

CTC-1052RV

USER MANUAL

Installation

Programming

Operating

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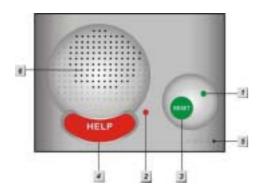
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1. Application Overview

1.1. Identifying The Parts

TOP VIEW



1 GREEN LED

- ON: AC Power is ON.
- FLASH every second: AC Power failure
- FLASH every 2 seconds: Panel or Device Low battery
- QUICK FLASH every 2 seconds: Supervision failure

2 RED LED

- ON: Off-hook / Waiting retry pause / Ready to enter Programming Mode (before entering PIN code)
- FLASH: Programming Mode
 Pendant Learning Mode

3 GREEN RESET BUTTON

- Press once in normal mode to reset mobility timer (see command 44)
- Before CTC-1052RV dials out for alarm reporting, press once to cancel the alarm reporting
- During or at-the-end of conversation, press once to terminate two-way voice communication
- In Programming Mode, press once to return to Idle Mode
- Press & hold for 3 sec: dial the Non-Emergency call. (See section 4.1.2.)
- Press & hold for 6 sec: enter Learning Mode
- Press & hold for 16 sec: disable mobility setting

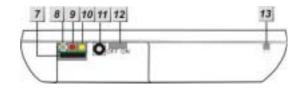
4 RED HELP BUTTON (with backlight)

- Back-lit disigned for easy access at night
- Backlight illuminates when off-hook
- Backlight flashes during the waiting period until help arrives

Microphone

6 Speaker

REAR VIEW



7 GPRS/GSM SIM Card Base

This slot is for inserting a SIM card.

8 GPRS/GSM Reset Button

Press & hold for 1 sec: GPRS/GSM automatically resets

9 GPRS/GSM Module LED Indicator (Red)

FLASH: Normal operation

10 GPRS/GSM Fault Indicator (Yellow)

- FLASH every 5 seconds: SIM card missing
- 2 FLASHES every 5 seconds: No signal/reception
- 3 FLASHES every 5 seconds: GPRS/GSM module abnormal
- 4 FLASHES every 5 seconds: SIM card PIN code error

<NOTE>

Fault indicator priorities: GPRS/GSM module abnormal > SIM card missing > No signal/reception > SIM card PIN code error

11 DC Jack

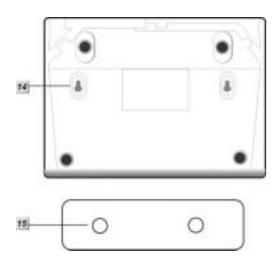
DC 12V 2A switching power connection

12 Battery Switch

Local Programming Telephone Unit Input

 A special telephone cord to connect CTC-1052RV and your phone unit for Local Programming (optional).

BACK VIEW



- Mounting Holes
- 15 Mounting Bracket

1.2. The Power Supply

- An AC power adapter is required to connect to a wall outlet. Be sure only to use an adapter with the appropriate AC voltage rating to prevent component damage. A DC 12V output and 2A switching power is generally used to power CTC-1052RV.
- In addition to the adapter, there is a rechargeable battery inside CTC-1052RV, which serves as a back-up in case of a power failure.
- The battery used is a Ni-Cd 7.2V 1300 mAH rechargeable battery.
- During normal operation, the AC power adapter is used to supply power to CTC-1052RV and at the same time recharge the battery.
- When the battery is fully charged, it serves as a back-up power source for a period of at least <u>14.5</u> hours. It takes approximately <u>48</u> hours to fully charge the battery.
- The battery can be manually disconnected by the battery switch located at the bottom (covered with a rubber cap).
- Battery Switch is set as ON by factory default. If switched to OFF, the battery will not be charged when AC power is connected, nor will it serve as a back-up power source when AC power is missing.

<NOTE>

Please make sure the battery switch is slid back to ON position (as marked) after manually disconnected the rechargable battery.

1.3. Insert GPRS/GSM SIM Card

CTC-1052RV Panel features built-in GPRS/GSM communication facility to report to the Monitoring Station.

To Insert SIM card:

<NOTE>

It is recommended to disable the SIM card PIN code before inserting into the Control Panel.

The GPRS/GSM SIM card base is located on the rear side of the unit:

 Insert the SIM card with the chip side facing up.



- Push to the furthest extend, then press on the edge of the SIM card firmly to secure it.
- SIM Card will delete its SMS message whenever the CTC-1052RV is powered on.

To remove SIM card:

Press and release on the edge of SIM card, the card will spring out.

1.4. How to install the Control Panel

Locating a suitable position for the Control Panel

- The Control Panel requires main power and a constant GPRS/GSM reception.
- The Control Panel should be easily accessible.
- The Control Panel should not be placed in a damp location, such as a bathroom.
- The Control Panel should not be placed close to any heat source, such as microwave ovens, which can reduce signal strength.
- The Control Panel should not be located alongside other radio transmitting devices, such as mobile phones, cordless phone, or wireless computer network (Wi-Fi) devices.
- Important: When drilling into a wall, ensure there are no hidden cables or pipes.

Mounting the Control Panel

The Control Panel can be mounted on the wall or wherever desired (e.g. on the table). Ensure the Control Panel is fitted at approximately chest height where the buttons, microphone, and speaker can be easily accessed and operated.

- Use the 2 holes of the Wall Mounting Bracket as a template, mark off the holes' positions.
- Drill 2 holes and insert the wall plugs if fixing into plaster or brick.
 - Screw the base to the wall.
- Hook the Control unit onto the Wall Mounting Bracket (holding the unit with the front facing you).

1.5. Compatible with Climax's SMS Editor

CTC-1052RV is compatible with Climax's SMS Editor, which is designed to facilitate SMS remote programming via a PC. This tool allows you to program the panel easily from your computer, without sending complex SMS text messages from a mobile phone.

2. Learn-in the Devices

There are two methods to learn in devices: **local learning** and **command learning**. Total 10 sensors (including one talking pendant, WTRV or WTRVS) are allowed to be learnt into the system. And only one WTRV/ WTRVS can be learnt into the system.

Local Learning:

You can use the local learning method to learn in 2 devices only. Refere to **2.1** Learning Pendant # 1 to learn in the first device and then **2.2** Learning Pendant #2 to learn in the second one.

- Users can enable CTC-1052RV to get into the learning mode to learn in WTR- Series, Fall Sensor or WTRV/ WTRVS.
- 2. **WTRV/WTRVS** is only allowed to be learnt in by using the Local Learning method.
- If you have learned the first device to the system by following instructions in the 2.1 section, you are not allowed to use Command 91 (Command Learning) to learn in another device.
- 4. If you have learned the second device to the sytem as instructed in the 2.2 section, you are not allowed to use Command 92 (Command Learning) to learn in another device.

Command Learning:

- Users can use Command #91 ~ 94 to learn in devices into the system, including PIR Sensor, Smoke Detector, Panic Button, Carbon Monoxide, Wrist & Neck Transmitter, Water Sensor, Pendant Transmitter, WTR- series and Fall Sensor. Please refer to 3.2 Programming Your 1052RV: Commands 91-94 for details.
- You are not allowed to learn in WTRV/ WTRVS by using Command Learning method.
- 3. **Command 91** is designed to learn in WTR- Series or Fall Sensor only.
- 4. **Command 92** is designed to learn in WTR- Series or Fall Sensor only.

- Command 93 is designed to learn in WTR- Series or Fall Sensor only for silent reporitng.
- 6. **Command 94** is designed to learn in the following sensors:
 - PIR Sensor ----- PIR
 - Smoke Detector ---- SD
 - Carbon Monoxide ---- CO
 - Fixed Panic Button ---- PB
 - Wrist Transmitter ---- WTR
 - Pendant Transmitter ---- WTR
 - Water Sensor ---- WS
 - Fall Sensor

2.1. Learning Pendant #1

Refer to the following instruciton to learn in the WTR- Series, Fall Sensor or WTRV/ WTRVS.

For Normal Wrist Transmitters (WTR-) or Fall Sensor

- Press and hold the RESET button of CTC1052RV for 6 seconds until you hear the <u>double beep</u> and followed by a long beep.
- 2. The RED LED starts flashing. CTC-1052RV is now in the learning mode.
- 3. Press and both the **RESET** and <u>Pendant</u> #1 (WTR- Series or Fall Sensor) buttons simultaneously until CTC-1052RV emit a double-beep.
- 4. Pendant #1 has been learnt-in successfully.

For Talking Pendant (WTRV/ WTRVS)

- Press and hold the RESET button of CTC1052RV for 6 seconds until you hear the <u>double beep</u> and followed by a long beep.
- 2. The RED LED starts flashing. CTC-1052RV Pro is now in the learning mode.
- Press and hold the WTRV/ WTRVS button for 5 seconds until you hear a long beep. The WTRV/ WTRVS's Green LED turn to RED.
- 4. The WTRV/ WTRVS is now in the learn mode.

5. Press and hold the **RESET** button on CTC-1052RV for 20 seconds and release button until you hear two beeps, followed by a long beep.

<NOTE>

- Meanwhile, WTRV/ WTRVS's LED turns from RED, then blink green to steady green.
- 6. Start work test to check if WTRV/ WTRVS is learnt in successfully.
- 7. Simply press the WTRV/ WTRVS button, you will hear 6 contiunous beeps from WTRV/ WTRVS.
- During WTRV/ WTRVS's beep, CTC-1052RV will repond with 2 beeps respectively. It indicates that WTRV/ WTRVS is within the operating range.
- Press the Reset & Help button at the same time to exit the learning mode. The RED LED will dim to indicate that the system is back to idle mode.

< IMPORTANT NOTE>

It is prohibited to learn in another or the same Pedant twice, unless the previously learnt-in pendant is removed first.

2.2. Learning Pendant #2

Refer to the following instructions to learn in the second device (WTR- Series, Fall Sensor or WTRV/ WTRVS).

For Normal Wrist Transmitters (WTR-) or Fall Sensor

- Press and hold the RESET button of CTC1052RV for 6 seconds until you hear the <u>double beep</u> and followed by a long beep.
- 2. The RED LED starts flashing. CTC-1052RV is now in the learning mode.
- Press and both the HELP and <u>Pendant</u> #1 (WTR- Series or Fall Sensor) buttons simultaneously until CTC-1052RV emits a double-beep.
- 4. Pendant #2 has been learnt-in successfully.

For Talking Pendant (WTRV/ WTRVS)

- Press and hold the RESET button of CTC1052RV for 6 seconds until you hear the <u>double beep</u> and followed by a long beep.
- 2. The RED LED starts flashing. CTC-1052RV is now in the learning mode.
- Press and hold the WTRV/ WTRVS button for 5 seconds until you hear a long beep. The WTRV/ WTRVS's Green LED turn to RED.
- 4. The WTRV/ WTRVS is now in the learn mode.
- Press and hold the HELP button on CTC-1052RV for 20 seconds and release button until you hear two beeps, followed by a long beep.

<NOTE>

- Meanwhile, WTRV/ WTRVS's LED turns from RED, then blink green to steady green.
- 6. Start work test to check if WTRV/ WTRVS is learnt into successfully.
- 7. Simply press the WTRV/ WTRVS button, you will hear 6 contiunous beeps from WTRV/ WTRVS.
- 8. During WTRV/ WTRVS's beep, CTC-1052RV will repond with 2 beeps respectively. It indicates that WTRV/ WTRVS is within the operating range.
- Press the Reset & Help button at the same time to exit the learning mode. The RED LED will dim to indicate that the system is back to idle mode.

<IMPORTANT NOTE>

It is prohibited to learn in another or the same Pedant twice, unless the previously learnt-in pendant is removed first.

2.3. Remove Pendant #1 & #2

CTC-1052RV can be programmed to remove Pendant #1 & #2 by Command 80, Command 81 or 82. Please refer to 3.2 Programming Your 1052RV: Commands 80, 81 or 82 for details.

3. System Configuration

3.1. Entering Programming Mode

Two CTC-1052RV programming modes are available: Local Programming Mode and Remote Programming Mode.

<NOTE>

GPRS/GSM will be powered down when in Programming Mode. When AC Power resumes or when exits from Programming Mode, GPRS/GSM will be powered on again.

