

SHEPHERD ULTIMATE

Smart Home Security



INSTALLATION MANUAL

<https://www.thecrowgroup.com/>

Table of Contents

The SHEPHERD ULTIMATE™ Architecture	3
Features and Capabilities.....	3
Overview & Communication Capabilities	5
Installing the SHEPHERD™	9
Web Installer Access.....	10
Quick Install Guide	11
Voice Device	14
User Types ,Code, Pendants,Tag.....	20
User Settings.....	20
User Options.....	20
User Type.....	21
Area Assignment	21
Keypad Assignment.....	21
Permissions.....	22
Pendants.....	22
Access Tag.....	23
Areas.....	24
Area Names	24
Settings.....	24
Timers and Delays	24
Zone Assignment.....	25
User Assignment.....	25
Time Zone Assignment.....	26
Signals to Output.....	26
Area account numbers.....	26
Beeps to Keypads	26
Zones.....	27
Zone Status	27
Area Assignment	28
Working Mode	28
Zones Options.....	30
Camera Assignment.....	30
Zone Key switch.....	31
Alarm to Output.....	31
Delays and timers.....	32
Radio Zones.....	33
Zone Configuration –features & options examples:	33
Re-trigger.....	36

Output Type.....	38
Time Zone Assignment.....	38
Timing	40
Add Output.....	40
Alarm to Output.....	41
Chime Alarm Reset By.....	42
Report Channels.....	43
Channel Type	43
Settings.....	44
Area account numbers.....	45
Reporting Options	45
Keypads.....	47
Radio Keypads.....	47
SH-KP Icon Keypad Overview.....	47
Settings.....	48
Area Assignment	49
Communication	50
Remote Access.....	50
Communication Options	50
TCP/IP.....	51
GSM	52
Wi-Fi.....	52
DECT.....	53
RF.....	54
Miscellaneous.....	56
Chime Control.....	56
User Options.....	56
Miscellaneous.....	57
Panel Options.....	57
Voice device (DECT Device).....	60
Overview	61
Control	62
Log	62
...More.....	62
Disconnect.....	63
CrowCloud™ Web Services	63
Mobile Applications.....	68
Appendix 1: Installer Event log messages.....	69

The SHEPHERD™ Architecture

Features and Capabilities

Up To 64 Users	User Codes, and/or pendants, and/or Tags
Up to 128 2 Way Wireless Zones	Up to 64 Zones in Total, ISM (RF) , Extender ISM (RF) or/and DECT zones Working modes options (normal, 24H, Chime, Zone is a key switch...) Remotely zone configuration Zone supervision Zone is assigned to Cameras ...and more
Up to 32 Two Way Wireless Outputs	Up to 64 in Total, ISM (RF) ,ISM Extender or/and DECT outputs
Up to 4 Partitions (areas)	With Area Name customization
Alarm Detection devices	PIR, CRT, EDS3000AM, Magnet Contact, Glass break detector, Smoke detector, MAG&Shock, AQ, and many more...see CROW web site for more devices types
Visual verification	Up to 16 indoor or outdoor PIRCAM or mix of both detectors in total
Audio verification	SH-AVM is an indoor audio verification module, originating emergency end to end user phone calls
Home Comfort devices	ACP Smart Plug, SH-AVM
Safety Devices	Smoke ,Flood, Air Quality , Temperature and Humidity detectors
Signaling Devices	Indoor and Outdoor sirens
Communication	GSM/GPRS/4G support VoLTE Ethernet Wi-Fi SMS messages and SMS Control Commands GSM calls for SH-AVM module full duplex calls
GSM Modem	Model :L610-EU (FIBOCOM) LTE Cat1 LTE Bands supported: B1/B3/B7/B8/B20/B28 Fall Back: 2G (900/1800MHz)
USB-C connector	For Factory use Only
Up To 8 report channels	TCP/IP channel Wi-Fi channel GSM/GPRS /4G channel Backup function between communication report channels SMS Full Duplex voice calls on panic event or originating calls (with DECT Voice devices)

Multi-protocol support to CMS	CROW - (CROW receiver server SW installation required on the CMS side) SIA DC09 – SIA DCS SIA-09 (ADM-CID) SIA Null – event time control programmable reporting options
Log Events	+2000 events
Up To 32 Time Zones	Time zone for Area - Arm/Disarm Time zone for an output Time zone for user
Cloud and Mobile Services	Admin Management ,Web installer page, personal page, End User Mobile App on Android and iOS
Remote Programming	Via Web browser interface

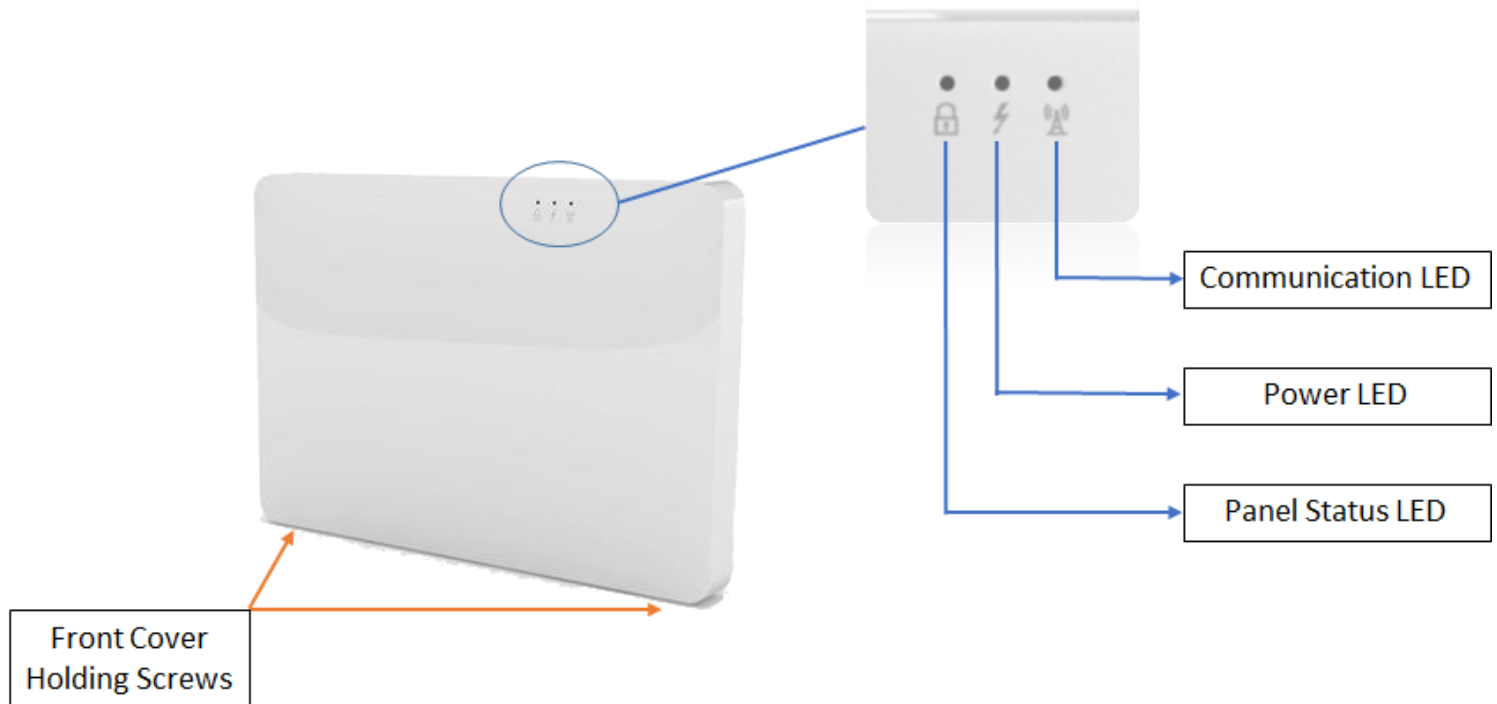
Communication Protocol	Freewave2™ Two Way ISM GFSK with 5 frequencies & LBT DECT ULE
Advanced RF module	based on Chip EFR32FG23
Frequency Bands (MHz)	868MHz or 916MHz
Operating Range	Up to 800 meters open space
Installer and User Codes	1 Installer code 20 End Users
Arming Modes	Total, Stay, Latchkey, Duress, Bypass

ELECTRICAL	
Power Input	230VAC 0.4A, 50Hz
Power Supply Type	Internal AC/DC Adaptor 6V/2A
Low Battery Threshold	3.6V (±0.1V) DC
Backup Battery Type	Battery Pack 3.7V/2600mAh or 3.7V/4400mAh 3.7V/6000mAh
Time to Charge	Less than 24 hours
Battery Autonomy	1 single battery More than 12 Hours (w/o DECT active)
Battery Charge Max current	Approx. 500mA
Current Consumption	Average: 120mA (with DECT active 230mA)

PHYSICAL PROPERTIES	
Dimensions	233.8 x 165.8 x 31.6 mm
Weight	1.40Kg with battery
Operating Temperature Range	-10° C to 55 °C
Storage Temperature Range	-20 °C to 60 °C

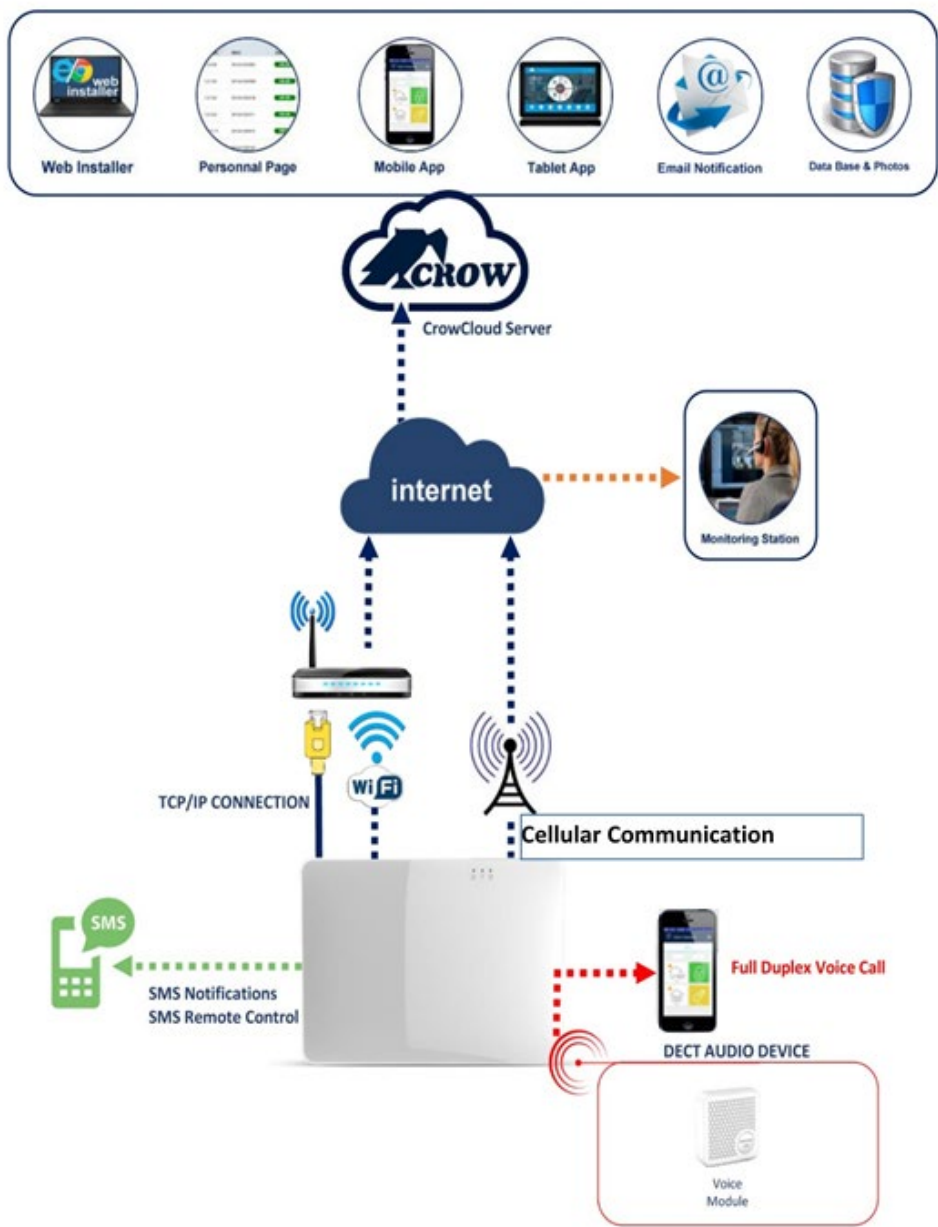
- Security Grade2, Environmental Class II
- Power supply Type A
- ATS category DP3

