

## 3.2 Setup Menu

To enter the **Setup** menu hold the Caregiver Key (**C-Key**) for several seconds. When navigating the Care Station menu, use the **A-Key** to cycle through the options, and **C-Key** to confirm the choice.

1. **Add/Del PAD & MAT**
2. **Add/Del Sensor**
3. **OORC Status**
4. **Set Sys. Time**

### 3.2.1: Add/Del PAD & MAT

This will allow staff members to manage Cordless chair pads and floor mats. Select the type of devices from BedPAD, ChairPAD, or FloorMAT, and then activate the transmitter to enter the device into the Care Station memory.

You will then be prompted to enter a six digit ID for the device, which will be displayed during any alarm.

### 3.2.2 Add/Del Sensor

The Protector System also supports other types of RF sensors, such as PIR, Gas, Smoke or magnetic Door Contact sensors. These types of devices have total 12-digit address and data bits. The Protector System uses only 6 digits; the others should be fixed, or will not be recognized.

A0	A1	A2	A3	A4	A5	A6	A7	D3	D2	D1	D0
O	O	X	X	X	X	X	X	X	X	O	O

'O' – the bit should be 'Open', do not short to anything,

'X' – the bit can be short to 'H', 'L' or 'Open'.

For PIR sensor, D3 and D2 are set to 'O', and for Door Contact sensor, D3 set to 'L' and D2 set to 'O'.

Bits A2-A7 must have a unique configuration within the network.

### 3.2.3 OORC Status

This stands for Our of Range Status, and will search for any devices programmed into the system whose signals are not being received by the network. You should either check the status of devices in the Lost List, or remove them from the memory of the system if they are not being used.

### 3.2.4 Set Sys. Time

You can set the time and date here.

## 3.3 Day/Night Mode

The Care Station has an option to silence alarms, which is activated by selecting Night Mode.

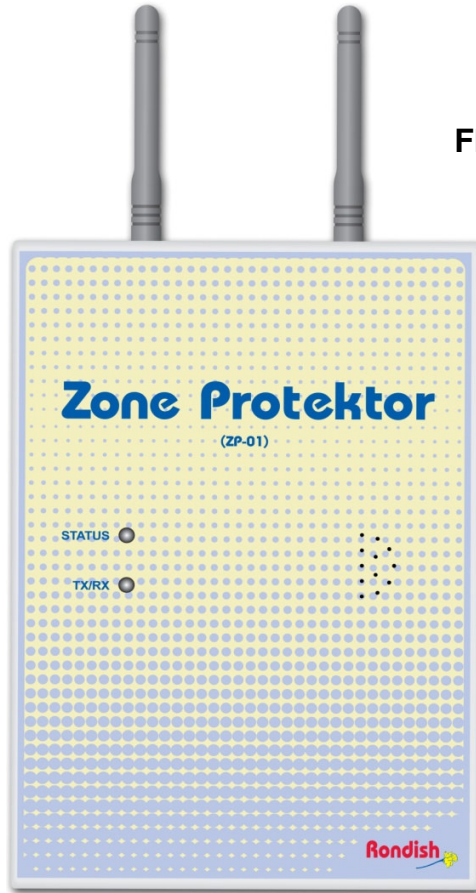
In normal operating mode the LCD display will show.....



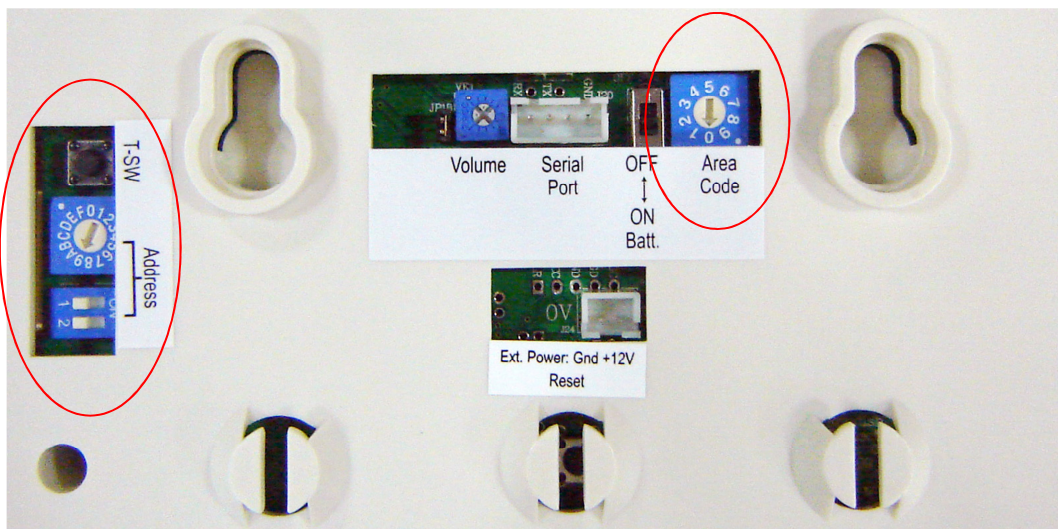
To select night mode, press and hold the **A-Key** to enter the Operation Mode menu. Use the A-Key again to select Day or Night. The menu will exit automatically after several seconds.