3.1.1. Local Programming Mode (Optional)

From Idle mode, follow the steps below to enter Local Programming mode.

- Step 1. Plug in the telephone set into LOCAL PROGRAMMING input located on the rear side of CTC-1052RV.
- Step 2. Pick up the handset.

 RED LED lights up.
- Step 3. Enter default ACCESS CODE, <u>1111</u> followed by <u>#</u>.
- **Step 4.** CTC-1052RV will emit 2 short beeps and the red LED starts to flash, indicating it is in **Programming Mode.**
- **Step 5.** Proceed to program system by referring to the Commands in section **3.2 Programming Your 1052**.

<NOTE>

- Local programming is prohibited when AC Power fails.
- The first digit of Access Code must be entered within 15 seconds, otherwise CTC-1052RV will exit automatically.
- Failure to enter the correct Access Code within 2 minutes will cause CTC-1052RV to exit the Programming mode automatically.
- To exit Programming mode, enter <u>99</u> followed by <u>#</u>, or place the handset on hook, or disconnect the Programming telephone set.

3.1.2. CTC-835 Programmer

CTC-835 is a powerful programming tool (sold separetely) that features a built-in keypad and LCD display to help you to program the medical alarm panels effeciently and conveniently. It also features **Once-for-All Uploading**, which allows you program on a computer via the supplied **Pilot** software and you can then upload all the settings to the medical alarm panel simultaneously with a single mouse click.

For detailed usages, please refer to the Operation Manual of CTC-835 Programmer.

3.1.3. SMS Remote Programming

CTC-1052RV can be remotely programmed via SMS commands. Please refer to section **3.3 SMS Remote Programming** for usage.

3.2. Programming Your 1052

• How to enter Commands?

Please make sure CTC-1052RV is in Programming Mode (RED LED flashes continuously) before trying any CTC-1052RV Command Functions. Please refer to section System Configuration, Entering Programming Mode.

Follow the protocol below to command CTC-1052RV:

CC	<u>#</u>	DTMF ACK	Function Selection	<u>#</u>	DTMF ACK
1.	2.	3.	4.	5.	6.

- 1. **CC** = 2-digit DTMF Command
- 2. # = Termination of the DTMF Command
- 3. ACK = DTMF Command Acknowledgement

On CTC-1052RV:

Short beep: Command succeeded

Long beep: Command failed

On the programming phone set:

Short beep: Command succeeded

Long beep: Command failed

- Function Selection = According to different Command you will have different entering in this part, e.g. Tel. Number, Account number, etc.
- 5. # = Terminates Function Selection
- 6. **ACK** = Function Selection **Acknowledgement**

On CTC-1052RV:

Short beep: Command succeeded

Long beep: Command failed

On the programming phone set:

Short beep: Command succeeded

Long beep: Command failed

- Follow the Command Steps to program your CTC-1052RV:
- **Step 1.** Enter Command number (DTMF Numeric Command, ex. (01), (02)...)
- **Step 2.** Press (#) to terminate the DTMF Command.
- **Step 3.** One short beep will be heard for successful Command entry.
- **Step 4.** Enter the desired Command function number.
- **Step 5.** Enter (#) to terminate the Command Operation.
- **Step 6.** CTC-1052RV will emit a short beep, indicating successful programming.

The maximum interval between key strokes is 2 minutes. Otherwise, commands will be ignored and CTC-1052RV will automatically exit to Idle Mode.

 Any erroneous programming must be rectified and program again correctly.

Command 01-04

Telephone Number Programming

- Used to program the 1st 4th Tel. numbers respectively.
- To program the 1st Tel. number: enter (01) followed by (#). After one short beep, enter (telephone number) followed by (#). CTC-1052RV will emit one beep signaling the 1st Tel. number was programmed successfully.
- Likewise, the 2nd, 3rd or 4th Tel. numbers can be programmed using Command (02), (03) or (04) respectively.

<NOTE>

- When entering the phone number, entering (*) means a 3-sec. pause. (ex. Switchboard system, extension, etc.)
- [™] Up to 20 digits including (★) are allowed for each telephone number.

Delete Telephone Number:

- To delete the 1st Tel. number, enter (01) followed by (#), after one short beep, enter another (#). CTC-1052RV will emit another short beep, signaling the 1st Tel. number is erased.
- Likewise, you can erase the respective 2nd, 3rd or 4th Tel. Numbers, by following the above procedure.

Command 05-06

Select Telephone Number for Alarm Reporting and Status Reporting

<IMPORTANT NOTE>

If the Tel. number is selected in Commands #5, #6 and #7, then Command #7 holds the top priority to overwrite the setting. The Tel. number selected in Command #7 will not be used for alarm and/or status reporting.

- Command (05): Select which telephone number & GPRS/IP (1-6) is/are to be used for Alarm Reporting.
- Command (06): Select which telephone number & GPRS/IP (1-6) is/are to be used for Status Reporting.

Available Key-in options:

Tel. Number / IP Address	Function Selection Sequence
1 st Tel. #	(1)
2 nd Tel. #	(2)
3 rd Tel. #	(3)
4 th Tel. #	(4)
5 th GPRS1 #	(5)
6 th GPRS2 #	(6)
1 st & 2 nd Tel. #s	(12)
1 st & 3 rd Tel. #s	(13)
1 st & 4 th Tel. #s	(14)
1 st Tel & 5 th GPRS. #s	(15)
1 st Tel & 6 th GPRS. #s	(16)
2 nd & 3 rd Tel. #s	(23)
2 nd & 4 th Tel. #s	(24)
2 nd Tel & 5 th GPRS. #s	(25)
2 nd Tel & 6 th GPRS. #s	(26)
3 rd & 4 th Tel. #s	(34)
3 rd Tel & 5 th GPRS. #s	(35)
3 rd Tel & 6 th GPRS. #s	(36)
4 th Tel & 5 th GPRS. #s	(45)
4 th Tel & 6 th GPRS. #s	(46)
5 th & 6 th GPRS. #s	(56)
1st, 2nd & 3rd Tel. #s	(123)
1 st , 2 nd & 4 th Tel. #s	(124)
1 st , 3 rd & 4 th Tel. #s	(134)
2 nd , 3 rd & 4 th Tel. #s	(234)
1 st , 2 nd , 3 rd & 4 th Tel. #s	(1234)

1 st , 2 nd , 3 rd , 4 th Tel. & 5 th GPRS. #s	(12345)
1 st , 2 nd , 3 rd , 4 th Tel. 5 th & 6 th GPRS. #s	(123456)

 Factory default is set as (123456). Alarm & Status will be reported to all of 4 Telephone Numbers+2 GPRS (IP).

<NOTE>

- The Tel. number selected in Command #7 will not be used for alarm and/or status reporting, even if it is selected in command #5 and/or #6.
- When multiple Tel. numbers are selected, CTC-1052RV will always dial in respective programmed order.
- The latest Command (05-06) setting(s) will overwrite any previously enter setting(s).
- When CTC-1052RV reports, GPRS has higher proity than phone reporting.

Command 07

Select Telephone Number for Nonemergency call

- This command is used to select which telephone number will be used for nonemergency call.
- The selected Tel. number will not be used for alarm, status, other alarm and/or Mobility reporting, even if it is selected in command #5 and/or #6.
- Available key-in options:

Tel. Number	Function Selection Sequence
Disable	(0)
1 st Tel. #	(1)
2 nd Tel. #	(2)
3 rd Tel. #	(3)
4 th Tel. #	(4)

 Factory default is set as (0) disable. Nonemergency call will be reported to all of 4 Telephone Numbers.

- Please refer to section 4.1.2 for more information.
- When the Control Panel has the AC failure condition, non-emergency can be made by pressing and hold the Reset button for 3 seconds. Then the main unit will emit a beep every 2 seconds for 20 seconds until the Red LED lights on, indicating the GSM module wakes up to call out. Before the Red LED lights on, you can press the Reset Button to cancel calling.

<NOTE>

Command #07 can't be used for GPRS setting.

Command 10-14

Account Number Programming

- Commands (10-14) are used to set the account number for the telephone numbers used for Digital Reporting.
- Command (10): Set the <u>same</u> account number for all telephone numbers.
- Command (11-14): Set the account numbers for the 1st-4th Tel. numbers used for Digital Reporting respectively.
- In (Function Selection) key in 4 or 6 digit Account Number.

Command 20-24

Reporting Method

- Commands (20-24) are used to program the Alarm reporting method for each Tel. Number.
- Command (20): Program the same Alarm Reporting Method for <u>all</u> 4 Tel. Numbers.
- Command (21-24): Program the alarm reporting method for the 1st-4th Tel. Numbers respectively.
- Available Options:

Method	Function Selection	
<u>Digital</u>	(0)	Contact ID
Reporting	(1)	Scancom

Method	(2)	Tunstall
Speech Method	(3)	Open Two-way communication
SMS Reporting Method	(4)	SMS (CID)

 (0), Contact ID, is set as factory default for all 4 telephone Numbers.

<NOTE>

The latest Command (20-24) setting(s) will overwrite any previously entered setting(s).

If any of Digital Reporting Methods is selected:

Once alarm or emergency data is successfully transmitted, CTC-1052RV will automatically enter specific Follow-On and/or Call Back Mode as specified by Command (38).

If Speech Method is selected:

After the dialing for alarm/emergency trigger is successful, CTC-1052RV opens a two-way voice communication between the Call Recipient and CTC-1052RV for 1-10 minutes (set by Command #46).

If the Call Recipient needs more talk time, they can press any keys except 9 on their phone set to add another 1-10 minutes (set by Command #46).

To terminate the call, press (9) or RESET BUTTON on CTC-1052RV.

During the <u>Speech</u> period, CTC-1052RV will emit two beeps via the telephone handset to alert the call recipient the remaining time of 20 & 10 secs.

During the <u>Speech</u> period, if there is no any DTMF command pressed, the call will automatically hang-up and be recorded as an unsuccessful call. It will retry up to a max. of 4 times on each Tel. Number accordingly.

If any of SMS Reporting Methods is selected:

CID sent over SMS is a backup path

when alarm can't go through in digital reporting method. Once alarm or emergency data is successfully transmitted, the CTC-1052RV will automatically send out a SMS (CID) Message.

Command 31

Ringer Enable for Incoming Calls

 CTC-1052RV can be programmed to emit a ring tone as an audio alert, or silent for incoming calls.

Function Selection	Result
(0)	OFF (Ring Tone Disable)
(1)	ON (Ring Tone Enable)

• Factory Default is set as (0), OFF.

<NOTE>

- If the function is set to **ON**, you can answer the incoming call by pressing the **RED HELP BUTTON** or **Pendant Button**.
- The time-out period for the incoming call is 30 minutes. During the communication, CTC-1052RV will emit two beeps via the telephone handset to alert the call recipient the remaining time of 20 & 10 secs.
- Press any DTMF keys (<u>except</u> <u>DTMF#9</u>) can extend another 30 min.
- To terminate the incoming call: (1) press the green reset button on CTC-1052RV; or, (2) press DTMF #9 from the call recipient's end.
- During the AC Power failure period, Ring Tone is automatically disabled.

Command 32

Audible Fault Alert

 CTC-1052RV can be programmed to emit detected and existent Fault Alert Beeps at every 30 secs.

Function Selection	Result
--------------------	--------

(0)	OFF (No Warning Beep)
(1)	ON (With Warning Beep)

- Factory Default is set as (0), OFF.
- The fault situation includes Low Battery Fault (for both CTC-1052RV and Devices) and AC Failure.

Command 33

Help Arrived Signaling

This function is only available for the digital Contact ID reporting method.

- It is used for the Monitoring Center personnel to confirm if the help has arrived for the user or not.
- If Help Arrived Signaling is set to ON, once the Alarm Reporting is completed, the RED HELP BUTTON will start to flash.

Press the GREEN RESET BUTTON when the Help arrives, and CTC-1052RV will report to monitoring center and the RED BUTTON will stop flashing.

 If Help Arrived Signaling is set to OFF, once the Alarm Reporting is completed, CTC-1052RV will return to idle mode.

Function Selection	Result
(0)	<u>OFF</u> (Disable)
(1)	<u>ON</u> (Enable)

Factory Default is set as (0), OFF.

<NOTE>

If the GREEN RESET BUTTON is not pressed within 15 minutes, CTC-1052RV will send one more Help Call report to summon help and inform the Monitoring Center that no help has arrived within the past 15 minutes.

