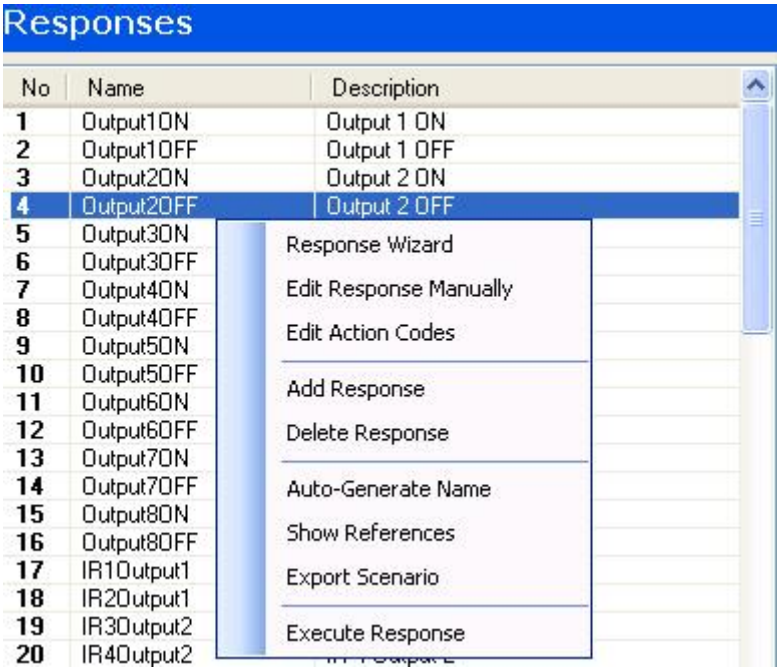


The Response number is on the left. If the number is in bold, it means that the Response number is fixed, and will not be affected when you add and delete responses. The advantage of fixing Responses is so that you know the number when using a keypad to check or change programs. To either fix or unfix a Response, right click on the response and select Fix Response or Unfix Response. The option to Fix and Unfix ALL Responses can be found on the Edit Menu.

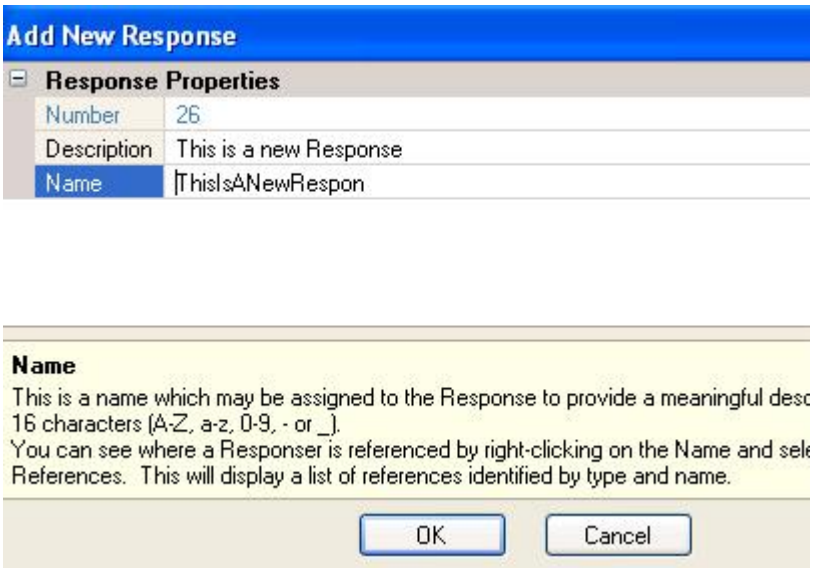
The window below the Responses shows the actions of the highlighted Response in CCL (Comfort Configuration Language),

If Input DiningLight=0 Then
Toggle Output DiningRoomLight
Endif

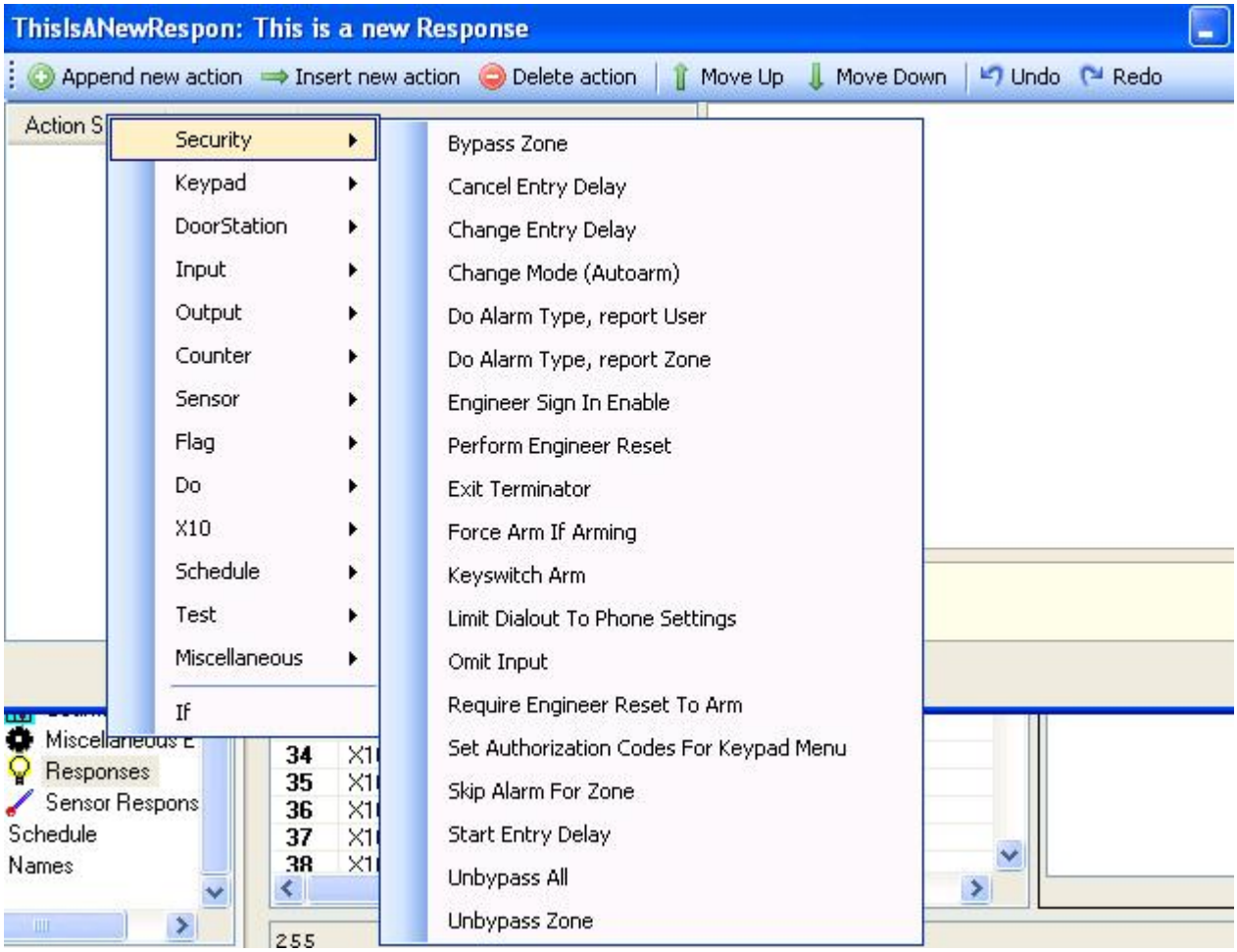
To add a new Response, right click anywhere on the Response line and select Add Response



The Add New Response window is shown

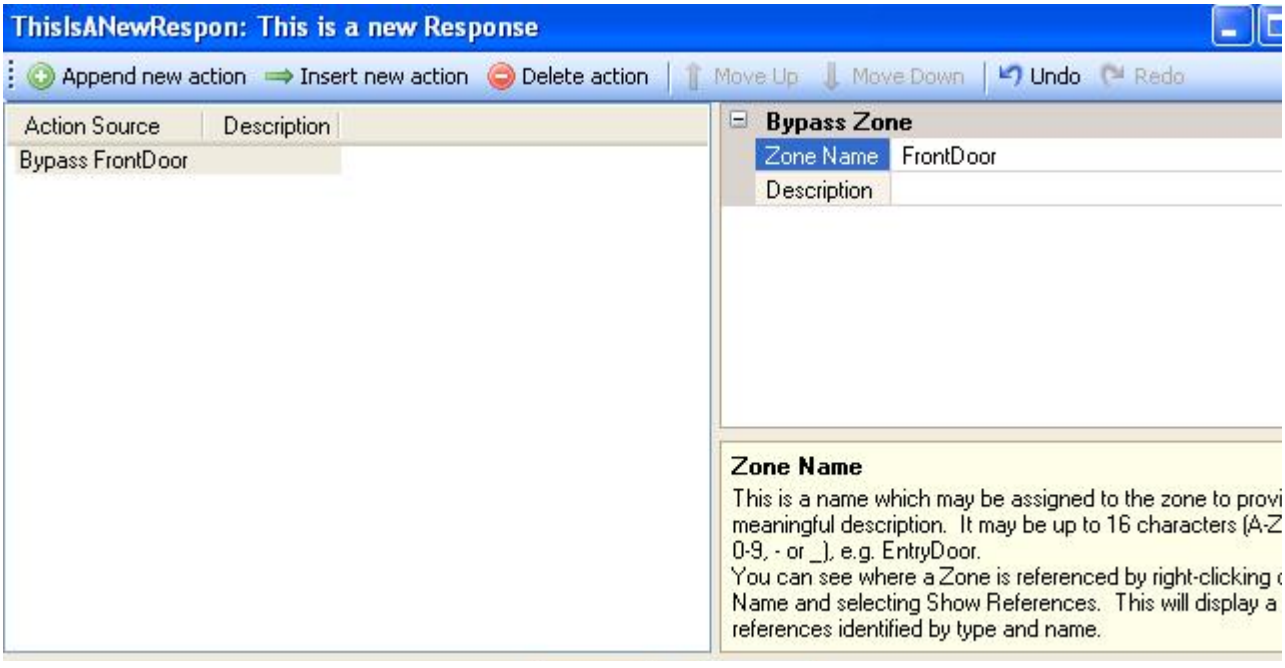


Enter a Description for the Response. Pressing the ENTER key will automatically generate a Name for the Response, which is the Label for the Response. Press OK

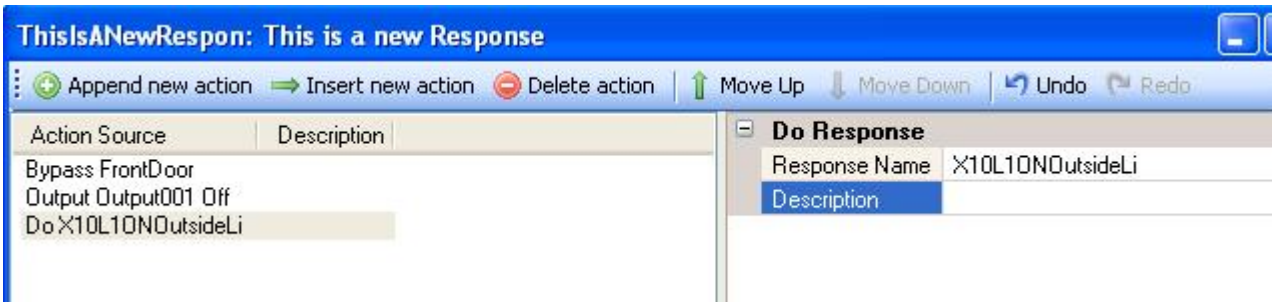


The categories of Actions are shown. Each of the categories tabs will open a new window where all the actions belonging to that group are displayed, for example, if you click on Security, the actions relating to Security will appear.

Clicking a specific action to select it. You may be asked to select parameters of an action e.g. the zone number, depending on the action.

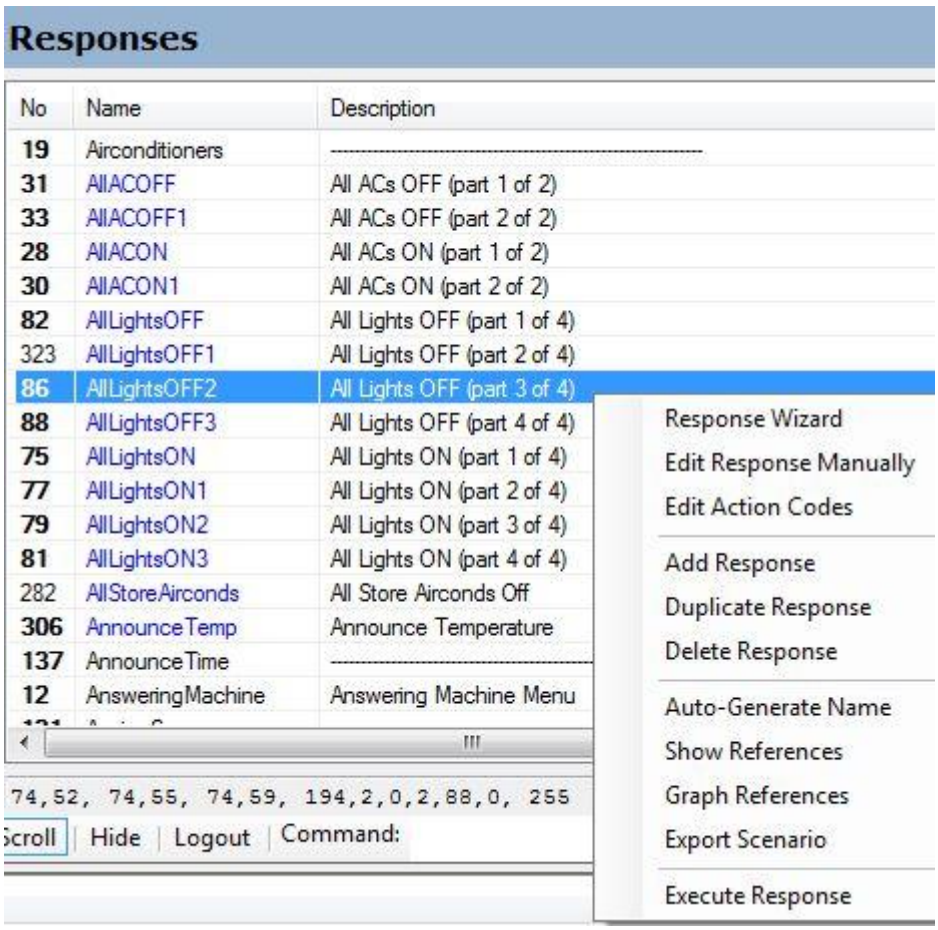


In this way a series of Actions can be selected and added to the new Response.

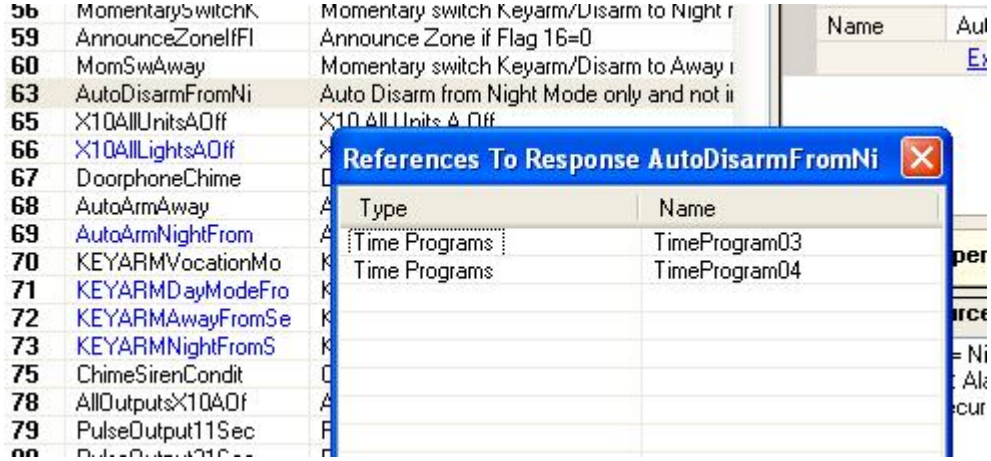


References to Responses

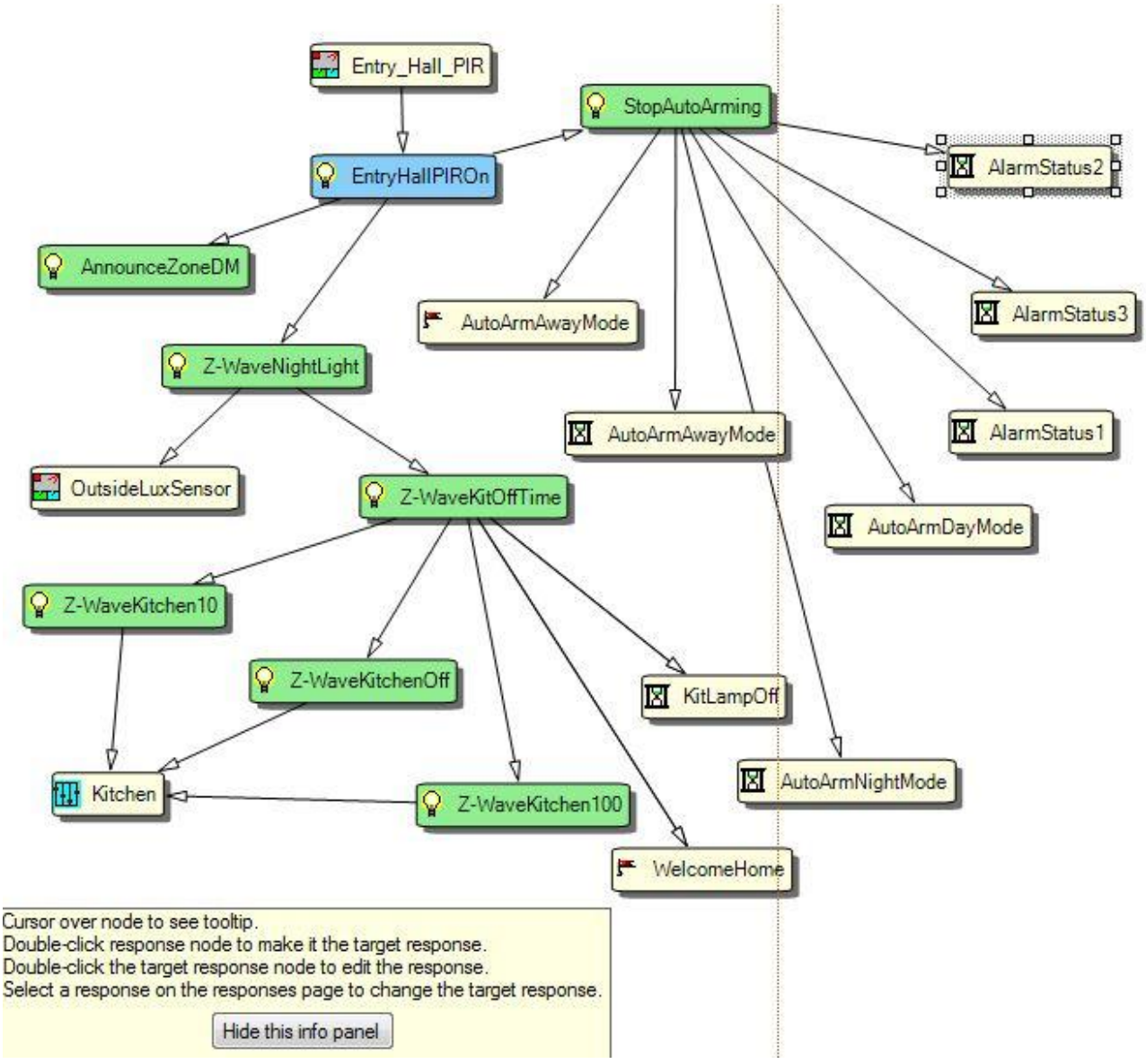
The Name of the Response identifies the Response in Comfigurator when it is referenced from an event. The responses which are referenced from any Event will have their names in blue. Response 101 to 107 in the screen below are referenced. To find out where the Responses are referenced is from right-click on the Response and select “Show References” as in the screen below.



In this example below Response 63 “auto disarm from Night Mode” is referenced from Time Programs 3 and 4.

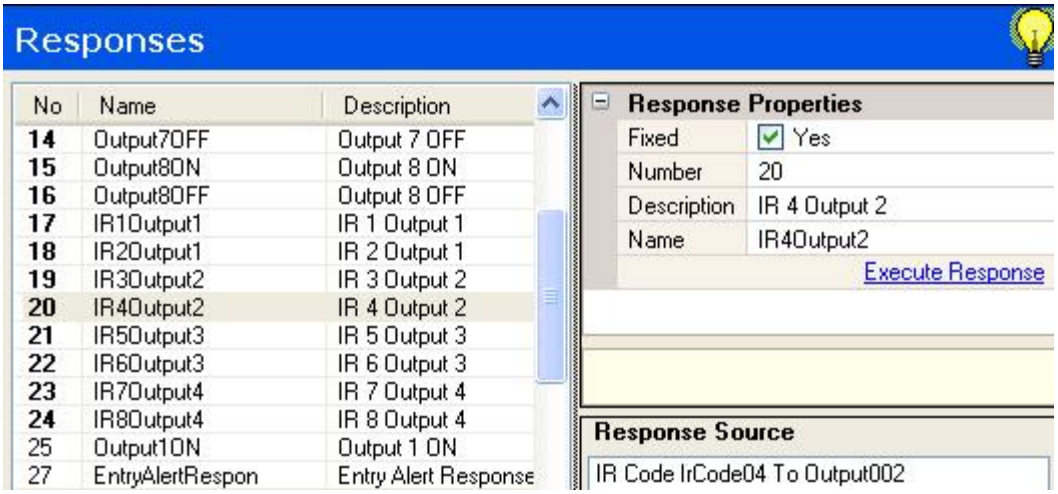


Graph References is a powerful way to trace references to Responses, Zones , Counters, Flags, and Alarms (from Comfigurator 3.9.5)



Being able to trace references to any Response is a great help when troubleshooting Comfort's programmed behaviour.

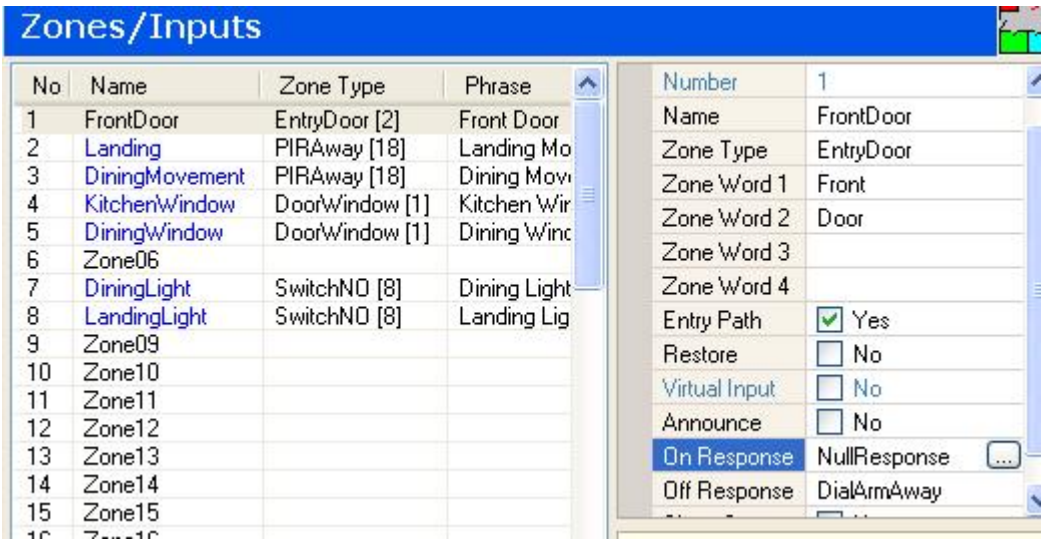
Execute Responses



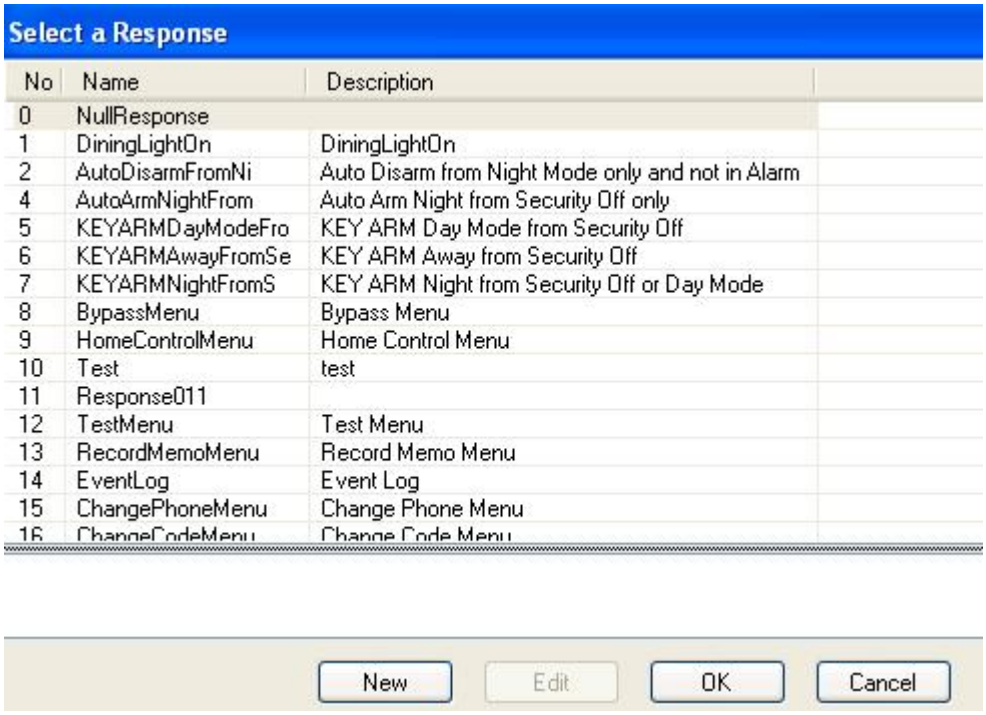
You can “Execute” a Response by pressing the link shown above in each Response. This means that the programmed actions will be activated by Comfort. This is a useful tool to test your programming. Comfort must be connected for this to work.