## 4.0 PROGRAMMING THE ZONE PROTEKTOR NETWORK

FRONT PANEL VIEW  
(ZP-01)



REAR PANEL VIEW



There are 5 steps to program each Zone Protektor.

1. Set Network ID
2. Set High Frequency Wireless Channel (must match Master Care Station)
3. Set Target Address
4. Set Zone Protektor Address
5. Set Site/Area Code

Enter programming mode to set the Network ID, Channel, and Target Address. Press and hold the **T-SW** button until the **Tx/Rx** LED on the front panel flashes and remains on.

#### **4.1: Network ID**

The Network ID setting must be the same for all Zone Protectors and Master Care Station communicating on the same High Frequency network and prevents receiving unwanted calls from a nearby system.

Adjust the “**Address**” rotary switch to the required Network ID:

**0-3** (factory default =“**0**”)

Then press the **T-SW** button once and the Tx/Rx LED will flash once to accept the input.

#### **4.2: Set High Frequency Wireless Channel**

The High Frequency wireless channel must be the same as that chosen on the Master Care Station. This can be adjusted using the rotary switch at “Address” to set a new digit:

**0-4** for the 868MHz frequency band (CE)

**0-9** for the 916MHz frequency band (US).

Press the **T-SW** button again to confirm the setting.

### 4.3: Set Target Address

The **Target Address** for the ZP-01 to communicate with the Master Care Station, should be set to “48” (i.e. = <MO> as set at Master Care Station), or the address of another Zone Protektor.

- (1) Adjust the rotary switch to “4” and press the **T-SW** button,
- (2) Adjust the rotary to “8” and press **T-SW** again.
- (3) The Tx/Rx LED will then come back on and stay on “steady” briefly to indicate “programming finished”.
- (4) The ZP-01 then automatically exits programming mode, reboots itself and returns to normal operating mode.

### 4.4: Set Zone Protektor Address

This parameter tells the Master Care station where to send signals. This ZP address” (“00-47”) must be unique within the system so it can be individually called by the Master Care Station and various Call Points.

The ZP-01 unique address is set by adjusting the rotary and DIP switches at “**Address**”. This setting can be selected without entering “Program Mode”.

The matrix chart below can be referred to when adjusting the rotary and DIP switches to set the required ZP Address.

Rotary Switch Code	DIP-Switch		
	POS 1: OFF POS 2: OFF	POS 1: ON POS 2: OFF	POS 1: OFF POS 2: ON
0	0	16	32
1	1	17	33
2	2	18	34
3	3	19	35
4	4	20	36
5	5	21	37
6	6	22	38
7	7	23	39
8	8	24	40
9	9	25	41
A	10	26	42
B	11	27	43
C	12	28	44
D	13	29	45
E	14	30	46
F	15	31	47

For example, setting ZP Address to “18”:

- (1) setting of “2” on the rotary switch
- (2) setting of **POS 1: ON** and **POS 2: OFF** on DIP switch

When this is changed the ZP-01 should be turned off and then back on.

#### **4.5: Setting Site/Area Code**

This feature will prevent a Zone Protektor from processing calls from equipment in different areas, and a Slave Monitor (see **page 13**) can then be used to display calls from only within the area.