Command 34

Emergency Button Enable

 The RED HELP BUTTON can be enabled or disabled to send an Emergency alarm report:

Function Selection	Result
(0)	OFF (Deactive)
(1)	ON (Active)

• Factory Default is set as (1), ON.

<NOTE>

- When this function is programmed as OFF, the RED HELP BUTTON is deactivated.
- When this function is programmed as **ON**, the RED HELP BUTTON is activated. When pressed, it will send an Emergency alarm report to the Monitoring Station.

Command 35

Silent Mode

 CTC-1052RV can be selected to operate in Silent Mode. This will mute all normal operation warning beeps, guard time tone, key tone and ring.

<NOTE>

In silent mode, the speaker still functions normally for two-way voice communication.

Function Selection	Result
(0)	ON (Silent)
(1)	OFF (Normal)

Factory Default is set as (1), OFF.

Command 37

AC Fault Report

 The CTC-1052RV can be programmed to send a Fault Report when an AC power failure is detected.

Function Selection	Result
(0)	OFF (Send No Report)
(1)	<u>ON</u> (Send Report)

• Factory Default is set as (1), ON.

<NOTE>

Reporting will only be made after a continuous one hour of AC Fault condition is detected.

Command 38

Follow-On & Call-Back Function

 The Command is available for Digital Reporting Methods (when <u>Command #20 - #24</u> is set as (0), (1) or (2))

Function Selection	Result
(0)	Follow-On
(1)	<u>Call-Back</u>
(2)	Follow-On & Call-Back

- Factory Default is as (0), Follow-On.
- When this function is programmed as (0), а successful alarm reporting (triggered by pressing the Help button on the Medical Panel) to the Monitoring Center, CTC-1052RV will automatically enter the Follow-On mode as specified by Command (45). If the alarm is triggered by a Talking Pendant (WTRV/WTRVS), the system will automatically enter to the "Wait for Command" mode (skips to check Command 45) and wait for the DTMF 2 signal pressed by the Monitoring Center to set up the two-way communication between WTRV/WTRVS and Monitoring Center.
- When this function is programmed as (1),

after a successful alam reporting (triggered by pressing the Help button on the Medical Panel) to the Monitoring Center, CTC-1052RV will automatically hang up the line and start a 5-minute waiting period to auto answer any incoming phone calls from the Monitoring Center. The Monitoring Center personnel should enter an authorized access code (default: 1111), followed by (#) to set up the two way communication between CTC-1052RV and the Monitoring Center.

If the alarm is triggered by a Talking Pendant (WTRV/WTRVS), during the 5-minute waiting period, the system will wait for an authorized access code (default:1111), followed by (#) to open the two-way communciation between WTRV/WTRVS and the Monitoring Center.

 When this function is programmed as (2), successful alarm after a reporting (triggered by pressing the Help button on the Medical Panel) to the Monitoring Center, CTC-1052RV will automatically enter the Follow-On mode as specified by Command (45). If the alarm is triggered by a Talking Pendant (WTRV/WTRVS), the system will automatically enter the "Wait for Command" mode (skips to check Command 45) and wait for the DTMF 2 signal pressed by the Monitoring Center to the two-way communication set up between WTRV/WTRVS and Monitoring Center.

Once Follow-On Mode is terminated, CTC-1052RV will automatically start a 5-minute waiting period to auto answer any incoming phone calls from the Monitoring Center. The Monitoring Center personnel should enter an authorized access code (default: 1111), followed by (#) to set up the two way communication between CTC-1052RV and the Monitoring Center. If the alarm is Talking triggered by а Pendant (WTRV/WTRVS), during the 5-minute waiting period, the system will wait for an authorized access code (default:1111), followed by (#) to open the two-way communciation between WTRV/WTRVS and the Monitoring Center.

<NOTE>

During two-way communication, you can use DTMF command to switch the communicating method. Please refer to

section 4.2. Alarm Activation.

- The Access Code must be entered within 15 secs. Otherwise, CTC-1052RV will disconnect the call automatically.
- To terminate the call, press DTMF (9) or RESET BUTTON on CTC-1052RV.
- If the 5-minute waiting period is up, CTC-1052RV will automatically exit this waiting mode and return to idle mode.
- During the AC Power failure period, Call-Back function is automatically disabled.

Command 40

Set Access Code

- The Access Code is used to enter Programming Menu (locally or remotely), and the Call-Back Function.
- It consists of 4 digits and has been set to (1111) as factory default. Before you set your own Access Code, (1111) must be keyed in.
- To set a new Access code; enter the desired (<u>4-digit number</u>) in Function Selection.

Command 42

Guard Time Delay

This command is deisgned for any compitable sensor, except Fall Sensor.

- CTC-1052RV can be programmed to delay alarm reporting from (00) (instant reporting) to (99) seconds.
- During this time period, a continuous series of beeps will be emitted to alert user.
- If a false alarm is triggered by any compitable device, it can be cancelled within the Guard Time Delay.

Function Selection Result

(00)	INSTANT REPORTING
(01) - (99)	DELAY

• Factory Default is (10), 10 SECONDS.

<NOTE>

- Emergency alarm cannot be cancelled after the Guard Time is elapsed.
- The Guard Time Delay for Fall Sensor is set by **Command 66**. **Command 66** is used if a fall is detected.
- If an emergency alarm is triggered by pressing the Active Button on Fall sensor, the guard time delay time is restricted to **Command 42**, rather than **Command 66**.
- Command 42 is less than the delay time set by Command 66, the system will follow the setting of Command 42 to respond accordingly if an alarm is triggered.

Command 43

Periodic Test Call

 CTC-1052RV can be programmed to make test calls periodically from (00) (no test call) to every (1) - (7) or 30 days:

Function Selection	Result
(0)	<u>OFF</u>
(1) - (7)	<u>1 - 7 DAYS</u>
(8)	30 DAYS

Factory Default is set as (0), OFF.

<NOTE>

Whenever programming mode is accessed, CTC-1052RV will reset the Periodic Test Call timer.

Command 44

Mobility Timer

This function monitors user movement around the premises and sends an inactivity report to the Monitoring Center if the user fails to reset the inactivity timer. This will disable or enable the Inactivity Timer with selectable count down periods. Options are:

Function Selection	Result
(00)	DISABLE
(01)	1HR
(02)	2HR
(36)	<u>36HR</u>

Factory Default is set as (00), DISABLE.

- The Mobility Timer counting down can be reset by:
 - 1. Pressing the **RESET** button on CTC-1052RV, or,
 - 2. Movement detected by PIR Detector
 - 3. Only workable by entering 2 digits.
- When Mobility Timer expires and no reset signal is received, CTC-1052RV starts to emit one long beep every 5 minutes to alert the user. After 30 minutes, if reset signal is not received, a mobility alarm reporting will be made.
- The reporting method for mobility alarm is the same as the emergency alarm. The report will be sent based on your reporting methods without guard time waiting.
- When **(00)** is selected, no code is sent to Monitoring Center.
- When CTC-1052RV is in idle mode, press and hold the green reset button for 16 seconds, until you hear a long beep. Then release the button; the Mobility function will be disabled.

Command 45

Follow-On Mode Choice

- This Command is only available for Digital reporting with <u>Command #38</u> set as (0) or (2).
- It is used to select the Follow-On Choice for CTC-1052RV after it has made a report to the Monitoring Center.
- After reporting, CTC-1052RV can wait for further commands, or enter a Two-Way Full Duplex Communication, or Listen-In Half Duplex Communication immediately according to the setting under this command:

Function Selection	Result
(0)	WAIT COMMAND
(1)	<u>LISTEN</u>
(2)	TWO WAY

• Factory Default is set as (2), TWO WAY.

<NOTE>

- When (0) is selected, after CTC-1052RV has made an alarm report to the Monitoring Center, it will wait for 1-10 minutes (set by Cammand 46), and then follows the DTMF commands that are received from the Central Monitoirng Station for action.
 - If no command is received after the waiting period, the system will automatically return to Idle mode.
- When (1) is selected, after CTC-1052RV has made a report to the Monitoring Center, it will automatically enter **Listen-In Half Duplex** for 1-10 minutes (set by Command 46) allowing the Monitoring Center Personnel to listen in to what is happening on the other side.
- When (2) is selected, after CTC-1052RV has made a report to the Monitoring Center, it will immediately enter a Two-way Full-duplex Communication mode for 1-10 minutes (set by Command 46), that gives the user the ability to speak directly with the Monitoring Center

Personnel.

- If either Scancom or Tunstall reporting format is selected, CTC-1052RV will ignore Command #45 selections. It will always open a Two-way voice for Follow-On choice.
- ### If an alarm is triggered by WTRV/WTRVS, the Monitoring Center personnel has to press the DTMF 2 over 1 second to open the two-way communication between WTRV/WTRVS no matter what Follow-On choice you have set.

Command 46

Follow-On Mode & Two-Way Period

 This command is used to program the allowable time duration for Follow-On mode choice (Commend #45) & Two-way voice communication period (Speech mode). It can be set from (01) (1 minute) -(10) (10 minutes).

Function Selection	Result
(01)	1 MINUTE
(02)	2 MINUTES
(03)-(10)	3-10 MINUTES

Factory default is set as (05) 5 minutes. The allowable time duration for either Wait Command, Two-way, Listen-In Only or Two-way voice comminucation in Speech mode is two mins. During the 2-min period, CTC-1052RV will emit two beeps via the telephone handset to alert the call recipient the remaining time of 20 & 10 secs. Pressing assigned DTMF key can extend another 1-10 minute(s).

Command 47

Off-Set Time

- After the Control Panel's power is supplied, the time of the Check-in Report starts calculating.
- According to the setting of Off-Set Time, the Control Panel will send Check-in Report once, and then send report

according to the setting of Command 43 - Test call.

Function Selection	Result
(1)	<u>1 Hour</u>
(2)	<u>2 Hour</u>
(3)	<u>3 Hour</u>
(4)	<u>4 Hour</u>
(5)	<u>8 Hour</u>
(6)	<u>12Hour</u>

- Factory default is set as (1) 1 Hour. When the Off-Set Time is reset in programming Mode, the time of the Off-Set period will recalculate.
- Off-Set time Report will be sent only once, and then the Control Panel sends Check-in Report according to setting of period test call, unless the Control Panel restarts or the Off-Set time is reset.

<NOTE>

Whenever programming mode is accessed, CTC-1052RV will reset the Off-Set timer.

Command 49

Supervision

This function is not available for the digital Scancom reporting method.

 This option is used to enable system Supervision function. Once enabled, CTC-1052RV will be able to receive the checkin signals from Wrist Pendants (WTR-) to indicate their proper functioning.

Function Selection	Result
(0)	<u>Disable</u>
(1)	4 Days
(2)	5 Days
(3)	6 Days
(4)	7 Days
(5)	8 Days
(6)	9 Days

(7)	10 Days

- Factory default is set as (0) Disable. No code is sent to Monitoring Center.
- When the supervisory timer expires and no supervision signal is received from WTR-, the supervisory alarm reporting will be made.
- The reporting method for supervisory alarm is the same as the emergency alarm. The report will be sent based on your reporting methods without guard time waiting.

Command 60

GSM Band Select

 Depending on your local telecom service provider's network setting, you will need to adjust the GSM band setting accordingly. Please check with our local telecom service provider for the appropriate setting.

Function Selection	Result
(0)	Mono-band Mode 850 MHz
(1)	Mono-band Mode 900 extended (900E) MHz
(2)	Mono band Mode 1800 MHz
(3)	Mono band Mode 1900 MHz
(4)	<u>Dual-band Mode</u> <u>850/1900 MHz</u>
(5)	<u>Dual-band Mode</u> 900 extended (900E)/1800 MHz
(6)	<u>Dual-band Mode</u> 900 extended (900E)/1900 MHz

 Factory default is set as (5) Dual-band Mode 900 extended (900E)/1800 MHz (Europe)/ (4) Dual-band mode 850/1900 MHz (U.S.).

Command 61

Check SIM Card PIN Code

This option is used to check SIM card PIN Code.

Function Selection	Result
(0)	<u>OFF</u> (Disable)
(1)	<u>ON</u> (Enable)

Factory default is set as (0) OFF.

