Quick User's Manual







RANGER ALARM C-8

Version 3.1

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System's features:

- 8 monitoring zones with individually programmable zone's function and sensitivity.
- Supports 8 different zone functions: Entrance, Follower, Interior Follower, Burglary, 24-hour, Fire, Silent, and Force Arming.
- Support NO and EOL type of sensors.
- Supports up to 4 LED keypads apart by a maximum distance of 150m.
- Support 2 arming mode: HOME arming, and AWAY arming.
- Support 1-key fast arming (HOME arming, and AWAY arming.)
- 3 emergency keys: Fire, Medical, and Panic.
- Support 1 Master access code, and 8 User access codes (The 8th User access code can be used as Duress Code).
- 2 high current outputs: 1 for siren, and another for optional used.
- Support 4 user phone numbers for personal reporting on system event. With backup reporting or double reporting.
- Support 2 CMS phone number and 1 CMS account ID.
- Support Ademco Contact ID standard for CMS reporting.
- Support DTMF and Pulse dialing.
- Support remote arming/ disarming via phone.
- Audio tone reporting via phone on system event.
- Auto reset fire detector power supply (PGM) upon disarm if fire alarm is triggered.

LED Indications

(BASE mode)

HOME System is armed at HOME arm		System is armed at HOME armed mode.		
System is operating at H		System is operating at HOME disarmed mode.		
AWAY		System is armed at AWAY armed mode.		
		System is operating at AWAY disarmed mode.		
READY		System is ready to arm.		
	0	System is not ready to arm. One/more of the monitoring zones are triggered.		
		Alarm is triggered by one/more of the monitoring zones triggered.		
PHONE		Phone module exists.		
	0	Phone module is missing/ damaged.		
		Phone line is in used by the system.		
	_			
TROUBLE	0	No system trouble exists.		
		System trouble occurs.		
CONFIG		System is operating at mode other than BASE mode.		
	0	System is operating at BASE mode.		
		System is operating at MASTER/ INSTALLER access code validating mode.		
FIRE		Fire alarm is triggered.		
	_			
Zone LEDs		The corresponding monitoring zone sensor is triggered.		
	0	The corresponding monitoring zone sensor is operating at its normal state.		
		The corresponding monitoring zone sensor is bypassed.		
	LED	turn ON		
0	LED turn OFF			
	LED blinking			

BUZZER Beep Indications

NORMAL	1 short beep	Key pressed is accepted.
ACCEPTED	2 short beeps	Access code accepted.
		Valid changes.
CANCEL	2 short beeps,	Previous input cleared.
	1 long beep	Previous setting reloaded.
		Move up 1 level in programming mode.
		Return to base mode.
INVALID	1 short beep,	Invalid access code.
	1 long beep	Invalid changes.
ERROR	1 long beep	Zone's monitoring sensor is triggered.
		Keypad locked.
FAULT	Continuous	Alarm, emergency.
	beep	
ENTRY / EXIT	1 short beep	Entrance's zone delay timer is triggered
	every 3	(entry/exit timer is counting down).
	seconds	
	1 short beep	Last 5 seconds of delay time before system is
	every second	armed or alarm triggered.

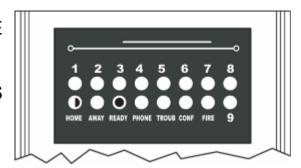
SIREN Indications

FAULT / ALARM	Steady, continuous ON.
FIRE	Pulsing, 1 second ON + 2 second OFF repeatedly.
System is armed remotely	1 short siren.
System is disarmed remotely	2 short siren.

1. To Arm/Disarm/Clear Alarm

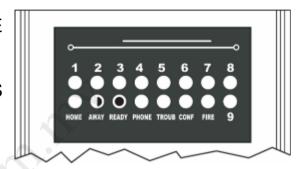
A) HOME mode:

- Press the '#' for several times to back to BASE mode.
- ii. Enter '*' + '1'.
- iii. If an ACCEPTED beep is heard, the STATUS LED should be shown like figure on the right:



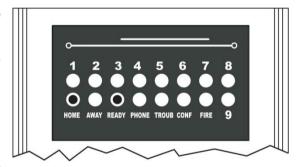
B) AWAY mode:

- Press the '#' for several times to back to BASE mode.
- ii. Enter '*' + '2'.
- iii. If an ACCEPTED beep is heard, the STATUS LED should be shown like figure on the right:



C) HOME arming:

- i. Ensure the system is operating at HOME mode (refer to A)
- ii. Enter a 4-digits [MASTER/USERS] access code.
- iii. If system is armed successfully, an ACCEPTED beep will be heard, the STATUS LED should be shown like figure on the right:
- iv. If an INVALID beep is heard, HOME arming is failed.