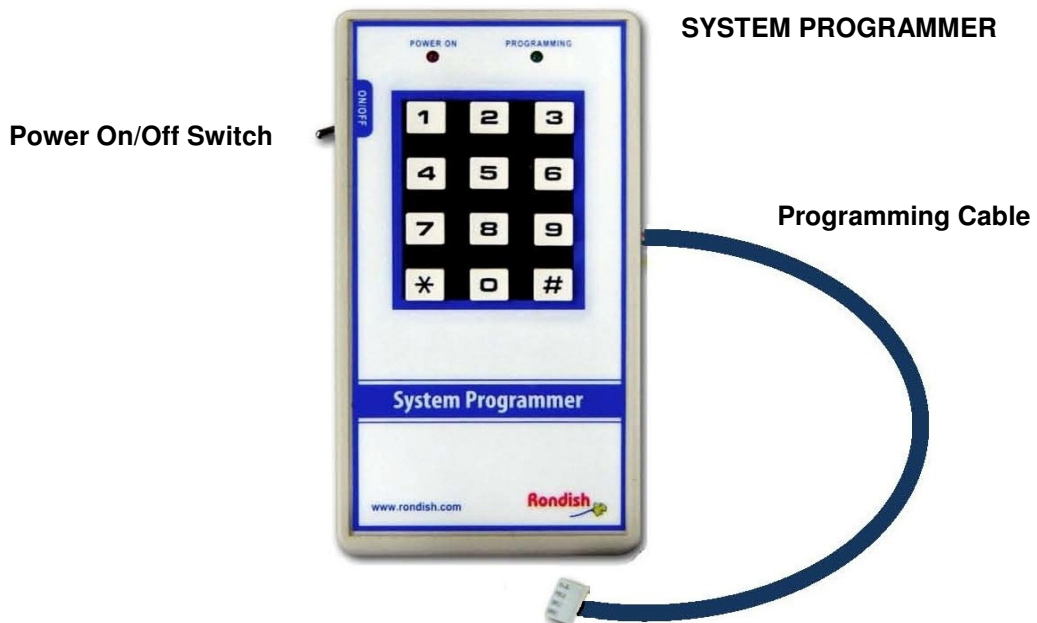
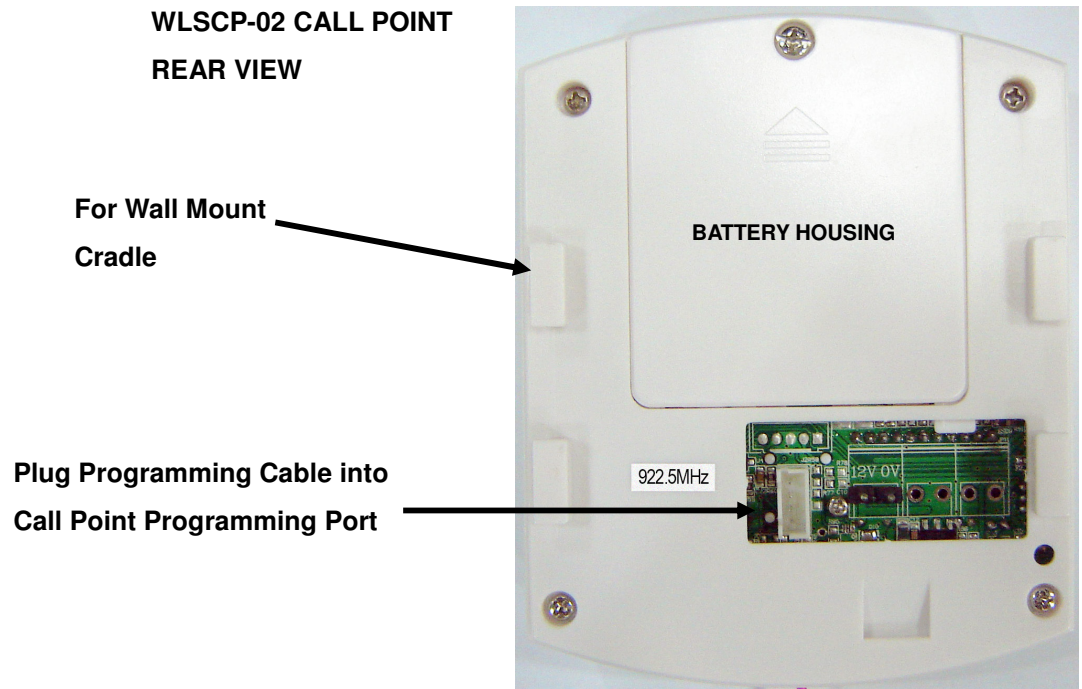
This can be set at the Zone Protektor without the need to re-enter “programming mode” by setting the separate rotary switch found above at “**Area Code**” (0-9).

The Master Care Station should be set to Area “**0**” so it receives calls signals from any Protektor II equipment within wireless range, regardless of site area. If no Slave Monitors are planned for the network, set every Zone Protektor area to “**0**”.

When this is changed the ZP-01 should be turned off and then back on.

## 5.0 PROGRAMMING CALL POINTS

In order to program Call Points (WLSCP-02), you will need to use a **System Programmer**, which connects to the port shown below. It will help to read through section 5.2 and first create all the programming strings based on how you want alarms displayed at Protektor Care Stations.



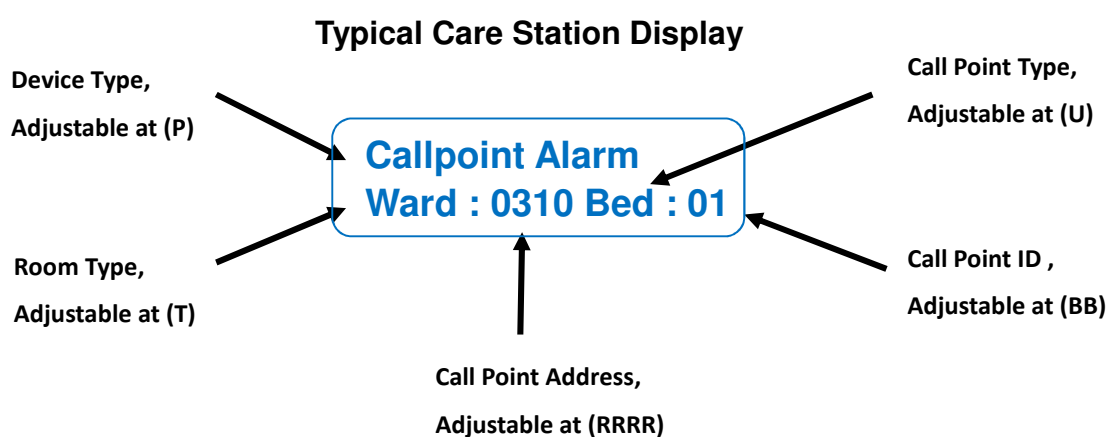
## 5.1 System Programmer Operating Instruction