<NOTE>

- If this fuction is disabled, the system won't check the entered SIM Card PIN Code set by Command 62.
- If the SIM card PIN Code is entered, be sure to enable this function. Otherwise, the SIM card will be locked

Command 62

Input SIM Card PIN Code

- This function is used to input SIM card PIN Code. To input a SIM Card Pin Code: 4 ~ 8 digits
- Factory default is set as (Null).

<NOTE>

- Whenever a SIM Card PIN code is entered, the system will check if the entered PIN code is matched. If not, the SIM card will be locked.
- This function is not used to change SIM Card PIN Code. If you want to change your SIM Card PIN Code, please use your cell phone to change it.
- If the SIM Card is locked, please contact your local telecommunication service provider.

Command 63

Speaker Volume Adjustment

 This function is used to adjust speaker volume. To set speaker volume in different communication channels, please set different parameters.

Function Selection	Result
(2)	Two-way

 To set speaker volume in two-way modes, the sequence is:

Communication Channel	DTMF	Speaker Volume	
2	*	1 to 5	

- * Communication Channel: 1 digit (2: Two-way)
- * Be sure to put * between communication channel value and speaker volume value.
- To set the speaker volume with a number, ranging 1 to 5. The higher the value, the louder the voice. Factory default is set as (3) for Two-Way mode.
- Please refer to programming command table section for configuration.
- Example: if you want to raise the speaker volume to level 5 in the Two Way mode, please enter: 1*5

<NOTE>

- The volume value in the Listen In or Talk-Only mode is adjusted for the best communication quality. It is fixed and can not be changed.
- Echo volume varies depending on adjustment of speaker volume and microphone sensitivity. To minimize the impact of echo, if you raise speaker volume, please be sure to lower microphone sensitivity, and vice versa.
- The call recipient can not adjust speaker volume values if the communication is set up between WTRV/ WTRVS and himeself.

Command 64

Microphone Sensitivity Adjustment

 This function is used to adjust microphone sensitivity. The microphone sensibility only can be adjusted in the two-way mode.

- To set the microphone sensitivity with a number, ranging 1 to 5. This value represents the received sound source range. The higher the value, the wider range of sound source. Factory default is set as (3).
- Please refer to programming command table section for configuration.

<NOTE>

- The sensitivity level in the Listen In or Talk-Only mode is adjusted for the best communication quality. It is fixed and can not be changed.
- Echo volume varies depending on adjustment of speaker volume and microphone sensitivity. To minimize the impact of echo, if you raise speaker volume, please be sure to lower microphone sensitivity, and vice versa.
- The call recipient can not adjust speaker volume values if the communication is set up between WTRV/ WTRVS and himeself.

Command 66

Guard Time Delay for Fall Sensor

- This command is used to set the guard time delay time for fall sensor.
- CTC-1052RV can be programmed to delay alarm reporting (triggered by Fall Sensor) from (00) (instant reporting) to (99) seconds.
- During this time period, a continuous series of beeps will be emitted to alert user.
- If a false alarm is triggered by Fall Sensor, it can be cancelled within the Guard Time Delay.

Function Selection	Result
(00)	INSTANT REPORTING
(01) - (99)	DELAY

• Factory Default is (15), 15 SECONDS.

<NOTE>

- If an emergency alarm is triggered by pressing the Active Button on Fall sensor, the guard time delay time is restricted to **Command 42**, rather than **Command 66**.
- The Guard Time Delay for Fall Sensor is set by **Command 66**. This command is used if a fall is detected.

Command 80-84

Remove Devices

- CTC-1052RV can be programmed to remove ALL previously learnt devices by entering (80) followed by (#). The system will emit an acknowledging beep over the phone for the user.
- Command (81) is used to remove Pendant
 # 1 (learnt-in by Command 91)
- Command (82) is used to remove Pendant #2 (learnt-in by Command 92).
- Command (83) is used to remove Silent Wrist (learnt-in by Command 93).
- Command (84) is used to remove Other Devices (learnt-in by Command 94).

<NOTE>

Power Switches are not to be removed by any Command. They are to be removed by clearning their own memory. Please refer to the Power Switch's manual to proceed.

Command 91

Learn-In Pendant #1

<NOTE>

- This command is not available in Remote Programming Mode.
- Only one Pendant (WTR- Series or Fall Sensor) can be learnt into CTC-1052RV by using Command #91.
- If you have learned one device into the system by using local learning method (as mentioned in 2.1 section), you are not allowed to use Command 91 to learn in another device.
- For learning Pendant #1:

Step 1: Enter 91 + # on the phone set, then

- a short beep will be heard via the phone set.
- **Step 2:** Press the Pendant Button within 20 secs.
 - Learning can only be completed within the signal reception range of CTC-1052RV.
 - If no signal is received within 20 sec, CTC-1052RV will emit a long beep and automatically returns to Programming mode.
- **Step 3:** CTC-1052RV will emit 2 beeps to indicate that Pendant #1 is learnt-in successfully.
 - Adding a Pendant for a second time is prohibited unless it is removed from the system first.
 - If **one long beep** is emitted instead of 2 beeps, it indicates:
 - ✓ The device has already been learnt-in.
 - ✓ Another device has been learntin before.

Command 92

Learn-In Pendant #2

<NOTE>

- This command is not available in Remote Programming Mode.
- Only one Pendant (WTR- Series or Fall Sensor only) can be learnt into CTC-1052RV by using Command #92.
- If you have learned one device into the system by using local learning method (as mentioned in 2.2 section), you are not allowed to use **Command 92** to learn in another device.
- For learning Pendant #2:
 - Step 1: Enter 92 + # on the phone set, then a short beep will be heard via the phone set.
 - **Step 2:** Press the Pendant Button within 20 secs.
 - Learning can only be completed within the signal reception range of CTC-1052RV.
 - If no signal is received within 20

- sec, CTC-1052RV will emit a long beep and automatically returns to Programming mode.
- **Step 3:** CTC-1052RV will emit 2 beeps to indicate that Pendant #2 is learnt-in successfully.
 - Adding a Pendant for a second time is prohibited unless it is removed from the system first.
 - If **one long beep** is emitted instead of 2 beeps, it indicates:
 - ✓ The device has already been learnt-in.
 - ✓ Another device has been learntin before.

Command 93

Learn-In Silent Pendant

- This command is not available in Remote Programming Mode.
- Only one Silent Pendant (WTR- Series or Fall Sensor only) can be learnt into CTC-1052RV by using Command #93.
- For learning Silent Pendant:
 - Step 1: Enter 93 + # on the phone set, then a short beep will be heard via the phone set.
 - **Step 2:** Press the Pendant Button within 20 secs.
 - Learning can only be completed within the signal reception range of CTC-1052RV.
 - If no signal is received within 20 sec, CTC-1052RV will emit a long beep and automatically returns to Programming mode.
 - **Step 3:** CTC-1052RV will emit 2 beeps to indicate that Silent Pendant is learnt-in successfully.
 - Adding a Pendant for a second time is prohibited unless it is removed from the system first.
 - If **one long beep** is emitted instead of 2 beeps, it indicates:
 - ✓ The device has already been learnt-in.

✓ Another device has been learntin before.

<NOTE>

When CTC-1052RV received the alarm signal from the Silent Pendant, it will not emit any warning beeps during Reporting and Guard time period.

Command 94

Learn-In Device

<NOTE>

- This command is not available in Remote Programming Mode.
- Up to 7 devices can be learnt into CTC-1052RV by using Command #94.
- The available devices that can be learnt-in Command #94 are:
 - ✓ PIR Sensor ----- PIR
 - ✓ Smoke Detector ---- SD
 - ✓ Carbon Monoxide ---- CO
 - √ Fixed Panic Button ---- PB
 - ✓ Wrist Transmitter ---- WTR
 - ✓ Pendant Transmitter ---- WTR
 - ✓ Water Sensor ---- WS
 - ✓ Fall Sensor
 - **Step 1:** Enter **94** + # on the phone set, then a short beep will be heard via the phone set.
 - **Step 2:** Press the learn button on the device within 20 secs.
 - Learning can only be completed within the signal reception range of CTC-1052RV.
 - If no signal is received within 20 sec, CTC-1052RV will emit a long beep and automatically returns to Programming mode.
 - **Step 3:** CTC-1052RV will emit 2 beeps to indicate the device is learnt-in successfully.
 - Adding a Pendant for a second time is prohibited unless it is removed from the system first.
 - If **one long beep** is emitted instead of 2 beeps, it indicates:

- ✓ The device has already been learnt-in.
- ✓ When an 8th device is attempted to learn-in.
- **Step 4:** Repeat steps 1-3 until all devices are learnt-in.

<NOTE>

- Adding a device for a second time is prohibited unless it is removed from the system first.
- WTRV is not able to learn-in under this command.

Command 98

Factory Default Reset

- To Reset CTC-1052RV to factory default settings, enter (98) and then (#).
- After one short beep, continue by entering (**) and then end with another (#), one beep will be heard for termination.
- Once the Factory Default Reset is executed, all the programmed data is returned to its default value and all the devices that have been learnt-in are removed. You have to do the programming and learn-in the device one by one again.

Command 99

Exit Programming Mode

 Enter (99) and (#), after one short beep, CTC-1052RV exits the Programming Mode and returns to idle mode.

3.3. SMS Remote Programming

- Prior to proceed, please be reminded to change the language setting of your mobile phone to English.
- **Step 1:** Use your handset and go into the SMS edit screen.

- **Step 2:** Enter the **SMS keyword** (default is **PROG**).
- Step 3: Enter a space.
- Step 4: Enter the access code (default is 1111 as defined by Command 40).
- Step 5: Enter a space.
- Step 6: Enter the programming command.
- **Step 7:** Editing is complete; you may send to the Control Panel.

<EXAMPLE>

E.g. PROG_1111_ TEL1:0227940001			
PROG	\rightarrow	SMS Keyword	
_	\rightarrow	Space	
1111	\rightarrow	Access Code	
_	\rightarrow	Space	
TEL1	\rightarrow	Telephone number 1	
:	→	Colon	
0227940001	→	Programming data/option	

<NOTE>

For a complete list of SMS commands, please refer to section 5.5. CTC-1052RV SMS Remote Programming Command Table.

4. Operation

4.1. Idle Mode

When the system is in Idle Mode, CTC-1052RV is ready to execute the following functions:

4.1.1. Answering Incoming Phone Calls

This function is only available when <u>Command</u> #31 is set as <u>ON</u> (factory default is <u>OFF</u>).

- For an Incoming telephone call, CTC-1052RV will emit cycles of 2 quick beeps.
- User can answer the call either by pressing the <u>Pendant Button</u> or the <u>RED</u> <u>HELP BUTTON</u> on CTC-1052RV.
- User can also remotely answer the call by pressing the <u>Pendant Button</u> on the Talking Pendant (WTRV).
- Once CTC-1052RV answers the call, it will open a Two-Way Voice Communication. The RED HELP BUTTON illuminates.
 - Enter (7) to Speaker Volume Control and then press (6) or (4) to increase or decrease the levels of speaker volume in the "Two-Way" communication mode.
 - Enter (8) to Microphone Sensitivity Control and then press (6) or (4) to increase or decrease the levels of microphone sensitivity in the "Two-Way" communication mode.

- Please note that if you wish to enable a designed shortcut function, please press DTMF keys over 1 second to enable the function you desire.
- If levels of speaker volume and microphone are adjusted in the two-way communication mode, the adjusted value will be restored.
 - To hang-up, press either the <u>Pendant</u> <u>Button</u> again, the <u>RESET</u> button on CTC-1052RV, or press <u>DTMF 9</u> by the caller.
- To hang-up, the caller can press **DTMF 9** or just put the handset back into the base cradle.
- 30-minute is allowed for each call and is inextensible.

If the two way communication is setup between WTRV/ WTRVS and the emergency call recipient, the levels of speaker volume and microphone sensitivity can not be adjusted.

4.1.2. Non-Emergency Speech Call

This function is only available when Command #7 is programmed.

Normal AC Power Supply

- **Step 1.** From Idle mode, press and hold the **RESET** button for 3 seconds until CTC-1052RV emits a short beep.
- **Step 2.** Release the button and **one short beep** will sound. CTC-1052RV dials the phone number entered in Command #7.
- Step 3. If the dialing succeeds, CTC-1052RV will open a two-way voice communication between the call recipient and CTC-1052RV for 30 minutes. The Red button backlight will illuminate during the communication.