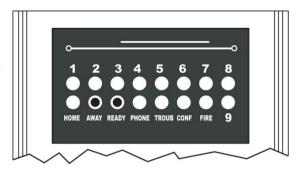


Troubleshooting:

- If READY LED is OFF. One or more monitoring zones is/are triggered, the triggered zone(s) is/are indicated by the corresponding ZONE LED(s) turning ON.
- Ensure the valid 4-digit MASTER/USER access code is entered correctly. If total of invalid access code exceeds the preset maximum of acceptable invalid access code, the keypad will be locked and a continuous beep will be heard. Siren might be triggered and a CMS report will be sent (depends on the system configuration).

D) AWAY arming:

- i. Ensure the system is operating at AWAY mode (refer to B)
- ii. Enter a 4-digits [MASTER/USERS] access code.
- iii. If system is armed successfully, an ACCEPTED beep will be heard, the STATUS LED should be shown like figure on the right:
- iv. If an INVALID beep is heard, AWAY arming is failed.



Troubleshooting:

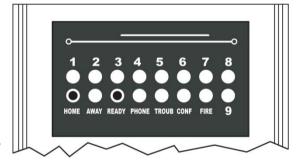
- If READY LED is OFF. One or more monitoring zones is/are triggered, the triggered zone(s) is/are indicated by the corresponding ZONE LED(s) turning ON.
- Ensure a valid 4-digit MASTER/USER access code is entered correctly. If total of invalid access code exceeds the preset maximum of acceptable invalid access code, the keypad will be locked and a continuous beep will be heard. Siren might be triggered and a CMS report will be sent (depends on the system configuration).

E) To disarm system/ turn off siren:

- i. Enter a valid 4-digits [MASTER/USER] access code.
- ii. If system is armed successfully, an ACCEPTED beep will be heard. System will then operate at either HOME/AWAY mode.

F) 1-key HOME arming mode:

- i. Ensure the system is operating at either HOME mode (refer to A) or AWAY mode (refer to B).
- ii. Press and hold the '*' key for 3 seconds.
- iii. If system is armed successfully, an ACCEPTED beep will be heard, the STATUS LED should be shown as the figure on the right:
- iv. If an INVALID beep is heard, HOME arming is failed.

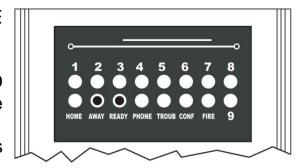


Troubleshooting:

- If READY LED is OFF. One or more monitoring zones is/are triggered, the triggered zone(s) is/are indicated by the corresponding ZONE LED(s) turning ON.
- Ensure the 1-key fast arming function is enabled in system configuration.

G) 1-key AWAY arming mode:

- i. Ensure the system is operating at either HOME mode (refer to A) or AWAY mode (refer to B).
- ii. Press and hold the '#' key for 3 seconds.
- iii. If system is armed successfully, an ACCEPTED beep will be heard, the STATUS LED should be shown like figure on the right:
- iv. If an INVALID beep is heard, AWAY arming is failed.



Troubleshooting:

- If READY LED is OFF. One or more monitoring zones is/are triggered, the triggered zone(s) is/are indicated by the corresponding ZONE LED(s) turning ON.
- Ensure the 1-key fast arming function is enabled in system configuration.

H) 1-key Emergencies alarm triggered:

Fire alarm	Press and hold the FIRE emergency key (or key 7) for 3 seconds.
Medical alarm	Press and hold the MEDICAL emergency key (or key 8) for 3 seconds.
Panic alarm	Press and hold the PANIC — emergency key (or key 9) for 3 seconds.