Front View



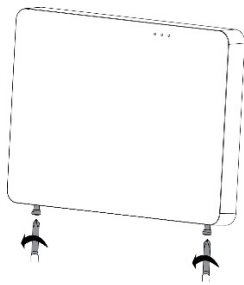
Led Indications

SYSTEM STATUS	LED INDICATION		
System is armed	RED	-	-
System is in Arm process	RED Blink	-	-
Burglary Alarm	RED Blink		
Panic Alarm	Led state no change	-	
System is disarmed and Ready to Arm	Green	-	-
System is disarmed and NOT Ready to Arm	LED Off	-	-
Main power and Back up Battery are OK	-	Green Blink	-
Battery missing OR Battery in charge mode	-	Green / RED Blink	-
AC fail – system working on back up battery Mode	-	RED Blink	-
System working with main communication method (Ethernet)	-	-	Green Blink
System working with backup communication method (WIFI or GSM)	-	-	Green / RED Blink
No communication method	-	-	LED Off
Remote configuration connection	-	-	Green
WPS mode	Green Blink	Green Blink	Green Blink



Installing the SHEPHERD PLUS™

Note: Be sure that the control panel is mounted near a socket outlet that is easily accessible. The socket outlet for the power supply of the control panel should have its own fuse circuit

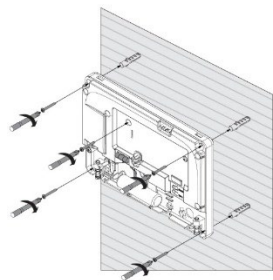


Use Philips screwdriver to unscrew the 2 holding screws located at the bottom of the panel

The screws are handling by a hidden spring. They cannot be totally removed



Remove the front cover of the panel by tilt it outside

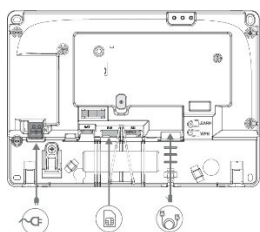


Place the unit on the wall

Use the water level indicator to position it straight on the wall

Mark the holding holes on the wall and drill the wall

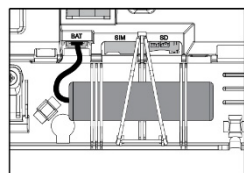
Mount the unit on the wall with screws



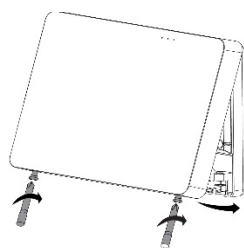
Ethernet – Connect the Ethernet cable to a router or an internet outlet

GSM – Insert micro-SIM card into the SIM card slot

AC – Plug into a power outlet



Connect the backup battery



Insert back the front cover by tilting it inside

Close the 2 holding screws

Overview

Note! : Find all Parameters Definitions in **Program Definitions description** chapter in this manual

Web Installer Access

Web installer Access link: <https://installer.crowcloud.com> – Installer should use this link to login into system and to be able to manage, program and control the system.

Ensure that you have an installer account prior any installation (if not, please ask for it from your Distributor).

After mounting the control panel, connect it to the AC power and to the internet via the Ethernet cable plugged into the router. Verify communication led is flashing in green color. Panel uses its MAC Address to communicate to the Crowcloud™, so any search or connect based on panel's MAC Address or name.

Important Note: Do not use the same account details for Installer and for End user account, accounts must be different.

The installer must verify with his distributor whether he has been assigned to a subgroup of panels or the distributor has a registration code to use the option of take ownership of certain panels he has purchased from the distributor

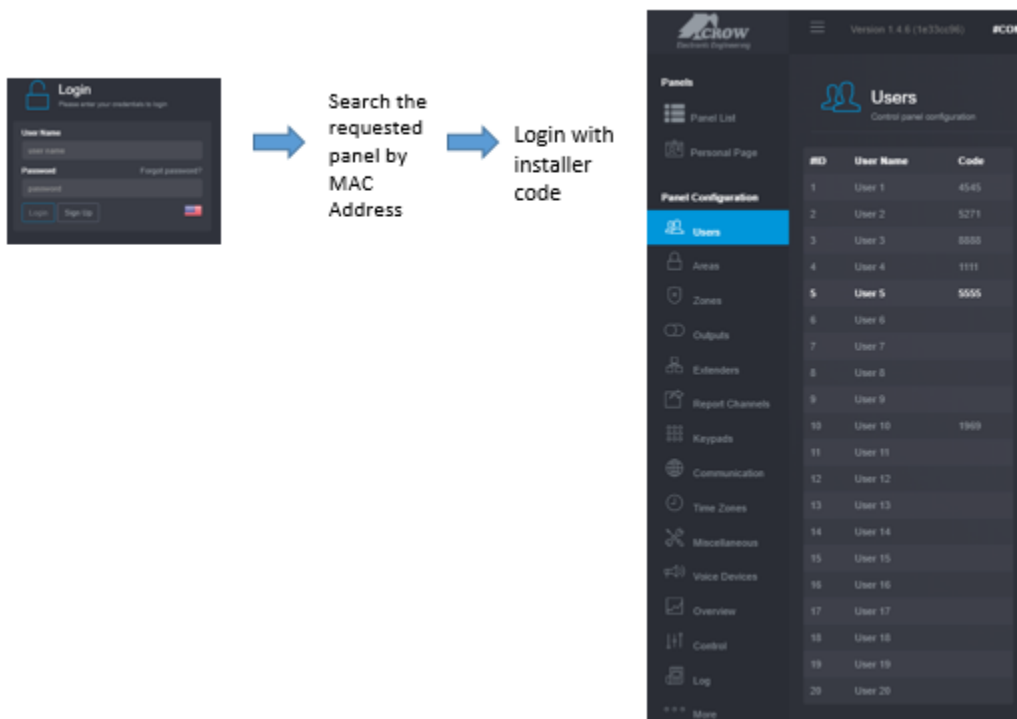
Installer opens account with registration code option: <https://installer.crowcloud.com> and uses the “Sign up” button to open new installer account with registration code (installer must obtain the registration code from his distributor)

The panel by default automatically connect and register on the CrowCloud™.

The configuration of the SHEPHERD PLUS™ panel has to be performed through the web installer interface.

This part of the CrowCloud™ allows access to an online full configuration interface of the SHEPHERD PLUS™ control panel.

The below screenshot shows an example of web page screen:



Quick Install Guide

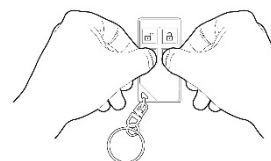
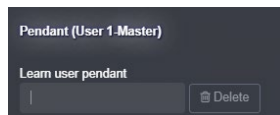
Enter the installer code (by default the code is 000000).

For security reasons, it is highly recommended to change the installer code. Go to "Miscellaneous", change the installer code in Panel Options, and submit.

Users codes and names

SHEPHERD PLUS™ panel can manage up to 20 users, click on User to change its code and set the options if required.

Learn remote pendant by inserting its unique ID number and submit configuration.



Note: to activate pendants, press and hold the two lower buttons of the remote control device.

Remote led shows green light on the end of learning successfully.

Areas Names

SHEPHERD PLUS™ panel offers up to 4 areas (partitions), select the Area # to program and see all options.

Zones

SHEPHERD PLUS panels offers up to 64 wireless zones (ISM/Extender ISM or DECT ULE), click on required zone # to display its options.

- Click on ADD zone button, select the link type ISM for RF devices, Insert unique ID number of the device, device type selected automatically or can be select manually. (NOTE: there is special section that shows how to pair DECT devices in the next para.)
- Set up working mode of the zone (Stay mode, 24-hour...) and more options if required.
- Find installation and learning instructions for each device stored in the CROW website section support and download
- Save configuration by clicking on the save configuration button.

Note: DECT Devices

The pairing of DECT ULE device must be preliminarily pairing performed from "Communication" → "DECT" → "Learn DECT Device". (NOTE: ensure DECT is enabled)

When the DECT device pairing is done, then you can go to Zones level and assign the paired DECT device ID to a zone between zones 1 to 64. Chose link type "DECT" and then assign to a Zone.

Click save configuration button to save changes and activate learned zones.

Outputs

SHEPHERD PLUS™ panel offers up to 32 wireless outputs (ISM/ISM Extender and/or DECT ULE e.g. Siren or ACP smart plug), click on required output to display its options.

ADD Output, select link type "ISM", Insert unique ID number of the device, select device type and give it a name.

- Find installation and learning instructions for each device stored in the CROW website section support and download.

Note:

The pairing of DECT ULE device must be paired first from "Communication" → "DECT" → "Learn DECT Device". When the DECT device pairing is completed, then you have to go to "Outputs" and assign the DECT ID to an output.

Report Channels

SHEPHERD PLUS™ panel offers 5 report channels types for events communication, and up to 8 report channels, channel #8 is dedicated channel for cloud (cannot be modified), select 1-7 report channel # to display its options.

Set the channel according to: 1. Channel Type 2. Settings 3. Protocol type 4. Port no. 5. Area account code 6. Report options.

Select channel type as follow:

TCP / IP	Set channel type as TCP/IP. Need to set Ethernet enabled to use this type of channel
Wi-Fi	Set channel type as Wi-Fi. Need to set Wi-Fi enabled to use this type of channel
GSM IP	Set channel type as GPRS 4G . Need to set 4G IP enabled to use this type of channel in setting "Communication" → "GSM" (see below in para "Communication")
GSM (SMS +Voice)	Set channel type as SMS Text Messages (Note: GSM Voice for panic event + AVM module only)
VOICE	Set channel type as VOICE (when using AVM module for event announcements)

NOTE: The TCP/IP, GSM IP and GSM SMS channels are enabled by default.

Keypads

Up to 4 Keypads per system, select Keypad # and start to program by Add Keypad button, select Link type "ISM", insert Keypad ID # (serial number), and select Device type, save configuration.

- Find installation and learning instructions for each device stored in the CROW website section support and download.

Communication

Default remote access password is "12345678", it is recommended to modify the password.

Activate communication paths configured in "Report Channels".

TCP/IP:

By default, the DHCP is active; the router will assign an internal IP to the SHEPHERD PLUS™. You can assign a dedicated IP address to the panel by filling its static IP, Subnet mask and its Gateway (address of the router).

GSM IP:

This option activates the GPRS-4G . Fill in the APN of your provider.

GSM SMS:

This option activates SMS features if selected in "Report Channels".

Wi-Fi:

The SHEPHERD PLUS™ panel can connect to the router in Wi-Fi mode.

Fill in the network SSID (name of the wireless network), Security type and network password.

DECT:

Pairing of DECT devices in communication->DECT level and go to "Zones" or "Outputs" to assign paired devices.

RF Repeater:

The SHEPHERD PLUS™ panel can support wireless repeaters. Follow the repeater instructions for learning Repeater device.

RF

In case of jamming, you can adjust manually the RF Channel frequency range from 1 to 5.

Miscellaneous

There are panel options such as:

Installer code

Duress digit

License time

Timers and Delays

User Options

Chime Control

!!!! Find descriptions of above options and program parameters in Program Definitions Description chapter in this manual.