To use the Rondish System Programmer, just plug the Programming Cable into the Call Point Programming Port (shown above) and turn on the power switch. Each Call Point (WLSCP-02) must be programmed for Network Configuration and Installation Position; the Device Configuration will not always need programming.

1. Network Configuration
2. Device Configuration
3. Installation Position

## 5.2 Programming Strings for Call Points

Enter the programming “strings” described in each section below. If an error has occurred during input, press “#nnn” and re-start from the beginning of the input “string”. A programming example will follow, which shows a hospital ward.



### 5.2.1: Network Configuration

The “program string” is **#000 ZZ AA S**. Where:

- **#** = “Ready to Program”
- **000** = Network Configuration Program Code
- **ZZ** = “Zone Protektor Address” of nearest ZP-01 unit (00-47)
- **AA** = Call Point Zone Address within this area/zone (00-63)
- **S** = Site/Area Code (0-9)



## Notes:

1. The Call Point Zone Address code can be chosen and set for 00-63 within the operating area of an individual Zone Protektor. This address tells the Care Station how to contact the Call Point, and must not be repeated for each ZP.
2. The Site/Area code allows a Slave Monitor to display alarms from only its area. The Slave Station, Zone Protektor and Call Point areas must match.

### 5.2.2: Device Configuration

With the programmer still powered up, you may then continue by keying # again and inputting the string. This string will not always need to be entered.

The program string is **#010 P LL G**. Where:

- # = "Ready to Program"
- **010** = Device Configuration Program Code
- **P** = Product Type (3 = "Bath Alarm Button" or 8 = "Call Point")
- **LL** = Presence Area (0-31)
- **G** = Group Reset Facility (0 = Turn Off, 1 = Turn On).

#### Presence Area (LL)

Caregiver may press the "**Presence**" button to light the green colour at the indication Call Light and notify the Master Caregiver Station of location, ID and "**Presence 1**".

While this Call Point is in "Presence" mode, if another Call within the zone with the same "Presence" code (Presence Area) is activated, the Call Point will alert the caregiver another call has been activated from within it's "Presence Area" with a flashing LED and beeping at intervals of 15s.

#### Group Reset (G)

Within a particular Zone Protektor "Zone", if "**G**" is turned on (i.e. set to "**1**"), operating any single Call Point "Reset" button with this Protektor zone location will reset any, or all activated Call Point/s that have been programmed for "Group Reset On" in that Protektor zone.

If **G** at any Call Point within this zone is set to “**0**” it will not be reset, even if another Call Point Reset button set to “**1**” within this “RRRR” group is pressed.

### 5.2.3: Installation Position

With the programmer still powered up, you may then continue by keying **#** again and inputting the string. The program string is **# 020 T RRRR U BB**. Where:

- **#** = “Ready to Program”
- **020** = Installation Position Program Code
- **T** = Room Type
- **RRRR** = Call Point Address
- **U** = Call Point Type
- **BB** = Call Point ID

#### Room Type (T)

For “**T**”, choose the appropriate digit from the following options. This will adjust how the call is displayed at Protektor Care Stations. If this number is set to ‘0’, it’s display will be based on the Global Settings at the Master Care Station (section **3.3**).

- 1 = Room
- 2 = Flat
- 3 = Ward
- 4 = Home
- 5 = Apartment
- 6 = Area

#### Call Point Address (RRRR)

This differs from the Call Point Zone Address (AA), and determines how the Care Station will display the alarm location. There are four digits, which can be used in any combination to represent floors/buildings and rooms. A common practice is to use the first two digits for floor, and the second two for room number.

## Call Point Type (U) + Call Point ID (BB)

This allows the Call Point / Bath Alarm Button to display its location within a building, ward, or area chosen at "Room Type".