Tips:

- The emergency key function can be enabled/ disabled in system programming mode.
- The system will trigger the alarm, and may report to CMS and USER via the phone module depending on the system configuration.

2. 1-Key Hold Down Functions

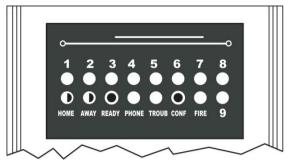
Press the following key and hold down for 3 seconds to access the particular operation mode or to enable/disable some functions:

Key	Functions	Remarks	
0	Acknowledge system	If ACCEPTED beep is heard, system's faults are	
	faults	acknowledged and system's fault beeping is muted	
		provided it is enabled. System's faults LED will	
		remain uncha	nged.
2	Show system's faults	Zone LED	Fault Events
		1	AC Loss
		2	Battery Loss/ Dead
		3	Phone line loss
		4	CMS report failure
		5	Phone module missing/ dead.
		6	Maximum invalid access code
			exceeded
3	Show the previously	Press '*' to view next previously triggered zone(s),	
	triggered zone(s)	system can st	ore up to 5 records.
4	Enable/ disable zone	If ACCEPTED	D been is beard the zone shime is
4	chime	If ACCEPTED beep is heard, the zone chime is enabled.	
	Ciline		beep is heard, the zone chime is
		disabled.	beep is fleata, the zone chime is
		disabiod.	
5	Enable/ disable PGM	If ACCEPTE	D beep is heard, the PGM output is
	output.	disabled.	
		If CANCEL	beep is heard, the PGM output is
	4	enabled.	
	4		
6	Enter walk test mode	Please refer to (8) To perform walk test for more	
		details.	
7	Trigger fire alarm	1	o (1) To Arm/Disarm/Clear Alarm for
8	Trigger medical alarm	more details.	
9	Trigger panic alarm		
*	1-key home arming		
#	1-key away arming		

3. To Add/Delete/Edit MASTER/USER access code

To enter MASTER/USER access code selection mode:

- Press the '#' for several times to back to BASE mode.
- ii. Enter '*' + '4' + 4-digits [MASTER] access code.
- iii. If valid 4-digits [MASTER] access code is entered correctly, an ACCEPTED beep will be heard.
- iv. the STATUS LED should be shown like figure on the right:
- v. Zone LED turning ON indicates the corresponding access code memory is occupied.



A) To edit MASTER access code:

- i. Press '0' to select MASTER access code,
- ii. All LEDs blinking indicate the MASTER access code is occupied,

Tips:

- You can press '*' to clear previous key entry and re-enter the new access code again. A CANCEL beep will be heard.
- Press '#' return back to MASTER/USER access code selection mode.
- iii. Enter the 4-digits new [MASTER] access code, except 9999
- iv. If an ACCEPTED beep is heard, the new access code is being accepted.

Troubleshooting:

- If an INVALID beep is heard, the new access code is already been occupied. Please repeat step (ii) with a different 4-digits [MASTER] access code.
- v. Re-enter the same 4-digits new [MASTER] access code to confirm change of the [MASTER] access code.
- vi. If an ACCEPTED beep is heard, the [MASTER] access code is changed successfully. The system will return to MASTER/USER access code selection mode.

Troubleshooting:

• If an INVALID beep is heard, the access code entered at step (iv) is different from the one entered at step (ii). Please repeat step (ii) with a different 4-digits [MASTER] access code.

Note:

MASTER access code can not be deleted.

B) To add/edit USER access code:

- i. Press '1-8' to select USER access code.
- ii. The blinking ZONE LED indicates the corresponding [USER] access code is selected.

Tips:

- You can press '*' to clear previous key entry and re-enter the new access code again. A CANCEL beep will be heard.
- Press '#' return back to MASTER/USER access code selection mode.
- The 8th User access code can be used as Duress code if the CMS Reporting on Duress code is enable during Installer Programming mode (Programming Address: 89)
- iii. Enter the 4-digits new [USER] access code.
- iv. If an ACCEPTED beep is heard, the new access code is being accepted. Please proceed to step (v).