Audio Verification Module

SH-AVM is an indoor audio verification module. Upon transmission of an alarm signal, the SH-AVM provides remotely controlled and full duplex functionality between a central station operator and the occupants of the premises. Receiving audio verification simultaneously with the alarm signal allows the CMS to prioritize and verify alarms before acting, making the SH-AVM the ideal solution to false dispatching and unverified alarm problems. Up to 5 modules can easily be installed in any convenient location in your home.

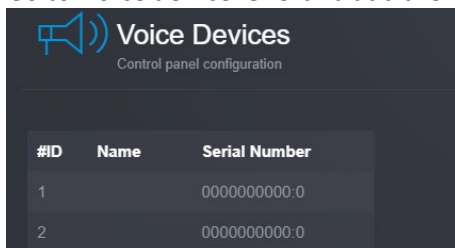
NOTE: make sure your system is equipped with working GSM SIM card.

VOICE DEVICE

The SH-AVM is a DECT module; therefore, AVM module must be paired first in communication level -> Learn DECT device,

How to pair the voice device module:

1. Ensure to charge the AVM battery first (USB charger)
2. Go to communication level → Go to DECT sub level, press on the learn DECT device button, and press the pairing button of the voice device located in the back side of the voice device and the dial green led in the front should be flashing while the system is running the learning process. Verify in the web installer screen that shows stage 1 and stage 2 finished and completed and successfully learned message.
3. Next step, assign the pairing voice device to selected voice device # (1 to 5) by Add Voice device button.
4. Go to Voice device level and add the new voice device



5. Insert from 1 to 16 Outgoing Destination numbers for Panic call event in Communication -> Alarm Phone.

Alarm Phone

Outgoing phone numbers

#ID	Contact number	Area 1	Area 2	Area 3	Area 4
1	<input type="text"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	<input type="text"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- Insert Phone destination number to make a call by pressing the dial button, USER->select user #-> phone.(see below picture.)

Control panel configuration

#ID	User Name	Code
1	User 1-Master	1234
2	User 2-A1	2222
3	User 3-A2	3333
4	User 4-A3	4444
5	User 5-A4	5555
6	User 6	
7	User 7	

Advanced Configuration (User 1-Master)

Name

Code

Phone

- Save configuration

Call Scenarios:

1. Pressing voice device's Panic button, panel generates GSM call to any predefined destination number
2. Pressing the Voice device's Dial button, panel generates GSM call to any predefined destination number
3. Call Disconnect Button
4. End user can Call the control panel and the call can be answered in the Voice device by pressing the dial button (no.4)

Reminder Note: Do not forget to insert SIMcard to support voice calls

Overview

This level displays general information such as device state, device type, RSSI, battery level, Zones, Users, Outputs information. Battery and RSSI level statistics per hour, day, week and more.

Diagnostic sub level shows the relevant and current panel communication type is online. Information on Ethernet, GSM, panel Radio Frequency, Wi-Fi details.

In Addition, there is a walk test tool, which helps installer to test the system, verify all works properly before leaving the site.





- Battery Status
- Ethernet network status with internal connection status.
- Wi-Fi connection status and details
- GSM and GPRS/4G status with RSSI level
- ISM 2-Way Wireless Radio information

Walk Test

Click on "Start Walk Test" to start the test. Check Zones connection status, device type and RSSI signal of each ISM detectors.

By cross walking through all of the detectors connected to the system and activating them, the associated zone will latch up to allow verification that all zones are commutating properly with control panel.





The results of the walk-test displayed on the screen to verify which detectors triggered during walk-test mode

#ID	Name	Serial	State	Type	RSSI	R	Check	Active
9	 Zone 9	2805367	Open	Magnet & Vibration sensor		No		

Press "Exit & Stop Walk Test" button, the walk-test mode will be terminated

Screenshots below, describes triggering detector while system is in walk test mode,

Note: the communication panel led shows orange color while the system is in walk test mode.

#ID	Name	Serial	State	Type	RSSI	R	Check	Active
9	 Zone 9	2805367	Open	Magnet & Vibration sensor		No		

Control

This is a level for installer testing the system that allows the system be ARM, DISARM or STAY ARM for each AREA.

More... ---

More level displays information such as Panel MAC address, Status, version, Panel's IP address, last connection, Time Zone, country, there is ability of:

Backup configuration

Panel upgrade (from cloud or local file)

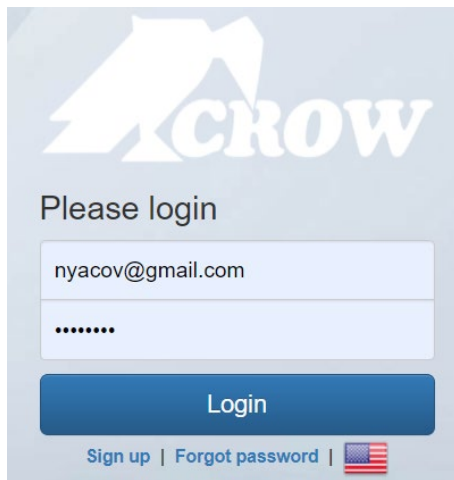
Creating default file configuration (installer can create his own default configuration)

Apply default configuration

Link to personal page

Restart panel

End User Personal Web Page ---



The next step after installation is done End user should run the next link <http://Crowcloud.com> and proceed with the user registration to your SHEPHERD PLUS™ panel.


The Crow Cloud personal user webpage allows the end user direct access to all of his own registered control panels and:

- Monitor and Control panel and connected devices
- Browse alarm pictures and request for immediate take picture
- Get panel connection info
- Manage cloud users
- And more...

If you already have an account, insert your account details and login, or create a new user account by clicking "Sign Up"

Creating End User Account steps:

1. Press on the [Sign up](#) button
2. Fill in End user account details (use relevant email address)
3. The password must be alphanumeric and at least 8 characters



Create Account

Login (Email)

First Name

Last name

Type password

☐ Show password

Retype password

☐ Show password

Submit

[Login](#)

4. Submit
5. Run the link www.crowcloud.com again
6. Login with new account details
7. Press on the Add panel to Account button and associate the new account with the end user panel's MAC Address.
8. Remote access password must be modify from default , please ask your installer to modify it first
9. The user code is by default 1234, recommended to change it.
10. Press on the next button

Add panel to account

MAC address	<input type="text" value="_ _ _ _ _"/>
Panel Name	<input type="text" value="Name"/>
Remote access password	<input type="text" value="Remote access password"/>
User code	<input type="text" value="User code"/>

Next

Mobile Applications

Smartphone iOS and Android



Install the Crow Pro application
on your smartphone
(iOS / Android)

Whether you are at home, at work, on a business trip, or on vacation, The Crow Pro™ application provides you the easiest way to monitor and control your SHEPHERD PLUS™ :.

- Switch between linked panels (home, office...)
- Control panel state (Arm, Disarm...)
- Check latest events
- See and Operate on active Outputs (Activate/Deactivate)
- See and Operate Zones (Activate/Deactivate Bypass)
- Take picture from connected Pircam(s)
- View stored pictures and Share them (via mail, message...)
- Access to Panel & Users Info

Preliminary Important Note:

Configuration changes will take effect only when you will send the updated configuration to the control panel.

We highly recommend saving your latest configuration before each update.

Program Definitions description

User Types ,Code, Pendants,Tag

Click on the user to display its available options.

User Settings

Parameter	Description	Default Configuration
User Name	Enter name of user up to 16 characters	User #
User Code	Enter user code (4-8 digits)	Code 1 defaults to 1234. This means that User 1 automatically gets the code 1234
Phone	Enter user's Phone number (creating full duplex call by pressing the call button of Voice Device)	Empty

User Options

Parameter	Description	Default Configuration
Usercode can arm	User can arm all areas that assigned to user	Enable
Usercode can arm stay	User can arm Stay Mode for all areas that assigned to user	Disable
Usercode can disarm	User can disarm all areas that assigned to user	Enable
Usercode can disarm stay	User can disarm Stay Mode for all areas that assigned to user	Enable
Security Guard User	User can arm all areas that assigned to user, but may only disarm if the panel is currently armed and in the alarm state	Disable
Latchkey Mode User	The User will arm the alarm in Latchkey Mode. If a user with this option on disarms the alarm no disarm report will be sent via the dialer. If LatchkeyMode is armed and a user with this option off disarms the alarm a disarm report will be sent to alert parents when their children have returned home. Reporting of Latchkey Disarm is enabled at Reporting Options.	Disable
Code required after access tag	After presenting access tag user has to enter a valid user code	Disable
User Emergency Alarm	When this option is checked / activated, the panic event is replaced by an emergency event and also the CID to the monitoring station alarm is different	CID 101

User Type

Parameter	Description	Default Configuration
Keypad User	Users assigned to keypads; User Codes used to Arm/Disarm all or part of the alarm system.	Disable
Pendant User	Radio keys can be used to Arm/Disarm all or part of the alarm or they can operate outputs directly', Unlike user codes, a radio key cannot be assigned to a keypad so if a radio key is assigned to more than one output and the radio key is operated, all of the outputs assigned to the radio key will turn on	Disable
Access Tag User	Access Tag can be used to Arm/Disarm all or part of the alarm or it can be used to operate outputs for access control purposes	Disable
Remote Control User	This option defines user rights for remote control of the control panel.	Disable User 1 is enable by default

Area Assignment

Parameter	Description	Default Configuration
User Assigned To Area	Codes uses to Arm/Disarm all or part of the alarm system or they use to operate outputs for access control purposes.	All users assigned to Area 1

Keypad Assignment

Parameter	Description	Default Configuration
User can operate at keypad	Any user assigned to operate at certain Keypads. This option controls a code that can Arm/Disarm from certain keypads.	

Time Zone Assignment

Parameter	Description	Default Configuration
User Controlled by Time Zone	When the user controlled by time zone, the keypad code and pendant are not active, when the time zone is not started or finished. Only when the time zone started, the user can perform actions in the system in accordance with its rights as defined by configuration.	Not assigned

Handset Assignment

Parameter	Description	Default Configuration
User assignment to handset	The device refers to the SH-fall device, this feature used to associate handset to a user, the system supports up to 4 devices, and each of the devices is associated with one user only. When activating an example panic from SH-Fall, the system creates an event that contains the user name ID.	Disable

Permissions

Parameter	Description	Default Configuration
User can change his code and name	The user can change his code number and name	Enable for all users
User can change all codes and names	They user can change code number and name for all users.	Disabled

Pendants

Parameter	Description	Default Configuration
Learn user pendant	Enter the unique serial ID of the pendant (remote control) or Panic watch device and save configuration	Empty
Delete user pendant	Delete existing pendant from memory Delete user pendant and send configuration to panel	-
Pendant can disarm at alarm only	If this option is enable, the pendant can disarm the alarm during alarm only. If this option is off, the pendant cannot disarm the panel in any state.	Disable

Pendant can disarm at entry delay only	If this option is on, the pendant can only disarm the alarm during the entry delay time. This means that authorized radio key users must enter the building and trigger the entry delay before the can disarm the alarm.	Disable
On pendant panic alarm call voice	A feature must enabled in the check box if we want a two-way voice call in the event of a panic, for instance, from a panic watch device. in order to establish a two-way voice call, we must ensure at least one voice device is set up in the system. So that the call will establish between the voice device and the destination end user's phone.	disable
Pendant Panic , Fire, Medical Alarm to Outputs	A Pendant Panic, Fire, Medical Alarm can be assigned to an Output or multiple Outputs. This can be used to operate an audible or visual alarm connected to the Output	No Outputs selected

Access Tag

Parameter	Description	Default Configuration
Learn user tag	The access Tag must enrolled into the panel before it can used, learn done by RFID point in the keypad, please ensure that this user already has a code otherwise, the RFID will not function normally.	
Delete user tag	Delete a tag done from web installer page by delete button.	
Access tag can arm	If this option is on, access tag can arm area assigned to user	Enable
Access tag can disarm	If this option is on, access tag can disarm area assigned to user	Enable
Access tag can Turn On/Off Output	Access Tag can be assign to an Output or multiple Outputs. This can be used to operate an audible or visual alarm connected to the Output	No Outputs selected

Areas

Click on an Area to display its available options.