### If Product Type P = 8 (Call Point), can choose:

<u>U</u>			<u>BB</u>	
0	=	Bed	+	01-60. (This zone can have up to 60 beds).
1	=	Living Room	+	01-03. (Can have up to 3 rooms)
2	=	Corridor	+	01-03
3	=	Kitchen	+	01-03
4	=	Stairs	+	01-03
5	=	Lift	+	01-03
6	=	Roof	+	01-03
7	=	Garage	+	01-03
8	=	Garden	+	01-03
9	=	Section TBA	+	01-09

### If Product Type P = 3 (Bath Alarm Button), can choose:

<u>U</u>			<u>BB</u>	
0	=	Toilet	+	01-20.
1	=	Disabled	+	01-09
2	=	Shower	+	01-09
3	=	Bath	+	01-09
4	=	Male	+	01-20
5	=	Female	+	01-20
6	=	Section TBA	+	01-20

## 5.2.4: Programming Summary for Call Points

<b>Program string</b>	<b>#000 ZZ AA S</b>		
#000	Network Configuration		
ZZ	Target ZP-01 unit (00-47)		
AA	Call Point Zone address (00-63)		
S	Site code (0-9)		
<b>Program string</b>	<b>#010 P LL G</b>		
#010	Device Configuration		
P	Product type (3 (Bath) or 8 (Call point) only)		
LL	Presence Area (0-31)		
G	Group reset (0 (off) or 1 (on) only)		
<b>Program string</b>	<b>#020 T RRRR UBB</b>		
#020	Installation Position Configuration		
T	Room Type		
	1	Room	
	2	Flat	
	3	Ward	
	4	Home	
	5	Apartment	
	6	Area	
RRRR	Call Point Address (4 Digit)		
UBB	<b>When "#010" P code = 8</b>		
	Call Point Type		Call Point ID
	0	Bed	01-60
	1	Living Room	01-03
	2	Corridor	01-03
	3	Kitchen	01-03
	4	Stairs	01-03
	5	Lift	01-03
	6	Roof	01-03
	7	Garage	01-03
	8	Garden	01-03
	9	Section TBA	01-09
	<b>When "#010" P code = 3</b>		
	Bath Alarm Type		Bath Alarm ID
	0	Toilet	01-20
	1	Disabled	01-09
	2	Shower	01-09
	3	Bath	01-09
	4	Male	01-20
	5	Female	01-20
	6	Section TBA	01-20

## 5.3 Programming Waterproof Call Points

Waterproof call points do not have a connection point for the system programmer. These use similar programming strings as described above, but they must be entered manually using a caregiver key and the call button.

To enter programming mode, apply the **C-Key** to the green triangle until the LED begins flashing and then hold the call button for ~5 seconds until the LED stays on.

Instead of beginning programming string with #000, #010, or #020 as with the system programmer, you will instead enter a two-digit password. To enter a digit, press the call button the desired number of times and confirm by touching the **C-Key**. To enter '0' do not press the call button before touching the **C-key** again. The LED will flash acknowledgment each time.

The programming strings should follow the below format:

21 ZZAAS  
22 PLLG  
23 TFFRRUBB

### Note:

1. Entering the device configuration string will often not be necessary. Factory default is (P = 3, bathroom type), (LL = no presence area), (G = no group reset).
2. WCP-04 units will be sent from production in "Sleep Mode". To exit this mode, press and hold the Call button for ~10 seconds. The call point can be put back into sleep mode by entering password "25"