<NOTE>

- If the dialing fails, the Control Panel will emit 5 beeps, indicating that the Control Panel may have faults and it is not allowed to use non-emergency call function. Please make sure that the settings are correct. Please note that the call will not be retried.
- **Step 4.** At the last 20 & 10 secs, CTC-1052RV will emit a beep via the telephone handset to alert the call recipient.

<NOTE>

- **30-minute** is allowed for each call and is inextensible.
- **Step 5.** Press DTMF 9 or Reset button, or hang up to terminate the call. The Red button backlight dims and CTC-1052RV returns to idle mode.

AC Failure

Step 1. Press and hold the RESET button for 3 seconds until CTC-1052RV emits a beep every 2 second for 20 secods until the RED lights on, allowing GSM module to wake up to dail out.

<NOTE>

- Before the RED LED lights on, you can press the Reset button to cancel calling.
- Step 2. After 20 seconds, if the dialing succeeds, CTC-1052RV will open a two-way voice communication between the call recipient and CTC-1052RV Pro for 30 minutes. The Red button backlight will illuminate during the communication.

<NOTE>

- If the dialing fails, the Control Panel will emit 5 beeps, indicating that the Control Panel may have faults and it is not allowed to use non-emergency call function. Please make sure that the settings are correct. Please note that the call will not be retried.
- **Step 3.** At the last 20 & 10 secs, CTC-1052RV will emit a beep via the telephone handset to alert the call recipient.

<NOTE>

- 30-minute is allowed for each call and is inextensible.
- **Step 4.** Press DTMF 9 or Reset button, or hang up to terminate the call. The Red button backlight dims and CTC-1052RV returns to idle mode.

4.1.3. AC Power Check Up

- If the AC Power failure is detected for 10 seconds or longer, the GREEN LED starts to flash as a visual warning to the user. GSM will be then be powered down. Thus, Remote Programming is unavailable. GSM will be powered up only at times of reporting
- Once the AC Power resumes, the GREEN LED turns steady on again.
- If the AC Power failure lasts for an hour, CTC-1052RV will send an <u>AC Failure</u> report to the Monitoring Center.
- After the Power restoration lasts more than one hour, CTC-1052RV will report <u>AC</u> <u>Restore</u> to the Monitoring Center.
- During the AC Power failure period, Call-Back function is automatically disabled.

4.1.4. CTC-1052RV Low Battery

- CTC-1052RV continuously checks its own Battery Condition 30 minutes after powering up.
- When the battery low condition lasts for <u>4</u> <u>6 mins</u>, CTC-1052RV will report to the Monitoring Center and the GREEN LED flashes slowly.
- Press the <u>RESET</u> button to clear the warning beeps, and the LED returns to steady ON.

4.1.5. Devices Low Battery

 When CTC-1052RV receives a battery low signal from a particular device, it will report to the Monitoring Center and the GREEN LED will flash rapidly until the fault condition is cleared.

4.1.6. Automatic Check-in Report = Periodic Test Call

- When CTC-1052RV is programmed to send a periodical check-in report, CTC-1052RV will report to the Monitoring Center accordingly.
- The Periodic-Check-in Timer will be reset whenever Programming Mode is entered.

4.1.7. Mobility Timer

- In order to check the user's well being, a Mobility Timer can be set by using Command #44.
- If Mobility Timer is set as Enable, a counting down period starts from:
 - Immediately after powering up CTC-1052RV.
 - Exit Programming Mode
- After the pre-set Timer expires, CTC-1052RV will emit a beep at every 5 minutes to notify the user for 30 minutes.
- When the Mobility timer is not reset after 30 minutes, CTC-1052RV will send a Mobility Timer Expired report to the Monitoring Center.
- After CTC-1052RV sends a Mobility Timer Expired Report, but the Mobility timer still not be reset, when reaching next pre-set time, the CTC-1052RV will emit a

- beep at every 5 minutes to notify the user for 30 minutes. Yet, if no reset action after 30 minutes, the panel will send another **Mobility Timer Expired** report to the Monitoring center and the step will repeatly until Mobility timer is reset.
- Mobility Timer can be reset by pressing <u>RESET</u> button once on CTC-1052RV or whenever a movement is detected by PIR Detector.
- To disable the Mobility Timer function:
 - Set Command #44 to 00 (Disable), or,
 - Press and hold the <u>RESET</u> button on CTC-1052RV Pro for 16 seconds or longer.

Disable the Mobility function in idle mode:

- **Step 1:** When the system is in Idle Mode, press & hold the Reset Button for 16 seconds.
- Step 2: During the 16-sec period, CTC-1052RV will emit one short beep → a double beep → continuous three short beeps → a long beep.
- **Step 3:** Release the Reset Button when you hear the last long beep; a short beep will sound to indicate the mobility function is disabled.

<NOTE>

Please use Command #44 to enable the Mobility timer again.

4.1.8. No Pendant Present

- This function is only available for the digital Contact ID reporting method.
- If there is no pendent being learnt into CTC-1052RV 30 mins after powering up, it will send a <u>No Pendant Learnt-in</u> report to the Monitoring Center and repeat every hour thereafter, until a pendant is successfully learnt in.

<NOTE>

The control panel will still send No pendant Learnt-in report even when 1052RV is only Learning WTRV. But if WTRB is learnt in, the control panel won't send No pendant Learnt-in report.

4.1.9. Country Code

The Phone Number Format for each SIM card may vary between different Telecom companies. Thus, you can either check with your Telecom provider or follow the steps described below to check the correct format.

- **Step 1:** Remove the SIM card from SIM card holder on the Panel, and insert it into a workable mobile phone.
- **Step 2:** Power on the mobile phone and send a test SMS message to another mobile telephone number.
- **Step 3:** Once the test message is received, you can then check the phone number format shown in the received message.

<EXAMPLE>

With the phone number <u>0987654321</u>, the format should either INCLUDE or EXCLUDE Contry Code, which is "886" for Taiwan as below:

INCLUDE Country Code	+886987654321
EXCLUDE Country Code	0987654321

- **Step 4.** Remove the SIM card from the Mobile phone and insert it back into SIM Card holder on Panel.
- A. If the Phone Number Format <u>EXCLUDES</u> Country Code, please skip this section.
- B. If the Phone Number Format <u>INCLUDES</u> Country Code, please proceed to SMS Remote Program and send in this format:

"PROG 1111 REPLA:886&0"

Where:

PROG = SMS Keyword

1111 = Access Code

REPLA = SMS command for Country Code

886 = number to be replaced

0 = number to substitute

After this is completed, Country Code "886" will be replaced by "0".

4.2. Alarm Activation

- When an alarm is triggered, CTC-1052RV will enter the Guard Time Delay period (see Command 42), both RED LED and RED HELP BUTTON backlight turn on steadily.
- During the Guard Time period, pressing the <u>RESET</u> button on CTC-1052RV, it will cancel the alarm signal and return to Idle Mode.
- If the Guard Time Delay is set as **00**, CTC-1052RV will dial immediately.
- The Alarm reporting cannot be cancelled by pressing the <u>RESET</u> button on CTC-1052RV after the Guard Time Delay expires.
- The first alarm reporting priority is GPRS Reporting Method.
- Press and hold the WTRV/ WTRVS's button for 8 seconds to terminate alarm reporting, instead of the <u>RESET</u> button on CTC-1052RV.

Confirmation Beeps

- Once Guard Time Delay expires, CTC-1052RV will summon help based on the programmed reporting method. A continuous confirmation beeping sound (about 1 secs per beep) will be heard after CTC-1052RV dials out, to inform you that the call is in progress (regardlss of Digital or Speech Reporting Method).
- Confirmation beeps will be heard in the following situations:
- After CTC-1052RV dials out to summom help until kiss off (for Digital Reporting Method)
- After CTC-1052RV dials out to summom help until the call is answered (for Speech Reporting Method)
- When first reporting failed, and CTC-1052RV retries
- Once the first reporting succeeded, and CTC-1052RV is in progress of back-up reporting, the confirmation beeps will not be heard.

< IMPORTANT NOTE>

When an alarm is triggered by any device (except Talking Pendant Series, WTRV/WTRVS), please note that the two way communication is set up between the Central Monitoring Station and the Control Panel. If an alarm is triggered by Talking Pendant Series, the two-way communication between the Central Monitoring Station and Talking Pendant Series.

Alarm Triggered by Talking Pendant Series (WTRV/ WTRVS)

Press the Active button on a talking pendant to trigger an alarm. Then you will hear a talking pendant's confirming beeps and the beeps will stop until a talking pendant receives a DTMF command. If a talking pendant receives a DTMF command, it indicates that the connection is setup successfully. While the WTRV is triggered, 1052RV's Help Button and Red button will lighten until connection ends.

<NOTE>

- When an alarm is triggered by Talking Pendant Series (WTRV/ WTRVS), the two-way communication is set up between the Central Monitoring Station and the Talking Pendant.
- When an alarm reporting successfully goes through to CMS, but if no DTMF command is received by a talking pendant, after 2.5 minutes, connection will timeout and the talking pendant will stop beeping.
- When reporting to CMS fails, the talking pendant will go to retry cycle and its confirming beeps will continue until it receives a DTMF command or until a retry cycle.

GPRS Reporting Method

It is required to use SMS Remote Programming to set Access Point Name, IP Address, Port Number, GPRS/IP Account Number, User Name, and Password before GPRS Reporting Method becomes effective.

- Access Point Name (APN): the name of an access point for GPRS.
 Please inquire your SIM card service provider for your APN.
- IP Address: Central Monitoring Station server IP
- Port Number: Central Monitoring Station server port number
- GPRS/IP Account Number: your account number, as set in Digital Reporting Method (refer to section 3.2. Programming Your 1052: Command 10-14)
- User Name: offered by your SIM card service provider. Please inquire your service provider for your GPRS username. If no username is required, you may skip this step.
- Password: offered by your SIM card service provider. Please inquire your service provider for your GPRS password. If no Password is required, you may skip this step.
- To disable GPRS Reporting Method: by removing the IP address, GPRS reporting becomes ineffective. Proceed to SMS Remote Programming and send in this format:

"PROG 1111 TCIP1:"

Where:

PROG = SMS Keyword

1111 = Access Code

TCIP1 = SMS command for IP Address(no input value means deletion of characters)

Digital Reporting Method

After the alarm reporting is successfully received by the Monitoring Center, CTC-1052RV will then follow the choice of Command #38, to enter **Follow-On and/or Call-Back** mode.

Call-Back Operation

 If <u>Command #38</u> is set as Call-Back (1) or Follow-On & Call-Back (2), after alarm is reported to CMS, the system will then wait 5 mins for Monitoring Center Personnel to call-back after reporting.

- If an alarm is successfully reported, after the Monitoring Center calls back within this 5-minute period, CTC-1052RV auto-answers the call after the 1st -2nd ring and waits for proper Access Code (default is 1111) entry followed by the (#) key within 15 secs. Please enter Access Code in normal operation speed.
- Upon the correct Access Code received, CTC-1052RV will then open a Full-Duplex Communication to allow the Call Recipient to speak to CTC-1052RV Pro /WTRV/WTRVS directly. You can also use the following DTMF command to switch the speech mode.
- Enter (1) to TALK ONLY
- Enter (2) to open TWO-WAY VOICE COMMUNICATION
- Enter (3) to LISTEN-IN ONLY
- End a Call: enter (9) to HANG UP or put the handset back into the base cradle.
- Enter (7) to Speaker Volume Control and then press (6) or (4) to increase or decrease levels of speaker volume in the "Two-Way" communication modes.
- Enter (8) to Microphone Sensitivity Control and then press (6) or (4) to increase or decrease levels of microphone sensitivity in the "Two-Way" communication mode.
- Press any DTMF key, except the designed "hang-up" key (9), to add another preset communication time. Please note that when a particular DTMF key is pressed, its designed shortcut function will be executed & the communication time will be extended at the same time.

<NOTE>

- Please note that if you wish to enable a designed shortcut function, please press DTMF keys over 1 second to enable the function you desire.
- If the levels of speaker volume and microphone are adjusted in the two-way communication between the Control Panel and the emergency call recipient, the adjusted value will be restored.
- If the two way communication is setup

between WTRV/ WTRVS and the emergency call recipient, the levels of speaker volume and microphone sensitivity can not be adjusted.