Assigning Responses to Events

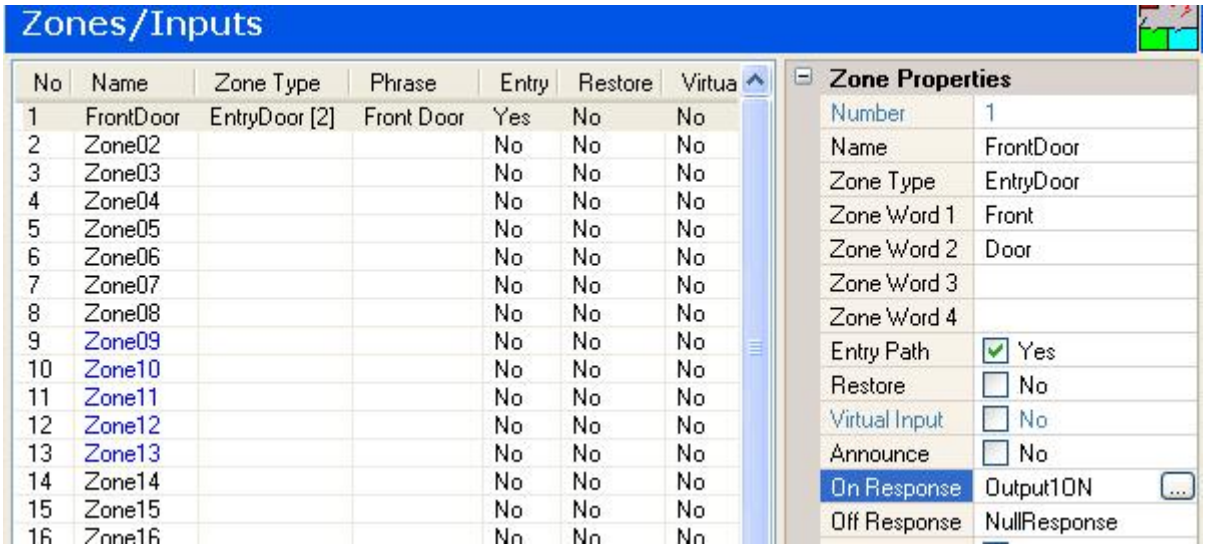
Once the desired Response has been created, or if it already exists as a default or predefined response, it can be assigned to any Event. For example, to have Output 1 turn on when the Main door (Zone 1) is opened, go to Security > Zones. Zone 1 On Response should point to the Response which turns on Output 1. Select Zone 1 On Response as shown below. Click on the ... Button to the right.



A Response Window will open.



Select an existing Response from those listed. If the Response you want does not exist, create a new Response by pressing the “New” tab on the bottom of “Select a Response” screen. Click on the “No” Column to sort the Responses by number and click on the “Name” Column to sort by Name. Select a response by clicking on it and pressing OK. The Zones screen should now look like this;



The selected Response name should be in the On Response field. Any Response can be assigned to an Event in this way. The same Response can be assigned to multiple events.

Delete Unreferenced & Unfixed Responses

Edit > Delete Unreferenced & Unfixed Responses will delete all Unreferenced (Unused) or Unfixed Responses from the Response list so as to reduce the clutter caused by unused Responses. Fixed Responses are seen in the Response Window with the Response number in bold. A Response can be fixed or unfixed in the

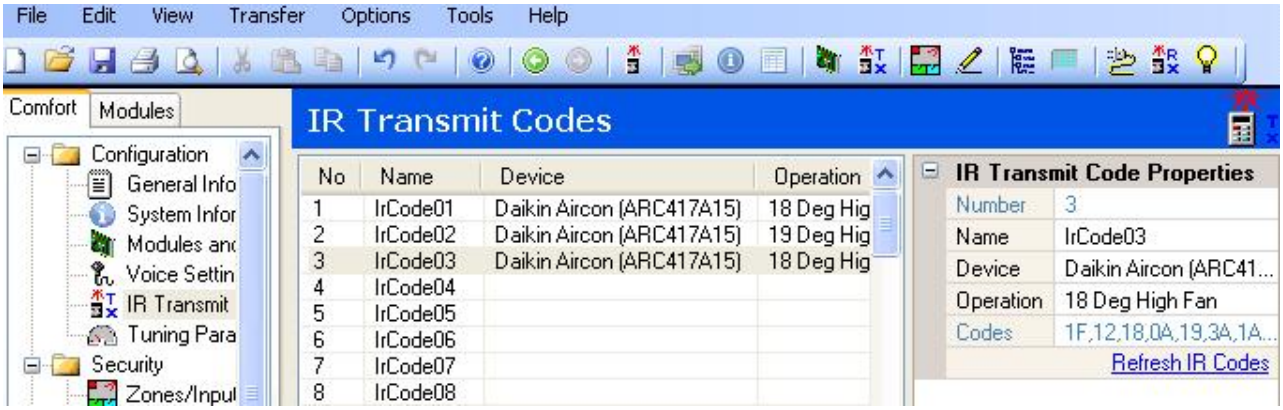
Response Property on the right pane. There is also an EDIT Menu option to Fix or Unfix all Responses. Referenced Responses are shown in Blue in the Response window.

More on Programming Responses

Infrared Transmissions from Outputs

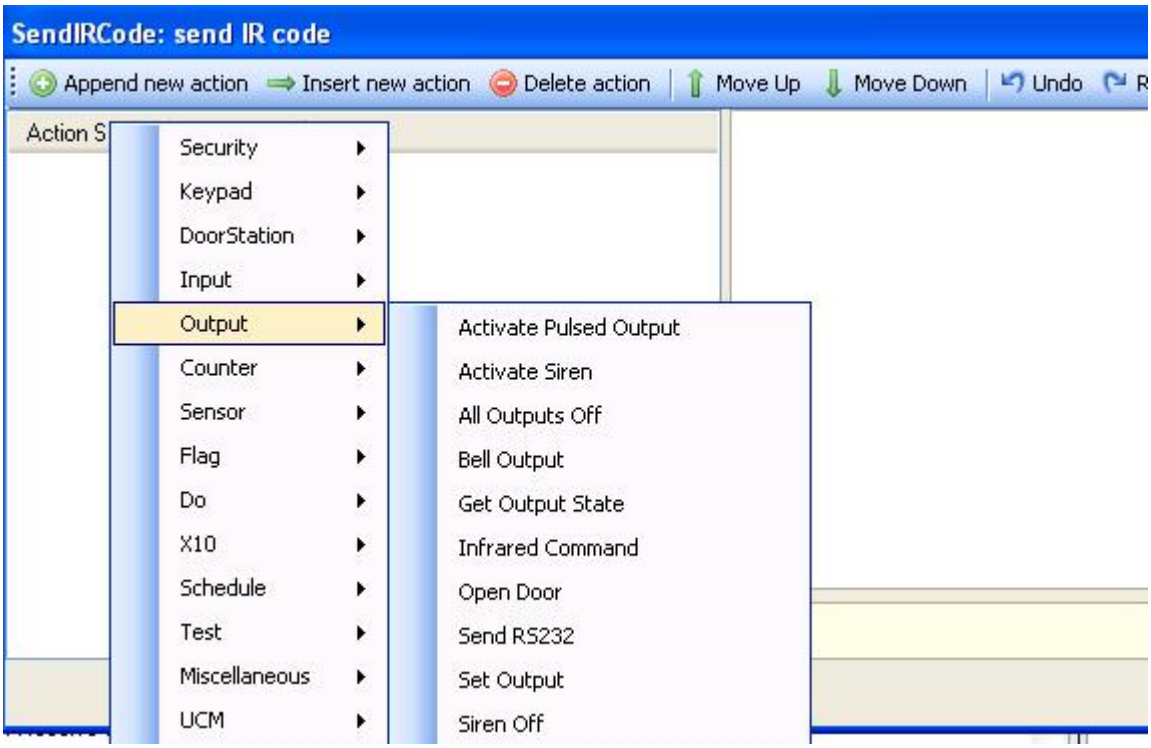
Any Infrared code defined in Configuration > IR Transmit Codes can be sent from any Comfort Output (with an infrared Transmitter Module eg IRM01). Note that new IR codes can be learned using the UCM/USB, Ethernet or /232 which have build in a IR Learner and using Comfigurator Tools > IR Learner. This is described in the UCM Manual from http://www.cytech.biz/ucm_manual.html

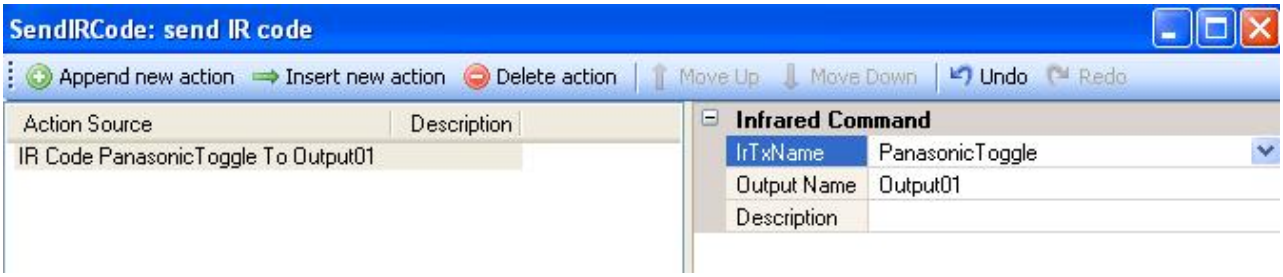
The IR Transmit codes should be selected in Configuration > IR Transmit codes



Create a new Response using Add Response

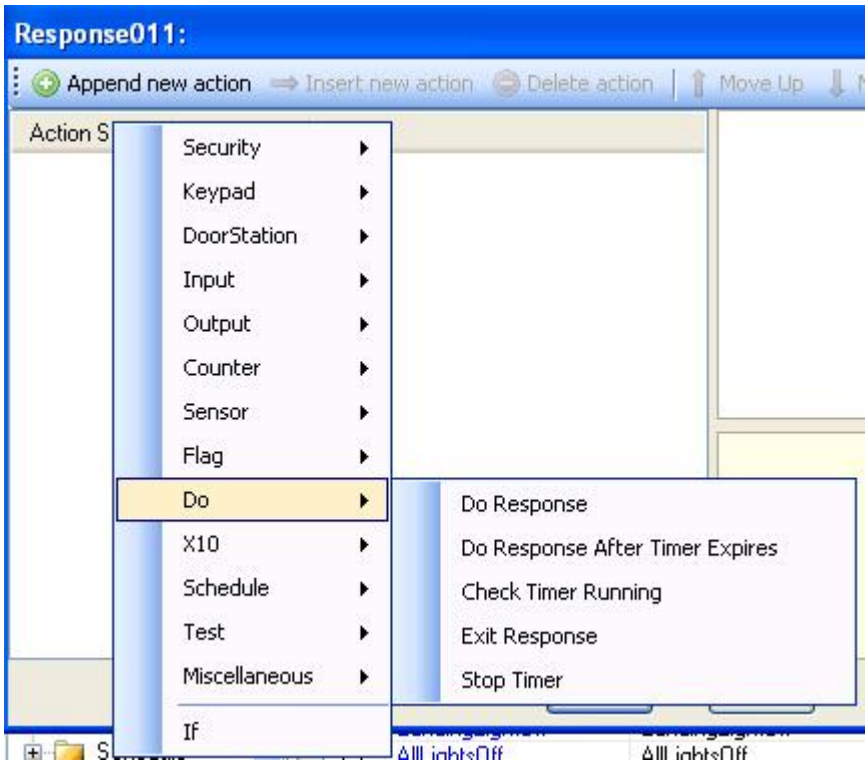
Select Output from the tabs on the left. A new window opens showing the Output actions available. Select Output > Infrared Command.





The right of the screen shows two boxes, “IRTxName” and “Output Name”. Select the IR Code name to be used, and the Output number to send the IR signal from. Outputs 1 to 64 and RIO outputs 129 to 248 can be selected, provided the required number of Slaves (SEM) and LEM (Local Expansion Modules) or RIO01s are connected.

Do Response



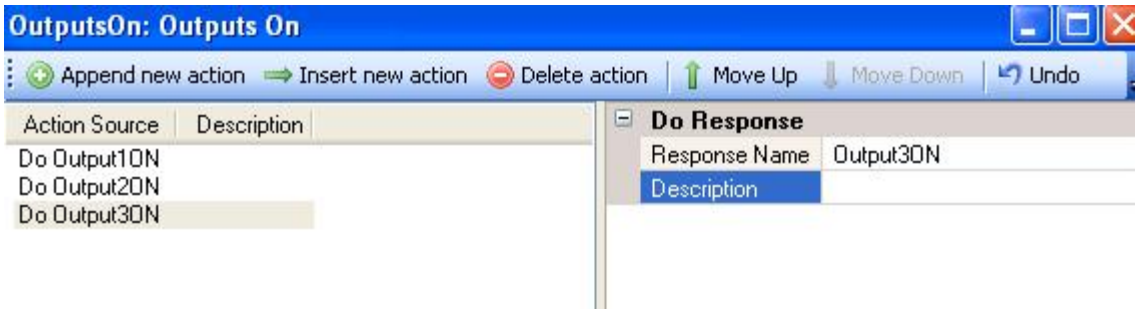
The Action Do Response allows a Response to call another Response, just like a subroutine in computer programming. For example we may want a Response to turn on 3 outputs - 1, 2 and 3. Select the response to edit or create a new response in the usual way.

To turn on Output 1, select Response 1 “Output 1-ON”.

Click OK to go back to the Select Action window and click OK again to go back to the Response Wizard. You should see “Do Output1-ON [Output 1 ON]” as the action which has been defined.

Select DO again and select Do Response, select response 3 “Output 2-ON”. Click OK to go back to the Select Action window and click OK again to go back to the Response Wizard.

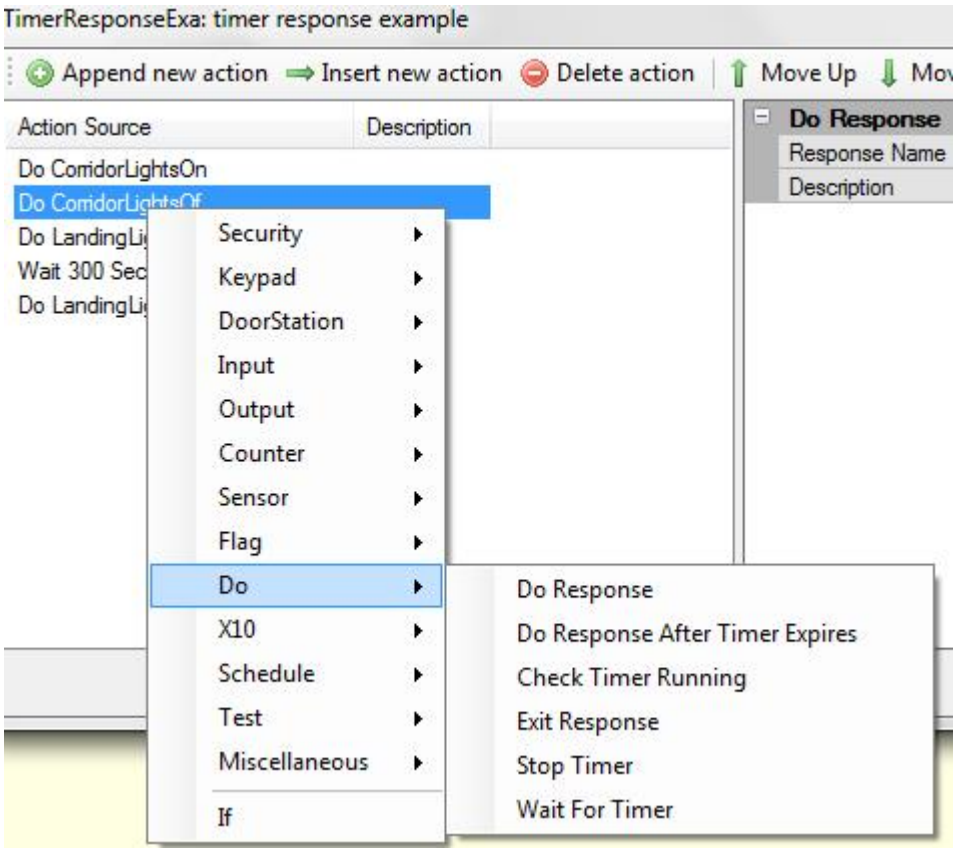
Select DO again and select Do Response, select response 5 “Output 3-ON”.



This allows you to make use of previously defined Responses and combine them in a larger Response. This is a very useful and powerful programming tool.

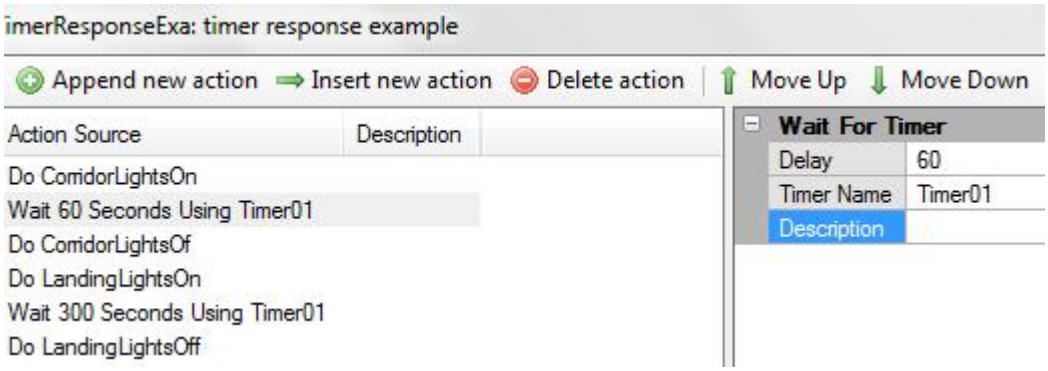
User Timers and Responses

Comfort II Ultra has 64 User Timers which can be used to created timed delays of 1 second to 65278 seconds between actions. For example, to add a delay of 5 minutes after Do Response Corridor Lights On;



Select “Do “ Category, and “Wait for Timer” action. The “Wait for Timer” action parameters are shown below.

Select the timer delay and the timer number.



The above response switches on Corridor Lights, waits for 60 seconds, switches off corridor lights, switches on Landing Lights, waits 300 seconds then switches off Landing Lights. Note that Landing Lights and Corridor Lights on and off are in Responses.

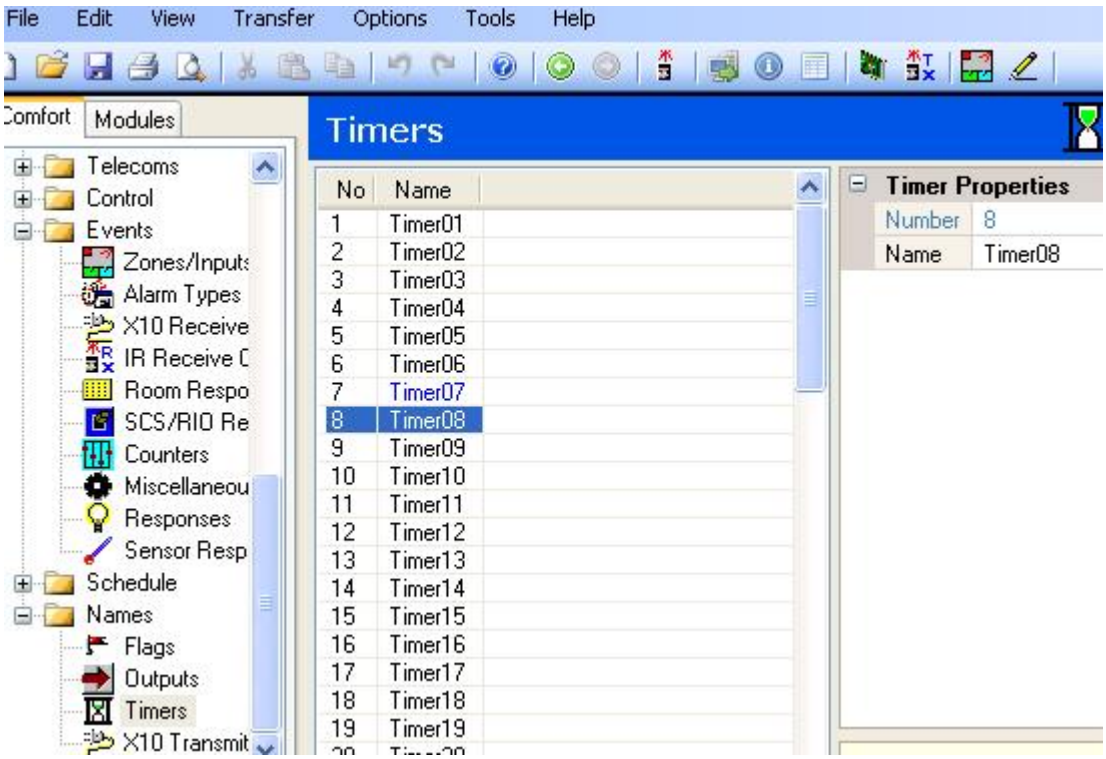
The “Wait for Timer” action does not hold up other responses or activity in Comfort. If an Alarm or zone activity takes place during the timed delay, these are handled immediately.

Stop Timer

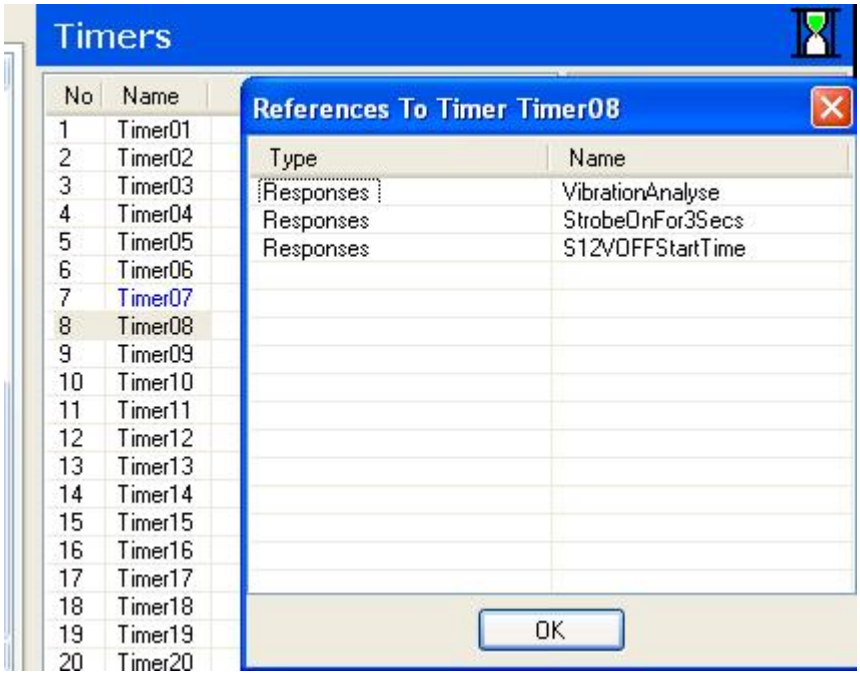
You can stop any timer which is running using the Stop Timer Action. In the above example, when the timer is running, if another event causes the Stop Timer 1 action, the following actions after the wait for timer action to turn off the light would not be activated.

Timer References

Go to Names > Timers to see the screen shown below. The Timers which are used by Responses are shown in blue. The Timers in black are not currently in use.