Area Names

Parameter	Description	Default Configuration
Area Name	Enter name to identify the Area	Area #

Settings

Parameter	Description	Default Configuration
Report Arm at the end of Exit Delay	If this option is on the panel will report the Arm/Stay Arm signal to a monitoring station when the exit delay expires. If it is off, the panel will report the arm signal immediately the system has been armed	Not Selected
Use near and verified alarm to report	To reduce the possibility of false alarms the panel can require two alarms on different zones within a 45 minutes period before a full alarm is sent. If this option is turned ON it applies to all zones assigned to that area. An alarm on a single zone will send a Near Alarm report to the monitoring station. If no further alarms occur within 45 minutes, the near alarm timer is reset and a restore is sent for the zone that activated. If the zone that activated is still in alarm when the 45 minutes timer expires, a zone bypass for that zone is sent and the zone will remain bypassed until the area is disarmed. Any new alarms after the timer has expired will send another Near Alarm report. If a second alarm on a different zone occurs within 45 minutes of the Near alarm, an Intrusion Verified alarm report will be sent. This format only applies to Contact ID and Pager reporting. Turning this option on will stop zone alarms from being reported in Domestic & Voice formats as there are no messages for near and confirmed alarms. You must turn this option off if using Domestic or Voice formats	Not Selected
Fail to arm if exit zone still open	If this option is turned ON it doesn't give to arm or stay arm the area if one of the low security zones or exit delay zones still open after exit delay expired. This option not valid for automatic arm by time zone.	Not Selected

Timers and Delays

Parameter	Description	Default Configuration
Area Exit Delay Time (sec)	Each Area can have its own exit delay time. The delay can be programmed from 1-255 seconds in one second increments. If the exit delay is set to '0' the panel will be instantly armed.	60 seconds
Area exit stay delay time (sec)	Each Stay Mode Area can have their own exit delay time. The delay can be programmed from 1-255 seconds in one second increments. If the exit delay is set to '0' the panel will be instantly armed.	60 seconds

Area delinquency delay time (days)	<p>Each Area can have their own Delinquency time. The delinquency time monitors the arm/disarms of each Area. If an Area has not been armed within the set number of days a delinquency report will be sent.</p> <p>Each time an Area is armed the delinquency timer is reset. A value of '0' disables the delinquency monitoring.</p> <p>NOTE: If the default value of '0' is changed at this location (e.g. a value of 10 is entered meaning 10 days), the next time the area is armed a delinquency restore message will be sent via the dialer as a test that the function is operating</p>	0 second (immediate)
Area inactive time (Min.)	Each Area can have own inactive time. The inactive time monitors a lack of activity for each Area at disarm. If an Area has not been, activate within the set number of minutes an inactive zone report will be sent. Each time an Area is activated the inactive timer is reset. A value of '0' disables the inactive monitoring	0
Area alarm restore time (Min.)	The feature it is dedicated to auto reset for Panic, Fire and Medical alarms events, In case there is no KP installed in the system. This is the time (in minutes) that all those events will be restored, <<0>> means that user must use Manually to restore the alarm whether is with a code or pendant or from mobile App. <<X>> minutes means that the alarm will be restored after <<X>> minutes.	0

Zone Assignment

Parameter	Description	Default Configuration
Assigned Zones	<p>This option assigns Zone(s) to Area.</p> <p>If a Zone is assigned only to one area it will activate if specified area is armed. If zone assigned to more than one area it will activate only when all assigned areas are armed. By default all zones assigned to Area 1.</p>	<p>All zones assigned to Area 1</p> <p>Areas 2, 3 and 4 not selected</p>

User Assignment

Parameter	Description	Default Configuration
User Assignment	<p>This option assigns Users to Areas.</p> <p>If Users have this option activated, they can Arm/Disarm all zones assigned to Area</p>	<p>All Users assigned to Area 1</p> <p>Areas 2, 3 and 4 not selected</p>

Time Zone Assignment

Parameter	Description	Default Configuration
Time Zones	If area assigned to time-zone it will automatically armed when time-zone starts and disarmed when finished. You can assign more than one time-zone to each area. If assigning multiple time-zones you should insure that they do not overlap as this could cause confusion	

Signals to Output

Parameter	Description	Default Configuration
Arm Area Indication to Outputs	For monitoring purposes, an Arm indication can be assigned to an Output. It could be used to start a video recorder or similar device. Each Area can have a separate arm indication assigned to a different output if required	No Outputs selected
Stay Arm Area Indication to Outputs	For monitoring purposes, a Stay Arm indication can be assigned to an Output. Each Area can have a separate indication assigned to a different output if required	No Outputs selected
Disarm Area Indication to Outputs	For monitoring purposes, a Disarm indication can be assigned to an Output. Each Area can have a separate disarm indication assigned to a different output if required	No Outputs selected

Area account numbers

Parameter	Description	Default Configuration
Area Account numbers	When system sends a report to a monitoring station there must be a unique account number programmed in report channels from 1-7 to identify the panel. There is an account code for each area. The account code is 4 digits. Each digit can be a number from 0-9 as well as the special characters B, C, D, E & F. For SMS report channels no need to define the account number.	All account in report channels from 1-7 are set "0" except the channel #8 with account "8000" for CrowCloud™ connection

Beeps to Keypads

Parameter	Description	Default Configuration
Area Armed Exit Delay Beeps to Keypad	This option is using for monitoring purposes of exit delay at arming by keypad beeping. If the option marked for specified area corresponded keypad will start beeps during time of arm exit delay, but no longer than given by buzzer reset time.	Enable for all keypads
Area Stay Armed Exit Delay Beeps to Keypad	This option is using for monitoring purposes of exit delay at stay arming by keypad beeping. If the option marked for specified area corresponded keypad will start beeps during time of stay arm exit delay, but no longer than given by buzzer reset time.	Disable

Zones

The SHEPHERD PLUS™ Panel supports up to 64 wireless zones: ISM zones and/or DECT Zones

We invite you to visit our website <http://www.thecrowgroup.com> for more information on our Two-Way wireless ISM and DECT detectors range.

To configure Zones, click on the zone to display its related options.

Parameter	Description	Default Configuration
Name	Enter zone name	
Add Zone	This option used for enrolling new device RF , DECT or Extender and assign it to a zone and setting the device's configuration	

Zone Status

Parameter	Description	Default Configuration
Zone is active	Activate or deactivate the zone, The panel will monitor the zone.	zone is activated automatically right after enrolling and learn a new device
Stay mode zone	Zone will cause alarm if triggered when Stay Mode is armed. This feature is normally used for arming just part of the alarm at night time.	All zones selected
Is Two trigger zone	If this option is ON the zone will have to trigger twice within the two trigger time before it will cause an alarm. If the zone does not trigger a second time before the two trigger time expires, the count is reset and it will take another two triggers to cause an alarm on this zone. If more than one zone is set-up as a two trigger zone, then a single trigger from two separate zones within the two trigger time can also cause an alarm. If the zone becomes faulty and still open once triggered at end of two trigger time period it will also cause an alarm.	No Zone selected
Exit delay zone	Zone should be closed for ready to arm. It will not cause an instant alarm if triggered during the exit delay time.	All zones selected
Can Arm if Zone is not Ready	Zone can remain open during arming and will cause alarm in case it will remain open after the exit delay expired. This zone is named "Low Security Zone".	No Zone selected

Outdoor Zone	A special feature for detectors that installed outside the premises, which mainly indicates to the control Monitoring center that the alert came from an external and not internal detector, such as the code according to the CMS. Zone will send Outdoor alarm (1136) in instead alarm (1130)	disable
Handover zone	A Handover Zone is one that its entry delay will apply provided a Non-Handover entry zone is triggered first. If no other entry delay zones are triggered before the handover zone the entry delay on that zone does not apply and the alarm will become instant (no entry delay)	No Zone selected
Manually bypassed zone	Zone can be manually bypassed while in the disarmed state. Once the area with the bypassed zone has been armed and then disarmed, the manual bypass is canceled and the zone must be manually bypassed again before arming if required.	All zones selected
Auto bypassed zone	Zone will be auto-bypassed if unsealed at the expiry of the exit delay. If a zone is unsealed at the time of arming and remains unsealed when the exit delay expires and this option is on for that zone it will be automatically bypassed by the panel. If the zone seals after that time it will be re-instated automatically and can then cause an alarm. On disarming of the alarm any auto-Bypasses are removed	No Zone selected
Disable Zone Tamper	If this option is turned ON then the zone tamper will be disabled, opening or removing the zone from the wall will not cause to tamper alarm on panel.	No Zone selected

Area Assignment

Parameter	Description	Default Configuration
Zone assigned to Areas	This option assigns the Zone to Area. If a Zone is assigned only to one area, it will activate if specified area is armed. If zone assigned to more than one area, it will activate only when all assigned areas are armed. By default all zones assigned to Area 1.	All Zones assigned to Area 1 only.

Working Mode

Parameter	Description	Default Configuration
Normal	Zone without any special behavior.	All zones selected
24-hour zone	If this option is ON the zone will be constantly monitored regardless of the arm/disarm state of the panel. If the 24 Hour zone also has an entry delay programmed, this delay will apply. Once the alarm has been generated it must be cleared by entry of a valid User code	No Zones selected

24-hour auto-reset zone	If this option is ON the zone will be constantly monitored regardless of the arm/disarm state of the panel. Once an alarm has been generated with a 24-Hour Auto-reset zone, the alarm will be reset automatically once the zone is closed. If the 24-Hour zone also has an entry delay programmed, this delay will apply. If the 24-Hour zone activates but then resets before the entry delay expires no alarm will be generated. This feature can be useful for monitoring plant type alarms such as freezer alarms.	No Zones selected
24-hour fire zone	If this option is ON the zone will be constantly monitored regardless of the arm/disarm state of the panel. If the 24-Hour Fire zone also has an entry delay programmed, this delay will apply. Once the alarm has been generated it must be cleared by entry of a valid User code.	No Zones selected
24-hour Water zone	If this option is ON the zone will be constantly monitored regardless of the arm/disarm state of the panel. If the 24-Hour Water zone also has an entry delay programmed, this delay will apply. Once the alarm has been generated it must be cleared by entry of a valid User code.	No Zones selected
24-hour Gaz zone	If this option is selected the zone will be constantly monitored regardless of the arm/disarm state of the panel. Once the alarm has been generated, it must be cleared by entry of a valid User code.	
24-hour High temperature zone	If this option is selected the zone will be constantly monitored regardless of the arm/disarm state of the panel. Once the alarm has been generated, it must be cleared by entry of a valid User code. This is a special feature that the HIGH temperature alarm event replaces the regular alarm (open/close) event from a detector	
24-hour Low temperature zone	If this option is selected the zone will be constantly monitored regardless of the arm/disarm state of the panel. Once the alarm has been generated, it must be cleared by entry of a valid User code. This is a special feature that the LOW temperature alarm event replaces the regular alarm (open/close) event from a detector	
Chime	If this option is ON, the zone will operate Chime mode when disarmed. When the alarm is armed the Chime Mode is disabled for this zone. A Chime zone can sound the keypad buzzer or operate an output to indicate that the zone is unsealed. It is normally used to monitor areas during the daytime	No Zones selected NOTE : please note that if zone is set to working mode "chime" zone in C.P FW 82.xx , the zone working mode changes to " 24H Gaz Zone" on upgrading C.P FW to 84.41
Permanent chime	If this option is ON, the zone will operate Chime mode when armed or disarmed. When the alarm is armed the zone will continue to only be a Chime Mode Zone and will not cause a burglar alarm. A Chime zone can sound the keypad buzzer or operate an output to indicate that the zone is unsealed	No Zones selected
Zone is key switch	This option enables zone as a keyswitch function	No Zones selected