If $\underline{\text{Command } \#38}$ is set as $\underline{\textbf{0}}$, Follow-On, or 2, Follow-On & Call-Back, it will then follow its setting as in $\underline{\text{Command } \#45}$, Follow-On Choice to open Two-way Voice, or, Listen-In, or just waiting for commands.

Follow On Operation

<u>Please note that if an alarm is triggered by</u>
<u>WTRV or WTRVS</u>, for follow-on operation, no matter what Follow-On choice (**Command 45**) you have set, the Monitoring Center personnel have to press the DTMF commands as below and the Monitoring Center can remotely control CTC-1052RV:

If an alarm is triggered by any compatible device (except WTRV/ WTRVS) or pressing the Help Button on Panel, the system will follow the preset Follow-On Mode (Command 45) to respond accordingly. The Monitoring Center can remotely control CTC-1052RV by the DTMF commands as below:

1. CONTACT ID FORMAT:

- Enter (1) to TALK ONLY
- Enter (2) to open TWO-WAY VOICE COMMUNICATION
- Enter (3) to LISTEN-IN ONLY
- End a Call: enter (9) to HANG UP or just put the handset back into the base cradle.
- Enter (7) to Speaker Volume Control and then press (6) or (4) to increase or decrease the levels of speaker volume in the "Two-Way" communication mode.
- Enter (8) to Microphone Sensitivity Control and then press (6) or (4) to increase or decrease the levels of microphone sensitivity in the "Two-Way" communication mode.
- Press any DTMF key, except the designed "hang-up" key (9), to add another preset communication time. Please note that when a particular DTMF key is pressed, its designed

shortcut function will be executed & the communication time will be extended at the same time.

<NOTE>

- Please note that if you wish to enable a designed shortcut function, please press DTMF keys over 1 second to enable the function you desire.
- If the levels of speaker volume and microphone are adjusted in the two-way communication mode, the adjusted value will be restored.
- If the two way communication is setup between WTRV/ WTRVS and the emergency call recipient, the levels of speaker volume and microphone sensitivity can not be adjusted.

2. SCANCOM FORMAT:

- Enter (1) to LISTEN-IN ONLY
- Enter (2) to TALK ONLY
- Enter (3) to open TWO-WAY VOICE COMMUNICATION
- End a Call: enter (5) to HANG UP or put the handset back into the base cradle.
- Enter (*) to TOGGLE
- Enter (7) to Speaker Volume Control and then press (6) or (4) to increase and decrease the levels of speaker volume in the "Two-Way" communication mode.
- Enter (8) to Microphone Sensitivity Control and then press (6) or (4) to increase and decrease the levels of microphone sensitivity in the "Two-Way" communication mode.
- Press any DTMF key, except the designed "hang-up" key (5), to add another preset communication time. Please note that when a particular DTMF key is pressed, its designed shortcut function will be executed & the communication time will be extended at the same time.

<NOTE>

Please note that if you wish to enable a designed shortcut function, please press DTMF keys over 1 second to enable the

- function you desire.
- If the levels of speaker volume and microphone are adjusted in the two-way communication mode, the adjusted value will be restored.
- If the two way communication is setup between WTRV/ WTRVS and the emergency call recipient,, the levels of speaker volume and microphone sensitivity can not be adjusted.

3. TUNSTALL FORMAT:

- Enter (C) to TALK ONLY
- Enter (*) to LISTEN-IN ONLY
- Enter (3) to open TWO-WAY VOICE COMMUNICATION
- End a Call: enter (#) to HANG UP or put the handset back into the base cradle.
- Enter (7) to Speaker Volume Control and then press (6) or (4) to increase or decrease the levels of speaker volume in the "Two-Way" communication mode.
- Enter (8) to Microphone Sensitivity Control and then press (6) or (4) to increase or decrease the levels of microphone sensitivity in the "Two-Way" communication mode.
- Press any DTMF key, except the designed "hang-up" key (#), to add another preset communication time. Please note that when a particular DTMF key is pressed, its designed shortcut function will be executed & the communication time will be extended at the same time.

- If an alarm is triggered by WTRV/ WTRVS, you press the **DTMF 3** over 1 second to open the two-way communication no matter what Follow-On choice you have set.
- Please note that if you wish to enable a designed shortcut function, please press DTMF keys over 1 second to enable the function you desire.
- If the levels of speaker volume and

microphone are adjusted in the two-way communication mode, the adjusted value will be restored.

- If the two way communication is setup between WTRV/ WTRVS and the emergency call recipient, the levels of speaker volume and microphone sensitivity can not be adjusted.
- The allowable time duration for Follow-On Period is set by <u>Command #46</u> (1-10 mins).
- During Two-way Voice Communication, at 20 & 10 seconds before the Follow-On period expires, CTC-1052RV will emit two beeps to alert both the user and the Monitoring Center Personnel.
- To extend the conversation, the Monitoring Center personnel can press the DTMF command again to add another 1-10 mins.
- Voice Communication can be terminated by the following:
 - DTMF Commands:

Contact ID: 9

Scancom: 5

Tunstall: #

- The **RESET** button is pressed.
- Automatically hangs up after the Follow-On Period expires.

Help Arrived Signaling

This function is only available for the digital Contact ID reporting method, and when Help Arrive Signaling (Command #33) is set to enable.

- Once the Follow-On Period or Call-back is completed, CTC-1052RV will start counting down the 15-min Help Arrived Timer. The <u>HELP</u> button starts flashing.
- By pressing the <u>RESET</u> button, CTC-1052RV will report to the Monitoring Center that help has arrived. The <u>HELP</u> button stops flashing and return to normal backlight.
- If the <u>RESET</u> button is not pressed within 15 mins, CTC-1052RV will send another **Help Call** report again to inform the Monitoring Center that no help has arrived.
- CTC-1052RV will then enter the 15

mins waiting period again. If **RESET** button is still not pressed, CTC-1052RV will exit reporting mode and return to Idle Mode.

Speech Reporting Method

- If Speech Reporting Method is selected, after dialing, CTC-1052RV will open a twoway voice communication between the Call Recipient and CTC-1052RV for 1-10 minutes (set by Command #46).
- If the alarm is triggered by Talking Pendent (WTRV or WTRVS), after the Central Monitoring Station acknowledges the signal emitted from WTRV/WTRVS and then WTRV/WTRVS receives the DTMF 2 signal (pressed by the Monitoring Center), a remote two-way voice communication between the Monitoring Center and WTRV/WTRVS will be opened.
- At 20 & 10 seconds before the time period expires, CTC-1052RV will emit two beeps via the telephone handset to alert the user.
- If the Call Recipient needs more talk time, they can press any keys except 9 on their phone set to add another 1-10 minutes (set by Command 46).
- To terminate the call, press either (DTMF
 9) or RESET button on CTC-1052RV.
- During the <u>Speech</u> period, if there is no any DTMF command pressed, the call will automatically hang-up and be recorded as an unsuccessful call. It will retry a max of 4 times on each Tel. Number accordingly.
- To terminate the call, press either (DTMF 9), RESET button on CTC-1052RV, or hold the <u>Pendent Button</u> for 8 sec on the Talking Pendant (WTRV).

Call Sequence

- The call sequence is followed by Tel. #1, Tel. #2, Tel. #3 to Tel. #4. It is recommended to set digital reporting method in first priority for immediate help.
- If either Digital Alarm reporting or Speech Alarm reporting is set, with anyone answered successfully, the call sequence will be terminated automatically.

- If both Digital and Speech Alarm reporting are set, the reporting call sequence will only be terminated once one Digital reporting (any of CID, Scancom or Tunstall protocols) and one Speech reporting are answered successfully.
- There is a calling pause between each call. For different Tel. Numbers, the pause is set as 5 secs, and for same Tel. Number, it is set as 62 secs.

Retry Method:

- Retry Circle: Each Tel. Phone number can be retried up to 5 times alternative; and max. 15 calls will be retried. During the retry period, the Red LED still stays on steadily, while the Red Help Button backlight dims.
- In the retry circle, if any digital, voice message, or speech reporting fails, CTC-1052RV Pro makes a 10-min pause, then starts another 15-call retry circle, followed by another 10-min pause. This cycle repeats until all reporting is/are answered successfully.
- During the 10-min pause, CTC-1052RV Pro returns to normal mode with Red LED on:
 - Press the Green reset button to terminate the reporting.
 - If new event happens, CTC-1052RV Pro starts the reporting immediately.

If an alarm is triggered by Talking Pendant (WTRV/ WTRVS):

- For Tel number(s) set as Digital Method (set by Command #20-24), the WTRV will wait for Central Monitoring Station's DTMF command after digital reporting is complete.
- For Tel number(s) set as Speech Method (set by Command #20-24), the WTRV/ WTRVS will open a remote two-way voice communication.

4.4. Walk Test (Range Test)

Put CTC-1052RV in **Learning Mode** to determine the operation range of the devices.

- **Step 1.** From Idle mode, press and hold the **RESET** button for 6 seconds.
- **Step 2.** Once pressed, a button beep sound will be heard. CTC-1052RV will emit one short beep at 3 sec., then a double beep when it reaches 6 sec.
- Step 3. Release the button after you heard the <u>double beep</u>. Then, a short beep will be heard indicating CTC-1052RV is now in **Learning Mode**. The **RED LED** begins to flash.
- **Step 4.** Move the device to your desirable location in the house, and press the **TEST button** to observe the range for its operation.
- **Step 5.** If CTC-1052RV responds with **one long beep**, then the particular device is within the operation range.

<NOTE>

For Talking Pendant WTRV/ WTRVS: During Walk Test, when the Pendant button is pressed you will hear WTRV/ WTRVS emit beep (1s-on / 1s-off). After about 3 sec, the Control Panel will emit a long beep. About 2 sec later, the Control Panel will emit a long beep again, indicating the Pendant is within the operating range. If you do not hear beeps emitted by Control panel, turn the Pedant off and repeat the steps mentioned above until you hear the Panel beeps.

Step 6. To exit Learning Mode, press both RESET & HELP buttons simultaneously. Or, CTC-1052RV will exit Learning mode automatically after 5 mins of inactivity.

4.5. Global Test

 Global Test is used to test if the complete system is working properly.

To do the Global Test:

- Step 1. Press the RESET button once.
- **Step 2. Within 5 secs**, press Pendant button.
- **Step 3.** CTC-1052RV will emit a short beep and report to Monitoring

Center.

<NOTE>

This function is for WTR- Series only, not for WTRV.

4.6. Factory Reset

CTC-1052RV will clear all programmed parameters by the following sequence:

- **Step 1.** Unplug the power cord from the DC Jack.
- **Step 2.** Remove the Battery Switch rubber cap.
- **Step 3.** Use a pen or screw-driver to slide the Battery Switch to <u>OFF</u> position (or the opposite direction of the ON marking)
- Step 4. Plug the power cord into the DC jack while holding down both the <u>HELP</u> & <u>RESET</u> buttons, until one long beep is heard, indicating that the Factory Reset is successful.
- Step 5. Release both buttons.
- **Step 6.** Slide the Battery Switch back to <u>ON</u> position again.
- **Step 7.** Replace the Battery Switch rubber cap.

<NOTE>

Once the **Fatory Reset** is executed, all the programmed data is returned to its default value and all the devices that have been learnt-in are removed. You will have to do the programming and learn-in the devices one-by-one again.

5. Appendix

5.1. CID Event Code

• 100 - Panel emergency

When the red HELP Panel button is pressed.

101 - Personal emergency

 When the Wrist Transmitter (WTR), Emergency Pendant or Fall Sensor is pressed.

102 –Inactivity

If no sudden movement within 10 seconds after fall detection, an inactivity code will be sent to Central Monitoring Station.

110 - Smoke emergency

When the Smoke Detector (SD) is triggered.

120 –Fall emergency

When a fall sensor is triggered.

147 - Sensor Supervisory Failure

When CTC-1052RV is unable to receive the signal transmitted from the Wrist Transmitter for a pre-set period by Command #49, Green LED flashes every 2 secs.