To see where the Timer is used, right-click on the Timer and select Show References or Graph References

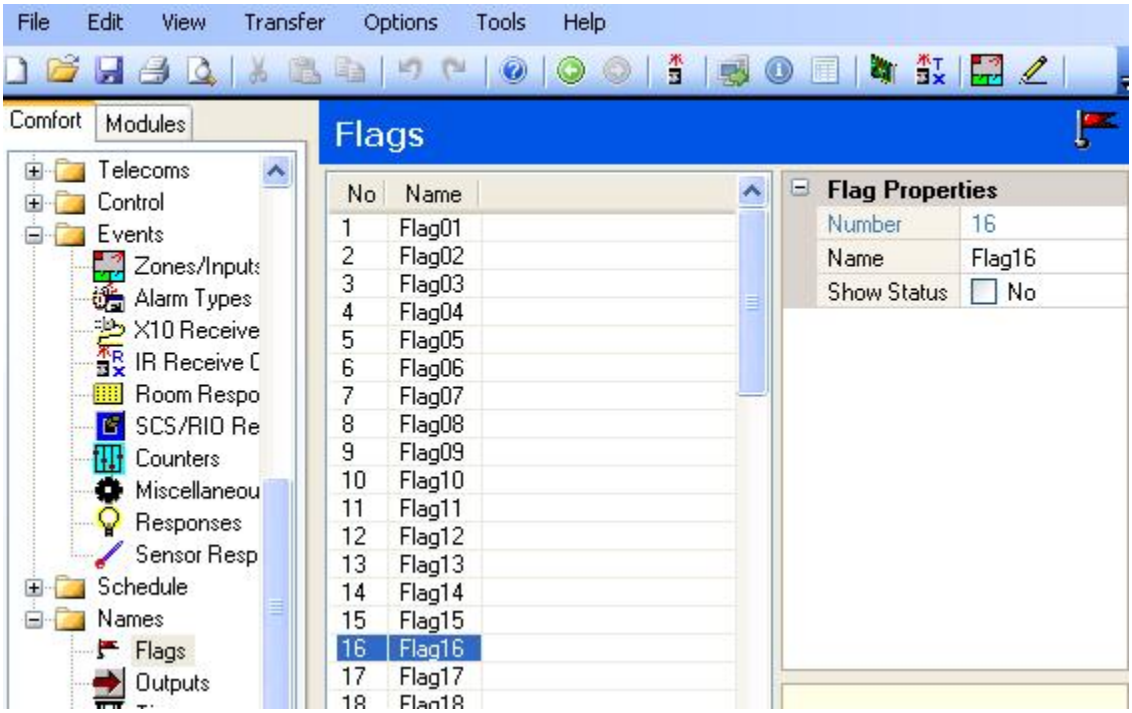


☎ Timers can be dragged and dropped in order to change the Timer number. The references to the timers are automatically changed. This saves time in programming when a different timer number must be used for any reason.

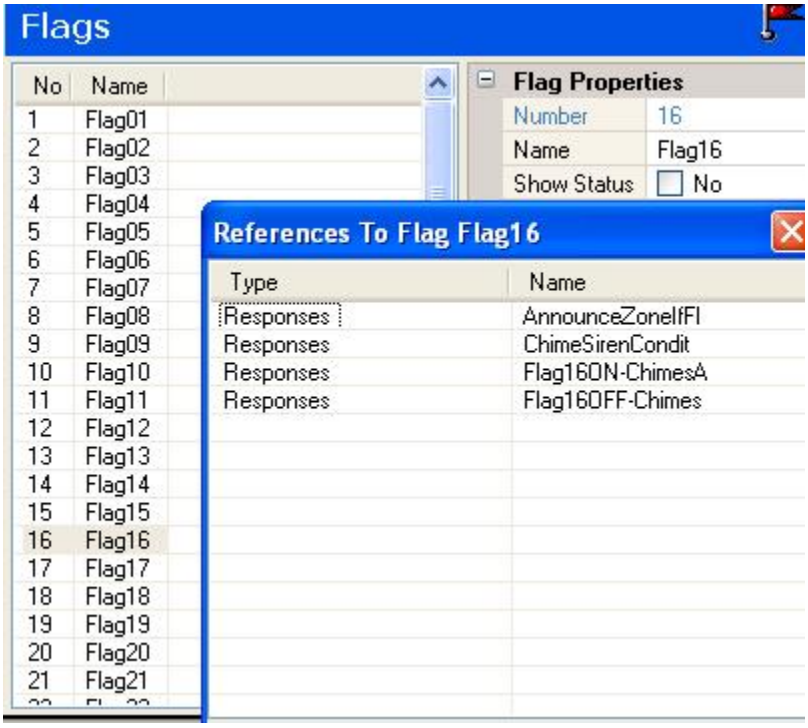
Flags

Flags are true/false or on/off indicators for use in conditional IF/THEN programming within Responses. A Flag can have two states, TRUE (ON) or FALSE (Output). In Comfort II Ultra the number of flags supported is 255. Action 132 (Set Flag, Clear Flag, Toggle Flag, Check Flag) is used to handle flags. The state of Flags (on/off) can be announced in the Home Control Menu by selecting Feedback Type = Flag.

To see which flags are used in a configuration, go to Names > Flags.



The Flags which are used or referenced by Responses or Control Menu, are shown in blue. To see the references, right click on the Flag and select Show References or Graph References.

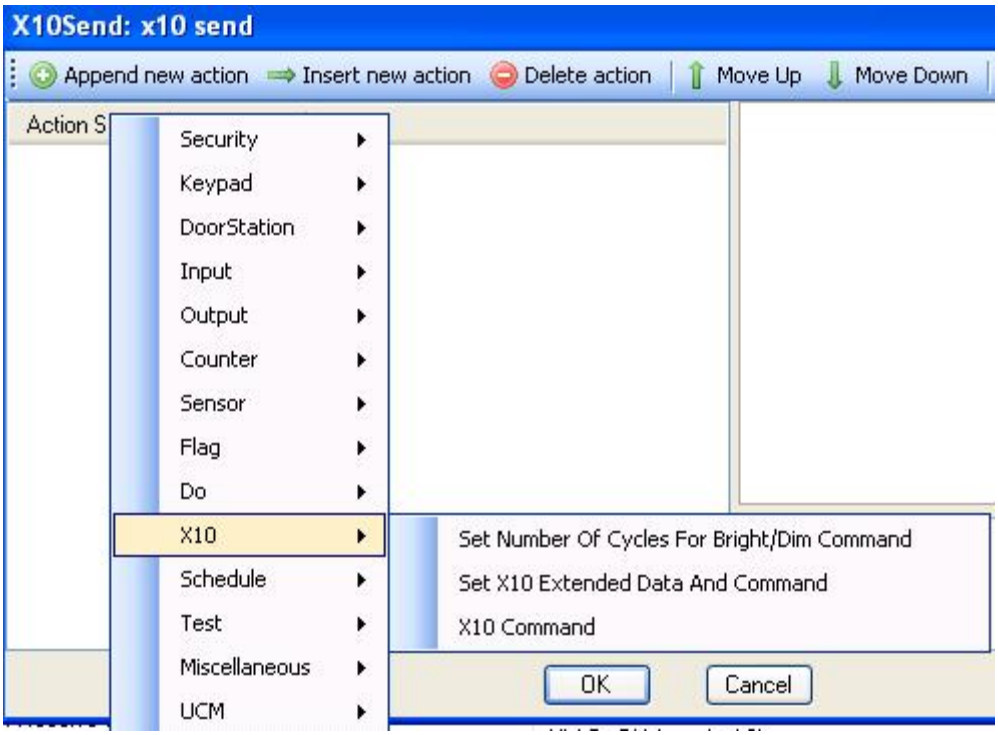


Show Status checkbox - when checked, Comfigurator will show the real time Flag status, i.e. on or off.

☎ Flags can be dragged and dropped in order to change the Flag number. The references to the timers are automatically changed. This saves time in programming when a different Flag number must be used for any reason.

X10 Commands

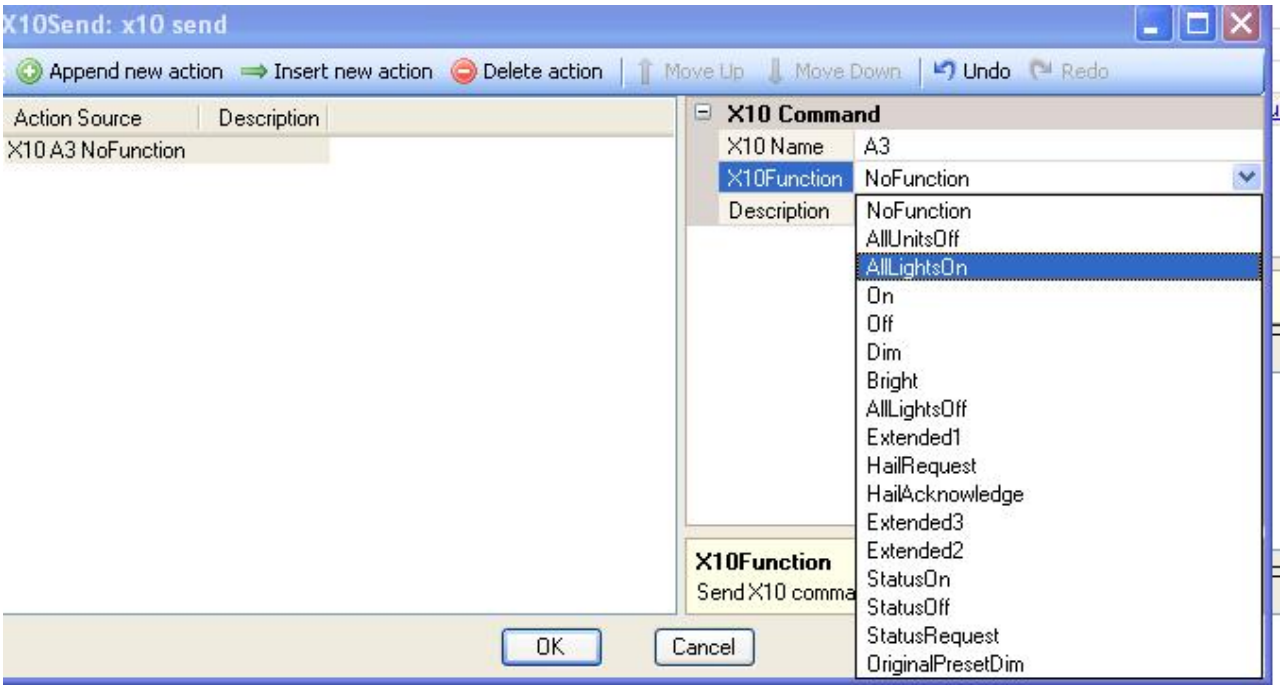
In Response Wizard, select the “X10” Tab.



The list of available X10 commands are shown;

Set Number of cycles for Bright/Dim Command, Set X10 Extended Data and Command, and X10 Command.

For a regular X10 command, the right part of the screen will show “X10 Name”, and “X10Function”. Select any housecode A to P and Unit code 1 to 16, and Functions Codes from the drop-down list as shown below:



These are the standard X10 functions. The “Dim” and “Bright” commands will dim and brighten the X10 Lamp modules according to the number of cycles set previously in the X10 command “Set Number of Bright/Dim command”

The number of bright or dim cycles is selected in the selection box. The maximum bright and dim cycles applicable is 32. This number of cycles selected will apply for all dim and bright X10 commands until changed by another Set Bright/Dim cycles command. To send a command to Dim X10 address P2 by 4 cycles, the Response requires 2 actions; X10 DimLevel 4, and X10 P12 Dim.

X10 Extended Data and Commands can be sent to X10 modules which are able to understand them.

Scenarios

A Scenario is a set of Responses as well as Events which trigger these Responses which accomplish a certain complex function. Scenarios can be packaged as a Scenario file (with .crsx extension) and saved so that it can be imported into other files using File > Import Scenario menu. This is very useful as it allows tested scenarios to be reused in future projects.

This is an example from an actual program. The requirements are:

At night between 11 PM and 6 AM the next morning, if motion has not been detected by a PIR in the living room for 30 minutes, the system will auto-arm to Night Mode.

This is a program to achieve this function;

Time Program 1 - 11 PM

Response SetAutoArmFlagtoNight

```
Set Flag Flag01
If Timer Timer10 = 0 Then
   Do AutoarmNighFlag
End If
```

This sets Flag01. If the 30 minutes timer 10 is not running, autoarm to night

Time Program 2 - 6 AM,

Response ClearAutoarmNight:

```
Clear Flag Flag01
```

PIR Zone Response = PIRStartTimer30M

```
Do AutoarmNighFlag After 1800 Seconds Using Timer10
```

This starts the timer for 30 minutes and arms to Night if Flag is set.

Response AutoarmNighFlag:

```
If Flag Flag01 <> 0 And SecurityMode = SecurityOff Then
   AutoArm NightMode
End If
```

This autoarms to Night mode is Flag is set

To export this as a Scenario, do File > Export Scenario. A window showing the Responses opens. Select the Responses which are used. Press and hold the Control key to select multiple Responses. In this case 4 Responses are selected;

SetAutoArmFlagtoNight

ClearAutoArmNight

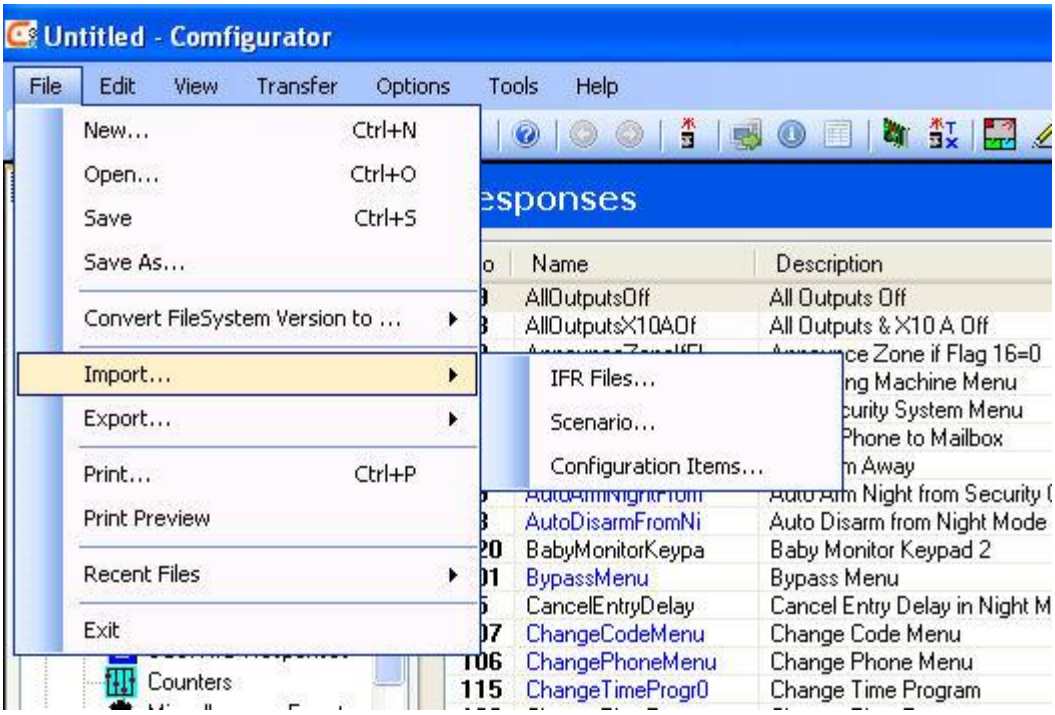
PIRStartTimer30M

AutoarmNighFlag

The Scenario will automatically include the Events and Responses which call the selected Responses, eg Time Programs 1 and 2, Flag10, Timer10

The scenario is saved as a crsx file

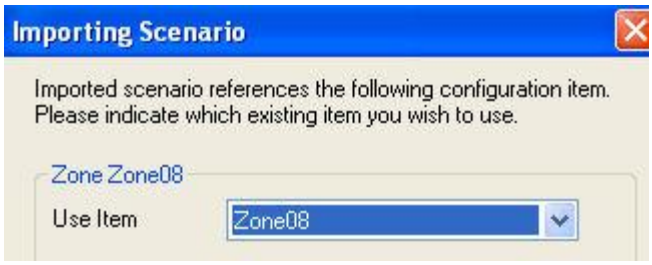
To Import the Scenario, go to File > Import Scenario and select the .crsx file



When the crsx file has been selected, Comfigurator will ask you to select the zone numbers and Output numbers for the imported events, e.g. the PIR zone in this case.

This allows you to assign a zone number for the PIR.

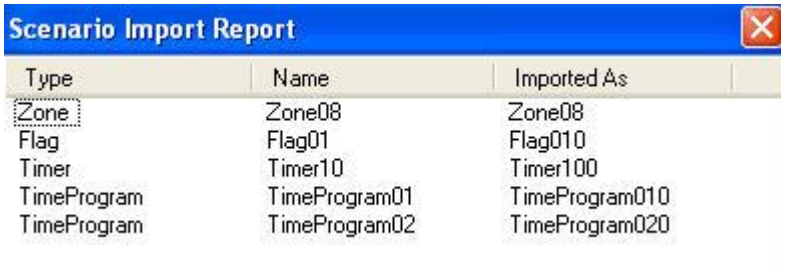
Comfigurator will ask for Zones and Outputs in the scenario to be selected as these are physical objects that have to be connected to Comfort.



The other events, Time Programs, Flags and Timers are assigned automatically, using the next available number of each type. A Scenario Import Report is shown showing how they were allocated.

This scenario has been imported into your cclx configuration file.

A Scenario Library can be built up from such working scenarios which will be a useful resource for Comfort installers


Scenario Import Report
Type
Name
Imported As
Zone
Zone08
Zone08
Flag
Flag01
Flag010
Timer
Timer10
Timer100
TimeProgram
TimeProgram01
TimeProgram010
TimeProgram
TimeProgram02
TimeProgram020

Control Menu Structure

For Comfort II Ultra, the Control menu can be organized into “Control Groups”, for example,

> ***0 for Lights,***
> ***1 for Air-conditioners,***
> ***2 for Appliances***

When one of the groups say “0 for Lights” is selected, another level of control keys is announced, e.g.

> ***0 for Hall light***
> ***1 for Master Bedrooom Light***
> ***2 for Dining room light***
> ***...***
>
> ***9 for Garage light***

When a control key is selected, the next menu level i.e. Operation, is announced

> ***Hall Light is On***
> ***0 for Off***
> ***1 for On***
> ***2 for (dim)***
> ***...***
>
> ***9 for ..***

This selects the operation intended for the device, i.e. on, off, dim, bright, high, cool etc..

Comfort II Ultra has 6 control groups 0 to 5. This 3-level menu structure allows 60 control keys with each control key having a maximum of 10 operations, giving a maximum of 600 (for Ultra) operations for the home control menu.

This 3-level Control menu applies only to Ultra and not to Comfort Optimum, which only have a 2-level menu structure without Control Groups.

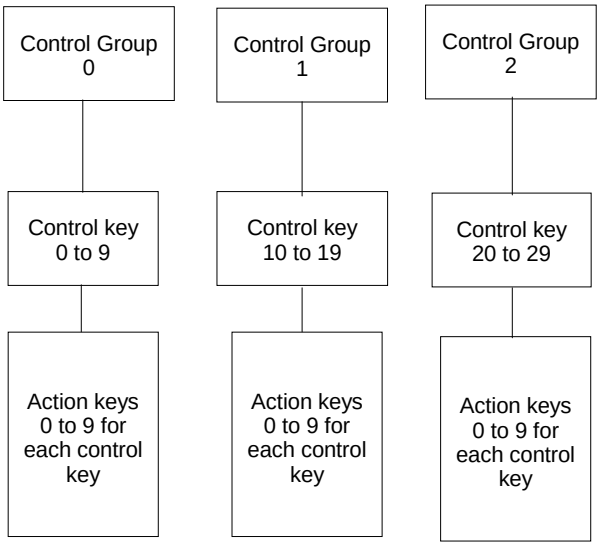
You can program up to 60 control keys 00 to 59 These Control keys can be grouped into groups. Group 0 for Control keys 0 to 9, group 1 for Control keys 10 to 19, and Group 2 for Control keys 20 to 29 etc.. For each group, you can enter 4 words from the word list to describe the group, e.g. “Lights”, “Heating and air-conditioning”, Home entertainment”, “appliances” etc... If a description is programmed for the control groups, the Home Control Menu will announce the group menu e.g. “Press 0 for Lights, 1 for air-conditioning, 2 for Appliances”. When the group number 0 to 2 is selected, the menu will announce the control keys in that group, e.g. for the Lighting group, “0 for Hall Lights, 1 for Bedroom Lights, 2 for kitchen light, ...” Selecting the control key will lead to the action keys e.g. “0 for Off, 1 for On, 2 for dim, 3 for Bright,...” This allows 3 levels of control menu - Group, device and action.

If the words for the Group are not programmed then the selection for the group will not be announced. For example, if Control group 1 is not programmed, the group menu will be (e.g.) “0 for Lights, 2 for appliances”.

If Group 0 does not have any words programmed, the Groups will not be announced. The control menu will announce control keys 0 to 9 only. This corresponds to the Home control menu with only 1 set of control keys 0 to 9.

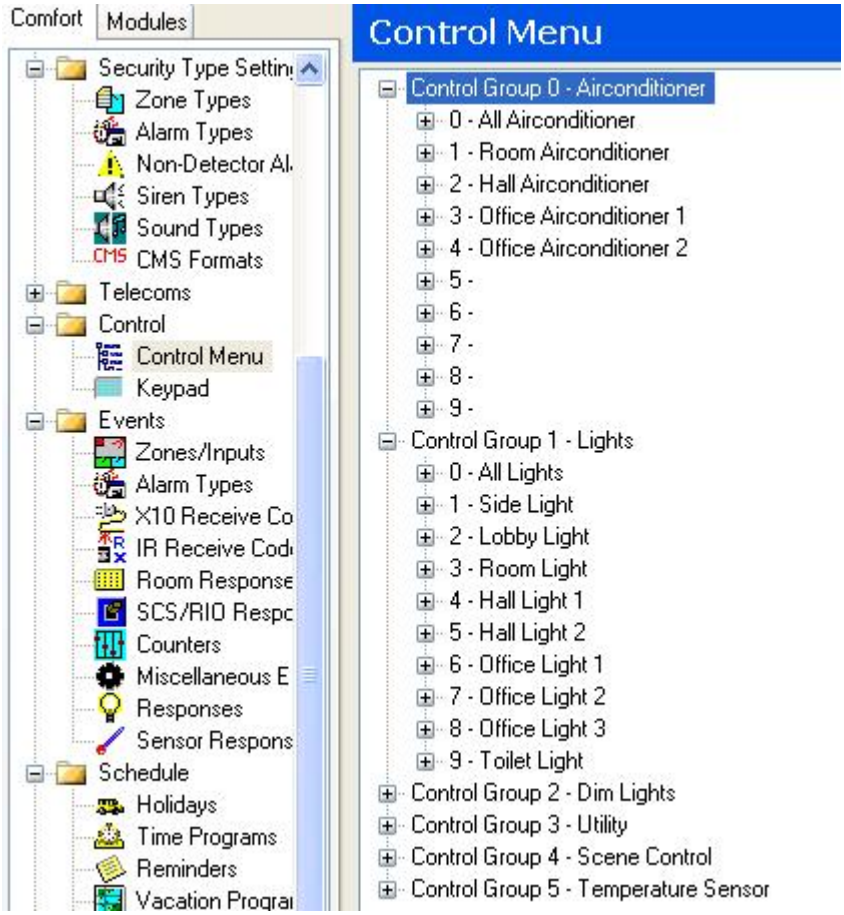
Even if there are less than 10 devices to be controlled, splitting up the devices into several groups may make it easier to select the device, without having to listen to the whole list of devices from 0 to 9.

The diagram below illustrates the relationship between Control groups, Control keys and Action keys.

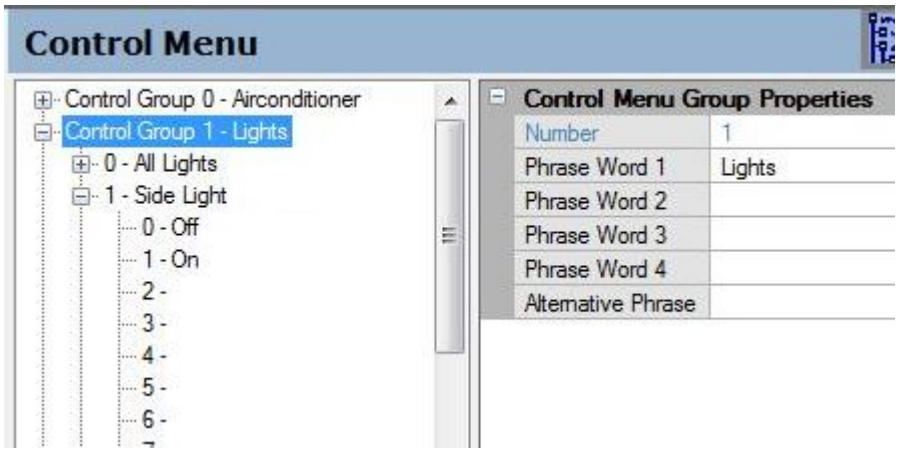


Control Menu Programming

To program Control Menu, select Control > Control Menu. The Control Groups will be displayed, for example see the screenshot below.