Zones Options

Parameter	Description	Default Configuration
Zone will not report alarm to channels 1-7	This option disables the zone to send alarm report including camera photos through all enabled communication channels 1-7 In addition, there is no activation of siren and KP buzzer. special event code 4130 indication and "shadow event name assigned to this feature.	Disable (unchecked)
Zone will not send alarm to channel 8	This option disables the zone to send alarm report, excluding camera photos through channel 8,	Disable (unchecked)
Zone Sends Reports	This option enables the zone to send report function through all enabled communication channels.	All Zones Selected
Zone is on Soak Test	If a zone is suspected of being faulty and is causing false alarms, you can turn it into a Soak Test Zone and it will still be monitored for alarms when armed but it will not cause the sirens to sound or report to the dialer. The Soak Test zone will still be logged in the event memory however so it is possible to check the activity of the zone, via the memory, and after a suitable period of no alarms it can be re-instated as part of the alarm by removing the Soak Test option	No Zones selected
Exit Terminator Zone	If this option is selected, when the zone unseals during the exit delay time and then seals again the panel will cancel any remaining exit delay time and arm in 3 seconds from the time the zone was sealed.	No Zones selected
Trigger if open	The camera will be triggered in any panel state mode.	No Zones selected

Camera Assignment

Parameter	Description	Default Configuration
Zone is assigned to Cameras	This option enables the zone to trigger PIRCAM or multiple PIRCAMs.	No Zones selected

Zone Key switch

Parameter	Description	Default Configuration
Key Switch can ARM	This option enables Arming of the assigned Area via the Keyswitch	
Key Switch can DISARM	This option enables Disarming of the assigned Area via the Key-switch	
Key Switch is normally open	The key-switch can be a NO (Normally Open) or a NC (Normally Closed) key-switch.	
Key Switch is momentary	The operation of the key-switch can be momentary or latching. If this option is on, the key-switch operation is assumed to be momentary. This means that each time the key-switch is operated then released the area will toggle its current state (I.e. if armed it will become disarmed or vice versa). If this option is turned off it is assumed that the key-switch is a latching type. This means that when the key-switch is operated and the key removed the contacts remain in the same state. When a latching key-switch is used, turning on the switch will arm the area and turning it off will disarm the area.	

Alarm to Output

Parameter	Description	Default Configuration
Zone alarm to outputs	If an Area is Armed and a zone assigned to that Area activates, the zone can trigger selected Outputs for local alarm signaling. This location assigns Zones to Outputs for alarms that occur when in the Full Armed State	No Outputs selected
Zone stay alarm to outputs	If an Area has Stay Mode Armed and a zone assigned to that Area activates, the zone can trigger selected Outputs for local alarm signaling. This location assigns Zones to Outputs for alarms that occur when Stay Mode is Armed	No Outputs selected
Zone 24H alarm to outputs	If a zone is programmed as one of 24 Hour type zone and if it is open then the selected output(s) is activated for local alarm signaling. In case of standard 24-hour zone the output will be active for the full reset time. In case of 24-hour auto-reset zone the output is deactivated when the reset time expires or if zone is closed. If a zone is a 24-hour fire zone then the output will pulse at a rate equals to the pulse time for that output.	No Outputs selected

Alarm to Outputs (cont)

Parameter	Description	Default Configuration
Zone tamper to outputs	Zone tamper can trigger selected output(s) for local alarm signaling.	No Outputs selected
Chime zone alarm to outputs	If a zone is programmed as a Chime zone and it activates, the zone can trigger selected Outputs for local alarm signaling. The output will operate for the Chime to Output time at location. The zone must clear before the output can be activated again	No Outputs selected
Zone near alarm to outputs	If zones are programmed for near and verified alarms, it is also possible to get an indication of a near alarm from any of the 16 outputs using this program location. A near alarm is the first alarm during an armed period	No Outputs selected
Zone verified alarm to outputs	If zones are programmed for near and verified alarms, it is also possible to get an indication of a verified alarm from any of the 16 outputs using this program location. A verified alarm is the second alarm from a different zone to the one that caused the near alarm and must happen within 45 minutes of the near alarm	No Outputs selected

Delays and timers

Parameter	Description	Default Configuration
Armed zone entry delay time (seconds)	Each Zone has it's own Entry Delay time when in the Full Armed State. The delay can be programmed from 0 to 9999 seconds in one-second increments. If the entry delay is set to 0 the zone will be an instant zone.	All zones are selected
Stay mode entry delay time (seconds)	Each Zone has it's own Entry Delay time when in Stay Mode. The delay can be programmed from 0 to 9999 seconds in one-second increments. If the entry delay is set to 0 the zone will be an instant zone.	All zones are selected
Zone Sensor watch-time (minutes)	If value of this option is greater than zero then zone will be checked to see that it operates during the disarmed state. If it is not operated within the specified time a 'Sensor-watch' alarm will be generated. This feature is designed to detect a faulty zone that is not operating normally or one that has had its detection area blocked. The timer is stopped when the area assigned to the zone is armed and resumes with the specified value when disarmed again. The timer is reset back to the original value every time the zone operates while disarmed. The range of values from 0 to 9999 minutes.	All zones are selected

Radio Zones

Parameter	Description	Default Configuration
Name	Enter name to identify the Zone	Zone #
Add Zone (Learn Radio zone)	<p>Radio detector must be enrolled into the panel before it can be used. Select zone # , Add Zone -> Link Type :ISM or DECT , Device's ID, Device type</p> <p>Note: The pairing of DECT ULE device must be preliminarily performed from "Communication" → "DECT" → "Learn DECT Device". When the DECT device pairing is done, then you can go to "Radio Zones" and assign the DECT device ID to a zone.</p>	
Delete radio zone	Removing radio zone from the system.	-
Zone Config	This function set remotely the radio zone parameters such as led on/off, pulse detection, Pet immunity, Gain level, etc.	Dedicated menu according to detector type enrolled
Radio Zone Module	Select device type "ISM " for RF devices or "DECT" for DECT devices.	

Zone Configuration –features & options examples:

Wireless PIR Detector

Wireless PIR Configuration

LED

Enabled

Supervision

7 min

Pet

OFF

Number of pulses

2 pulse count

Sensitivity

2

Available Options

LED(s) state: Activation or not of the LED indicators

Supervision: Time period between each supervision in minute (from 1 to 30)

Pet Immunity: Activation of up to 25Kg Pet immunity

Number of Pulses: Pulse count for each motion detection

Sensitivity: PIR Sensitivity

Wireless Door / Window Magnet SH-MAG2

Available Options

LED Enable: Activation or not of the LED indicators

Magnetic Contact Detector

LED

Enabled

Supervision

7 min

Internal Switch

Enabled

External Switch

Disabled

Logic of Switches

Logical "OR"

Supervision: Time period between each supervision in minute (from 7 to 30)

Internal Switch: Activation of the internal reed switch

External switch: Activation of the internal terminal block (to connect external wire device)

Logic of Switches: Alarm trigger according AND / OR Mode of both internal and external state.

Wireless Flood Detector

Flood Detector

SH-FLOOD 8F

LED

Enabled

Supervision

7 min

Available Options

LED Enable: Activation or not of the LED indicators

Supervision: Time period between each supervision in minute (from 7 to 30)

Indoor PIR Camera

LED
Enabled ▾

Pet
OFF ▾

Number of pulses
2 pulse count ▾

Sensitivity
2 ▾

Pictures in set
3 ▾

JPEG Quality level
90 % ▾

Picture resolution && color
VGA color(640x480) ▾

Advanced ▾

Advanced ▾

Camera state
Enabled ▾

Pulse direction mode
Any first ▾

Infra LED
Disabled ▾

Conf time b/w 1st and 2nd pulses
0.5s ▾

Time b/w 1st and 2nd pulses
3s ▾

Time b/w 2nd and 3rd pulses
2s ▾

JPEG Mode
Regular JPEG ▾

Picture rate
0.5 second ▾

Hold off time
30 second ▾

Contrast enhancement
ON (Auto) ▾

Sharpness enhancement
ON ▾

Available Options

LED(s) state: Activation or not of the LED indicators

Pet Immunity: Activation of the up to 25Kg Pet immunity

Number of pulses: Pulse count for each motion detection (1,2 or3)

Sensitivity: Sensitivity of the PYRO sensor

Picts per set: Number of pictures sent in case of alarm event

JPEG Quality level: Quality of the picture (from 20% to 90%)

Picture resolution & color: Selection between: QVGA B&W (320x240), VGA B&W (640x480), QVGA Color (320x240), VGA Color (640x480)

Camera State:

Pulse Direction Mode:

Infra LED:

Conf Time B/W 1st and 2nd Pulses:

Time B/W 1st and 2nd Pulses:

Time B/W 2st and 3nd Pulses:

JPEG mode: Regular or Differential (Video Motion Detection)

Pict Rate: Time laps between alarm pictures

Diff JPEG ratio: Sensitivity of the Video Motion Detection (High or Low)

Hold off (sec): Wait time between 2 detections and pictures (*between 30 to 120 sec*)

Contrast enhancement: Contrast emphasis of the picture

Sharpness enhancement: Sharpness of the picture

Re-trigger

Parameter	Description	Default Configuration
Zone re-trigger count	Each Zone has its own alarm re-trigger count. A value of 0 programmed at this location results in unlimited alarms for that zone during an armed period but a count of 1-15 will shut down the zone once the programmed count has been reached. Disarming the alarm will reset this count. In case the zone is assigned to more than one area, this counter should be multiplied by number of areas (e.g. if zone 1 belongs to A1 & A2, to achieve re-trigger count = 3, you will need to enter re-trigger count = 6, because alarm in each area will increment the counter and common number of re-trigger counts will multiply).	Value "0"

Zone # : Beeps To Keypads

Parameter	Description	Default Configuration
Armed Zone Alarm Beeps to Keypads	If an Area is Armed and a zone assigned to that Area activates, the zone can sound the buzzer at selected keypads for local alarm signaling. This location assigns zone alarm beep to a keypad for alarms that occur when in the Full Armed State.	Disable
Stay Mode Zone Alarm Beeps Keypads	If an Area is Stay Mode Armed and a zone assigned to that Area activates, the zone can sound the buzzer at selected keypads for local alarm signaling. This location assigns zone alarm beep to a keypad for alarms that occur when in Stay Mode is Armed	disable
Zone 24 hour alarm beeps to keypads	If a zone programmed as a 24 Hour type and it activates, the zone can sound the buzzer at selected keypads for local alarm signaling. If the zone is a standard 24 hour type or Fire type the keypad buzzer will sound until reset by a User but if it is an Auto-reset type the keypad buzzer will reset when the input clears	disable
Chime Zone Alarm Beeps Keypads	If a zone programmed as a Chime zone and it activates, the zone can sound the buzzer at selected keypads for local alarm signaling. The duration of the Chime beep programmed. The Chime function also can be locally disabled at each keypad individually if not required.	disable
Zone Tamper Alarm Beeps Keypads	Zone tamper can beep the keypad buzzer at individual keypads	disable

Radio Supervise Alarm Beeps Keypads	If a zone is programmed as a radio zone and that type is actively monitoring the supervision signal, a supervise signal failure from the detector alarm can sound the buzzer at selected Keypads for local alarm signaling	disable
Zone Sensor-watch Alarm Beeps Keypads	If the zone is programmed for inactivity monitoring and it is not operated within the time set at a 'Sensor-watch' alarm will be generated. A 'Sensor-watch' failure from the detector can sound the buzzer at selected Keypads for local alarm signaling	disable
Armed zone entry delay beeps to keypads	If the alarm is Armed and a delay zone triggers the entry delay it can also beep the keypad buzzer to warn that the entry delay is counting down and the alarm should be turned off	disable
Stay mode entry delay beeps to keypads	If Stay Mode is Armed and a Stay Mode delay zone triggers the entry delay it can also beep the keypad buzzer to warn that the entry delay is counting down and the alarm should be turned off	disable

[Outputs](#)

Settings

Parameter	Description	Default Configuration
Lockout Output	This option is used to limit the output to one operation per arming period.	disable
Pulse Output on Kiss-off after Arming	This option will cause the Output to short single pulse when any area is armed and the message has been kissed off by monitoring company.	disable
Disable Output During Disarm	This option will cause the Output to be disabled when all areas in DISARM state. It is designed to keep audible alarms silent when the full system disarm, but part of alarms (like Panic or Fire alarm) still turns audible alarms to on regardless of this setting.	disable
Enable Monitoring of output	If this option is enabled, the control panel monitors the status of the outputs by voltage level for wired outputs or coming supervision messages for wireless outputs. If disabled - monitoring the state of the outputs will be disabled	disable
Enable Mute	Disable the siren sound only	disable