Troubleshooting:

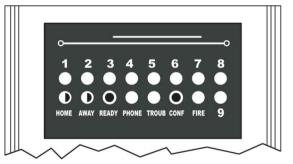
- If an INVALID beep is heard, the new access code is already been occupied. Please repeat step (ii) with a different 4-digits [USER] access code.
- v. Re-enter the same 4-digits new [USER] access code to confirm change of the selected [USER] access code.
- vi. If an ACCEPTED beep is heard, the [USER] access code is changed successfully. The system will return to MASTER/USER access code selection mode.

Troubleshooting:

• If an INVALID beep is heard, the access code entered at step (v) is different from the one entered at step (iii). Please repeat step (ii) with a different 4-digits [MASTER] access code.

C) To delete USER access code:

- i. Press '*' once to enable DELETE user's access code function, the STATUS LED should be shown like figure on the right:
- ii. Press '1-8' to select USER access code. The corresponding ZONE LED will blink.
- iii. Press '*' to confirm deleting the selected USER access code. To cancel deleting the selected USER access code, press '#'.

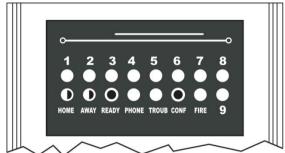


iv. If the selected USER access code is deleted, the corresponding ZONE LED will turn off. An ACCEPTED beep will be heard. The system will return to MASTER/USER access code selection mode.

4. To Add/Delete/Edit User reporting phone no

A) To enter User's Phone number selection mode:

- Press the '#' for several times to back to BASE mode.
- ii. Enter '*' + '5' + 4-digits [MASTER] access code.
- iii. If valid 4-digits [MASTER] access code is entered correctly, an ACCEPTED beep will be heard.
- iv. Zone LED turning ON indicates the corresponding phone memory is occupied, the STATUS LED should be shown like the figure on the right:



B) To add/edit Phone number:

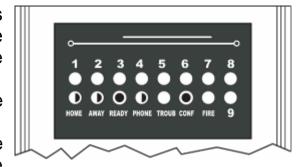
- i. Press '1-4' to select the corresponding phone memory.
- ii. The blinking Zone LED indicates the corresponding phone memory is selected.
- iii. Enter maximum 16-digits phone number.
- iv. Press '#' to complete phone number editing and return to User's Phone number selection mode.

Tips:

- You can press '*' to clear previous key entry and re-enter the new phone number again. A CANCEL beep will be heard.
- The phone digit entered is indicated by the corresponding zone LED turning ON.
- If 16-digit phone number is entered, the system will return to User's Phone number selection mode automatically.

C) To delete Phone number:

- i. In User's Phone number selection mode, press '*' once to enable DELETE user's phone number function, the STATUS LED should be shown like figure on the right:
- ii. Press '1-8' to select phone memory. The corresponding ZONE LED will blink.
- iii. Press '*' to confirm deleting the selected phone number. To cancel deleting the selected phone number, press '#'.



iv. If the selected phone number is deleted, the corresponding ZONE LED will turn off. An ACCEPTED beep will be heard. The system will return to User's Phone number selection mode.

D) To view Phone number:

- i. Press '1-8' to select a phone number memory.
- ii. The blinking ZONE LED indicates the corresponding User's Phone number is selected.
- iii. Press '*' to view the phone number stored in the selected phone memory.
- iv. The phone number is indicated by the corresponding ZONE LED turning ON. The end of phone memory is indicated by the 8 blinking ZONE LEDs (ZONE 1 ZONE 8).

5. To enable/disable zone bypass

To enter zone bypass mode:

- i. Press the '#' several times to back to the BASE mode.
- ii. Enter '*' + '6' + 4-digits [MASTER] access code.
- iii. Press '1-8' to enable/disable bypassing the corresponding zones.
- iv. Press '#' to return to BASE mode.

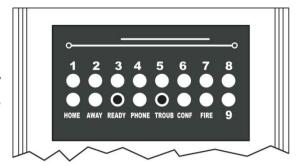
Tips:

- You can press '*' to restore previous setting of bypassed zones.
- The turning ON zone LED indicates that the corresponding zone is bypassed.
- In BASE mode, the blinking ZONE LED indicates the bypassed zone.