154 - Water emergency

When Water Sensor (WS) is triggered

162 - Carbon Monoxide emergency

 When Carbon Monoxide Detector (CO) is triggered

• 301 - Panel AC Failure

When AC power fails for more than 10 sec, Green LED flashes every sec with a beep every 30 secs.

302 - Panel Low battery

When CTC-1052RV is under Low Battery status, Green LED flashes every 2 secs with a beep every hour.

333 - No WTR Learnt-in

When CTC-1052RV has no WTRB learned-in previously.

• 373 - Smoke Low battery

 When Smoke Detector is under Low Battery Status, Green LED flashes every 2 secs with 2 beeps.

380 - WTR Low Battery

When Wrist Transmitter (WTR) or Emergency Pendant is under Low Battery Status, Green LED flashes every 2 secs with 2 beeps.

384 - Other devices Low Battery

When other devices are under Low Battery Status, Green LED flashes every 2 secs with 2 beeps whenever Low Battery signal is received from the device. The frequency of the beep will depend on the device.

406 - Emergency Cancel

When the GREEN REST BUTTON is pressed while reporting to Monitoring Center.

602 - Periodic test report

 When CTC-1052RV makes periodic Check-in reporting.

606 - Follow-On Function

 When CTC-1052RV receives kiss-off from Monitoring Center for opening Speech channel.

611 - Global test

When CTC-1052RV reports Global Test to Monitoring Center.

• 641 - Mobility

When CTC-1052RV makes Mobility Check reporting.

5.2. Tunstall Event Code

D#1011 - Panel AC Restored

When AC power is restored to CTC-1052RV.

D#1012 - Global test & Periodic test call report

- When CTC-1052RV reports Global Test to monitoring Center.
- When CTC-1052RV reports Periodic test call to monitoring Center.

D#1013 - Sensor Supervisory Failure

When CTC-1052RV Pro is unable to receive the signal transmitted from the Wrist Transmitter for a pre-set period by Command #49.

D#1014 - Device Low Battery

When other devices (except SD and WTR) are under Low Battery Status, Green LED flashes every 2 secs with 2 beeps whenever Low Battery signal is received from the device.

D#1015 – Mobility/ Inactivity

- When CTC-1052RV Pro makes Mobility Check reporting.
- ◆ If no sudden movement within 10 seconds after fall detection, an inactivity code will be sent to Central Monitoring Station.

D#1016 - Personal emergency or Fall emergency

- When Wrist Transmitter (WTR), Emergency Pendant or Fall Sensor is pressed.
- When a fall sensor is triggered.

D#1017 - Panel emergency

- When the RED HELP Panel button is pressed.
- ◆ When Water sensor is triggered.

D#1018 - Smoke emergency

- When Smoke Detector (SD) is triggered.
- When Carbon Monoxide Detector (CO) is triggered.

D#1019 - Panel AC Failure

When AC power fails for more than 10 sec, Green LED flashes every sec with a beep every 30 secs.

D#1019 – Panel Low battery

 When CTC-1052RV Pro is under Low Battery status, Green LED flashes every 2 secs with a beep every hour.

5.3. Scancom Event Code

515555517 - Panel emergency, WS Emergency or Fall emergency

- When the red HELP Panel button is pressed or WS triggered.
- When a fall sensor is triggered or pressed.
- 515555557 Cancel Panel emergency

- When the red HELP alarm is canceled.
- 515155557 Pendant 1 and Unit Button emergency
 - When the Pendant 1 or Unit button is pressed.

551555517 – Inactivity

◆ If no sudden movement within 10 seconds after fall detection, an inactivity code will be sent to Central Monitoring Station.

• 555155517 - Pendant 2 emergency

When the Pendant 2 is pressed.

• 555551557 - AC Failure

When the AC power fails for more than 10 sec, Green LED flashes every sec with a beep every 30 secs.

555553557 - AC Failure Restore

When AC power fails for more than 10 sec, Green LED flashes every sec with a beep every 30 secs.

51555559 - Global test / Auto-check-in report

When the CTC-1052RV reports Global Test to monitoring Center.

555551558 - Panel Low battery

When CTC-1052RV is under Low Battery status, Green LED flashes every 2 secs with a beep every hour.

• 555553557 - Panel Low battery Restore

When the Panel Low Battery restored for CTC-1052RV.

515555517 - WTR and/or PB emergency

 When the Wrist Transmitter (WTR), Emergency Pendant (EP) or Panic Button (PB) is pressed.

• 515555518 - WTR and/or PB Low battery

When the Wrist Transmitter (WTR), Emergency Pendant (EP) or Panic Button (PB) is under Low Battery status, Green LED flashes every 2 secs with 2 beeps.

53555557 - WTR and/or PB Low battery Restore

 When the Low Battery status of Wrist Transmitter (WTR), Emergency Pendant (EP) or Panic Button (PB) is restored.

155555517 - SD or CO emergency

When the Smoke Detector (SD) or Carbon Monoxide (CO) is pressed.

155555518 - SD or CO Low battery

When the Smoke Detector (SD) or Carbon Monoxide (CO) is under Low Battery status, Green LED flashes every 2 secs with 2 beeps.

35555557 - SD or CO Low battery Restore

When the Low By status of Water Sensor (WS) is under Low Battery status.

553555557 - WS Low battery Restore

When the Low Battery status of Water Sensor (WS) is restored

551555558 - IR Low battery

When the PIR Motion Detector (IR) is under Low Battery status, Green LED flashes every 2 secs with 2 beeps.

553555557 - IR Low battery Restore

When the Low Battery status of PIR Motion Detector (IR) is restored.

555555558 – Fall Sensor Low battery

When the Fall Sensor is under Low Battery Condition.

FCC Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

5.4. CTC-1052RV Programming Command Table

DTMF CHARACTER COMMANDS	DTMF ACK	COMMAND OPERATION	TERM I- NATO R	DTMF ACK	DEFAULT
01#	Bi	Telephone number 1	#	Bi	No number
02#	Bi	Telephone number 2	#	Bi	No number
03#	Bi	Telephone number 3	#	Bi	No number
04#	Bi	Telephone number 4	#	Bi	No number
05#	Bi	Telephone number & GPRS/IP for alarm report 1=TEL1, 2=TEL2, 3=TEL3, 4=TEL4, 5=GPRS1, 6=GPRS2	#	Bi	1,2,3,4,5,6
06#	Bi	Telephone number& GPRS/IP for status report 1=TEL1, 2=TEL2, 3=TEL3, 4=TEL4, 5=GPRS1, 6=GPRS2	#	Bi	1,2,3,4,5,6
07#	Bi	Telephone number for Non-Emergency Call	#	Bi	Disable
10#	Bi	Global account number, 4 to 6 digits	#	Bi	No account number
11#	Bi	4-6 digits Account number 1 (Tel. Number 1)	#	Bi	No account number
12#	Bi	4-6 digits Account number 2 (Tel. Number 2)	#	Bi	No account number
13#	Bi	4-6 digits Account number 3 (Tel. Number 3)	#	Bi	No account number
14#	Bi	4-6 digits Account number 4 (Tel. Number 4)	#	Bi	No account number
20#	Bi	All formats the same, 0 = Contact ID, 1= Scancom, 2 = Tunstall, 3 = Speech, 4=SMS CID	#	Bi	Contact ID
21#	Bi	0 = Contact ID, 1= Scancom, 2 = Tunstall, 3 = Speech, 4=SMS CID (Tel. Number 1)	#	Bi	Contact ID
22#	Bi	0 = Contact ID, 1= Scancom, 2 = Tunstall, 3 = Speech, 4=SMS CID (Tel. Number 2)	#	Bi	Contact ID
23#	Bi	0 = Contact ID, 1= Scancom, 2 = Tunstall, 3 = Speech, 4=SMS CID (Tel. Number 3)	#	Bi	Contact ID
24#	Bi	0 = Contact ID, 1= Scancom, 2 = Tunstall, 3 = Speech, 4=SMS CID (Tel. Number 4)	#	Bi	Contact ID
31#	Bi	Ringer enable, 0 = Disable, 1 = Enable	#	Bi	Ringer Disabled
32#	Bi	Audible fault alert, 0 = Off, 1 = On	#	Bi	Off
33#	Bi	Help arrived signalling, 0 = Off, 1 = On	#	Bi	Help arrived signalling Off
34#	Bi	Emergency button enable, 0 = Button off, 1 =Button on	#	Bi	Emergency button On
35#	Bi	Silent Mode, 0 = Silent mode On, 1 = Silent mode Off	#	Bi	Silent mode Off
37#	Bi	AC fault report, 0 = Off, 1 = On	#	Bi	On
38#	Bi	Follow-On & Call Back Function, 0 = Follow-On, 1= Call-Back, 2= Follow-On & Call-Back	#	Bi	Follow-On
40#	Bi	Set Access Code	#	Bi	1111
42#	Bi	Guard time delay, 00 = Instant; 99 = 99 seconds	#	Bi	10 seconds
43#	Bi	Test call, 0 = OFF, 1 = 1 Day, 2 = 2 Days, 3 = 3 Days, 4 = 4 Days. 5 = 5 Days, 6 = 6 Days, 7 = 7 Days, 8 = 30 days	#	Bi	No test call

DTMF CHARACTER COMMANDS	DTMF ACK	COMMAND OPERATION	TERMI- NATOR	DTMF ACK	DEFAULT
44#	Bi	Mobility time 00= Disable, 01 ~ 36= 1 ~ 36 Hours		Bi	Mobility time disable
45#	Bi	Follow-On Choice, 0 = Wait command, 1 = Listen, 2 = Two way voice communication	#	Bi	Two-way voice communication
46#	Bi	Follow-On mode & Two-Way Period, 01=1 min, 02=2mins, 03=3mins, 04=4mins, 05=5mins, 06=6mins, 07=7mins, 08=8mins, 09=9mins, 10=10mins.	#	Bi	5 minutes
47#	Bi	Off-set time, 1=1 hour, 2=2 hours, 3=3 hours, 4=4 hours, 5=8hours, 6=12 hours	#	Bi	1 Hour
49#	Bi	Supervision, 0 = disable, 1 = 4 days, 2 = 5 days, 3 = 6 days, 4 = 7 days, 5 = 8 days, 6 = 9 days, 7 = 10 days		Bi	Disable
60#	Bi	GSM Band Select 0=Mono-band mode 850 MHz (U.S.) 1=Mono-band mode 900 extended (900E) MHz (Europe) 2=Mono-band mode 1800 MHz (Europe) 3=Mono-band mode 1900 MHz (U.S.) 4=Dual-band mode 850/1900 MHz (U.S.) 5=Dual-band mode 900 extended (900E)/1800 MHz (Europe) 6=Dual-band mode 900 extended (900E)/1900MHz (Europe/U.S.)	#	Bi	Dual-band mode 900 extended (900E)/1800 MHz (Europe) Dual-band mode 850/1900 MHz (U.S.)
61#	Bi	Check SIM CARD PIN CODE 0: Disable 1: Enable	#	Bi	Disable
62#	Bi	Set Input SIM CARD PIN CODE : 4 ~ 8 digital	#	Bi	Null
63#	Bi	Set Speaker Volume Enter: Mode Number + * + Speaker Volume Note: Mode Number: 1 digit (2:Two-way) Speak volume: 1 digit (1~5 level)	#	Bi	Two way mode: 3
64#	Bi	Set Microphone Sensitivity: Note: Mic sensitivity: 1 digit (1~5 level) Only can be adjusted in the two-way mode.	#	Bi	Two way Mode: 3
66#	Bi	Guard time delay for Fall Sensor, 00 = Instant reporting; 99 = 99 seconds	#	Bi	15 sec
80#	Bi	Remove all device (learnt in Command 91-94)			
81#	Bi	Remove pendant #1 (learnt in Command 91)			
82#	Bi	Remove pendant #2 (learnt in Command 92)			
83#	Bi	Remove Silent Pendant (learnt in Command 93)			
84#	Bi	Remove the Devices (learnt in Command 94)			
91#	Bi	Learn-in pendant #1		Bi Bi	No device
92#	Bi	Learn-in pendant #2		Bi Bi	No device
93#	Bi	Learn-in silent emergency transmitters		Bi Bi	No device
94#	Bi	Learn-in smoke detectors, CO detectors, pendants and fixed emergency transmitters, long range pendants		Bi Bi	No device
98#	Bi	Load defaults when * * is pressed (DTMF A is heard after defaults have been loaded)	#	Bi	
99#	Bi	Exit programming mode			

5.5. CTC-1052RV SMS Remote Programming Command Table

• If the SMS Keyword is set as **PROG**, and Access Code is set as **1111** (factory default).