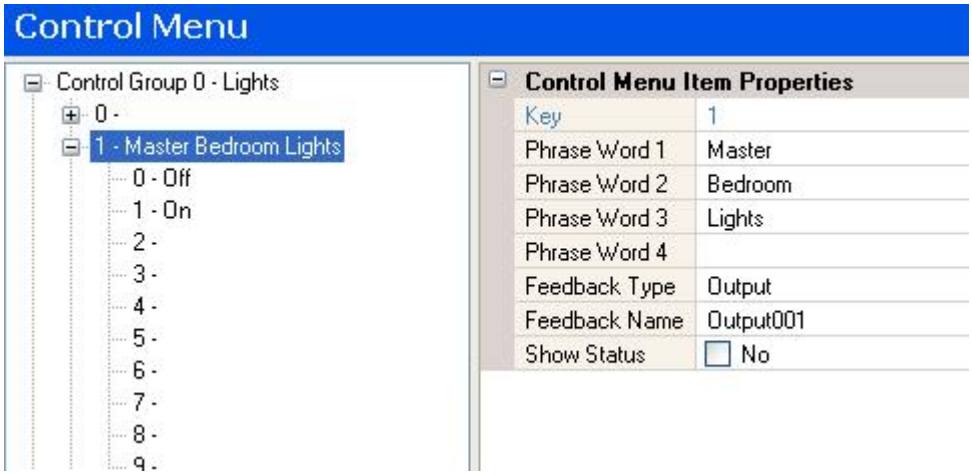
For each Control Group, select up to 4 words from the word list. In the Phrase box on the right, click on each of the 4 word boxes to select a word from the word list. If there are less than 4 words required, leave the remaining boxes blank.



In the example above, only 1 word “Lights” is selected with the others left blank. Control group 0 must be defined if the Control Groups are to be used.

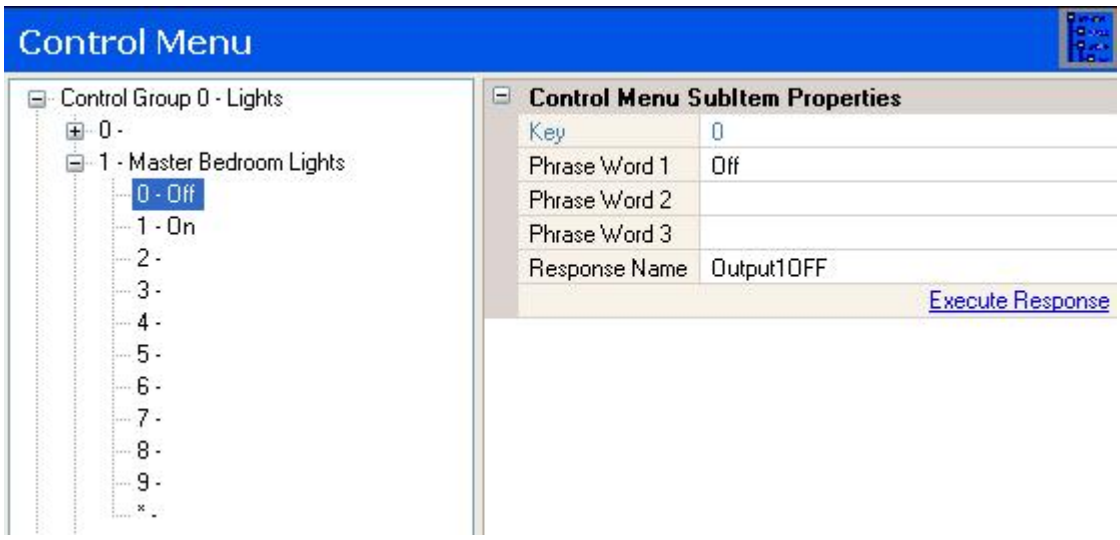
Once the Control group words have been selected, the next level of Control keys can be defined. In the Control Groups window, click on the “+” corresponding to the Control Group to display the Control Keys Level.

Each Control group consists of 10 control keys 0 to 9. For each control key which is to be used, select up to 4 words in the boxes on the right. In the example below Control Key 1 is programmed for 3 words “Master Bedroom Lights”



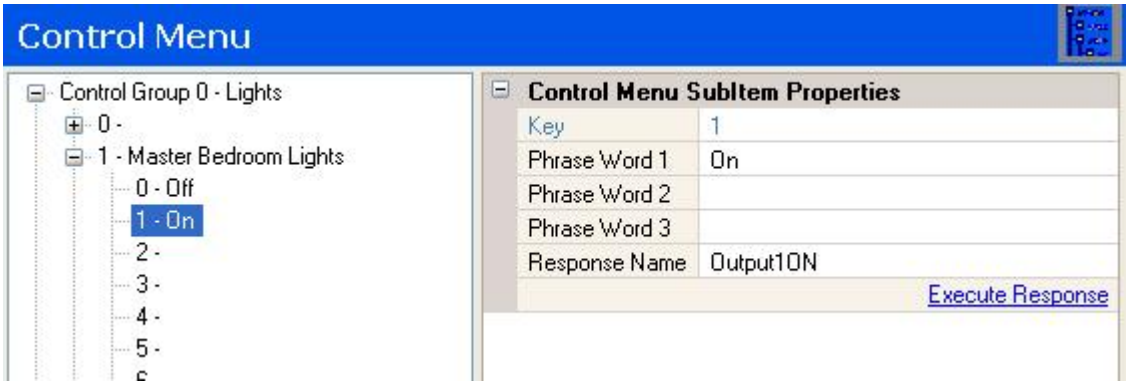
The section called “Feedback” will be explained later (see Control Menu feedback).

When the control keys have been programmed, the next step is to program the 3rd level of the Control menu, which is the Action keys. Click on the “+” next to the control key.



The screen above shows 10 Action keys 0 to 9, to be used for the “actions” to be performed for this control key. Each Action key is allowed up to 3 words, to be selected in the boxes on the right. In this example, action key 0 is “off”, action key 1 is “on”. Action keys 2 to 9 can be “dim”, “bright”, “up”, “down” etc. if required.

For each action key, select a Response to perform the required action, by clicking on the Response Name field on the bottom right. This opens a Response window where the desired Response can be selected. In the example above, the Response selected is “Output1OFF”. If there is no suitable response existing, create a new Response by selecting the NEW button at the bottom of the Select a Response Screen.



In the example above, action key 1 is programmed with word “On” and Response to turn on the Output 1.

Notes on Control Menu Programming

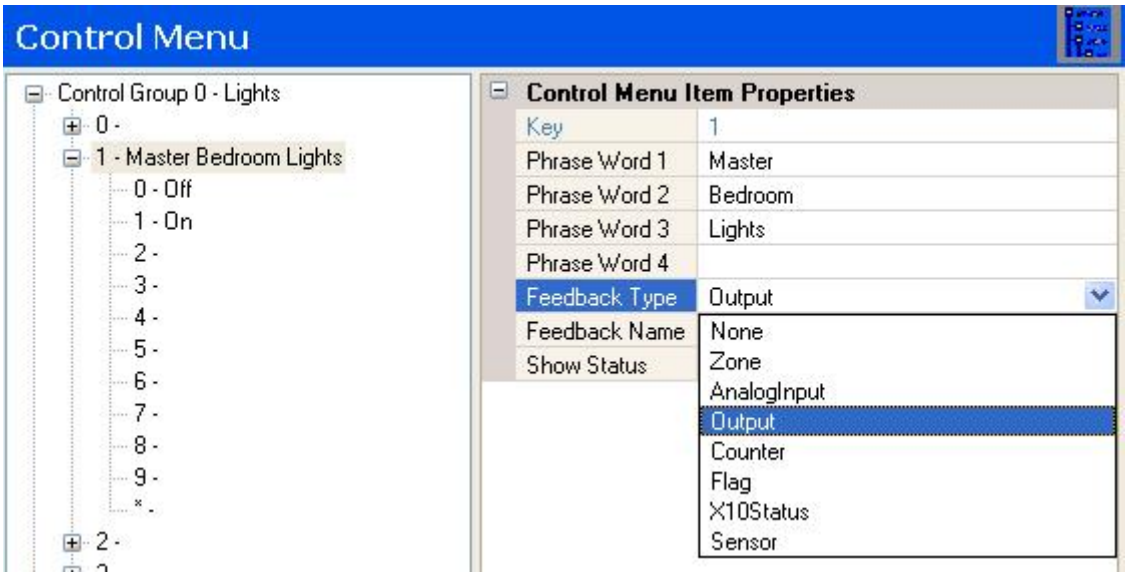
1 If the Control Menu is not programmed, (or more precisely, Control Key 1 is not programmed), the User Menu will not announce "4 for Home Control."

2 Make sure that for each group which is used, control key 1 has words programmed. If Control Key 11 is not programed, the user will not be able to access Control Keys 11 to 19. If Control Key 21 is not programmed, the user will not be able to access Control keys 20 to 29.

Control Menu Feedback

Each Control key is able to announce a feedback value. In our example, control key 1 is “Master Bedroom Light” controls Output 1. We can get the control menu to announce the state of output 1. In the bottom right corner of the Control Menu screen, there is a box called “Feedback”.

Click on the Feedback Type box to reveal a drop-down list with the values “None”, “Zone/Input”, “Analog Input”, “Counter”, “Flag”, “X10 Status” and “Sensor”. Since we want to get our feedback from an Output, select “Output” from this list.



The Feedback Name drop-down list shows all the Outputs by name. Select the desired output, in this case output 1. Note that Output 1 need not be associated with Control Key 1.

This is a working program which controls Output 1 on and off. Write this program to Comfort, by going to Transfer > Write to Comfort. When this has been completed, Press F, 2 on the keypad. The menu will say:

> *Press 1 for Lights,*
> *Press # for previous menu*

Press 1 for Lights

> *Press 1 for Master Bedroom Lights*
> *Press # for previous menu*

Press 1. The menu will say

> *Master Bedroom Light is **OFF**,*
> *Press 0 for Off, 1 for On*

Note that the state of the output is announced. The control menu will announce the state based on the words programmed in action keys 0 and 1. If the feedback status is off, the word for action key 0 will be announced (in this case “off”. If the feedback status is on, the word for action key 1 will be announced (in this case “on”).

The table below shows all the feedback types and the values applicable to each type.

Feedback Type	Meaning of Feedback Value
0	No Feedback
1	Zone 1-64 on/off
2	Analog Input 1-64 value
3	Output 1-64 on/off
4	Counter 0-127 value
5	Flag 1-64

If the Feedback Type is “None”, there will be no feedback announcement.

For Feedback Type 1 (Zone/Input), the specified zones/Input provides the feedback status. For example a Current Sensor Module (CSM) which detects the flow of AC current through a wire can be connected to the specified input to tell whether the controlled appliance is on or off.

For Feedback type 2 (Analog Input), the analog value at the specified input provides the feedback as a value in the range of 0 to 255 corresponding to 0 to 5 Volts.

☎ LEM Inputs are not analog inputs. Do not try to obtain analog values from LEMs as they will not be meaningful. Only the main Comfort controller inputs and SEM inputs have analog values.

For Feedback type 3 (Output), the Output states provide the feedback. Comfort knows if its own outputs are in the on or off state.

For Feedback type 4 (Counter), the specified Counter provides the feedback in the range 0 to 255.

For Feedback type 5 (Flag), the specified Flag provides the feedback (on or off).

Feedback Types 1 (zone on/off), 3 (output on/off), and 5 (Flag On/off) are binary, i.e. either on or off, and will take the words for action key 0 and 1. Feedback types 2 for analog input and 4 for counter are analog values ranging from 0 to 255 and will announce the value (0-255) instead of on/off. For example, if Counter 2 holds the temperature on degrees F, the control key can be programmed as

“Living Room temperature is 85, Press 0 for heat off, 1 for heat on”.

For the case of analog values, the values 0 and 255 are special cases, they are interpreted as binary values 0 and 1 respectively, so that they announce as action key 0 and 1 words. For example, if the counter 2 value is 255 in the heating example, the announcement will be

”Living Room temperature is ON, Press 0 for heat off, 1 for heat on”.

Moving and Copying in the Control Menu

Control menus can be moved using Drag-and-drop and Copy/Cut/Paste. This saves a lot of time when you have to add a new control key and shift all control keys down to make way for the new control key.

For example, in the screen below, Hall Airconditioner can be moved from Control Key 2 to Control Key 5 by positioning the cursor in Key 3 clicking and holding the mouse and dragging it to Control Key 5.

This moves all the Action Keys in the Hall Airconditioner Control key (e.g Off, On,..) as well as the Feedback to the new Control Key.

The same result can be achieved by using Cut and Paste. Position the cursor at the Control Key and select Edit Menu > Cut, then move to the new Control Key and select Edit >Paste. To copy the Control Key, use Edit > Copy, and Edit >Paste at the new Control Key.

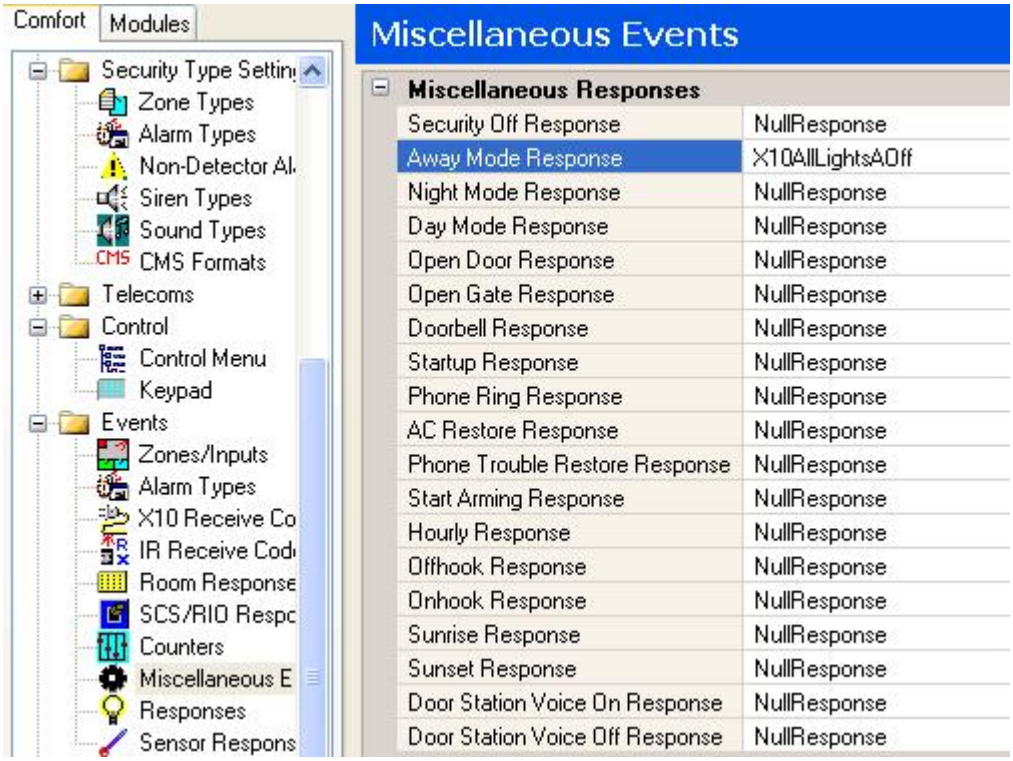
Drag-and-drop, Cut, Copy and Paste can be done on individual Action Keys in a Control Key instead of the whole Control key.

It is not possible to Copy, Cut and Paste Control Keys between files.

The Events in Comfort which activate Responses are described in this section.

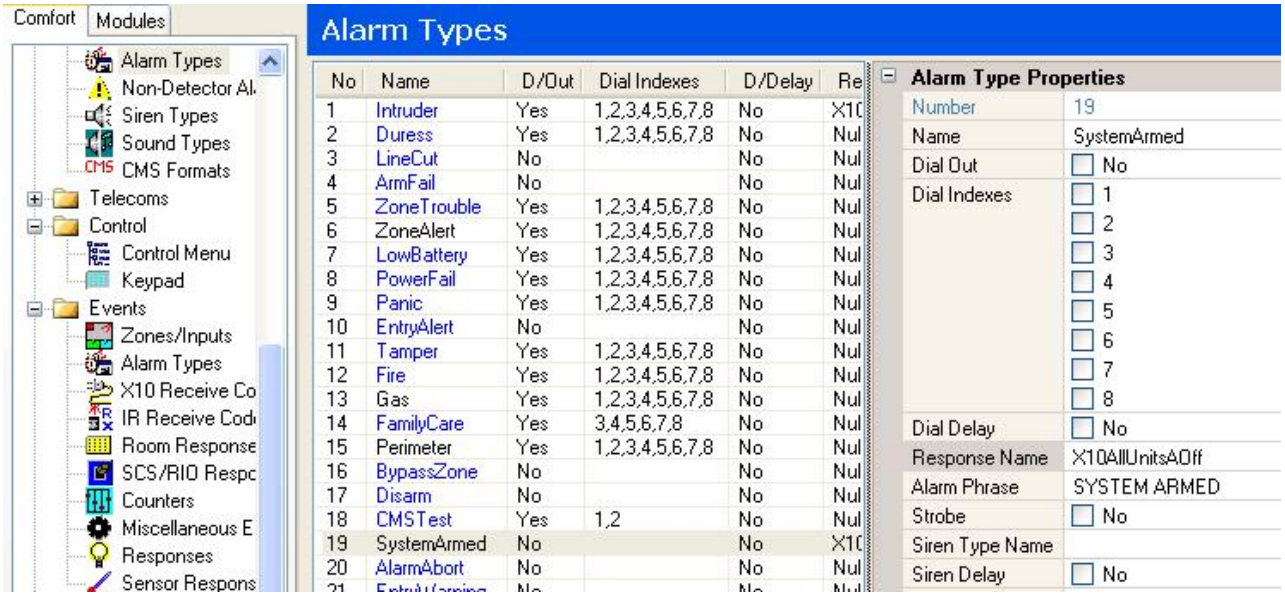
Arming and Disarming

Arming Comfort to any security mode (Away, Night, and Day) and disarming may cause an optional Response to be activated. To program this, go to Events > Miscellaneous Events.



To select the Response for each of the security modes, click on the response box next to the desired mode to open the Response selection window. In the example above, the Away Mode Response is set to “X10AllLightsA-Off”, a response which switches off all X10 Lights with “A” house code. If a suitable Response is not available, create a new Response by clicking on the NEW button at the bottom of the Select a Response screen.

In Security Type Settings > Alarm Types, the “System Armed” Alarm type (19) has a Response which is activated when the system is armed to all modes. The screen below shows the System Armed response assigned to X10AllUnitsOff. When the system is armed to Away Mode, the Away Mode Response is activated, followed by the “System Armed” Alarm type Response.



The “Disarm” Alarm Type (17) Response is also activated when the system is disarmed along with the Security OFF Response in Miscellaneous Events. Both Responses will be activated when the system is disarmed, with the Security OFF Event Response occurring first, followed by the System Disarmed Response. It is only necessary to assign a Response to one of these.

Miscellaneous Events

In the same screen Events > Miscellaneous Events, other Events which can trigger Responses are shown.

Open Door Response

This specifies a Response to be activated when "7 to Open Door" in the Door Station Menu is pressed. This happens after the doorbell is pressed.

Open Gate Response

This specifies a Response to be activated when "4 to Open Gate" in the Door Station Menu is pressed. This happens after the doorbell is pressed.

Doorbell Response

This specifies a Response to be activated when the Door Station button is pressed.

Startup Response

This specifies a Response to be activated at system reset, or when Comfort is powered on.

Phone Ring Response

This specifies a Response to be activated when the phone rings. Phones must be connected to Comfort’s TEL OUT terminal.

AC Restore Response

This specifies a Response to be activated when AC mains power is restored.

Phone Trouble Restore Response

This specifies a Response to be activated when the phone line is restored to normal.

Start Arming Response

This specifies a Response to be activated when the system starts the arming sequence, after the desired security mode has been set, but before the arming process is completed.

Hourly Response

This specifies a Response to be activated every hour on the hour. If… Then... actions can be used to select a range of hours where this applies.

Offhook Response

This specifies a Response to be activated when the phone goes offhook.

Onhook Response

This specifies a Response to be activated when the phone goes onhook.

Sunrise Response

This specifies a Response to be activated at Sunrise, defined in Schedule > Sunrise/Sunset Times.

Sunset Response

This specifies a Response to be activated at Sunset, defined in Schedule > Sunrise/Sunset Times.

Door Station Voice On Response

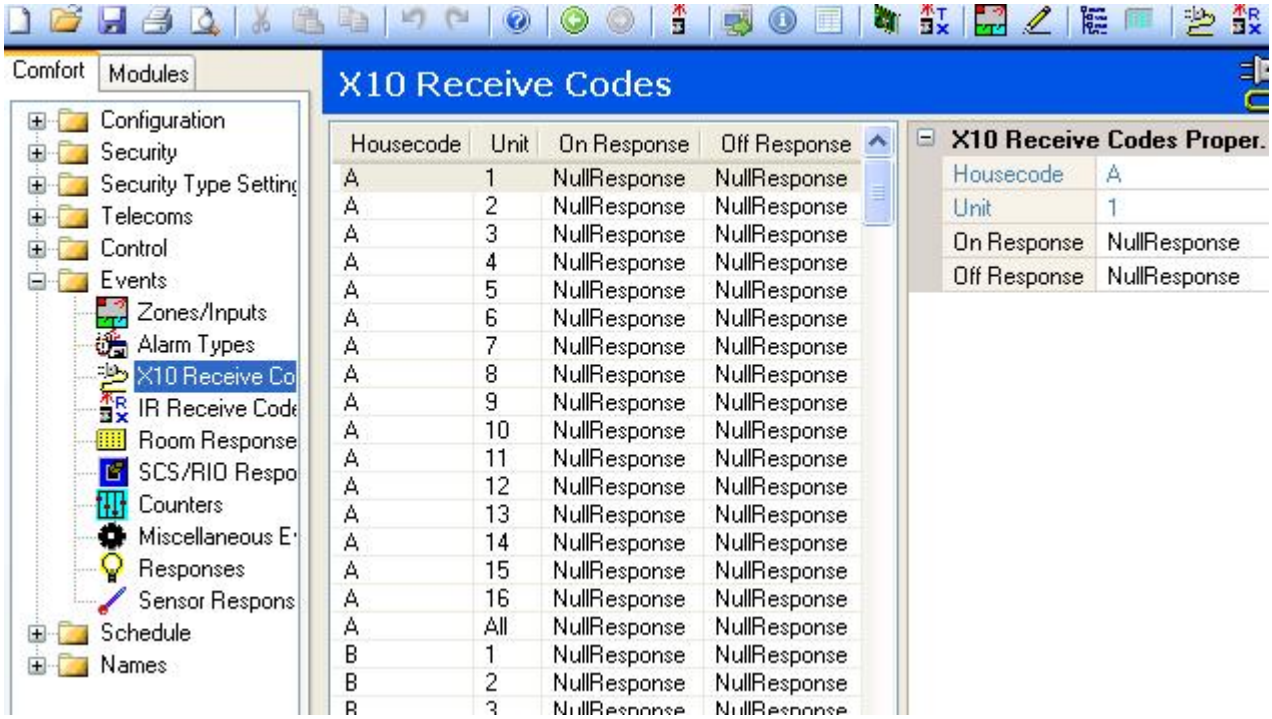
This specifies a Response to be activated at when the keypad or phone starts audio intercom with a Door Station. The purpose of this is to activate a relay for certain third party intercoms.

Door Station Voice Off Response

This specifies a Response to be activated at when the keypad or phone ends audio intercom with a Door Station. The purpose of this is to activate a relay for certain third party intercoms.