6. To view system trouble

To enter system trouble display mode:

- i. Press the '#' to back to BASE mode.
- ii. Press and hold '2' for 3 seconds.
- iii. An ACCEPTED beep will be heard, indicating system has entered the system trouble display mode, the STATUS LED should be shown like figure on the right:



Tips:

- The READY LED will blink if system's error occurs.
- iv. The system problem is indicated by the corresponding ZONE LED turning ON.

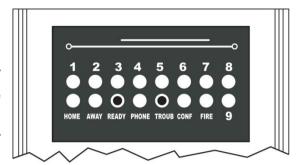
ZONE 1	AC loss.
ZONE 2	Battery loss/ damage.
ZONE 3	Phone line loss.
ZONE 4	CMS reporting fail.
ZONE 5	Phone module loss/ damage.
ZONE 6	Invalid access code exceeds maximum acceptable total.

v. Press '#' to return to BASE mode.

7. To view most recent triggered zone

To enter triggered zone display mode:

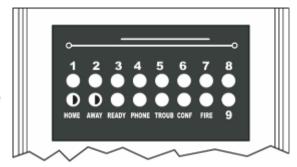
- i. Press the '#' to back to BASE mode.
- ii. Press and hold '3' for 3 seconds.
- iii. An ACCEPTED beep will be heard, indicating system has entered the triggered zone display mode, the STATUS LED should be shown like figure on the right:
- iv. The most recent triggered zone is indicated by the corresponding ZONE LED turning ON.
- v. Press '#' to return to BASE mode.



8. To perform walk test

A) To enter walk test mode:

- i. Press the '#' to back to BASE mode.
- ii. Press and hold 'TEST' for 3 seconds.
- iii. Enter 4-digits [MASTER] access code.
- iv. An ACCEPTED beep will be heard, indicating system has entered the walk test modem, the STATUS LED should be shown like figure on the right:



B) To perform monitoring zone's sensor walk test:

- i. Trigger each monitoring zone sensor.
- ii. An ACCEPTED beep will be heard, and the corresponding ZONE LED will blink. After few seconds, the ZONE LED will stop blinking, indicating the corresponding zone has been tested.

C) To perform siren test:

- i. Press the '0' to enable/ disable siren test.
- ii. The READY LED turns ON indicating the siren test is activated. The siren will be turned ON for 1 second.

Tips:

- Press '#' to return to BASE mode.
- If siren test is enabled, each time a monitoring zone sensor is trigger, the siren will be turned ON for 1 second.

9. Phone Event Reporting and Remote Control

The system is designed to allow user to call in for system status enquiry and also to arm/disarm/bypass the alarm system, and also to report an event to the user, via phone.

A) Setting up

Phone Event Reporting/ System status enquiry

In order to report alarm event to the user or system status enquiry via phone, there are few step of settings have to be done:

- i) Ensure the user's phone number is correctly entered in the system. For details on how to add/delete/edit user reporting phone number, please refer to section 4 of this user manual.
- ii) Ensure the communication setting is configured correctly. For detail on how to setup the user reporting events, please refer to the Installer's Programming manual (Programming Address: 84).

Phone Remote Control

In order to use this function, the phone remote control option has to be enabled in the system configuration during Installer Programming mode (Programming Address: 84).

The user can actually perform remote control on the alarm system via phone whenever the system reports an event to the user or the user can call the alarm system. In order to call in to control the system, ensure that the system is set to answer call automatically after a preset ringing tone. For detail on how to setup the total ring count accepted before the system answer a phone call, please refer to the Installer's Programming Manual (Programming Address: 81).