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CORRESPONDING DTMF CHARACTER COMMANDS	ITEM	COMMAND	EXAMPLE & USAGE	DEFAULT
	SMS Keyword (Installer)	KEYWD	PROG 1111 KEYWD:IPOG To set/change the SMS keyword for installer (4-character)	PROG
	User Keyword (User)	UKYWD	USER 2222 UKYWD:ICTR To set the SMS user keyword for user (4-character)	USER
	User Code	USEPN	USER 2222 USEPN:3333 To set the SMS user code	2222
01#	Telephone number 1	TELN1	PROG 1111 TELN1:0227940559 To set/change Telephone number 1 (Max. 20 digits, Null=to clear Telephone number 1)	No number
02#	Telephone number 2	TELN2	PROG 1111 TELN2:0227940559 To set/change Telephone number 2 (Max. 20 digits, Null=to clear Telephone number 2)	No number
03#	Telephone number 3	TELN3	PROG 1111 TELN3:0227940559 To set/change Telephone number 3 (Max. 20 digits, Null= to clear Telephone number 3)	No number
04#	Telephone number 4	TELN4	PROG 1111 TELN4:0227940559 To set/change Telephone number 4 (Max. 20 digits, Null=to clear Telephone number 4)	No number
05#	Telephone number for alarm report	ALMRP	PROG 1111 ALMRP:1234 To select the number for alarm report 1=Telephone 1, 2=Telephone 2, 3=Telephone 3 4=Telephone 4, 5=GPRS1, 6=GPRS2	1,2,3,4,5,6
06#	Telephone number for status report	STARP	PROG 1111 STARP:1234 To select then number for status report 1=Telephone 1 , 2=Telephone 2 , 3=Telephone 3 4=Telephone 4 , 5=GPRS1 , 6=GPRS2	1,2,3,4,5,6
07#	Telephone number for non- emergency call	NONRP	PROG 1111 NONRP:0 To select the number for non-emergency call 0=Disable, 1=Telephone 1, 2=Telephone 2 3=Telephone 3, 4=Telephone 4	0 = Disable
10#	Global account number	ACNTG	PROG 1111 ACNTG:1234, To set/change the same 4- or 6-digit account number for all 4 telephone numbers (Null=to clear 4 Telephone numbers)	No account number
11#	Account number 1	ACNT1	PROG 1111 ACNT1:1234, To set/change the 4- or 6-digit account number for Telephone number 1(Null=to clear account number for Telephone number 1)	No account number
12#	Account number 2	ACNT2	PROG 1111 ACNT2:1234, To set/change the 4- or 6-digit account number for Telephone number 2 (Null=to clear account number for Telephone number 2)	No account number
13#	Account number 3	ACNT3	PROG 1111 ACNT3:1234, To set/change the 4- or 6-digit account number for Telephone number 3 (Null=to clear account number for Telephone number 3)	No account number
14#	Account number 4	ACNT4	PROG 1111 ACNT4:1234, To set/change t the 4- or 6-digit account number for Telephone number 4 (Null=to clear account number for Telephone number 4)	No account number

CORRESPON- DING DTMF CHARACTER	ITEM	COMMAND	EXAMPLE & USAGE	DEFAULT
COMMANDS				
20#	Reporting method for all 4 Telephone numbers	FMATG	PROG 1111 FMATG:0 To set the reporting methods for all 4 Telephone numbers 0=Contact ID, 1=Scancom, 2=Tunstall, 3=Speech, 4=SMS CID	0 = Contact ID
21#	Reporting method for Telephone number 1	FMAT1	PROG 1111 FMAT1:0 To set the reporting method for Telephone number 1 0=Contact ID, 1=Scancom, 2=Tunstall, 3=Speech, 4=SMS CID	0 = Contact ID
22#	Reporting method for Telephone number 2	FMAT2	PROG 1111 FMAT2:0 To set the reporting method for Telephone number 2 0=Contact ID, 1=Scancom, 2=Tunstall, 3=Speech 4=SMS CID	0 = Contact ID
23#	Reporting method for Telephone number 3	FMAT3	PROG 1111 FMAT3:0 To set the reporting method for Telephone number 3 0=Contact ID, 1=Scancom, 2=Tunstall, 3=Speech 4=SMS CID	0 = Contact ID
24#	Reporting method for Telephone number 4	FMAT4	PROG 1111 FMAT4:0 To set the reporting method for Telephone number 4 0=Contact ID, 1=Scancom, 2=Tunstall, 3=Speech 4=SMS CID	0 = Contact ID
31#	Ringer enable for incoming calls	ENRIN	PROG 1111 ENRIN:0 To enable/disable ring tone for incoming calls 0=Disable, 1=Enable	0 = Disable
32#	Audible fault alert	FAUTA	PROG 1111 FAUTA:0 To enable/disable audible fault alert 0=Disable, 1=Enable	0 = Disable
33#	Help arrived signalling	HELPA	PROG 1111 HELPA:0 To enable/disable help arrived signalling 0=Disable, 1=Enable	0 = Disable
34#	Emergency button	EMBUT	PROG 1111 EMBUT:1 To enable/disable the Emergency button to send an emergency alarm report 0=Disable, 1=Enable	1 = Enable
35#	Silent mode	SILMO	PROG 1111 SILMO:1 To enable/disable silent mode 0=Silent mode On, 1=Silent mode Off	1 = Silent mode Off
37#	AC fault report	ACRPT	PROG 1111 ACRPT:1 To enable/disable AC fault report 0=Disable, 1=Enable	1 = Enable
38#	Follow-On & Call Back	FOLON	0=Follow-on, 1=Call-back, 2=Follow-on & Call-back	0 = Follow- on
40#	Set access code	ACCES	PROG 1111 ACCES:1234 To change the access code for installer (4-digit)	1111
42#	Guard time delay	GUDTI	PROG 1111 GUDTI:10 To set the guard time delay time 00=Instant, 01-99=1-99 seconds	10 = 10 seconds
43#	Periodic test call	TESTC	PROG 1111 TESTC:0 To set the periodic test call 0=Off, 1=1 Day, 2=2 Days, 3=3 Days, 4=4 Days 5=5 Days, 6=6 Days, 7=7 Days ,8=30 Days	0 = Off
44#	Mobility timer	MOBTI	PROG 1111 MOBTI:00 To set the Mobility timer 00=Disable, 01~36 =1 ~ 36 Hours	00 = Disable
45#	Follow-on choice	LFOLL	PROG 1111 LFOLL:2 To set the follow-on choice for digital reporting 0=Wait command, 1=Listen 2=Two-way voice communication	2 = Two-way voice comm.

CORRESPONDING DTMF CHARACTER COMMANDS	ITEM	COMMAND	EXAMPLE & USAGE	DEFAULT
46#	Follow-on & two-way period	FOLTI	PROG 1111 FOLTI:02 To set the duration for follow-on & two-way voice communication period 01-10=1-10 minutes	05 = 5 minutes
47#	Off-set time	OFFST	PROG 1111 OFFST:1 To set the off-set time 1=1 Hour, 2=2 Hours, 3=3 Hours 4=4 Hours, 5=8 Hours, 6=12 Hours	1 = 1 Hour
49#	Supervision	SUPPR	PROG 1111 SUPPR:0 To set the supervision timer 0=Disable, 1=4 Days, 2=5 Days, 3=6 Days 4=7 Days, 5=8 Days, 6=9 Days, 7=10 Days	0 = Disable
61#	Check SIM card Pin code	SIMPE	PROG 1111 SIMPE:0 To set Check SIM Card Pin Code 0 = Disable , 1 = Enable	0 = Disable
62#	Input SIM card Pin code	SIMPC	PROG 1111 SIMPC:0000 PROG 1111 SIMPC:12345678 To input SIM CARD Pin Code: 4~8 digits are allowed to be entered.	Null
63#	Set speaker volume	SPKVL	PROG 1111 SPKVL:2&1~5 > To set a communication channel: 2=Two Way > To set the speaker volume with a number, ranging 1~5.The higher the value, the louder the voice. Default is set as (3) for two-way mode.	Two way: 3
64#	Set microphone sensitivity	MICSN	PROG 1111 MICSN:1~5 To set the microphone volume with a number, ranging 1~5. The higher the value, the wider range the sound received. Default is set as (3). Note: only can be adjusted in the two-way mode.	Mic: 3
66#	Set guard time for fall sensor	FAGUD	PROG 1111 FAGUD: 00~99 To set the guard time delay time for fall sensor. 00=Instant, 01-99=1-99 seconds	15 sec
	Country code	REPLA	PROG 1111 REPLA:886&0 To replace the Country Code with 0 886 → Country Code	No country code
	IP address	TCIP1	PROG 1111 TCIP1:192.168.1.110 To set/change the IP address for the Monitoring Station Input IP address: 000.000.000.000 to 255.255.255.255	No IP address
	IP address	TCIP2	PROG 1111 TCIP2:192.168.1.110 To set/change the IP address for the Monitoring Station Input IP address: 000.000.000.000 to 255.255.255.255	No IP address
	IP address confirm	COMIP	PROG 1111 COMIP:192.168.1.110 (for confirmation) To set/change the IP address for the Monitoring Station Input IP address: 000.000.000.000 to 255.255.255.255	No IP address
	Port number	PORT1	PROG 1111 PORT1:3301 To set/change the port number for the IP address Input 1 to 5 digits	No port number
	Port number	PORT2	PROG 1111 PORT2:3301 To set/change the port number for the IP address Input 1 to 5 digits	No port number
	Port number confirm	СОМРО	PROG 1111 COMPO:3301 (for confirmation) To set/change the port number for the IP address Input 1 to 5 digits	No port number
	GPRS/IP account number	IPAC1	PROG 1111 IPAC1:1052 To set/change the GPRS/IP account number (4-10digit)	No account number
	GPRS/IP account number	IPAC2	PROG 1111 IPAC2:1052 To set/change the GPRS/IP account number (4-10digit)	No account number
	Access Point Name	APNSR	PROG 1111 APNSR:INTERNET To set/change the Access Point Name (APN server)	No APN

 User name	GPUSE	PROG 1111 GPUSE:123 To set/change the user name Input 1 to 15 alphanumeric characters	No user name
 Password	GPASS	PROG 1111 GPASS:65536 To set/change the password Input 1 to 5 digits	No password
 Reset to factory default	FTSET	PROG 1111 FTSET:YyS	

<NOTE>

- IP Address confirm (COMIP) & Port number confirm (COMPO) commands are used for GPRS server confiramtion purpose only. They do not change the IP address nor the port number settings.
- 2. GPRS functions can only be programed via SMS messages, and the commands **MUST** be sent in this sequence: Country code → IP address → Port number → GPRS/IP account number → Access Point Name → User name → Password.
 - One comand per one SMS message. Multiple command in one SMS message is not allowed.
- 3. When setting IP Address Confirm (COMIP) and Port Number confirm (COMPO) commands together, the confirmation will send to assigned IP address. However, if COMIP and COMPO are set respectively or one of their commands is deleted or unset, the confirmation will be sent over SMS to cell phone.
- **4.** User and Central Monitoring Station will receive the SMS confirmation message in this format:

"Confirmed_PROG_1111_COMIP: 192.168.1.110", or

"Confirmed PROG 1111 COMPO: 3301".

- 5. To set multiple SMS commands:
 - 1. Ex: **PROG_1111_ TELN1:**0227940559_**TELN2:**0227940559 (underline represents <space>).
 - 2. Maximum of 70 digits, including <space>, are allowed to be contained in a SMS message sent by the cell phone.
 - 3. SMS remote programming command only can be sent in the standby mode. After getting confirmation message, a command is regarded as set successfully.

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the installation, may cause harmful interference to radio communication. However, there is no guarantee that interference

will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- -Reorient or relocate the receiving antenna
- -Increase the separation between the equipment and receiver
- -Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- -Consult the dealer or an experienced radio / TV technician for help

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions

- (1) This device may not cause harmful interference and
- (2) this device must accept any interference received, including interference that may cause undesired operation.