Output Type

Parameter	Description	Default Configuration
Output is constant	The output will change its state when an alarm occurs	Disable

Time Zone Assignment

Parameter	Description	Default Configuration
Time Zone Assigned to Output	If a time-zone is assigned to an output it will turn the output on when the time-zone starts and turn the output off when it finishes.	disable

Signals to Output

Parameter	Description	Default Configuration
Mains Fail to Output	This option is used to assign a Mains Fail alarm to an Output	Disable
Fuse Fail to Output		*Not in use
Batt Low to Output	This option is used to assign a Battery Low alarm to an Output	disable
Monitor output fail to Output	This option will cause the Output to short single pulse when any area is armed and monitoring company has kissed off the message.	disable
Output tamper alarm to Output	This option is used to assign a Output tamper alarm to an Output. When output tamper alarm occurs, any output can be turned to on	disable works in ARM mode only (Shmulik decision)
Communication fail to Output	This option is used to assign a Communication Failure alarm to an Output	disable
Radio Zone Supervised Fail to Output	This option is used to assign a Radio Detector Supervisory Fail alarm to an Output	disable

System tamper to output	This option is used for indication of panel tamper alarm by specified Output. This option works in arm or stay arm state only and The Output turns to on.	
Sensor-watch to output	This option is used to assign a Sensor-Watch alarm to an Output. A Sensor-Watch alarm occurs when a detector has not operated within a set period of time. Zone sensor watch time can be set in zone level per each zone(in minutes)	
Duress Alarm to Output	Duress Alarm can be assigned to an Output or multiple Outputs. This can be used to operate an audible or visual alarm connected to the Output.	
Walk Test Pulse to Output	When the panel is in Walk-test Mode, this option assigns a one single pulse (one chirp) to the Output every time a zone is triggered.	disable
Pendant Panic, Fire, Medical Alarm to Output	A Pendant Panic Alarm can be assigned to an Output or multiple Outputs. This can be used to operate an audible or visual alarm connected to the Output	disable

Timing

Parameter	Description	Default Configuration
Output on delay time (seconds)	The 'On' delay allows the operation of the Output to be delayed by the time programmed at this location. If set to '0' there will be no on delay and the Output will operate the instant, it is turned on. The time range is 0-36000 seconds.	Disable
Output reset time (seconds)	The Reset time affects the time the output turns on in case of alarm state. The time range is 0-36000 seconds.	disable

Add Output

Parameter	Description	Default Configuration
Learn Radio Output / Serial number	Insert Device's ID and type	Disable
Delete Radio Output	Delete existing radio output from memory	disable
Output config	This function set remotely the radio output parameters according different output devices types such as led on/off, sounder on/off, led and sounder timeouts, and Loudness etc.	disable
Radio Output Module / Link type	Select device type "ISM" , "DECT" or "ISM Extender" (RL1, RL2)	disable

Parameter	Description	Default Configuration
Alarm from zones	If an Area is Armed and a zone assigned to that Area activates, the zone can trigger selected Outputs for local alarm signaling. This location assigns Zones to Outputs for alarms that occur when in the Full Armed State	No Outputs selected
Stay Alarm from zones	If an Area has Stay Mode Armed and a zone assigned to that Area activates, the zone can trigger selected Outputs for local alarm signaling. This location assigns Zones to Outputs for alarms that occur when Stay Mode is Armed	No Outputs selected
24H Alarm from zones	If a zone is programmed as one of 24 Hour type zone and if it is open then the selected output(s) is activated for local alarm signaling. In case of standard 24-hour zone the output will be active for the full reset time. In case of 24-hour auto-reset zone the output is deactivated when the reset time expires or if the zone is closed. If a zone is a 24-hour fire zone then the output will pulse at a rate equals to the pulse time for that output.	No Outputs selected

Alarm to Outputs (cont)

Parameter	Description	Default Configuration
Tamper from zones	Zone tamper can trigger selected output(s) for local alarm signaling.	No Outputs selected
Chime alarm from zones	If a zone is programmed as a Chime zone and it activates, the zone can trigger selected Outputs for local alarm signaling. The output will operate for the Chime to Output time at location. The zone must clear before the output can be activated again	No Outputs selected
Entry delay from armed zones	If the panel is Armed and a delay zone triggers, the entry delay it can also turn an Output to ON to warn that the entry delay is counting down and the alarm should be turned off	No Outputs selected
Stay entry delay from zones	If Stay Mode is Armed and a delay zone triggers the entry delay it can also turn an Output to ON to warn that the entry delay is counting down and the alarm should be turned off	No Outputs selected
Near Alarm from zones	If zones are programmed for near and verified alarms, it is also possible to get an indication of a near alarm from any of the 16 outputs using this program location. A near alarm is the first alarm during an armed period	No Outputs selected
verified alarm from zones	If zones are programmed for near and verified alarms, it is also possible to get an indication of a verified alarm from any of the 16 outputs using this program location. A verified alarm is the second alarm from a different zone to the one that caused the near alarm and must happen within 45 minutes of the near alarm	No Outputs selected

Parameter	Description	Default Configuration
Signal	The output will change its state when an detection/restore occurs	Not selected
Time	The output will change its state and stay on by time set in output reset time value	Not selected
Retrigger Time	Additional time will be added set in output reset time in case of re-trigger	Not selected

Extenders

Advanced Configuration

Parameter	Description	Default Configuration
Add Extender	<p>The SH-IO 2x2 is an external two-way wireless device, two Inputs (optional 2 zones per one input by EOL resistors) and 2 Output Relays module.</p> <p><u>Extender registration :</u></p> <ul style="list-style-type: none"> - Link type : ISM - Serial number : Device's ID No. - Device type : IO 2x2 Relay Board 	
Extender Config	<ul style="list-style-type: none"> - set Extender inputs type: N/O, N/C , single zone device or double zone devices - set Extender outputs mode : N/C or N/O - use the Extender instructions manual for connecting and setting EOL resistors and working mode. 	<p>Led : enable</p> <p>Input : 1, 2 Both N/C</p> <p>Output : 1, 2 Both N/C</p>
Delete	This button is used to delete the device from the system	

[Report Channels](#)

Click on a report channel 1-8 to display its options.

Channel Type

Parameter	Description	Default Configuration
TCP_IP	Set channel type as TCP/IP Need to set Ethernet enabled to use this type of channel	Note: The channel #8 is dedicated to the CrowCloud™™ connection; please do not change these settings.
Wi-Fi	Set channel type as Wi-Fi. Need to set Wi-Fi enabled to use this type of channel	
GPRS	Set channel type as 4G Need to set 4G IP enabled to use this type of channel in setting "Communication" → "GSM" (<i>see below in para "Communication"</i>)	
SMS	Set channel type as SMS Text Messages	
VOICE	Set channel type as a VOICE for voice Messages announcement to telephone when the system is in ARM mode or to a local voice devise when the system is in the DISARM	

Parameter	Description	Default Configuration
Channel is active	This option activates or deactivates a report channel for operations.	Channel #8 activated only

Destination address	<p>Can be up to 7 phone numbers (for channels 1-7 defines as GSM voice/SMS) or 7 server addresses (for channel 1-7 defined as TCP-IP/WiFi/GPRS).</p> <p>The length is up to 32 characters long (digits only for phone numbers and characters/digits for server address).</p>	No address specified
Protocol	<p><u>Defines one of the protocol types for each report channel:</u></p> <ul style="list-style-type: none"> • Crow (crow's receiver server is required at the CMS server) • SIA-09(ADM-CID) • SIA-09(SIA-DCS) <p>This option is available only if the specified channel is defined as TCP/IP, GPRS or Wi-Fi</p>	Crow predefined
Port	Defines report protocol port (up to 5 digits)	4700 predefined (Crow)
Channel Backup	This channel will be activate if the main channel has failed to open connection or deliver a message.	No channels selected
Failed channel (1-7) restore time (Min.)	If either channel has failed to deliver messages, it will be temporarily disable for a period defined by this parameter. During this time, the corresponding backup channel will be use.	3 minutes
SIA null-event time (seconds)	The C.P and CMS may be configured to supervise the connection When supported and enabled, the C.P shall periodically send the Null Message to the CMS. The supervision interval shall be configurable over a range of 1 seconds to 900 seconds.	20
Encryption code	The C.P may send an encrypted or an unencrypted Null Message to permit supervision of the link between the premises and the central station.	0x32

Area account numbers

Parameter	Description	Default Configuration
Account Number	<p>When system sends a report to a monitoring station there must be a unique account number programmed to identify the panel. There is an account code for each area.</p> <p>The account code is 4 digits. Each digit can be a number from 0-9 as well as the special characters B, C, D, E & F. For SMS report channels no need to define the account number.</p>	All account at "0" except the channel #8 with account "8000" for CrowCloud™ connection

Reporting Options

Parameter	Description	Default Configuration
Report Mains Failure	If this option is selected the panel will report a Mains failure after the report delay time has expired (see "Clock and Timers" → "Delays")	All channels selected
Report Battery Low	If this option is selected the panel will report a Battery Low	All channels selected
Report Communication Fail	If this option is selected the panel will report a Communication failure.	All channels selected
Report System Tamper	If this option is selected the panel will report a Tamper Alarm on the tamper panel is triggered	All channels selected
Report Keypad Tamper	If this option is selected the panel will report a Tamper Alarm from a keypad fitted with a tamper switch or a wrong code alarm from a keypad	All channels selected
Report Zone Tamper	If this option is on the panel will report a Zone Tamper Alarm	All channels selected
Report Zone Trouble	If this option is on the panel will report a Zone trouble Alarm	
Report Duress Alarm	If this option is on the panel will report a Duress Alarm	All channels selected
Report Panic Alarm	If this option is on the panel will report a Panic Alarm generated by keypad or RMT (pendant)	All channels selected
Report Manual Fire Alarm	If this option is on the panel will report a Keypad generated Fire Alarm	All channels selected
Report Manual Medical Alarm	If this option is on the panel will report a Keypad generated Medical Alarm	All channels selected
Report Zone Bypasses	If this option is on the panel will report a Manual or Auto Bypass on a zone	All channels selected
Report Arm-Disarm	If this option is on then all Arm/Disarm signals will be reported to a Monitoring Station	All channels selected
Report Stay Mode Arm-Disarm	If this option is on then all Stay Mode Arm/Disarm signals will be reported to a Monitoring Station	All channels selected