## 5.4 Example: Programing Call Points for a Hospital Ward

### Programming example and Guide for

7x Bed Hospital Ward

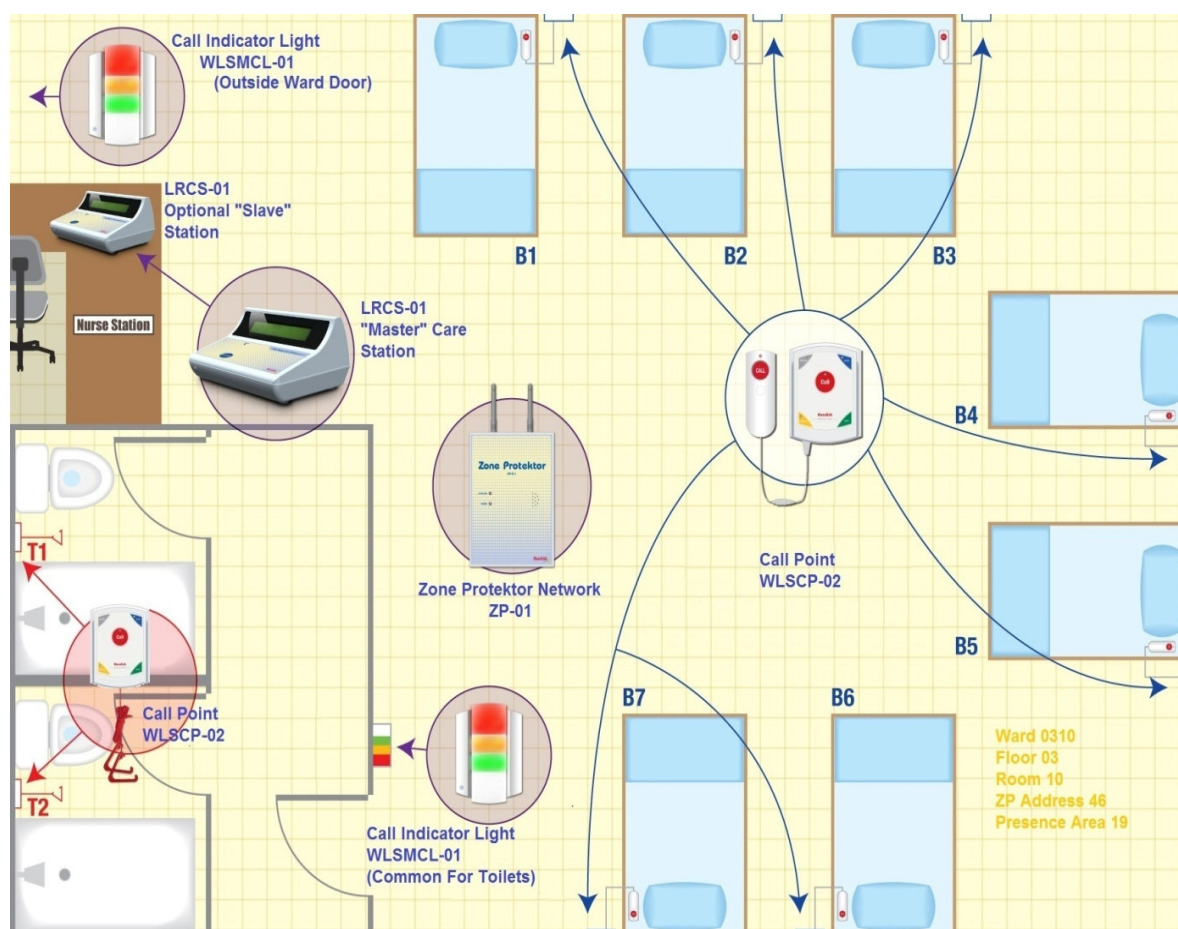
2x Bath/Toilet Areas,

Floor 03,

Ward 10,

Presence Area Code 19,

Nearest Zone Protektor = 46



The following equipment might be installed in this Ward:

7x WLSCP-02 Call Point (Bed Head) with NEC-02 Extension Cord

1x WLSCP-02 Pull Cord in Toilet T1

1x WLSCP-02 Pull Cord in Toilet T2

2x WLSMCL-01 Call Indicator Light (Ward Entrance and common Toilet area)

1x LRCS-01 Care Station (Nurse Station)

1 x ZP-01 Zone Protektor

## Program Ward 10 Bed Head Call Points (1 – 7)

### Bed 1:

Network Configuration: #000-46-01-0  
Device Configuration: #010-8-19-0  
Installation Position: #020-3-0310-0-01

(ZZ) ZPID = "46"

(LL) "Presence" Area Code = "19"

(U) Call Point Type "Bed" = "0"

**Callpoint Alarm**  
**Ward : 0310 Bed : 01**

(T) Room Type "Ward" = "3"

Care Station

Display For

Bed ID 01 above

### Bed 2:

Network Configuration: #000-46-02-0  
Device Configuration: #010-8-19-0  
Installation Position: #020-3-0310-0-02

**Callpoint Alarm**  
**Ward : 0310 Bed : 02**

Continue to program Beds (up to Bed 7)...

## Program Toilet 1 Call Point

The programming will be almost the same, except the device configuration must be set to bath, and programming will begin with a password if the WCP-04 units are used.

Network Configuration: 21-46-08-0  
Device Configuration: 22-3-19-0 (**P=3**)  
Installation Position: 23-3-0310-0-01 (**U=0, BB=01**)

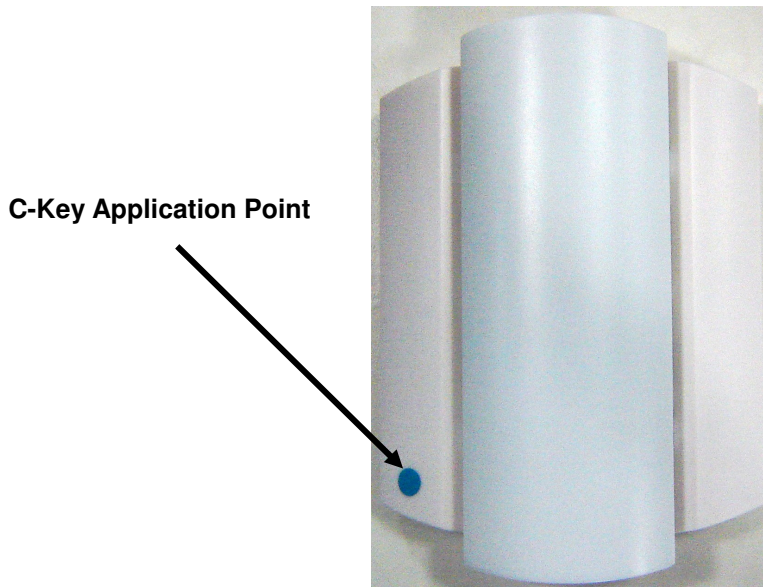
**Bath Alarm**  
**Ward : 0310 Toilet : 01**

Care Station Display for Toilet

ID 01 above

## 6.0 PROGRAMMING MULTICOLOR INDICATION LIGHTS

The Multi-color Indication Light can be located over a Flat, Ward entrance, or any other doorway. It will act as a transponder/extender to zone Protektor units for area Call Point alarms and can also be used as a call indicator outside a toilet area.