B) Tones indication

There are 9 types of tone that will be played during the phone event reporting/ system status enquiry process:

Tones	Description	Pattern
Welcome Tone	Continuous incrementing tone, sounds like "do, re, mi, fa, so, la, ti, do," that repeated 3 times	аШ хз
Accept Tone	Four continuous incrementing tone	.iil
Cancel Tone	Two short beeping tone	H
Invalid Tone	One short (higher tune) beeping tone followed by one longer(lower tune) beeping tone	
Emergency Tone	Tone that sounds like ambulance's siren	
A.C. loss Tone	2 very long beeping tones	
Zone status Tone	Represent whether zone is <i>ready or not ready</i> 8 tones will be played during zones status reporting:	
	 i. One tone represent "zone is ready" ii. Two tones represent "zone is open" iii. Three tones represent "Force arming zone is open" Zone 1 will be played first followed by Zone 2, Zone 3 and so on until Zone 8. 	
Zone reporting tone	Represent whether zone is <i>previously triggered</i> or not 8 tones will be played during zones reporting: i. One tone represent "zone is not triggered" ii. Two tones represent "zone is previously triggered" Zone 1 will be played first followed by Zone 2, Zone 3 and so on until Zone 8.	
Zone Triggered Tone	Several short tone(s), where number of tone(s) is the zone number that is <i>most recently triggered</i>	
Arming Status Reporting Tones	Accept tone – System armed. Cancel tone – System disarmed.	

C) The process

- 1. Call answered by system or user
- 2. Welcome Tone played
- User enters access code (master or user code, note that installer access code and factory access code cannot be used in phone event reporting/ system status enquiry process).
- 4. System verify access code:
 - i. If access code invalid:
 - Invalid Tone played
 - User re-enter the access code
 - Maximum acceptable invalid access code reach then call ended by system
 - Maximum acceptable invalid access code IS **NOT** reach then the system verifies access code again
 - ii. If access code valid:
 - If no event occurs, Accept Tone played
 - If event occurs, Emergency Tone, A.C. loss Tone or Zone Triggered Tone played
 - Phone operation MAIN mode entered.

5. MAIN mode:

In **MAIN mode**, user can perform some remote control or status enquiry function:

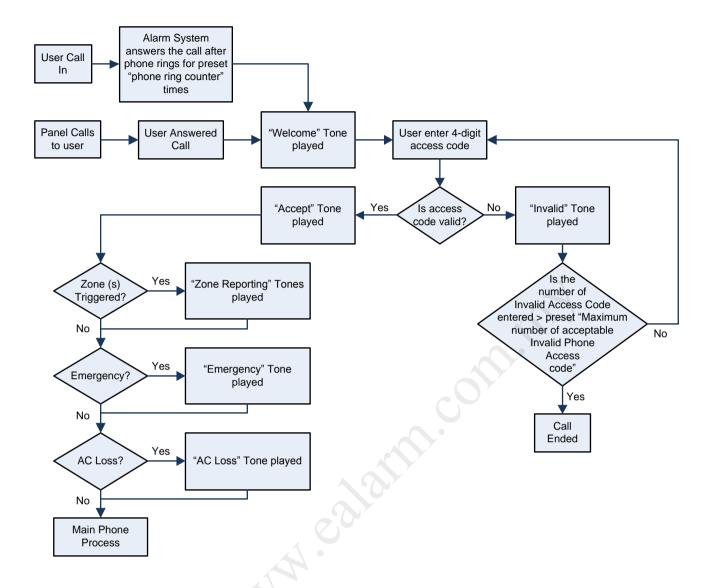
Key	Function	Tone played
1	Arm system *	Accept tone (Music Tone)
2	Disarm system *	Cancel tone (2 Tone)
3	Enquiry current zone status (whether	Zone status Tone
	zone is ready or not ready)	
4	Enter zone bypass mode *	Accept tone
		Music Tone: Bypass
		2 Tone: Un-Bypass
8	Enquiry system arming status	Arming status reporting tones
9	Trigger panic alarm	Accept tone
0	Enquiry currently triggered zones	Zone reporting tones
#	Replay events reporting	Zone Triggered tone, Emergency
		tone or A.C. loss tone