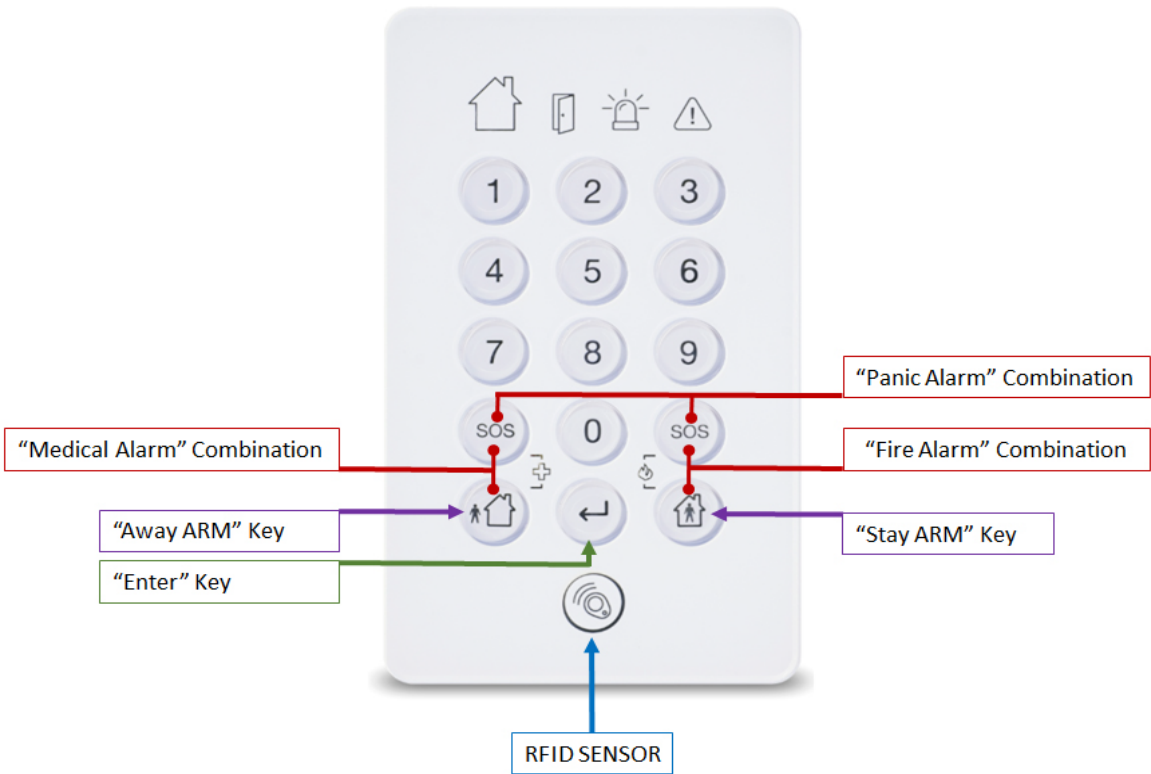
Report Disarm only after an Activation	If this option is on, the panel will not normally send an Arm/Disarm signal to the monitoring company, however, if a zone alarm occurs the panel will send a Disarm following the disarming of the panel to show it has been turned OFF by a valid user	No channel selected
Report Stay Disarm only after an Activation	If this option is on, the panel will not normally send a Stay Mode Arm/Disarm signal to the monitoring company, however, if a zone alarm occurs the panel will send a Stay Mode Disarm following the disarming of the panel to show it has been turned OFF by a valid user	No channel selected
Report Access to Program Mode	If this option is on the panel will report a Contact ID code to indicate that either Client or Installer program Modes have been accessed	All channels selected
Report Zone Restores	If this option is on the panel will report all zone restores. If this option is turned off the panel will only report the alarms	All channels selected
Report Delinquent	If the panel has been configured for Delinquency monitoring and an area has not been armed for the time set at, a Delinquency Alarm will be sent to the Monitoring Station	All channels selected
Report Radio Battery Low	If this option is on the panel will report a Battery Low from any radio zones that have the battery status monitored	All channels selected
Report Supervised Radio Alarm	If this option is on the panel will report a Supervised radio Alarm.	All channels selected
Report Zone Sensor-watch Alarm	If this option is on the panel will report a Zone Inactivity (Sensor-watch) Alarm.	All channels selected
Report Latchkey Disarm	When this option is turned ON and the panel was armed in Latchkey Report Mode, at Disarming by a non-latchkey user the specified latchkey disarm report will be sent via voice or SMS report channel to user, marked as latchkey mode user.	All channels selected
Report Communication Interference Detected	If the radio receiver detects Communication Interference (Jamming) of the radio frequency, the panel can report this event to the monitoring station if this option is turned on	All channels selected
Report Output Fail	If this option is on and a fault is detected on the output, a report will be sent to the monitoring station if Contact ID is set as the reporting format	All channels selected
Report Tests	If this option is selected, the panel can send automatic test connections, but if test connections are not required, they can be disabled by turning this option off.	All channels selected
Report Stay Mode Zone Alarms	If this option is on, the panel will report zone alarms in Stay Mode	All channels selected

Report output changed	The changing output state will be reported via SMS reporting to the user	All channels selected
Report Peripheral Tamper	If this option is on the panel will report a Tamper Alarm from a peripheral module (extender module or radio output) fitted with a tamper switch from a peripheral module	All channels selected
Report Zone Confirmed Alarm	If this option is on the panel will report a Zone Confirmed (Near and Verified) Alarms.	All channels selected

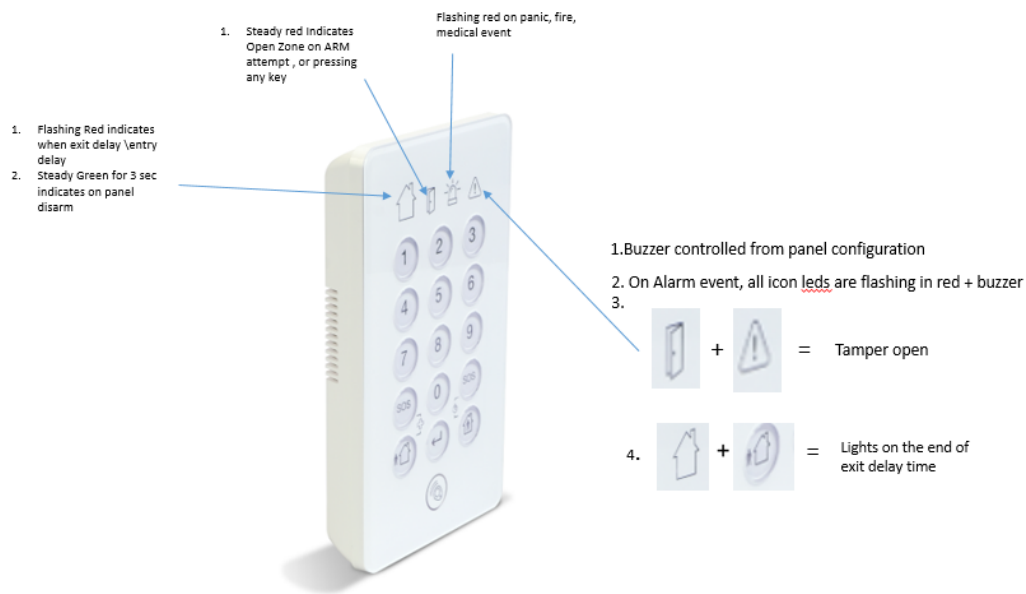
Keypads

Radio Keypads

SH-KP Icon Keypad Overview



The SH-KP is an optional two-way wireless keypad with built-in proximity RFID tag reader compliant with RFID tags including variation of millions ID combinations and numerical keypad.



For RFID control, please use access tag. Press the key "Enter" and serve the tag.

For learning procedure, please refer to the para "Radio Keypad" below.

For additional information on the SH-KP please refer to its manual.

Please note that there is another SH-Keypad ADV with more features and options, for more information please refer to SH-KP-ADV manual P/N P / N 7102382_B

Settings

Parameter	Description	Default Configuration
Enabled Beeps and LED indication	Enable /Disable audible beeps and LED indication light on the Keypad	Enable
No armed indication	This option allows the screen information on a keypad to be turned off when the panel is in the Armed or Stay Armed state. The screen return to the normal state on disarming of the system	Disable
On keypad panic alarm call voice	A feature must be enabled in the check box if we want a two-way voice call in the event of a panic from a panic Keyped device. In order to establish a two-way voice call, we must ensure at least one voice device (AVM) is set up in the system. So that the call will establish between the voice device and the destination end user's phone.	Relevant for SH-KP-PRO
Keypad emergency alarm	When this option is checked / activated, the panic event is replaced by an emergency event and also the CID to the monitoring statin alarm is different	Relevant for SH-KP-PRO

Area Assignment

Parameter	Description	Default Configuration
Keypad Assigned To Area	This option assigns Area to keypads. If a keypad assigned to one area, only it can Arm or Disarm only that area and show states only for this area.	Area 1

User Assignment

Parameter	Description	Default Configuration
Keypad control on users	Any user can assigned to operate at certain Keypads. This option controls whether a code or access tag User Can Arm/Disarm from certain keypads.	All users

Output Assignment

Parameter	Description	Default Configuration
Keypad is linked to outputs	A Keypad can be assigned to an Output or multiple Outputs. If a Keypad is not assigned to an Output a User cannot turn that Output On or Off from the Keypad. This feature is useful when using the access control features of the panel, e.g. a User may be allowed to operate more than one Output with their code but they will be limited to just the Output assigned to the Keypad they are using	All users

Alarm to Output

Parameter	Description	Default Configuration
Keypad medical alarm to outputs	A Keypad generated Medical Alarm can be assigned to an Output or multiple Outputs. This can be used to operate an audible or visual alarm connected to the Output	
Keypad panic alarm to outputs	A Keypad Panic Alarm can be assigned to an Output or multiple Outputs. This can be used to operate an audible or visual alarm connected to the Output	
Keypad fire alarm to outputs	A Keypad generated Fire Alarm can be assigned to an Output or multiple Outputs. This can be used to operate an audible or visual alarm connected to the Output	
Wrong Code Alarm to Output	If someone is attempting disarm the alarm by trying various code combinations and they enter in 5 wrong codes the panel will go into a 'Wrong Code' tamper alarm. The Alarm can be assigned to an Output or multiple Outputs. This can be used to operate an audible or visual alarm connected to the Output. A correct code entry will reset the tamper alarm	N/A
Keypad tamper alarm to outputs	If the keypad has a Tamper Switch fitted and this switch activated, the Tamper Alarm can be assigned to an Output or multiple Outputs. This can be used to operate an audible or visual alarm connected to the Output	

Add Keypad

Parameter	Description	Default Configuration
Link Type	Link type is "ISM "	
Serial number	Insert Device's ID number	
Device Type	Select keypad type 1.Led Indication Keypad 2. Advanced Keypad 3. Pro Keypad	
KeyPad Configuration	Setting the keypad config. Please refer to device's manual	Enable
Delete Keypad	Removing previously paired keypad from the system	

Communication

Remote Access

Parameter	Description	Default Configuration
Servers Password	It is defined up to 8 characters password for remote connection (CrowCloud™ and Mobile applications)	12345678
Server 1-4 Address	This parameter defines IP-address or DNS name of the remote access server.	mediator.CrowCloud.xyz (CrowCloud™ server address)
Server 1-4 Port	This parameter defines the port on remote access server the control panel using for registration procedure.	4705 (CrowCloud™ server port)

Communication Options

Parameter	Description	Default Configuration
Time to First Test Connection	Define the time of first automatic test connection.	00
Test Connection Time Period	Time period between successive automatic test connections	0
Incoming Phone numbers for remote control Phone	Setting of up to 8 assigned phone numbers which are authorized for control the system remotely via DTMF control	Empty
Listen only	Used to hear audio from voice device microphone, and no activation of voice device speaker	Empty
Use Hash for Confirmation	If the panel is set to use the Voice reporting call or voice messages announcements option, you can simply kiss-off (Acknowledge) the call/alarm by pressing the <#> button on the telephone right after answering the call, otherwise the call will disconnect after 30 sec. If the parameter is not set,	Enable

	the voice call will continue till remote phone or the originator will close connection (hangs down).	
Wait to Hash Timeout (seconds)	This is the time period required to press the Hash key after answering a call from the control panel / voice device otherwise the call will be disconnect at the end of this time.	200 (seconds)
Dial timeout (seconds)	Dial Timeout is the maximum amount of time a dial will wait for a connect to complete, if there is no connect completed, a dial will terminated.	200
Retries panic number	Number of Dial Attempts After a panic event, the dial attempt will be made only after the end of the Dial timeout of the previous dial if no one answered the call.	0
Auto answer	If the parameter is set, Automatically answer by the voice device devices when receiving a call from a phone without accepting a call by pressing a key in the voice box.	
Listen only	If the parameter is set, When receiving a call from a phone, the voice device will automatically answer the call without a ring or indicator light and without open the speaker, but only the microphone will be open for the caller (remote control phone must be programmed)	

TCP/IP

Parameter	Description	Default Configuration
Ethernet Enabled	If this option selected, the Ethernet connection is Enable.	Enable
DHCP Enabled	If this option selected, the DHCP is Enable. The server will automatically assign an IP address to the control panel.	Enabled
Static IP	If DHCP is Disable, the control panel must be manually configure with an IP address, subnet mask, Panel, DNS server.	Empty
Subnet Mask	The network subnet mask for defined static IP address.	Empty
Gateway	IP Address of the router/server.	Empty
DNS Server	The network DNS server address for defined static IP address.	Empty
TCP/IP Port for Remote Control	The number of incoming TCP/IP port using for remote control applications.	3064

GSM

Parameter	Description	Default Configuration
GSM IP Enabled	If this option is on, the GPRS/4G Data is Enabled. This communication method suits for Data connection to Monitoring Station or Server.	Enabled
GSM SMS Enabled	If this option is on, the GSM SMS is Enabled.	Enabled
PIN Code	GSM PIN code number according to GSM network requirements, up to 8 digits length.	No PIN Code
GSM User	GPRS user according to APN GSM network requirements.	Empty
GSM Password	GPRS Password according to APN GSM network requirements.	Empty
GSM APN	GPRS APN access point name according to your cellular provider.	"internet"
USSD Code	Unstructured Supplementary Service Data (USSD) is a protocol used by GSM cellular telephones to communicate with the service provider's computers, using for prepaid callback and mobile-money services. The parameter contains 3 decimal digits.	0
System Language	Used to change the language of SMS messages	
Voice Language	Used to change the language of Voice messages	
Low RSSI alert (-110 ÷ -50)	Low RSSI Alert RSSI measures the strength of a radio signal. Any RSSI value lower than the programmed RSSI value will alert about poor signal strength.	