No address codes are programmed into the light unit as it is essentially a “Read In” and data forwarding device. It has LED arrays producing lights in 4 colours, i.e.

1. (a) “Steady” Red for Nurse call from WLSCP-02 Call Point.  
(b) “Flashing” Red for Emergency (Code Blue).
2. “Steady” Green for Presence 1
3. “Steady” Orange for Presence 2
4. (a) “Steady” White for Nurse call from toilet, or bathroom  
(b) “Flashing” White for Emergency

There are 4 steps to setting up and programming the WLSMCL-01 Light Unit.

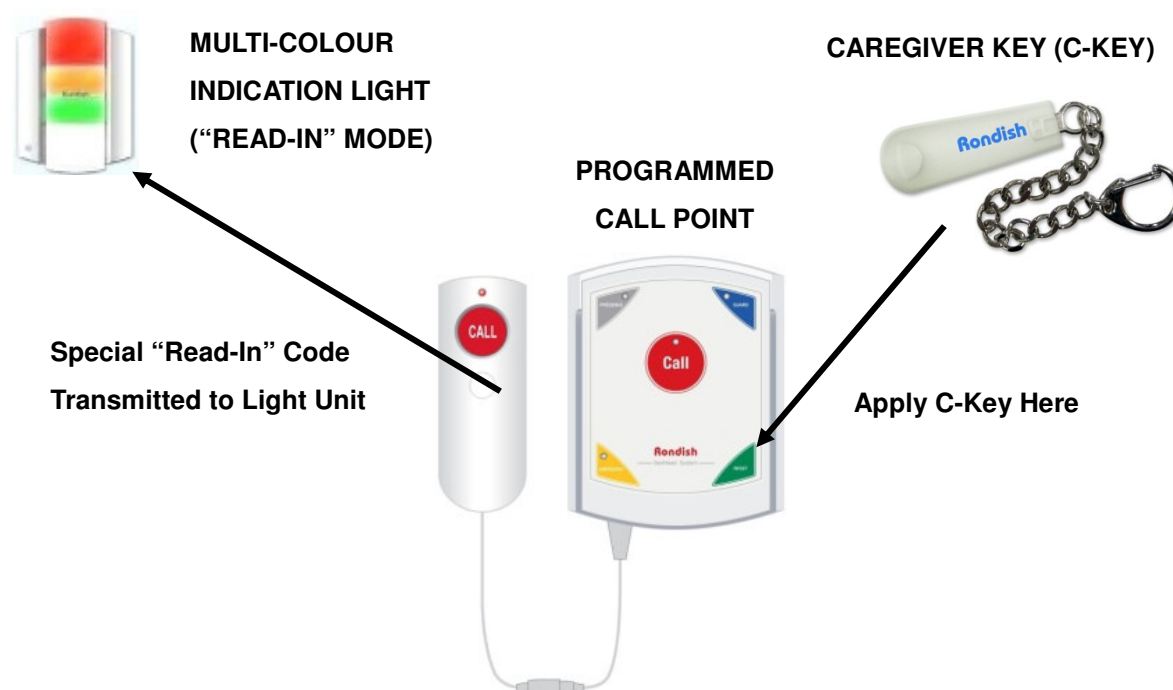


## 6.1 Erase Residual Memory in the Light

Place the **C-Key** at the point indicated on the front of the WLSMCL-01 housing and hold for around 6-8 seconds.

- (a) It will first enter into record mode and a single “beep” will be heard.
- (b) It will then emit 3 continuous short beeps followed by 2 short beeps.
- (c) Then the WLSMCL-01 lights flash in 2 groups i.e. Red + Green and Orange + White.
- (d) The WLSMCL-01 then emits 3 long beep sounds to confirm “Memory Erased”.