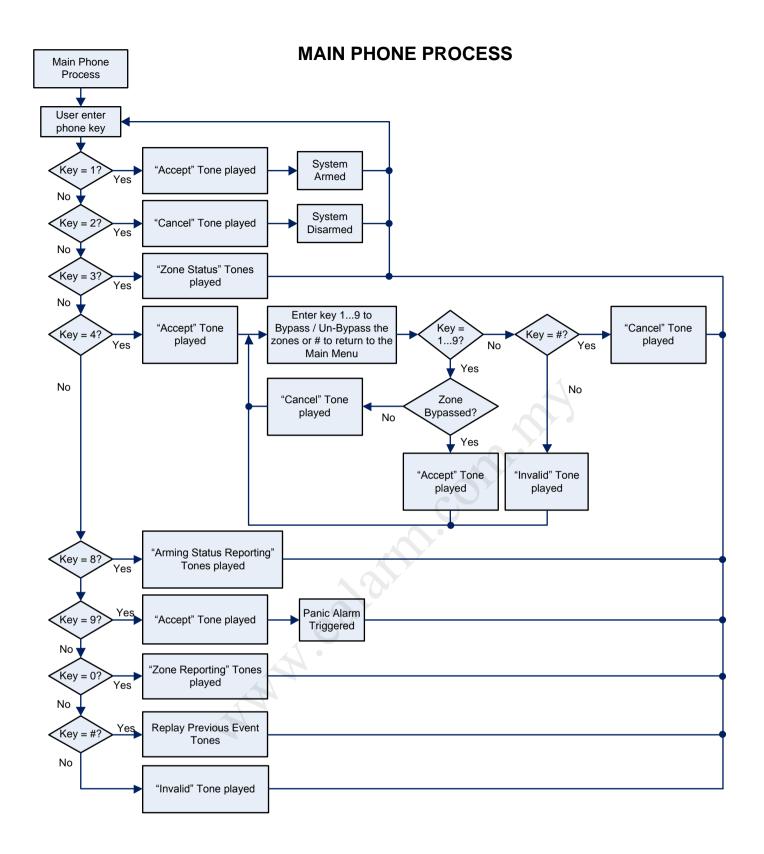
^{*} This option available only if phone remote control is enabled.

6. Zone Bypass Mode:

In **zone bypass mode**, user can press key 1 to key 8 in order to bypass or unbypass zone 1 to zone 8. If zone is bypassed, user will hear the **Accept Tone**; else if zone is un-bypassed, user will hear the **Cancel Tone**. User can return to **MAIN mode** by entering the # key and a **Cancel Tone** will be played.

PHONE EVENT REPORTING PROCESS or USER CALL IN PROCESS





Appendix 1

RANGER ALARM C-8 QUICK USER GUIDE SUMMARY

'#' → returns (to base mode)

While in base mode:

Access code → system arming/ disarming, clearing alarm or turn off siren

- "
 '*' + '3' + 4-digits [MASTER] access code → Reset fire detector power supply /
 Turn off force arming zone PGM output

'*' + '4' + 4-digits [MASTER] access code → Code edit / delete mode

- '*' + '5' + 4-digits [MASTER] access code → Code edit / delete mode

 '*' + '5' + 4-digits [MASTER] access code → Phone number edit mode
- '*' + '6' + 4-digits [MASTER] access code → Zone bypass mode
- '*' (x 3 seconds) \rightarrow 1-key HOME arming
- '#' (x 3 seconds) \rightarrow 1-key AWAY arming
- '0' (x 3 seconds) → Acknowledge system fault (Mute system fault beeping)
- '2' (x 3 seconds) → View system faults

Zone LED	System Fault Events
1	AC Loss
2	Battery Loss/ Dead
3	Phone line loss
4	CMS report failure
5	Phone module missing/ dead.
6	Maximum invalid access code exceeded

- '3' (x 3 seconds) \rightarrow Show previously triggered zone(s),
 - → Press '*' for next previously triggered zone(s)
- '4' (x 3 seconds) → Enable / disable zone chime
- '5' (x 3 seconds) → Enable / disable PGM output
- '6' (x 3 seconds) → Enter walk test mode
- '7' (x 3 seconds) → Trigger fire alarm
- '8' (x 3 seconds) → Trigger medical alarm
- '9' (x 3 seconds) → Trigger panic alarm

Phone operation (main menu, after enter valid access code):

- '1' → Arm system
- '2' → Disarm system
- '3' → View zones' status
- '4' → Zone bypass mode
- '9' → Trigger Panic alarm
- '0' → View previous triggered zone(s)
- '#' → Replay previous event's tone/ most recently triggered zone's tone

Note: press '#' to return to main menu in zone bypass mode