X10 Received Responses

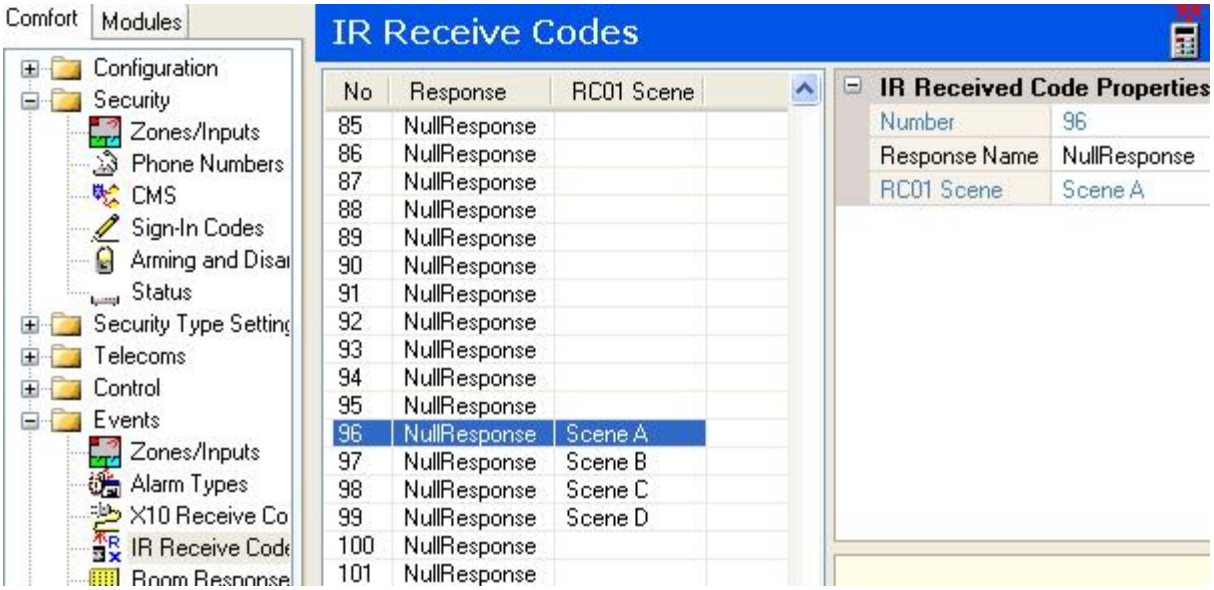
X10 signals received through the TW523/TW7223/XM10E for one selected house code can activate Responses. Select Events > X10 Responses to show the screen below.



This screen selects Responses activated when a defined X10 code is received for ON and OFF commands.

IR Received Responses

The Keypads with built-in Infrared receiver is able to receive 128 Comfort IR Codes (0 to 127) which activate Responses. This is also possible with the Remote Input-Output Module (RIO) with Infrared Receivers (IRR01) connected to any of its 8 inputs. In Comfigurator, select Events > IR Receive Codes to display the screen below.



The “No” (Number) column to the left refers to the IR Code numbered 0 to 127. Each Code can be associated with a Response. To select a Response, click on the Response to the right pane. This opens a Response selection window, where the desired Response can be selected. If a suitable Response is not available, create a

new Response by clicking on the NEW button at the bottom of the Select a Response screen.

The RC01 Remote control is able to send some of the IR codes to Comfort.

Refer to the RC01 manual (at http://www.cytech.biz/rc01_manual.html) to learn how to program the keys to control Comfort.

You can also program a Universal Learning remote control like the Logitech Harmony to send these Comfort IR codes.

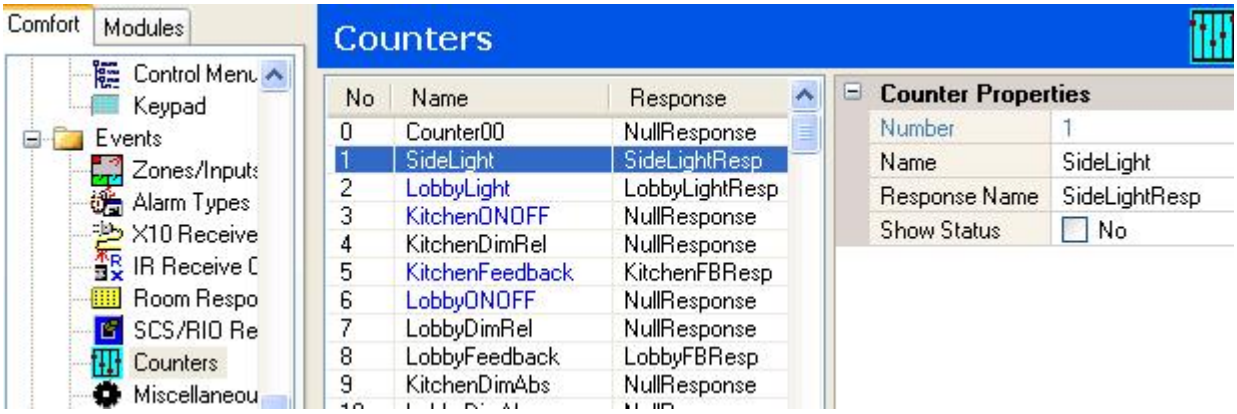
SCS/RIO Responses

The Remote Input/Output Modules extend the input and output capabilities of Comfort. Each Remote Input/Output Module has 8 Input and Output points. Each RIO Input can act as a digital input, as well as receive Infrared signals via small Infrared Receivers (IRR01). Refer to the Remote Input/Output Manual for details of how to install and set up Remote Input/Output Modules, and to the Scene Control Switch Manual for how to install and set up the SCS.

Counter Responses

Comfort II Ultra has 255 Counters which can be used for temporary storage or counting of events. Counters are also used to receive information from external modules, like the UCM/KNX for interface with the KNX Bus, UCM/CBUS from Clipsal CBUS, UCM/Velbus for interface with the Velbus from Velleman (http://www.velbus.eu). Changing counters by Comfort actions do not activate Counter Responses. Refer to the specific instruction manuals for these modules for full details of programming and installation.

To see the list of Counters and Responses, go to Events > Counters.



The counters in Blue are referenced by Responses or Control Keys. To see where they are referenced, right-click on the Counter and select Show References.

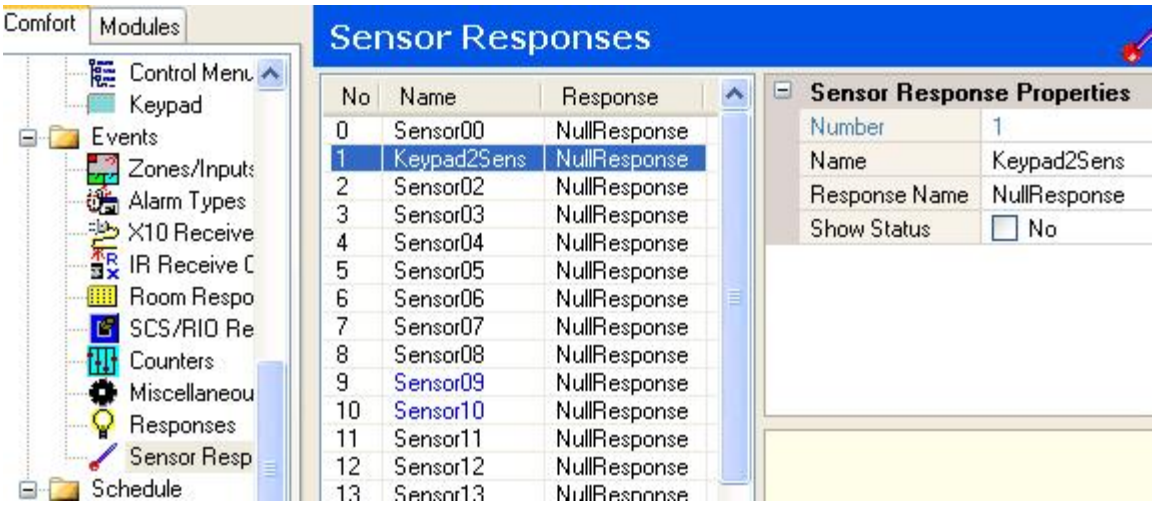
Show Status checkbox, if checked will show the real time value in the selected Counter. This is useful for troubleshooting and testing your programming.

☎ Counters can be dragged and dropped in order to change the Counter number. The references to the Counters are automatically changed. This saves time in programming when a different Counter number must be used for any reason.

Sensor Responses

Comfort II Ultra has 32 Sensors that can be synchronised with sensor values from external devices like KNX, Z-Wave, Velbus, and Universal UCMs. Refer to the specific instruction manuals for these modules for full details of programming and installation.

Go to Events > Sensor Responses.



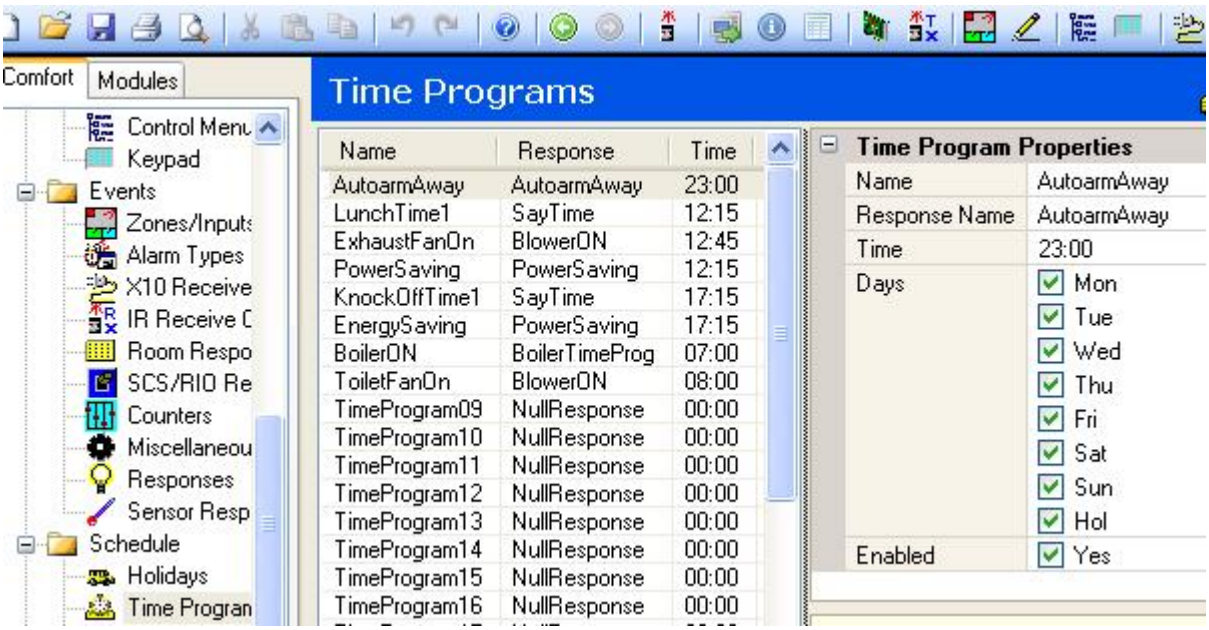
Each Sensor can trigger a Response when the sensor value is changed by one of the UCMs. Sensors shown in blue are referenced by other elements. To see the references, right-click and select Show References.

The “Show Status” checkbox will show the actual sensor values in Comfort.

☎ Sensor can be dragged and dropped in order to change the Sensor number. The references to the Sensor numbers are automatically changed. This saves time in programming when a different Sensor number must be used for any reason.

Time Programs (32 for Ultra II) are available which can be activated at any time of day and for any combination of days of the week and holidays. These Time Programs can be used to turn appliances and lights on and off or for arming and disarming the security system.

To Program Time Programs, go to Schedule > Time Programs.



Each Time program consists of an Activation Time, days of the week when active, and a Response. A Time Program can be specified for any combination of days of the week (Monday to Sunday) as well as Holidays. A Time program is activated if the current day of week is selected and the time matches the programmed time (to the minute). When this happens, the programmed Response is activated.

For example, in an office, Time Program 1 above is programmed for 11:00 PM on Monday, Tuesday, Wednesday, Thursday, Friday to activate a Response which arms the security system to Away Mode and turns off the lights, air-conditioning and photocopying machine.

The “Enabled” box when checked, enables the Time Program. If not checked, the Time Program will be inactive. Time Programs can also be Enabled or Disabled in the Time Program Menu on the keypad. (Program Voice Menu 6)

Holidays in Time Programs and Reminders

24 Holidays can be defined for the year. If a Time Program Day of week is ON for Holidays, it will be active on any of the defined Holidays. The application for this is when things should happen at a different time from normal days, for example when a shop opens later or closes earlier.

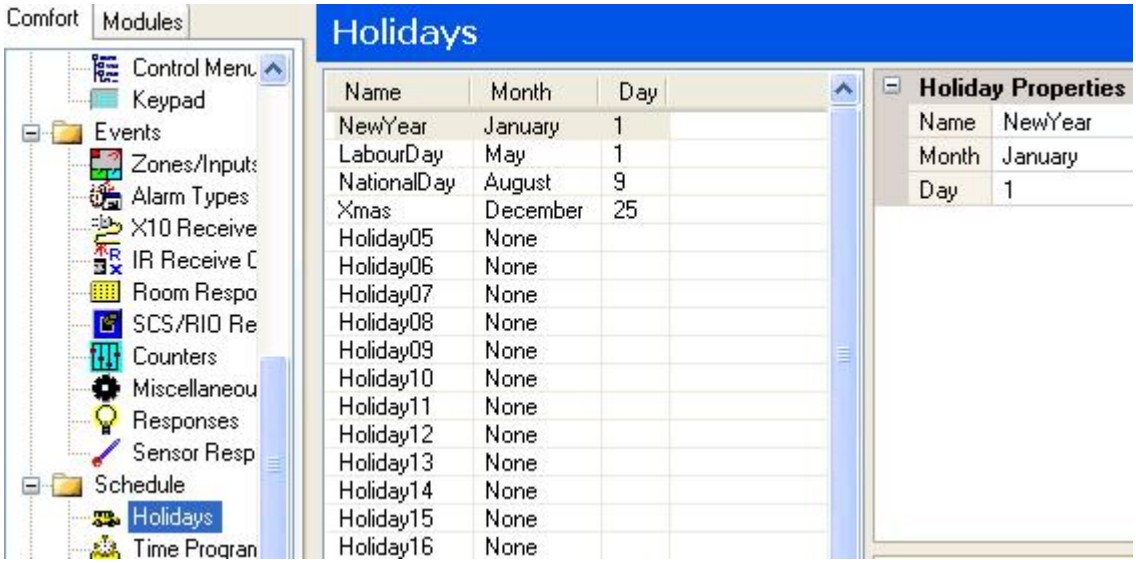
If a Time Program is set for days of week say Monday to Friday but not for Holiday, and a particular day is a Holiday (as defined in the Holidays table), the Time Program will be active on that day. If it is required that the Time Program/ Reminder should not be active on a Holiday then in the Time Program Response, the action code sequence

If Holiday = 0 Then

Exit Response

should be used to bypass the Response on holidays

To define Holidays, go to Schedule > Holidays.



For each of the 24 holidays, a Month and Day can be specified. These holiday definitions are used for Time Programs and Reminder Messages.

Time Programs in User Menu

The user can make changes to Time Programs in the Time Program Menu (Program Menu 6 for Time Programs). The Time Program number 1 to 16 # is entered. The Time Program menu will be announced.

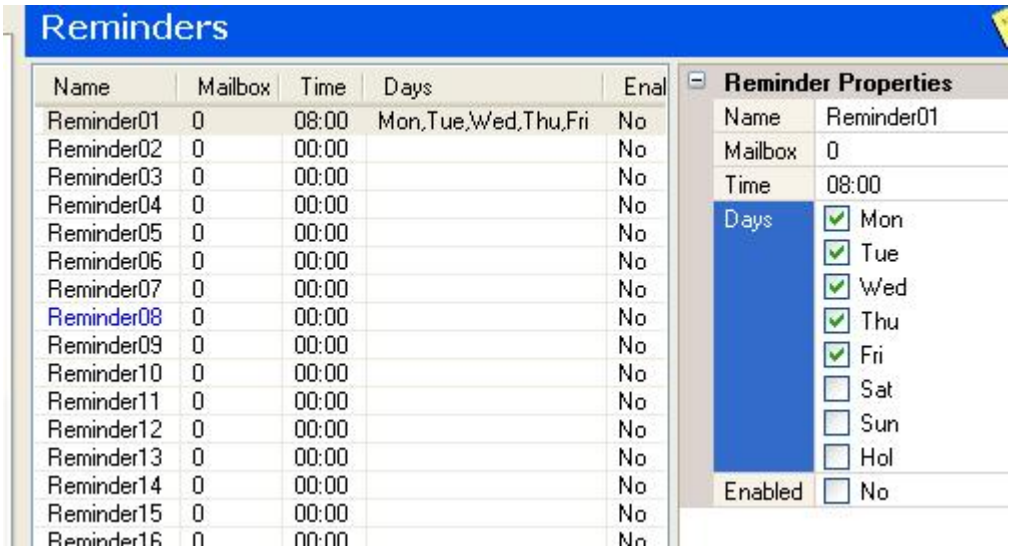
> *Time Program (1 to 16) ON (or OFF)*
> *Monday, Tuesday, Wednesday, Thursday, Friday, Holiday*
> *11:45 PM, Response 3*
> *Press 1 for ON*
> *0 for OFF*
> *2 to Change Time*

This allows the user to change the Time of day, Days of week, and to enable or disable the Time Program. 4 for Response will announce the Response programmed, but it does not allow the user to alter the Response. This can only be done in Engineer Menu (3,3).

pb`qflk=NM==objfkabo=jbpp^dbp

Comfort II Ultra has 16 Reminder messages, which ring the home phone and give a chime on the keypads or can call a pager or telephone to remind the user about appointments, to take medicine, watch favorite TV program or any other events on a weekly basis. When the phone is answered, the reminder message that was recorded previously will be heard. Pressing a key on the keypad when it gives the Reminder chime tone will cause the recorded Reminder message to be played.

To program Reminder Messages, go to Schedule > Reminders. The Reminders screen is shown below



In the above example, Reminder 1 is programmed for 8:00 AM on weekdays. This may be used as a wake-up call. The user must record a message into Reminder 1, e.g., “Time to Wake Up”

The “Enabled” box if checked enables the selected reminder. If not enabled, the reminder will not be active.

In all cases the appropriate message must be recorded into each reminder using the Reminder Menu.

Programming Reminders through the User Menu

Reminder Messages can be fully setup and recorded on the User Voice Menu.

1 Sign in with your personal code to get into User Voice Menu
2 Press 2 for Messages, 5 for Reminder Messages,
3 Select a Reminder Message number 1 to 8 and the # key, The voice menu says

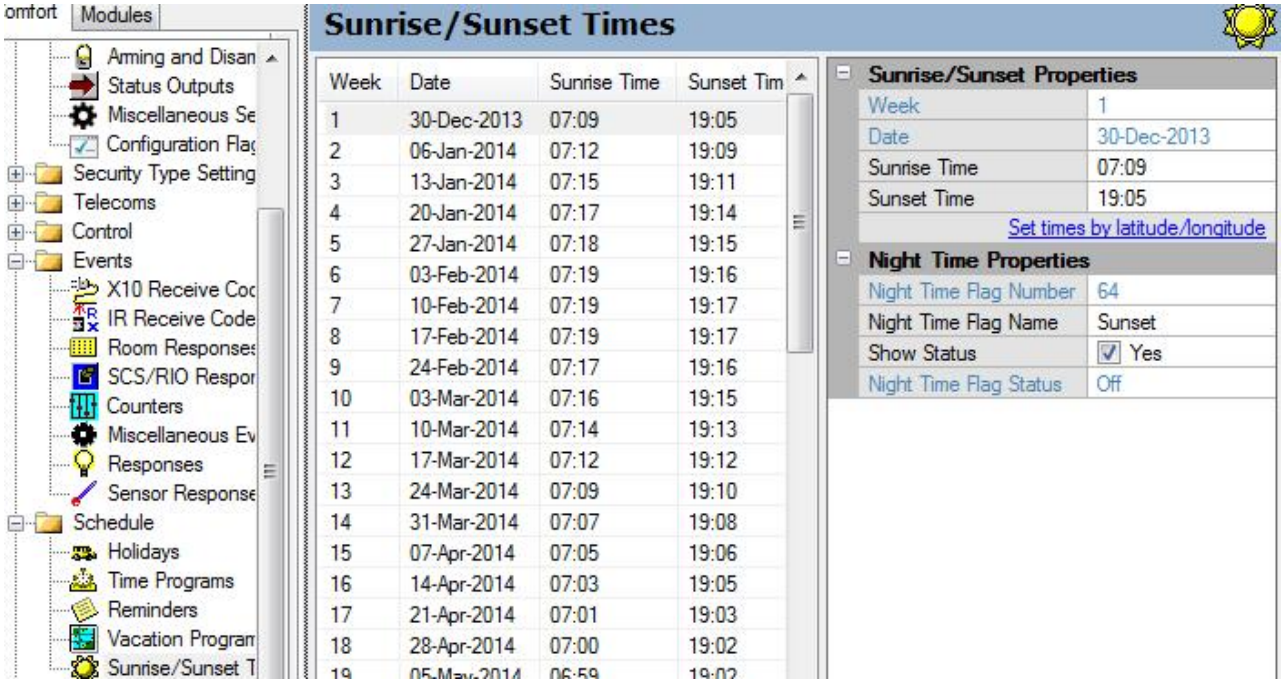
Reminder Message (1-8), ON (or OFF)
9:30 PM,
Monday, Tuesday, Wednesday, Saturday
(user name)
"Time to watch the News" (recorded message)
Press 1 for ON (Enable the Reminder)
0 for OFF (Disable the reminder)
2 to Change Time (change the time for this Reminder)
3 for Day of Week (set the days of week for this Reminder)
4 for Message (record, hear and erase the message)
5 for User Number (Assign Reminder to a User's phone)

Holidays in Reminders

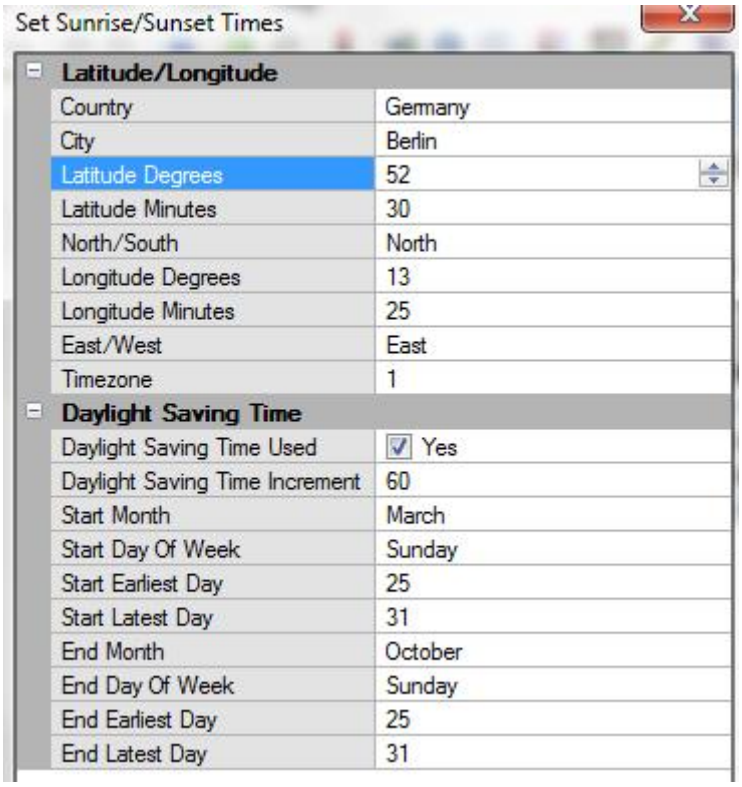
Refer to the "Holidays in Time Programs and Reminders" in the Time Programs Section.

pb`qflk=NN=prkofpb=prkpbq=qfjbp

Comfort is able to determine the approximate Sunrise and Sunset times for any week of the year. Go to Schedule > Sunrise/Sunset Times as shown below.



In the right pane, click on “Set Times by Latiture/longitude” and select your country and city. If your city is not listed, select the closest city.



The Sunrise/Sunset table will show the sunrise and sunset times for your location for the week by date.

At Sunrise, the Sunrise Response is activated, and at Sunset, the Sunset Response in activated.

The Night Time Flag is set between Sunset and Sunrise. This is useful in Responses when you need to test for Night time, eg

Zone Response:

If Night Time <>0 then
Do Response TurnOnLightFor5Minutes
EndIf

In “Night Time Properties”, you can assign a User Flag to the Night Time Flag. This allows you to check the status of the Night Time Flag. The “Show Status” box when checked will show the state of the Night Time Flag ie Off or On.

pb`qflk=NO=s^`^qflk=moldo^jp

Comfort has the ability to control lights and home appliances at semi-random times during the day or night in Vacation Mode. This is made possible by Vacation Programs. There are 8 Vacation programs available.