## 6.2 Prepare to “Read-In” Call Points



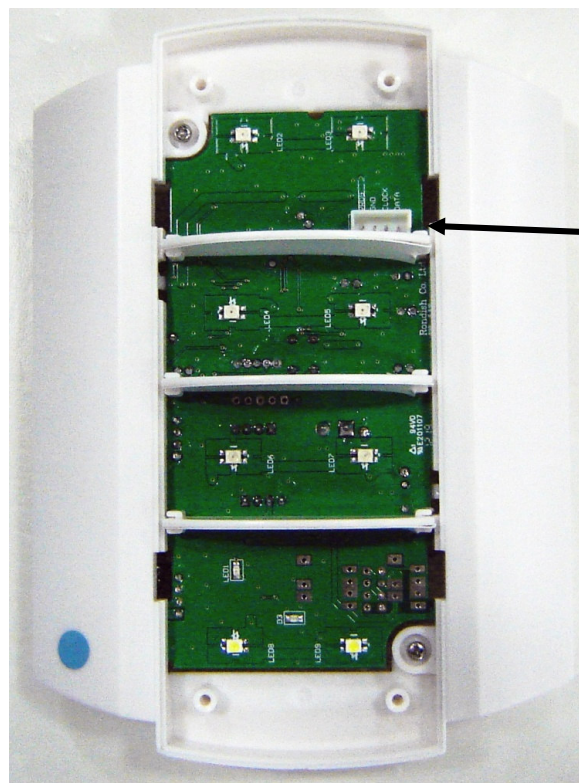
Placing The **C-Key** briefly at the point indicated on the front panel, the WLSMCL-01 first emits a short beep and then 3 short beeps to confirm “read-in mode”. If the light unit receives no more activity for a period of 1 minute, it will automatically exit learning mode and return to normal operation.

To read-in a programmed Call Point to the light unit, briefly apply the **C-Key** to the Call Point over the Reset button for about 6 seconds to transmit the code to the Light

unit while it is still in “read-in”. This Call Point ID and data will be recorded in the light unit memory.

Further associated Call Points in the area assigned to this light unit may then be read into its memory while it is still in “read-in” mode by applying the **C-Key** to the reset point on call point front panels.

### 6.3 Turning Buzzer ON/OFF and Adjusting LED Interval



WLSMCL-01 INDICATOR LIGHT (FRONT VIEW WITH LENS REMOVED)

Programming Port for Program Cable

Use the Rondish System Programmer, plug the Programming Cable into the Light Programming Port (shown above) and turn on the power switch.

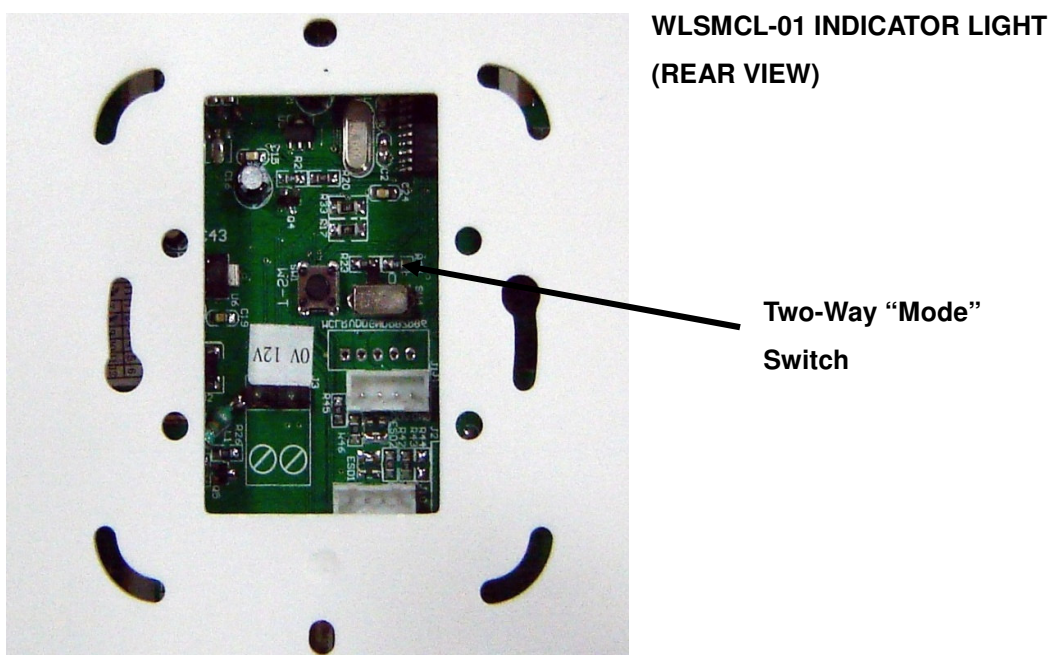
The program “string” is **#000 B**. Where: **B** = Buzzer on (**1**), Buzzer off (**0**)

The program “string” is **#001 U TT**. Where: **U** = Unit (0 = second, 1 = minute) and **TT** = time from 0-60

## 6.4 Setting Two-Way Mode Switch

This two-way “mode” switch may be set for:

- (a) **Mode 1:** Light Indicator only (it will not forward any calls to the ZP-01 network). This is important when operated as a light indicator only e.g. outside a toilet area and to avoid wireless contention with transmission (to a Zone Protektor) from other local light units.
- (b) **Mode 0:** In addition to the Light Indication, it will forward the call/data to the Zone Protektor network.



**Note:** When the light unit is operated for e.g. at a toilet, the call point is programmed as “3” (“Bath”), then automatically only the white colour light will operate.