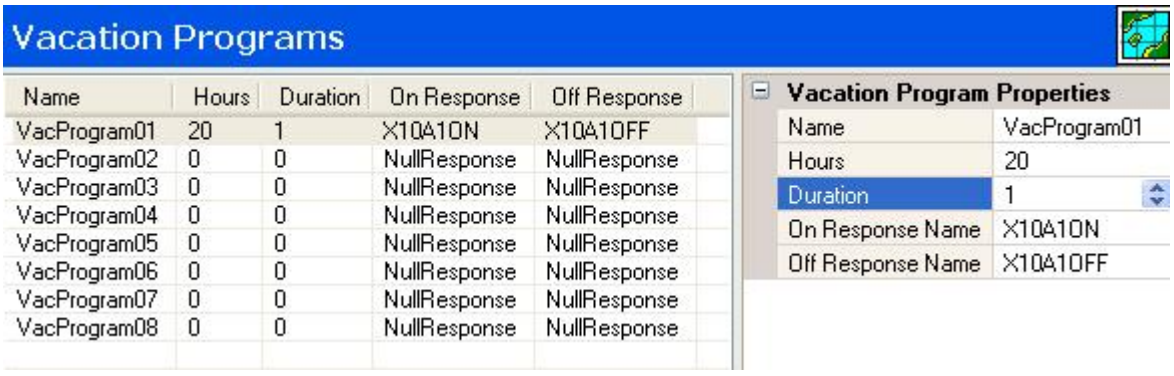
Each Vacation Program consists of a Start Time in hours (0-23), a Duration in hours (0-23), an ON Response, and an OFF Response.

The Start Time is when the ON Response is activated. Only the Start Hour (0 to 23) is specified in the Vacation program. The actual time within the hour is generated randomly by the system, and is different for each day that it is activated. The duration is specified in hours in the Vacation Program, but the actual duration minutes is also generated randomly, and is different each time that the Vacation program is activated. At the end of the Duration, the OFF Response is activated.

For example, Vacation Program 1 is programmed for Start Time of 7 PM, a duration of 1 hour, ON Response to turn on a light, and OFF Response to turn off the light. Each day, the light will turn on between 7 PM and 8 PM, for a duration of 1 hour to 1 hour 59 minutes. With this randomized pattern, it will not appear to be a programmed or automatic operation. All Vacation Programs may run simultaneously and overlap in time.

Programming Vacation Programs

Go to Schedule > Vacation Programs. The Vacation Programs screen will appear.

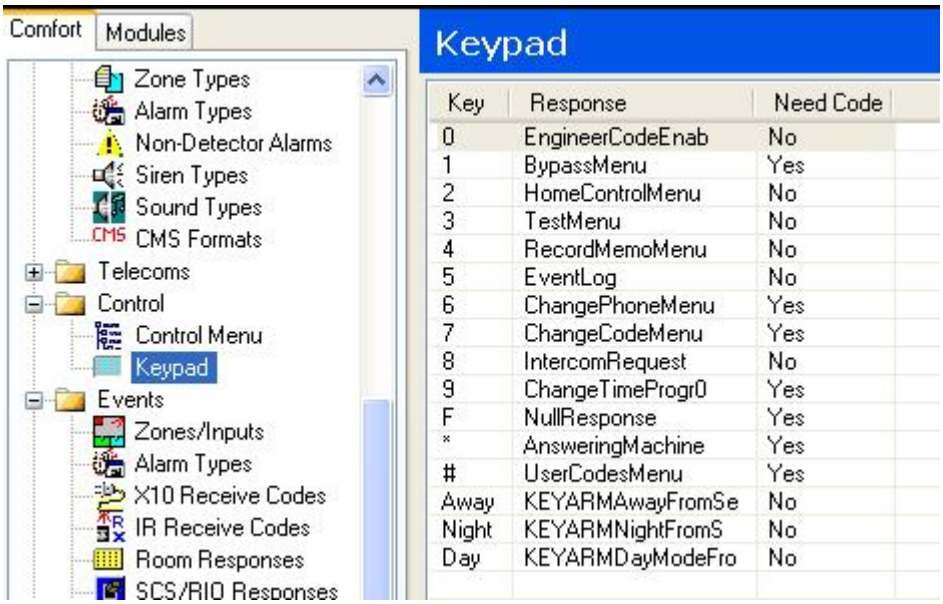


In the example above, Vacation Program 1 has been programmed for Start Hour 8 PM, duration 1 hour, On Response is X10 A1 On, Off Response X10 A1 Off. In Vacation Mode, at 8 PM to 8:59 PM the light or appliance controlled by X10 A1 will turn on for a duration of 1 hour to 1 hour 59 minutes.

Each of the 16 keypad function keys can be programmed to activate a Response. These Responses can be used to allow the keypad function key to control any appliance or scene, or to provide a shortcut to any menu in the Comfort Voice Menu system. Each function key can also be programmed to require a sign-in code in order to access the programmed Response or menu to provide additional security for sensitive functions.

Programming Keypad Functions

Go to Control > Keypad.



The screen shows the 16 keypad keys, the Response assigned to each and a box names “Need Code”. When this box is checked, the user must enter a valid sign in code in order to access the programmed Response. For example, if the one-touch arming keys (Away, Night, Day) have the “Need Code” box checked, a valid user code will be required before the system will arm. This tells Comfort who is arming the system, so it can apply the user authorization checks to the user. The user is also reported to the event log.

The default settings for the keypad function keys are shown above.

To program a menu shortcut into a function key, we shall follow the example of key 1, Bypass Menu.

Go to Events > Responses and select “BypassMenu” or Response number 101 in the default configuration.

The Actions for this Response are:

Authorize SecurityMenu

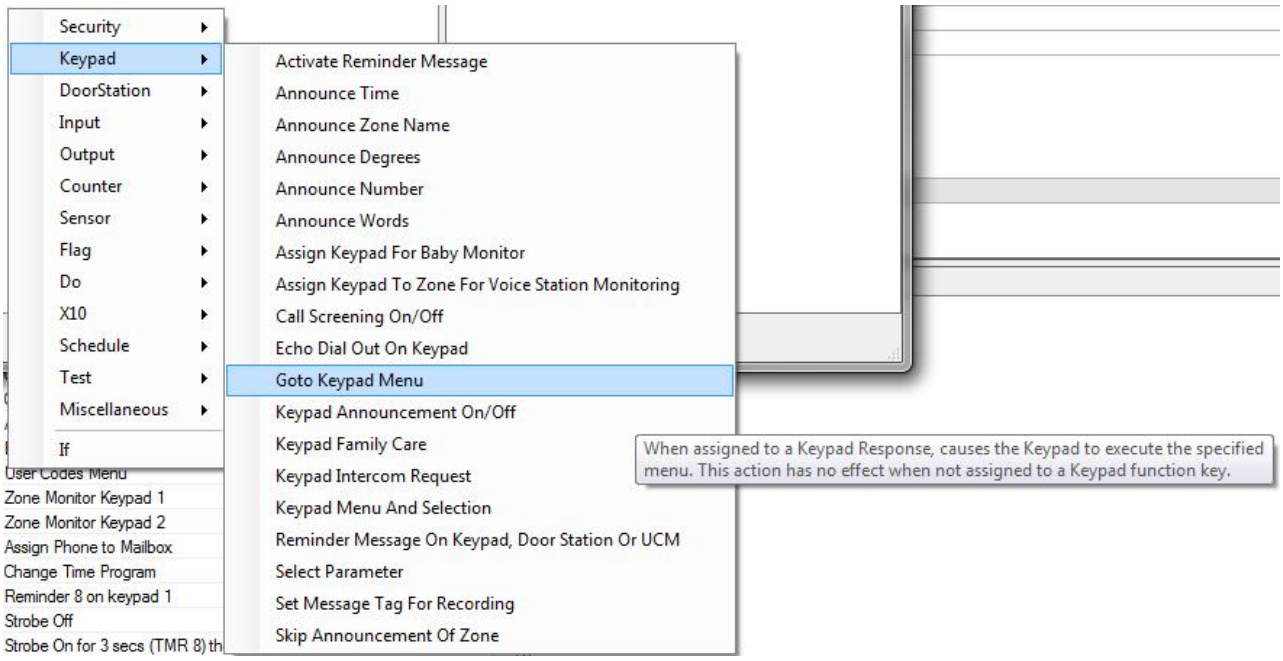
Keypad Menu Bypass

The first action “Authorize SecurityMenu” is selected from the Response Wizard. Select “Security” under ACTIONS on the left. The “Select Action” window opens.

Click on “Select Authorization Codes for Keypad Menu”. This causes the set of boxes on the right to open. These boxes select the combination of User Authorization settings which are applicable to this menu. In this instance, the Box for “Security Menu” is checked. This means that the user who presses this keypad button would need to have User Authorization for Security Menu to be able to access the programmed menu. Any combination of the settings can be checked, which means that to access the menu, the user should have authorization for all the settings. For example, if “Security Menu” and “Local disarm” are checked, the user must have authorization for both of these.

For User Authorization settings for each user code, see the Section on Alarms and Dialouts under “Sign in Codes”

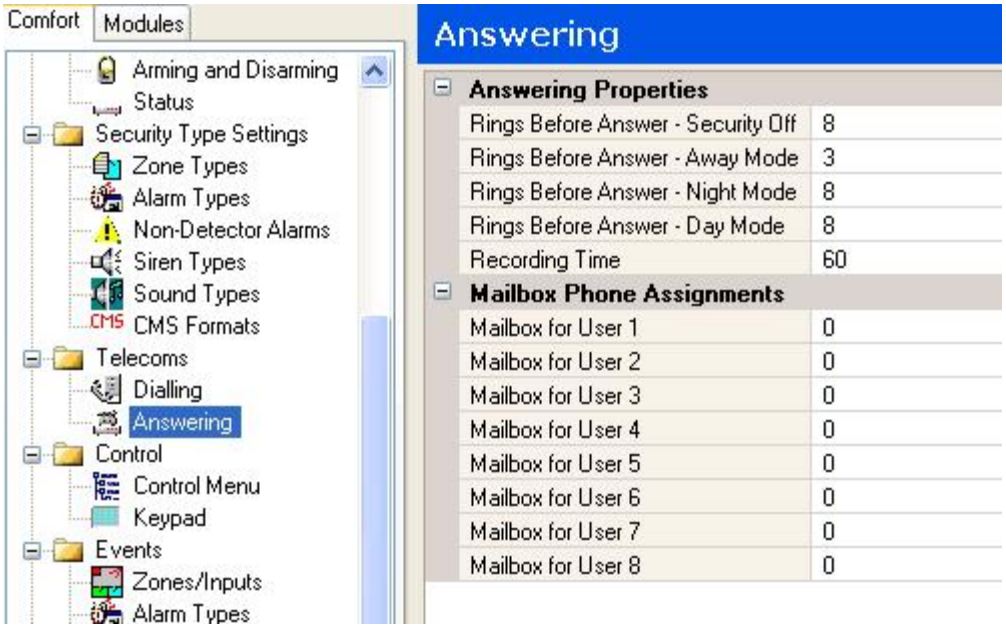
The next action, “Keypad Menu Bypass” is selected in Response Wizard under the Action “Keypad” tab, which opens the “Select Action” window shown below;



To activate a shortcut to a menu, select “Go To Keypad Menu”. This causes the box of “Control Menu” to appear on the right. Clicking on the arrow to the right of the box opens a drop-down list of available menu shortcuts. Select the menu from the list. In this example, “Bypass” is selected. Press OK to return to the Response Wizard and OK again to confirm.

You can program a function key to activate any appliance. For example, to turn on X10 A1, just assign Response “X10A1On” to the function key.

Comfort's built-in Answering Machine can be set up on the keypad User or Program Menu, as it is a user function. In Comfigurator, go to Telecoms > Answering to open the Answering Screen with default settings shown.



Rings before Answer

"Rings Before Answer" tells Comfort how many rings it should wait to answer the phone for each of the security modes. In Night mode, for example, the number of rings could be set to 0, to allow the answering machine to take all calls. In Security Off and Day mode, where people are in the house and awake, the number of rings could be set to 8 rings or longer. In Away Mode, the number of rings could be set to a smaller number. However, be aware when setting Away Mode rings to a different number that it may give callers the information that nobody is at home.

Press # by itself on the keypad when the phone is ringing to get Comfort to immediately answer the call without waiting for the programmed number of rings. This could be used with Caller ID, so that when an unwanted call is received, it can be sent to the answering machine.

Recording Time

The "Recording" time is the time allotted to each recorded message. This prevents callers from recording very long messages and filling up the recording memory. It applies also to memo messages recorded internally via the keypad and to reminder messages. However, if the actual message is shorter than the programed record limit, the extra time is freed up for new incoming messages

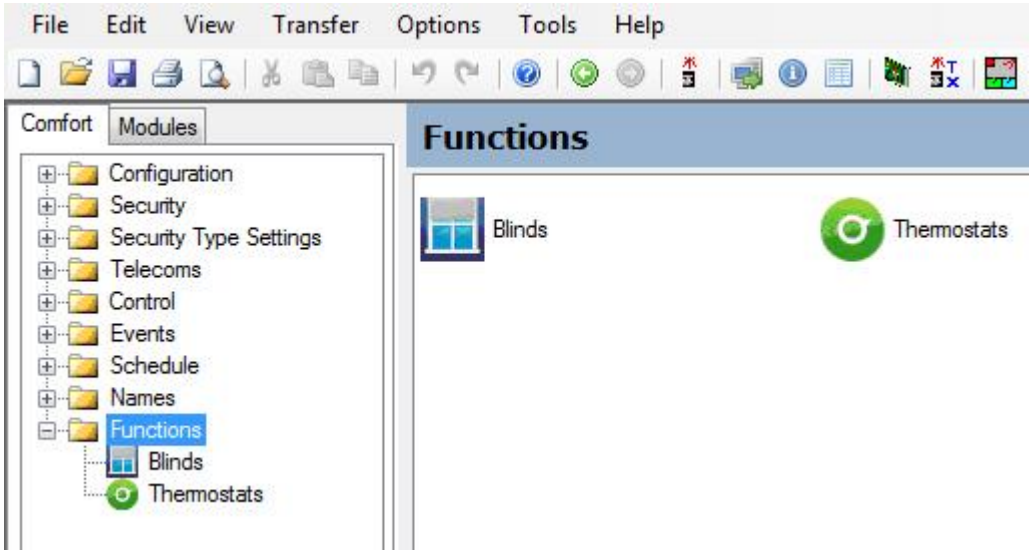
Assigning Phones to Mailboxes

The Mailbox Phone assignments area is to allow each user/mailbox to assign one of the 8 programmable telephone numbers. Any new message for the user will be forwarded to the assigned phone.

The new Blinds and Thermostats under the Functions category are available in Comfigurator 3.8.x. This simplifies the configuration of blinds and/or thermostats where previously they require complex programming using Responses.

Minimum requirements:

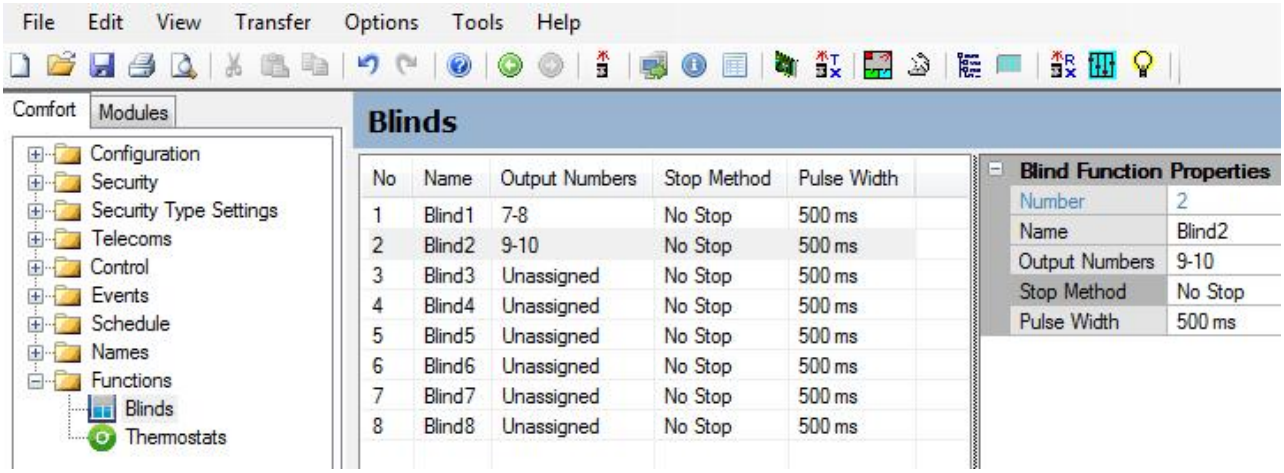
- Comfort Ultra or Logic Engine firmware 7.039 and above
- Comfigurator 3.7.8 and above



Blinds

The Blinds function allows Comfort to control automated blinds or curtains without programming pulses in Responses. Blinds are automated by installing a blinds motor and mechanism to roll up or down the blinds. A blinds controller is needed and is connected to up or down switches, and sometimes IR/RF remote control.

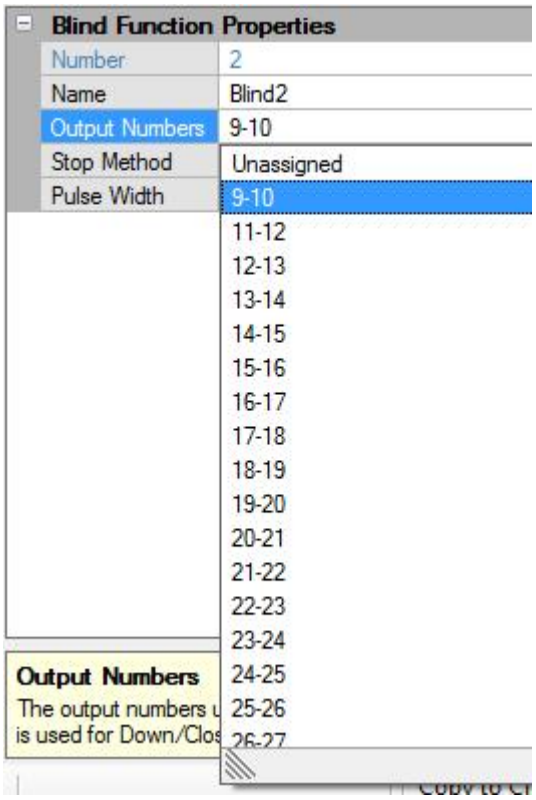
Blinds are driven by motors which can be controlled by relays either low voltage or 230V. One relay causes the blinds to go up / open and another causes the blinds to go down / close. Hence 2 outputs are needed for every blinds control.



Up to 8 blinds can be configured under Functions >> Blinds.

Output Numbers

Select the output numbers used for the blinds. The outputs assigned will be sequentially numbered.



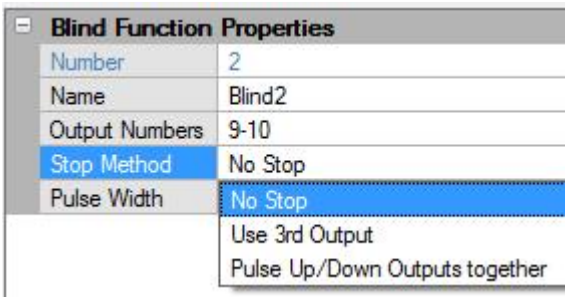
The specified output is for rolling up / open.

Output + 1 is assigned for rolling down / close.

Output + 2 will be assigned to STOP when 'Use 3rd Output' is used as the Stop Method.

☎ Note that outputs assigned to Blinds are unique. The same output cannot be assigned to other blinds or to Thermostats. The 2 outputs for Up and Down are interlocked, ie they cannot be turned on at the same time to prevent damage to the motor. However if the stop method is Pulse 2 outputs then the 2 outputs can be pulsed only for 1 second.

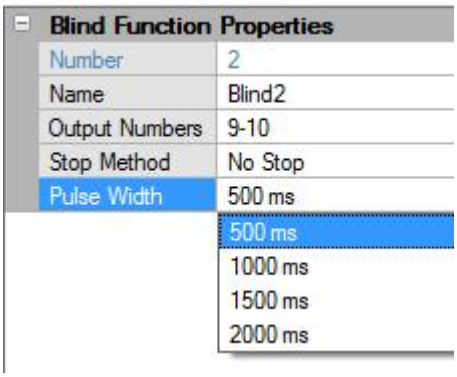
Stop Method



- No Stop means there is no command to Stop the blinds during movement.
- Use 3rd Output uses selected output + 2 for stopping the blinds.

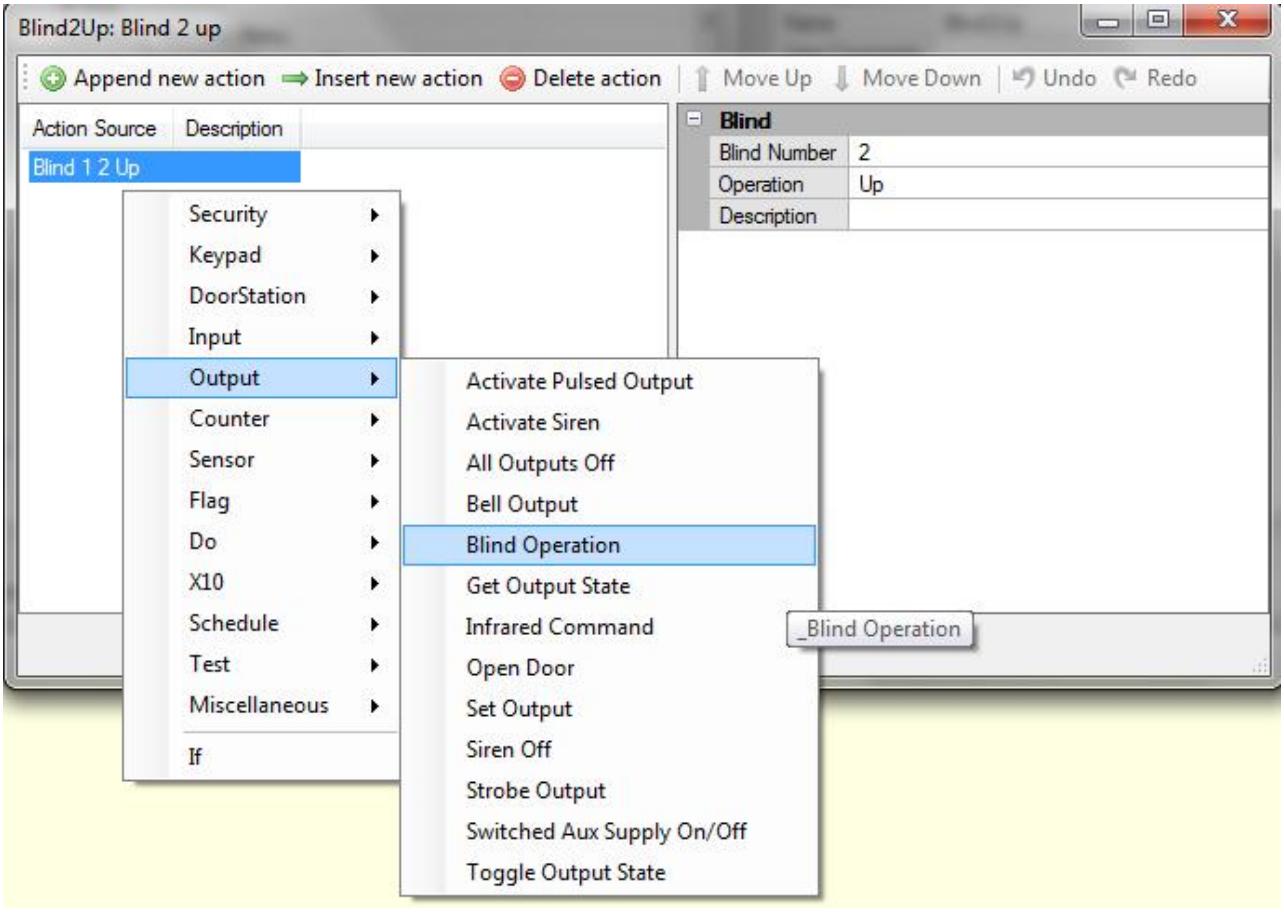
- Pulse Up/Down Outputs together gives a pulse on both Up and Down outputs to stop the blinds.

Pulse Width



There are 4 selections for pulse width: 500 ms, 1000 ms, 1500 ms, and 2000 ms.

A response can then be created by choosing the Output action > Blind Operation and assigned to e.g. Control Menu and KT03 touchscreen button response.



Thermostats

The Thermostats function allows Comfort to control the Heating and Cooling valves of a heating system or cooling system or a combined system using Comfort outputs.

Temperatures are kept in Comfort Sensors (1 to 32). The sensors can be loaded from temperature sensor in SCS, TCS, or other systems like KNX, Heatmiser, or Z-wave which is able to map to Sensors.

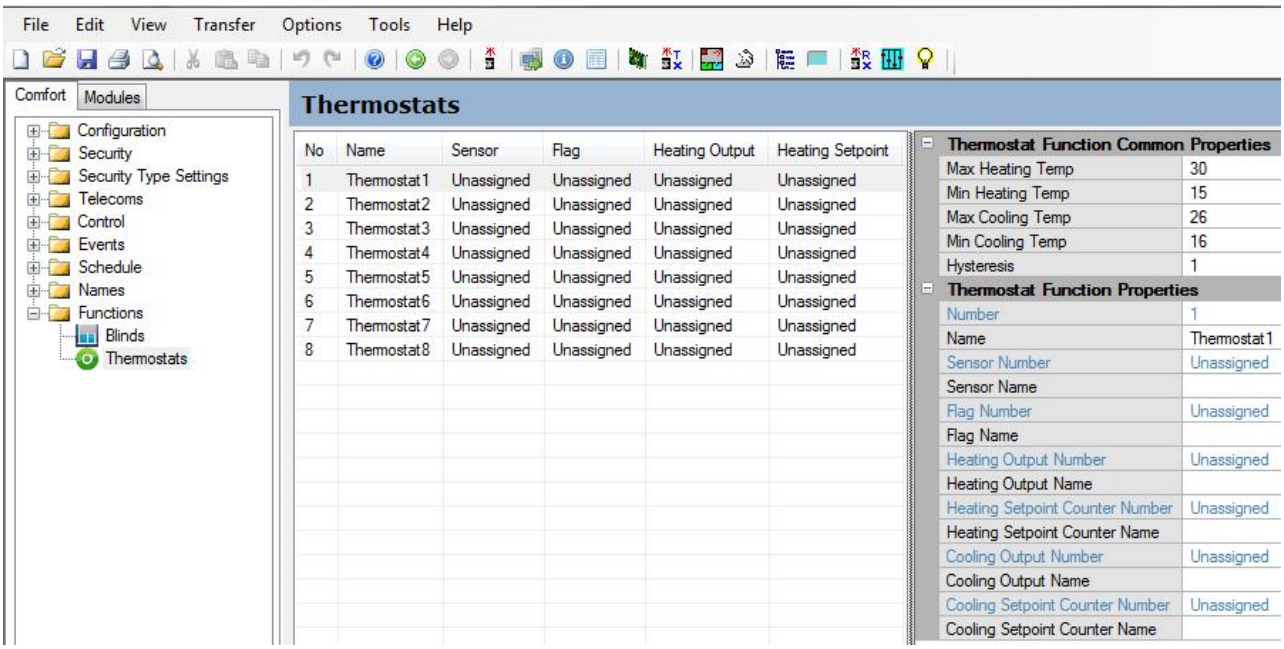
The Heating and Cooling Setpoints are kept in Counters. Changing the value in Heating Counter changes the heating setpoint and changing the value of the Cooling Counter changes the cooling setpoint.

A Comfort Flag is assigned to a thermostat. The thermostat can be turned on or off by setting and clearing the associated Flag.

Using Comfort Counters, Sensors, and Flags allows the thermostat to be controlled easily by manipulating these in Comfort.

Outputs are assigned to Cooling and Heating to be turned on or off to control heating and cooling.

☎ Note that outputs assigned to Thermostats are unique. The same output cannot be assigned to other Thermostats or to Blinds. The 2 outputs for Heating and Cooling are interlocked, ie they cannot be turned on at the same time to prevent damage to the heating/cooling mechanism.



There are 8 thermostats available, each with the following properties:

Max Heating Temp

This is the maximum heating setpoint temperature. If a higher value is put into the Heating Setpoint counter, the setpoint will be limited to this maximum value.

Min Heating Temp

This is the minimum heating setpoint temperature. If a lower value is put into the Heating Setpoint counter, the setpoint will be limited to this minimum value.

Max Cooling Temp

This is the maximum cooling setpoint temperature. If a higher value is put into the Cooling Setpoint counter, the setpoint will be limited to this maximum value.

Min Cooling Temp

This is the minimum cooling setpoint temperature. If a lower value is put into the Cooling Setpoint counter, the setpoint will be limited to this minimum value.

Hysteresis

This is the Hysteresis value used in the comparison between actual temperature and setpoint.

Name

This is a name which may be assigned to the Thermostat to provide a meaningful description.

Sensor Name

This is the Comfort Sensor assigned to the temperature of the Thermostat. Sensor assigned to Thermostats must be unique, i.e. They can be assigned to only 1 Thermostat.

Flag Name

This is the Comfort Flag assigned to the Thermostat. Assign a flag to a thermostat to enable and disable the thermostat. When the flag is off, the heating and cooling outputs will turn off. When the flag is on, the heating and cooling setpoints will operate the outputs based on comparison between the temperature and the heating/cooling setpoints. Flags assigned to thermostats must be unique, i.e. they can be assigned to only 1 Thermostat.

☎ Note that Flags are not reset by Comfort Reset in firmware 7.039 and above but cold Reset (power off without battery) will reset the Flags to 0.

Heating Output Name

This is the Comfort Output number for Heating control. If the Heating Output is Unassigned then the heating function will not work. Heating and Cooling cannot be on at the same time but they can both be off. Outputs that are assigned to Heating or cooling cannot be assigned to other heating/cooling or to Thermostats

Heating Setpoint Counter Name

This is the Comfort Counter number which holds the Heating Setpoint. The counter value is limited by the Minimum Heating Setpoint and Maximum Heating Setpoint and cannot be set to any values outside this range.

Setting the heating counter value = 0 will disable the heating function and turn off the heating output.

The same counter number can be used in more than 1 thermostat so the same setpoints can be used.

☎ Note that Counters are not reset by Comfort Reset in firmware 7.039 and above but cold Reset (power off without battery) will reset the counters to 0.

Cooling Output Name

This is the Comfort Output number for Cooling control. If the Cooling Output is Unassigned then the cooling function will not work. Heating and Cooling cannot be on at the same time but they can both be off. Outputs that are assigned to Heating or cooling cannot be assigned to other heating/cooling or to Thermostats

Cooling Setpoint Counter Name

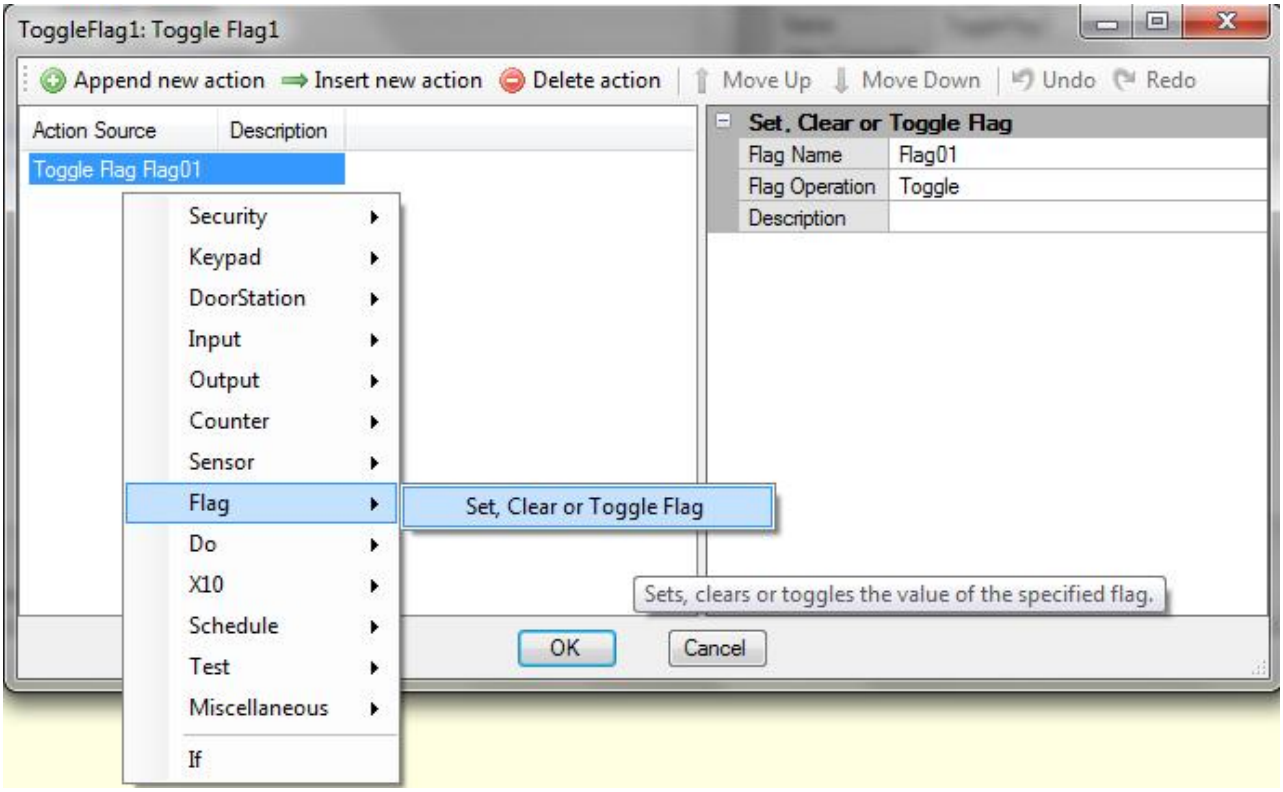
This is the Comfort Counter number which holds the Cooling Setpoint. The counter value is limited by the Minimum Cooling Setpoint and Maximum Cooling Setpoint and cannot be set to any values outside this range.

Setting the cooling counter value = 0 will disable the Cooling function and turn off the cooling output.

The same counter number can be used in more than 1 Thermostat so the same setpoints can be used.

☎ Note that Counters are not reset by Comfort Reset in firmware 7.039 and above but cold Reset (power off without battery) will reset the counters to 0.

A response can then be created by choosing the Flag action > Set, Clear or Toggle Flag; and choosing the Counter > Decrement, Increment or Initialize Counter, then assign them to e.g. Control Menu and KT03 touchscreen button response.



pb`qflk=NS==jfp`bii^kblrp=moldo^jjfkd

This section describes miscellaneous programming tricks and tips.

Drag and Drop

It is possible to use Drag and Drop to change the numbering of the following Comfort registers and functions;

- Zones
- Outputs
- Control Menu - Control Keys and Control Actions
- Counters
- Flags
- Sensors
- Timers

When using drag and drop to change these registers, the references to these rare automatically adjusted by Comfigurator. This saves a lot of time when a change to the connections or programing needs to be done

Dialing Out for Door Station in Away Mode

To get the system to dialout when the Door Station button is pressed in Away mode, go to Security Types > Alarm Types, look for Alarm Type 25 for Doorbell. This alarm type determines if there is to be a Door Station dialout in Away Mode, and to which phones. Check the Dialout box and select which phones 1 to 8 to dial to in Dial Index.

Preventing two pulses on the siren when Away Armed

By default, the external siren output gives two pulses when the security system is armed to Away Mode to provide confirmation of the armed state. In some installations, this may be undesirable. To disable this sound, go to Security Type Settings > Siren Types. Siren Type 5 is the Away Armed siren type, which has the Bell setting checked. To disable the beeps on the Siren, uncheck the “Bell” setting.

Changing the Siren duration for any Alarm

When an alarm occurs, the siren turns on for the programmed time, depending on the alarm type. These settings can be found in Security Type Settings > Siren Types, under the Duration column in seconds. For example, the Intruder Alarm uses Siren Type 1, which has a default duration of 300 seconds (5 minutes). Click on the Duration box for the Alarm type to change this number.

Resetting S12V Output

From version 4.101, the S12V output will not automatically reset for 5 seconds upon disarming the system. Latched shock detectors require power to be turned off when the system is being armed, while latched smoke detectors should be turned off when the system is disarmed. If none of these are used, then S12V can be used as another unswitched 12V supply for detectors and other devices. Action 90 can be used to switch the S12V output off when required, and turn it back on a few seconds later. The following Response can be used:

Response

Aux Off

Do S12V-ON [S12V ON] After 3 Seconds Using Timer08
Response 124: S12V-On
Aux On

To reset S12V when the system is disarmed, assign the Response to Alarm Type 17 (Disarm). To reset S12V when arming, assign the Response to Events > Miscellaneous Events > Start Arming Response.

Timer 8 used in this example is shared with the Vibration analyser and strobe flash. This can be done as these Responses run at different times and do not interfere with one another.

Program Entry door for instant alarm in Night Mode

By default, opening the Entry door (Zone Type 2) in Day and Night Modes will start an Entry delay instead of an instant intruder alarm, so as to allow occupants to return home after the system is armed. This may be undesirable in certain installations. To allow an Entry Door to cause an instant alarm in Night and Day modes, use Action 5 (Cancel Entry Delay). Response 85 (CancelEntryDelay) applied to the Entry door zone causes an intruder alarm in Night Mode. It can be modified to include Day mode if required.

Auto-bypass Recurring Zone (Swinger Shutdown)

If a zone keeps on triggering an alarm (e.g. Swinging door or defective PIR) the zone can automatically be bypassed after a programmed number of activations. The number of successive activations to cause a bypass of the zone in Security > Miscellaneous Settings > Zone Auto-shunt Count. If the value is programed to 0 or 255, there is no auto-bypass. Take note that this applies to successive activations of the same zone. This is also known as Swinger Shutdown.

Programming a Bell Delay

In commercial premises, it may be required to delay the Siren for a programmed time when an alarm is triggered. To do this, go to Security Types > Alarm Types, select the Alarm Type for which Bell Delay will be applied, change the S/Delay setting from “No” to “Yes”. (This can also be done in Engineer menu, 2 for Alarm Type Menu, 5 for Siren Type. Press # to leave Siren Type unchanged. The menu goes on to Siren Delay, 1 for on, 0 for off). Siren Delay can be turned on or off independently for each Alarm Type, but the duration of the delay is common, and is programmed in Security > Miscellaneous Settings > Siren Delay (value in minutes). The range of Bell delay is 0 to 255 minutes.

If a Phone Line cut is detected before or during a Bell Delay, the Siren is activated immediately, canceling any Siren Delay.

Programming a Dial Delay

To program a delay before dialing to the programmed telephones for each Alarm Type, go to Security Types > Alarm Types, select the Alarm Type for which Dial Delay will be applied, change the D/Delay setting from “No” to “Yes”. (This can also be done in Engineer menu, 2 for Alarm type, 1 for Dial Settings, press 1 for On, and 2 for Dial delay. Press 1 for Dial delay on, 0 for off). The Dial Delay can be turned on or off independently for each alarm type, but the duration of the dial delay is common, and is found in Telecoms > Dialing > Delay Before Dialing (value in seconds). The range of dial delay is 0 to 255 seconds.

Disabling dialouts in Night (and Day) Mode

It may not be desirable to have Comfort dial out in Night Mode, when people are at home. It will cause the owners cellular phone and/or pager to ring, which is not necessary if they are at home. If the setting “Repeat Last zone in Alarm” is programmed in Security > Configuration Flags, the keypad should keep repeating the last zone triggered during an a alarm, but it will not announce the zone while dialing out. Hence it is preferable to disable dialouts in Night mode unless someone outside the house, like a relative or a Central Monitoring Station is to be notified.

To disable dialout in Night Mode, use default Response 31;

```
If SecurityMode = NightMode Then
   Limit DialOut
End If
```

This Response is to be assigned to the Intruder Alarm (and Panic, Tamper) Response (Eng Menu 2, Alarm#, 2).

Limit Dialout (Action 100) skips dialout to the combination of phones specified (refer to “Action Codes Reference”). To disable dialouts in Night and Day mode, the Response should be

```
If SecurityMode <> NightMode Then
   If SecurityMode <> DayMode Then
      Exit Response
   End If
End If
Limit DialOut
```

If Phones 1 and 2 are assigned to Central Monitoring Station, and it is necessary to alert the CMS in Night Mode, the Response should be

```
If SecurityMode = NightMode Then
   Limit DialOut 3
End If
```

which allows dialout to phones 1 and 2 only.

Omitting Zones

When a Zone is bypassed (F+1 on keypad; or User Menu 3,1), the zone is ignored by the system until it is unbypassed, or the system is disarmed (when all bypassed zones are automatically unbypassed). To permanently “bypass” a zone, use the Omit Action (Omit zone). Omitted zones remain omitted until they are unbypassed using action Unbypass zone. The Omit action can be used for disabling a zone or group of zones in a room or department using a key switch independently of the main system. The zones which are omitted can be programmed as immediate in all modes to simulate an independent partition.

Reporting Bypassed Zones

Bypassed zones may be reported to the programmed phone numbers. Alarm Type 16 is the Bypass Zone alarm. Set the D/Out to ON and program the combination of dial indexes 1 to 8 to report for this event. When the system is auto-armed and Force arming is enabled, any zones auto-bypassed can be reported to the programmed CMS, telephones or pagers.

Playing a warning message on a Keypad or Door Station

When movement is detected in a zone, a warning message can be played on any Keypad or Door Station. Record the warning message as a Reminder message. The

Time and days of week do not need to be set, and the Reminder does not need to be turned on. Program the Zone response of the movement detector for a Response using the action:

Reminder (1-8) On Keypad (1 to 8)

Or for Door Station:

Reminder (1-8) On Keypad (49 to 51)

This will cause the reminder to be played on the selected keypad or door station when the zone is triggered.

Programming a Vibration/Shock Analyzer

Vibration, shock or inertial sensors tend to cause false alarms when knocked accidentally. To program a vibration sensor zone to cause an alarm only when knocked a number of times within a short time window, use Response 86 in the Zone Response. Response 86 by default causes an alarm only when the zone is activated 3 times within 30 seconds. This can be combined with a warning message on a keypad whenever the zone is knocked.

Programming a Zone for Entry Delay in Night Mode

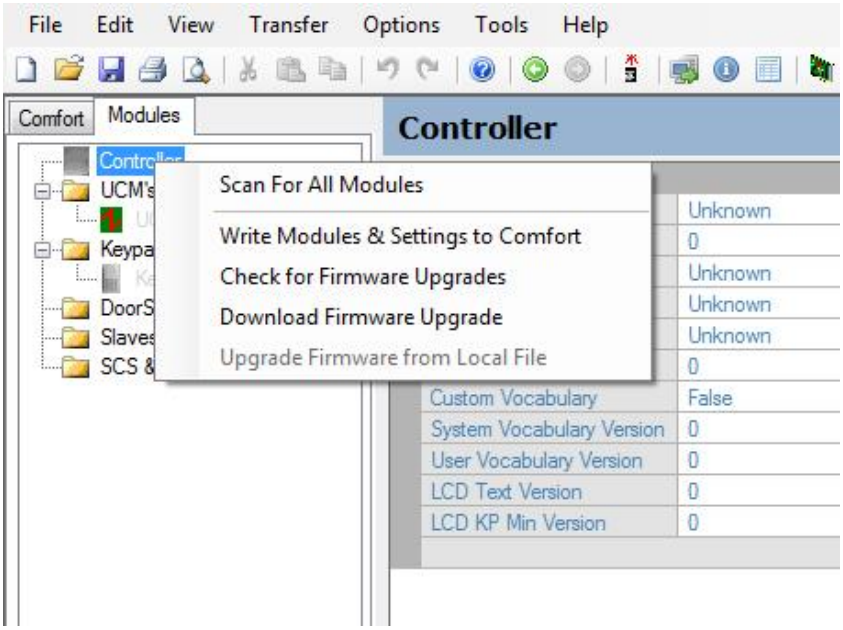
Program Response 54 into the Zone Response. This causes an Entry Delay when the zone is triggered in Night Mode. For Entry Delay in Day mode, use Response 53.

Comfigurator and the UCM can be used to upgrade Comfort firmware and Vocabulary.

Upgrading Firmware

Firmware is the embedded software which controls the operation of Comfort, Slaves, UCMs, and Keypads.

Right-click on the selected module to upgrade firmware.

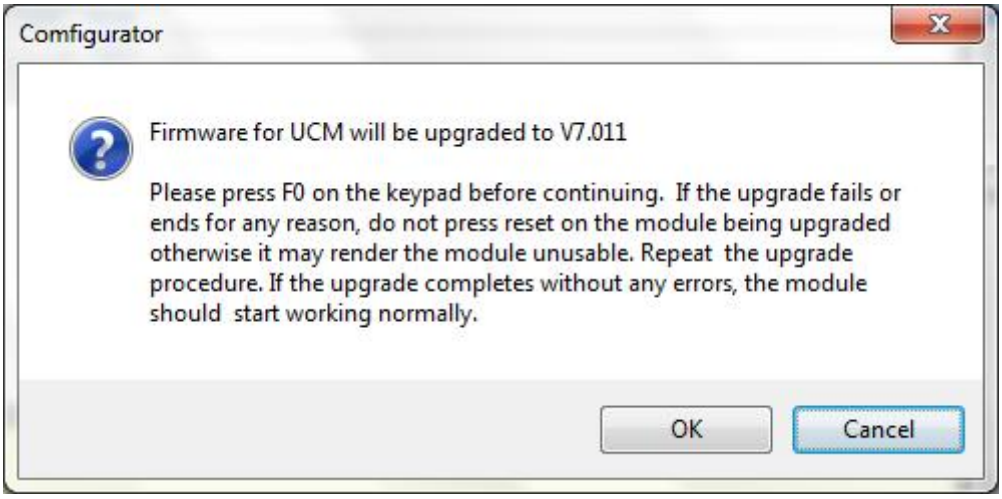


“Check for Firmware Upgrades” means if the firmware is not the latest on the Cytech Server the module firmware is upgraded. An Internet connection is required.

“Download Firmware Upgrade” means downloading the latest released version of a firmware to be saved in the computer to be used for Upgrading Firmware from Local File.

“Upgrade Firmware from Local File” allows you to upgrade the firmware by selecting a .cbf file on the hard drive. This is normally used for upgrading to Beta (test) firmware. This option is grayed out if a Module scan has not been done yet.

After selecting the upgrade option, a pop-up window will appear as below. Press F, 0 on any keypad to authorise the operation.



Only Comfort 2 and module firmware versions > 6 can be upgraded in this way. For firmware less than 6, please refer to the UCM Manual for instructions. This can be downloaded from http://www.cytech.biz/ucm_manual.html

☎ Please note that a module can only be upgraded with firmware of the same type. For example, Comfort II Ultra can only be upgraded with Comfort II Ultra firmware, Slave (SEM) can only be upgraded with Slave firmware. UCM/USB and Ethernet share the same firmware. UCM/KNX, UCM/CBUS, etc have their own different firmware types. Each module can be upgraded with the same type of firmware e.g. UCM/KNX firmware cannot be "upgraded" to UCM/CBUS or UCM/232, USB or Ethernet.

Upgrading Comfort Vocabulary

Transfer > Vocab Upgrade will upgrade the Comfort Vocabulary. The Vocabulary is the voice on Comfort. Comfort can speak in different languages. By changing the vocabulary, the same Comfort can speak in different languages or in the same language with a different wordlist. A Vocabulary upgrade is sometimes needed because of new sentences in the user voice menu. Also in rare circumstances, usually due to high voltage electrical surges, Comfort may lose its voice even though it continues working otherwise. A vocabulary Upgrade will restore the voice. The full procedure is described in the UCM Manual.

☎ It is better to use UCM/USB for upgrading Vocabulary. With UCM/Ehernet, the delays on the network may cause the vocabulary upgrade to fail.

Upgrading Comfigurator

When Comfigurator runs, it will check for the latest version on the Cytech server and prompt if you would like to download the new version. Also Help > Check for Updates will manually check for the latest version. This requires an Internet connection. It is recommended that you DO NOT do this unless the Comfort voice has been lost.

Updating Default Files

Default files and templates include the settings loaded when you start a new template in Comfigurator for various models e.g. Comfort II Ultra, Comfort II Optimum. Comfigurator allows the set of defaults to be automatically downloaded from the Cytech server. Go to File > Update Defaults. An Internet Connection is required.

Upgrading Comfort Server Manager

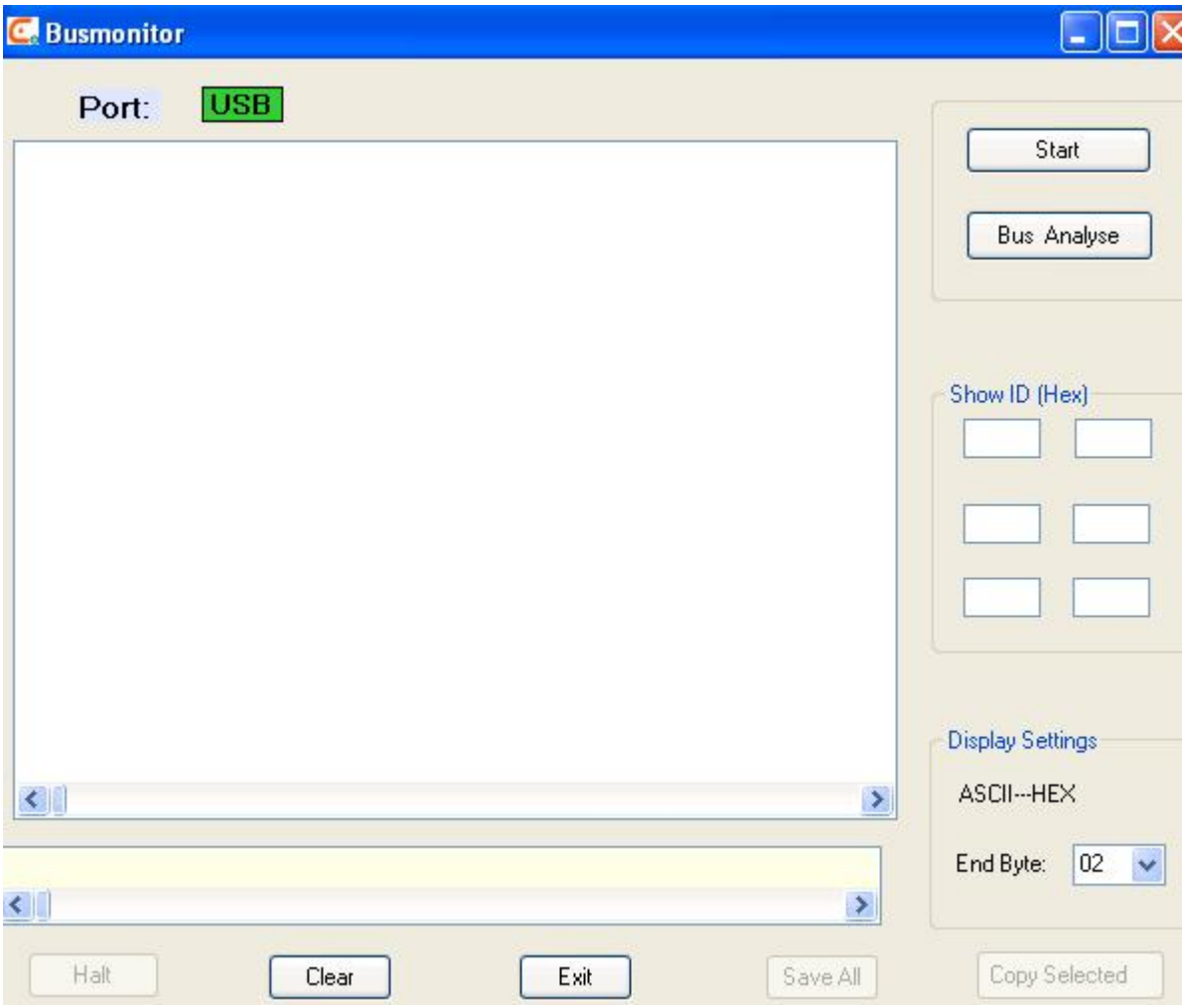
When you click Comfort Server Manager in Options > Settings to configure UCM/ETH03, Comfigurator will check if the current version is the latest, and if not, it will prompt you to download the latest software from the Cytech Server

The Tools menu has 2 additional tools; Infrared Utility and Bus Monitor

Bus Monitor

The Bus Monitor is a built-in tool in Comfigurator which monitors the communications on the Comfort RS485 Bus.

To launch Bus Monitor, go to Tools > Bus Monitor on the top menu bar.



The green PORT: text on the top right shows the connection method. This is set in Comfigurator.

There are 2 buttons on the top right, “Start” and “Bus Analyse.”

Start will show only the communications that have content, i.e. excluding Polling and Null replies. There will be an activity bar on the top.

The “Bus Analyse” Button will show all the activity including polls and Null replies. The screen will quickly fill up with the bus activity.

Use the “Save All” button to save the information from the monitor. This is useful for debugging purposes and can be sent to Cytech technical support for analysis.

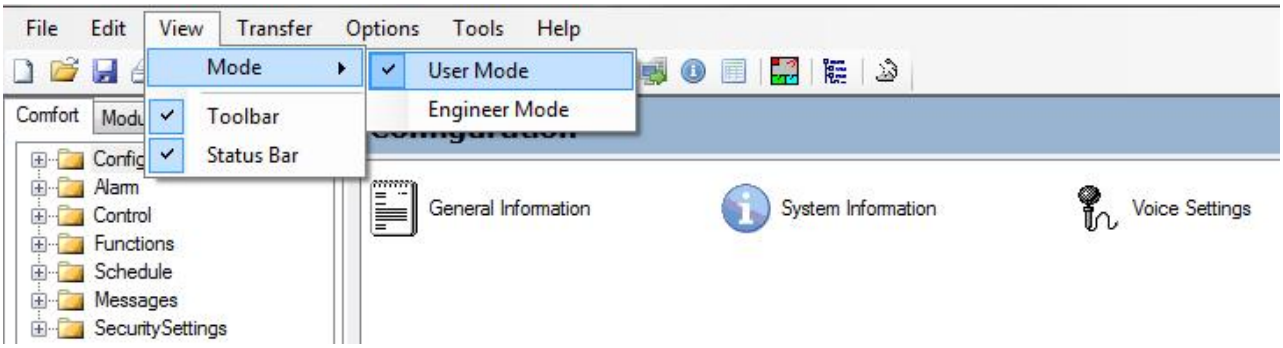
The Boxes Show ID (Hex) are used to enter IDs of modules that need to be monitored. For example to monitor only Keypad ID 1, enter 41 in the 1st box. Only Keypad 1 activity will be shown.

Infrared Utility

This allows Infrared (IR) signals from handheld remote controls to be learned via the UCM. This is fully described in the UCM Manual which can be downloaded from the Cytech website at http://www.cytech.biz/firmware.html

"User Mode" is a major new feature in Comfigurator 3.8.x, which is a simple user interface for Comfort similar to Wizcomfort which was a stand-alone program. Integration of User Mode with Comfigurator makes it easier to synchronise the programming software and User Interface with the firmware.

User Mode is also useful for testing the system after installation and programming. It can be launched from View menu > Mode > User Mode.



The purpose of User Mode is to allow end users to perform user programming line record and hear messages, arm and disarm the security system and operate the Control menu

The features of User Mode are:

1. See the status of Zones (Active, Inactive, Bypassed, Trouble).
2. Arm and Disarm the security system, see open zones, and allow Force arming.
3. Operate the Control Menu and see the feedback.
4. Operate the Blinds and Thermostat functions.
5. Change Time Program times and enable or disable individual Time Programs.
6. Change Reminder times and Vacation Programs.
7. Record, play, erase Voicemail, Greeting message, Reminders, Alarm Message, User Names via any keypad. This feature provides a direct shortcut to the voice menu on the keypad so it makes it easy for users to find the correct menu to perform these messages.
8. Do a Dial Test to dial to all the programmed phone numbers.
9. Change User Sign in codes, phone numbers, and Number of Rings.

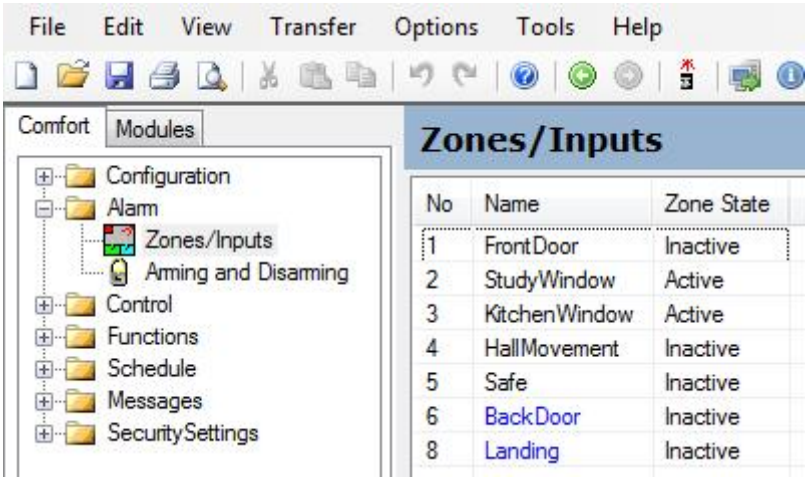
User Mode does not allow the programming of Responses. The user can switch to Engineer Mode and do their own programming, but the new facility of automatically backing up the cclx file before write to Comfort will allow the old file to be restored from the computer.

Configuration

Same as the Engineer Mode for General Information, System Information and Voice Settings described in previous sections.

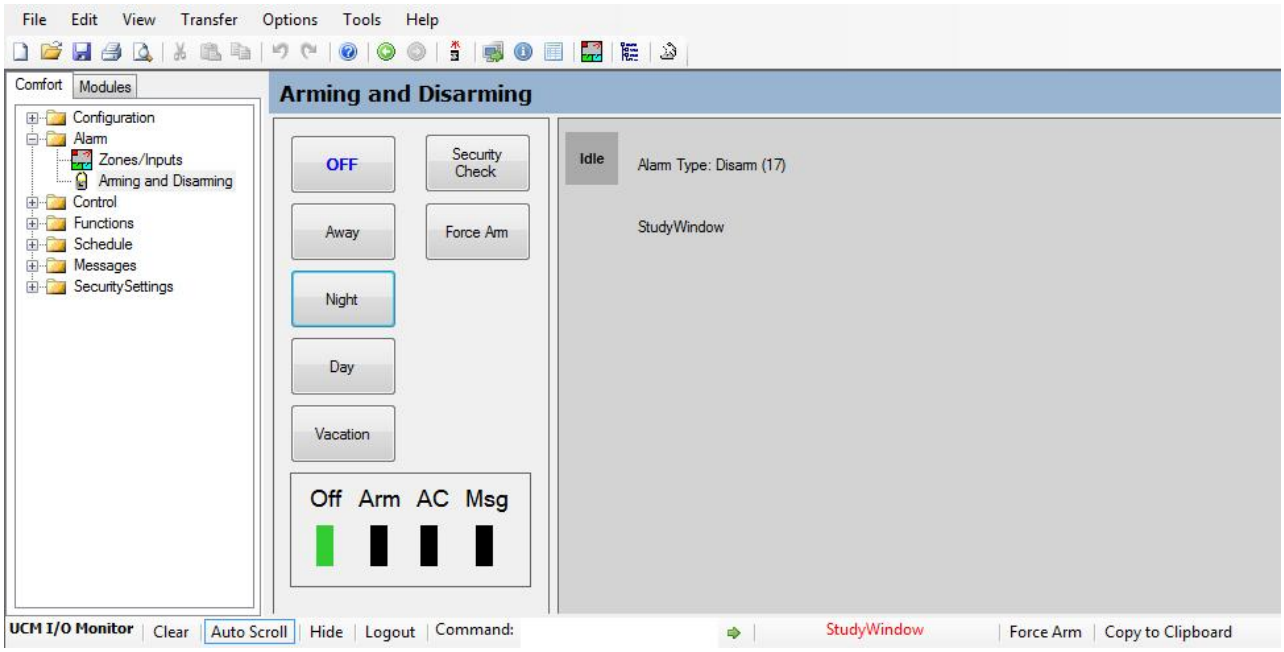
Alarm

Zones/Inputs status can be seen from Alarm > Zones/Inputs.



There are buttons for Security Off, Away mode, Night mode, Day mode, and Vacation mode in the Alarm > Arming and Disarming page. The Security Mode is highlighted on the button in Blue, e.g. Security Off is the current security Mode in the screenshot below.

The keypad LEDs status can also be viewed from the screen.



During arming any open zone will be displayed on the box on the right and in the event box in red text.

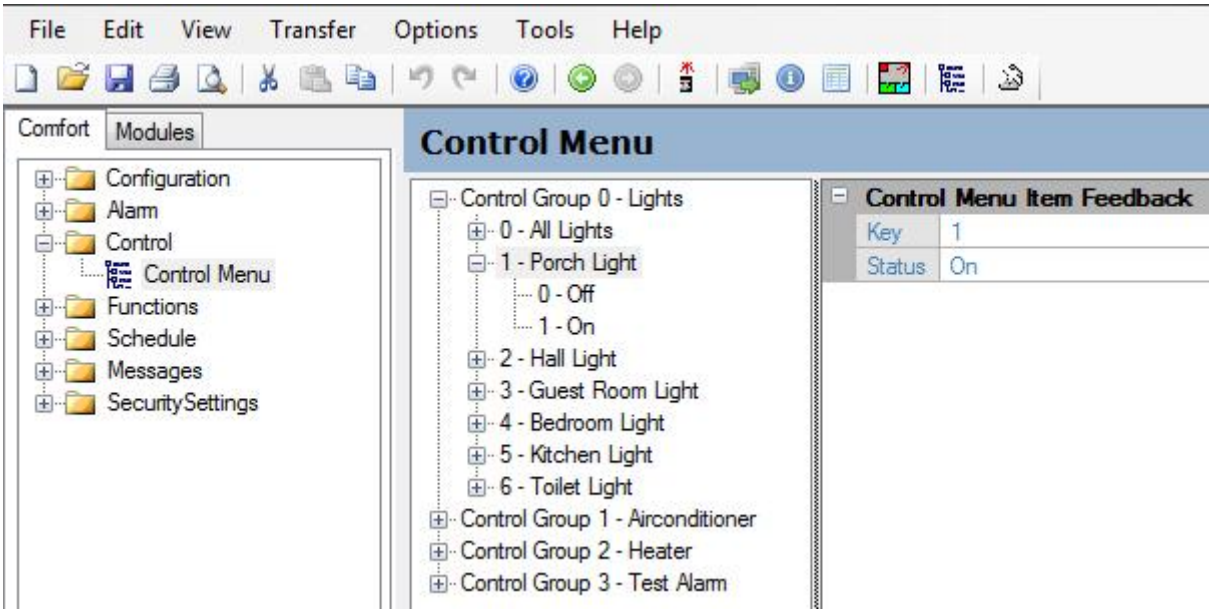
Force Arm button is used to automatically bypass the open zones and allow the system to be armed.

'Security Check' button is used to initiate walk test so that open zones are announced on the keypads. 'Force Arm' button

Control

The control menu can be operated by selecting the items in the list.

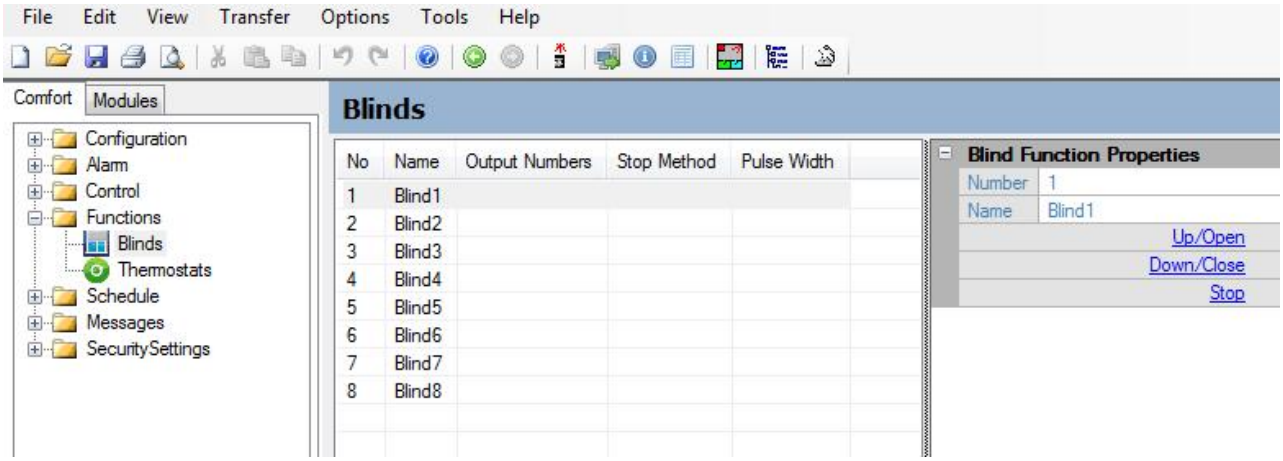
To see the status, press the device e.g. Porch Light in the screenshot below. The status is shown as On.



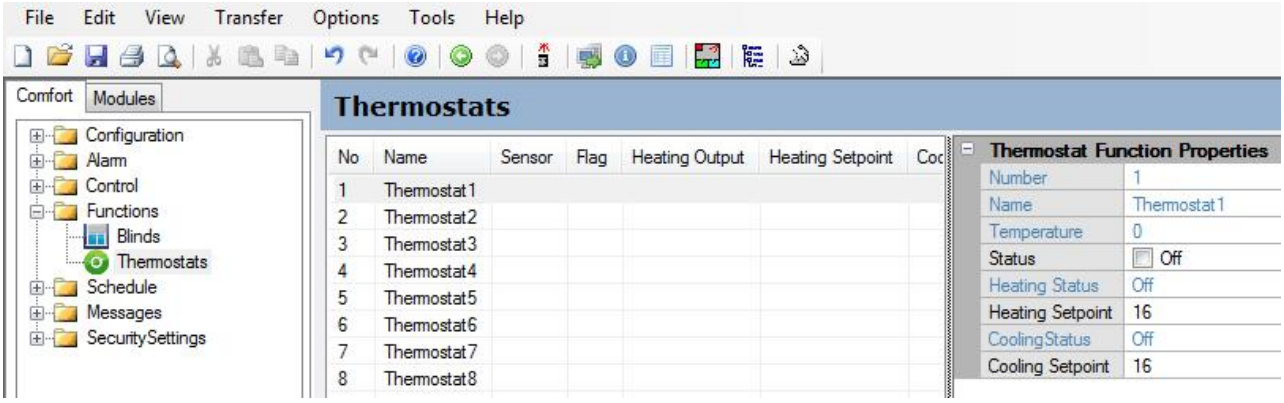
To control the device press one of the command below the device name, e.g. Off or On.

Functions

The control of Blinds can be done by selecting the Blind and pressing Up/Open, Down/Close, or Stop at the Blind Function Properties on the right pane.



You can see the temperature, setpoints, on/off state of a Thermostat as well as changing the setpoints from the Thermostat Function Properties on the right pane.



Schedule

Schedule consists of the same things as its Engineer mode counterpart i.e. Holidays, Time Programs, Reminders, Vacation Programs, and Sunrise/Sunset Times except the ability to edit Responses is not allowed.

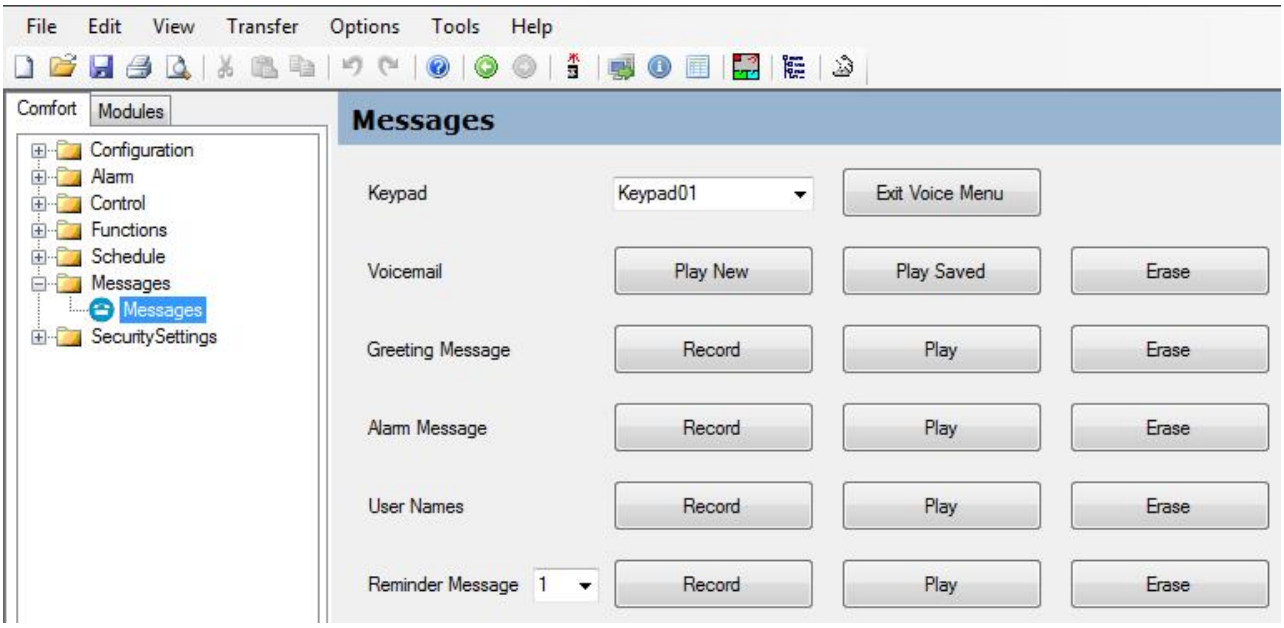
Messages

The Messages function allows messages to be recorded, played and erased using any keypad selected from the dropdown box.

Select the keypad nearest to you. For recording, you need to go close to the selected keypad to record on the keypad microphone (recording is NOT via the PC so do not speak to the PC).

Note that you can carry a laptop with you to go near to the keypad if connected by WiFi, since the expected connection method is by UCM/Ethernet (not USB).

These are shortcuts to the keypad menus to perform the desired operation, so the user does not have to navigate through the voice menu



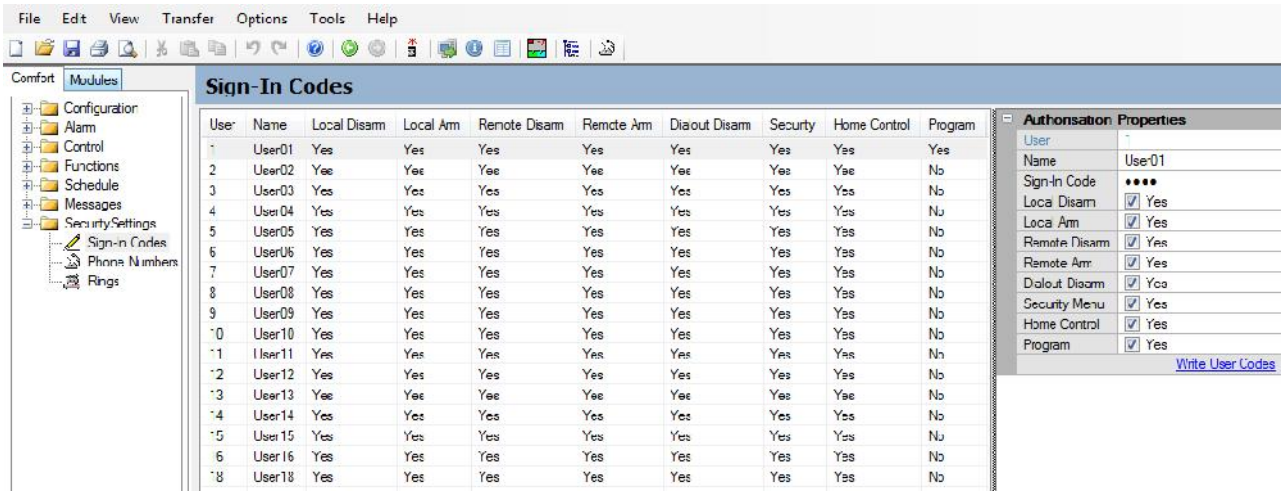
The Exit Voice Menu button on the top right ends the voice menu if the voice is talking and says “Thank You Goodbye”.

Security Settings

This consists of Sign-In Codes, Phone Numbers and Rings.

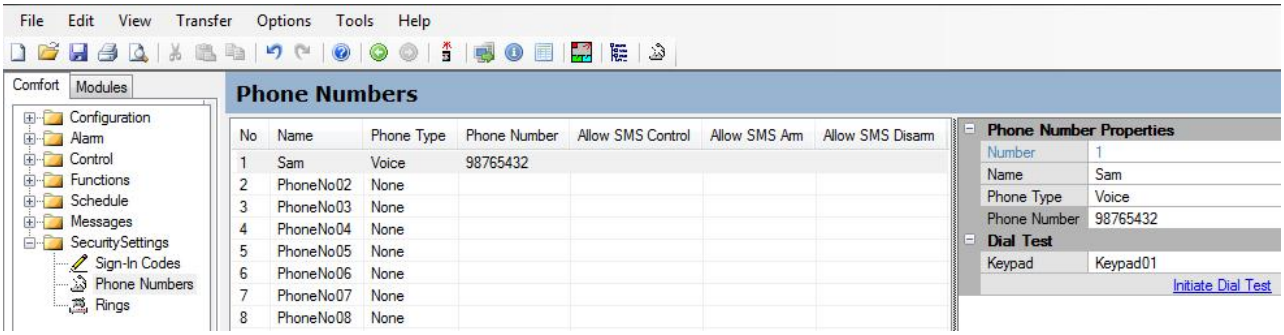
Sign-In Codes

This allows users to change, add user codes and write them to Comfort by pressing the 'Write User Codes' on the right pane properties.



Phone Numbers

This allows users to change phone numbers and Initiate Dial Test to test dialing out to all programmed telephone numbers.



Rings

This allows the number of rings before answer to be seen and changed, like in the Engineer mode Telecoms > Answering.

Change History

2.2.4 29 April 2014

Added Blinds and Thermostats Functions, User Mode

2.2.3 27 March 2014

Updated to Comfigurator 3.8

2.2.2 29 Sept 2013

Updated to Comfigurator 3.7

2.2.1 - 1 June 2013

Updated to Comfigurator 3.6.8

2.2.0 - 20 February 2013

Updated to Comfigurator 3.6.x

2.1.0 - 21 June 2012

Updated to Comfigurator 3.5.x

2.0.1 - 20 September 2011

Minor corrections

2.0.0 - 21 January 2011

For Comfigurator 3

1.0.5 - 25 June 2006

For Comfigurator 2 and Comfort II systems

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