Wi-Fi

Parameter	Description	Default Configuration
Wi-Fi Enabled	If this option selected, the Wi-Fi connection is Enable.	Disabled
SSID	The wireless network name	Empty
Security Type	Select the security type of your Wi-Fi network	"Open" – No Encryption
Password	Password of the wireless network you want to connect to.	Empty

What is DECT ULE?

ULE addresses Ultra-Low Energy application requirements by introducing optimized communication methods. Identified with low power consumption, low latency, long range, moderate data rate and value-added complementary voice capabilities, ULE is the best-of-class technology, which represents the next evolution in home networking.

ULE is based on DECT (Digital Enhanced Cordless Telecommunications) which is the de-facto standard for residential and business cordless phone communications worldwide.

DECT ULE is an SW protocol extension of the standard DECT, These devices can be easily support DECT ULE for Home Automation and Security/Monitoring.

DECT ULE: the perfect combination of long battery lifetime, high data rate, low cost and long transmission range.

Frequency Allocations:

- Europe: 1880-1900 MHz
- China: 1900-1920 MHz
- Japan: 1893-1906 MHz
- Latin America: 1910-1930 MHz
- US & Canada: 1920-1930 MHz

Parameter	Description	Default Configuration
DECT Enabled	If this option selected, the DECT Module Activated.	Enabled
DECT Contact Number	Phone numbers of the contact persons called from the Audio Panic DECT button	Empty
Learn DECT Device	DECT detector must be enroll into the panel before it can be use. Click this button to start DECT pairing process	-
Delete DECT HAN Device	Removing DECT device from the system. Select the device you want to delete and press the button Confirm deletion and save the configuration	ID of the DECT device
Delete DECT HS Device	Click this button to delete DECT Panic Button	Empty
DECT PIN Code	GSM pin code number according GSM network requirements, up to 8 digits length.	Empty

Crow Electronic Engineering Ltd. Is an active contributor to the ULE Alliance with a full range of DECT ULE products



Parameter	Description	Default Configuration
Starting RF Channel	The PANEL supports up to 5 frequencies to prevent jamming. You can choose frequency range from 1 to 5.	1
Learn Repeater	Enter the unique ID of the device Press Done and Save the configuration	-
Delete Repeater	Click this button to delete the selected wireless repeater	-

Time Zones

Settings

Parameter	Description	Default Configuration
Time Zone Start Time	The Time-zone start time is when the time-zone begins. The time using for arm of area(s), turn output(s) to ON state and activate rights of specified user(s). There are 8 time-zones that can be programmed.	Empty
Time Zone End Time	The Time-zone end time is when the time-zone finishes. The time using for disarm of area(s), turn output(s) to OFF state and deactivate rights of specified user(s). There are 8 time-zones that can be programmed.	Empty
Time Zone Day	The Time-zone days are the days of week that the time-zone will be active. You can select any combination of the days from Sunday till Saturday. There are 8 time-zones that can be programmed.	Empty
Holidays	It is possible to pre-program up to 8 holidays. Holidays can override the time-zone function on the programmed day. For example, if an output was automatically controlled by a time- zone, the pre-programmed holidays can stop the output from turning on or off on a holiday. A holiday consists of a single day programmed by date. The holiday begins at the start of the day (00:00:00) and finishes immediately before midnight (23:59:59) on the programmed date. Holidays can programmed in any order (although for simplicity it is recommend that they programmed in chronological order) and the panel automatically removes them once the day ends. If you wish to remove a programmed holiday, you should to clear the date field.	Empty

Time zones holidays:

Parameter	Description	Default Configuration
Date Format	Date format selection options	

Area assignment

Parameter	Description	Default Configuration
Time zone assign to Areas	If area assigned to time-zone it will automatically armed when time-zone starts and disarmed when it finishes. You can assign more than one time-zone to each area. If assigning multiple time-zones you should insure that they do not overlap as this could cause confusion.	
Time zone STAY Armed Areas	The parameter is used for the separation time zone possibility to make ARM and STAY ARM operations. If the parameter marked when time zone will start, the corresponded area will STAY armed. Otherwise, when time zone will start the area will ARMED.	NOTE: For STAY ARM to work, ARM must be checked as well

User Assignment

Parameter	Description	Default Configuration
Time zone control on Users	When the user is controlled by time zone, its keypad code, access tag and pendant deactivated all the time, when the time zone is not started or finished. Only when the time zone is started, the user can perform actions in the system in accordance with its rights as defined by configuration.	

Output Assignment

Parameter	Description	Default Configuration
Time zone assigned to Outputs	If a time-zone is assigned to an output it will turn the output on when the time-zone starts and turn the output off when it finishes.	

Chime Control

Parameter	Description	Default Configuration
Chime Alarm Beeps to Keypad	If a zone is programmed as a Chime zone and it activates, the zone can sound the buzzer at Selected keypads for local alarm signaling. The duration of the Chime beep is programmed. The Chime function can also be locally disabled at each keypad individually if not required	Not selected

User Options

Parameter	Description	Default Configuration
Cancel Handover Zone Function in Stay Mode	<p>If this option is selected, any zone programmed with the handover feature will act as a normal delayed zone during Stay mode (i.e. the handover feature will be ignored).</p> <p>The zone will still have the normal handover feature during the full arm state.</p>	Not selected

Panel Options

Parameter	Description	Default Configuration
Installer Code	This code is used to enter into full Installer Program mode. This code can only be changed while in Installer Program Mode. The Installer Code must be between 4-8 digits in length	000000
Duress Digit	A Duress alarm is created when the alarm system is disarmed by increasing the last digit of the original user code by 1 example : the original code is 1234 , to activate the duress code the code should be 1235 (123X x+1)	
Disable mains fail test	If the panel must be run off a DC supply or the Mains supply can fail regularly, this option disables the mains voltage monitoring to prevent mains fail alarms from occurring	Not selected
Images link	This feature used when panel uses the report channel SIA-DC09 (SIA-09 DCS) protocol type for CMS, Checking this box consolidates the images links associated with the same event for view created due to camera detection	
Buzzer Enable	If this option is enabled it means that the buzzer panel is in active mode	disable
Buzzer Reset Time	Buzzer Reset Time in minutes	1 minute
Cannot arm if the system low battery or AC Fail	if this option is selected, the panel cannot be armed if the panel battery is low or the AC has failed. When the battery is fully charged or the AC has returned, the panel can then be armed. If this option not selected, the panel can be armed during these fault conditions.	Not selected
Cannot arm when keypad fault	if this option is checked and a missing keypad alarm is present, the panel cannot be armed until the keypad has been reinstalled.	

Cannot arm when communication fault	<p>If this option is selected and the control panel has detected a communication fault (Ethernet or GSM/GPRS) the panel cannot be armed.</p> <p>To reset the failure the line must be re-instated to allow arming again.</p>	Not selected
Keypad locks for 90 sec after 5 code attempts	After 5 incorrect codes are entered the keypad will be locked out for 90 seconds	Enable
Code must be 4-8 digits long	<p>If this option is selected, all user codes, installer code, time zone passwords and remote access password must be between 4-8 digits long.</p> <p>If it is not selected, the minimal length of the code is one digit.</p>	Not selected
Enable keypad tamper	if this option is checked the keypad tamper will be enable and can cause to keypad tamper alarm if keypad removed from the wall. If this option is OFF, then the keypad tamper will be disabled, opening or removing the keypad from the wall will not cause to tamper alarm on panel.	
Enable Output Tamper	Monitoring of Tamper alarm indication for any device which is connected to Control Panel's output.	Selected
Enable panel tamper	if this option is checked the Panel tamper will be enable and can cause to Panel tamper alarm.	
Send picture after disarm	Continue send picture after disarm	
Max report count	The maximum number of log reports from any single source. The value is limited from 3 to 10.	10
Panel title	This is the name you give to your control panel to identify it (Ex: Home)	MiniGW
License time	Time period to permit the user control panel and use all activity	Not selected
EN Compliance	Enable/Disable EN 50131 Compliance	Not selected
UL Compliance	TBD	

Timers And Delays

System Date and Time

Parameter	Description	Default Configuration
Daylight Saving	If you are in Daylight Saving Time when the alarm system is installed, you MUST turn this option on so that the panel knows that Daylight Saving Time is currently active. Failure to do this will not allow the clock to automatically adjust to the correct time when Daylight Saving Time Ends	Empty
GMT	Time zone starts from Greenwich Mean Time (GMT 0)	2

Timers

Parameter	Description	Default Configuration
Radio Zone Supervised Time (minutes)	If a radio detector is capable of sending regular supervisory signals to the panel and the zone type is set for 'Supervised Signal Active', this timer sets how long a period has to elapse with no received transmissions before a supervisory failure alarm is generated. The time range is 1-255 minutes.	63
Two Trigger Time (seconds)	If a zone is set to two trigger, the zone has to cause an alarm twice within the two trigger time period to cause an alarm. If multiple zones are set to two trigger, an alarm will be generated if two zones trigger once each within the two trigger time period. If a two trigger zone goes into alarm but remains in alarm for longer than the two trigger time period (ie detector failure or cable cut) an alarm will be generated. The time range is 5-255 seconds.	20

Delays

Parameter	Description	Default Configuration
Alarm Reporting Delay (seconds)	If this address is set to 0, there will be no report delay. If it is set to any value other than 0 then a delay equal to the programmed value will stop the panel from reporting an alarm until this delay time expires. While the timer is active certain outputs can be disabled. Once the timer has expired it will not start again, the panel must be disarmed then armed to reset the timer. The value in seconds, maximal limit is 255 seconds.	0
Mains Fail Reporting Delay (seconds)	If a Mains Failure occurs this timer delays the reporting of Mains Failure to a Monitoring Station. If the mains power returns before the timer expires, then no report is sent. If Mains Failure is assigned to an output, this delay must expire before the output will turn on. The value in seconds, maximal limit is 3 hours (10800 seconds).	900
Communication Fail Reporting Delay (seconds)	If a Communication Fail occurs this timer delays the reporting of Communication Fail to a Monitoring Station. If specified communication path returns before the timer expires, then no report is sent. If Communication Fail is assigned to an output, this delay must expire before the output will turn on. The value in seconds, maximal limit is 3 hours (10800 seconds).	0

Voice device (DECT Device)

Advanced Configuration

Parameter	Description	Default Configuration
Name	Enter voice device name	
Add Voice Device	Use this Button to learn voice device into the system but not before pairing the DECT Voice device in Communication level.	Empty
Is Active	Panicevent can be enable or disable from Voice device	Enable
Emergency alarm	Voce device generates Emergency Alarm instead Panic Alarm on pressing the panic button.	

Area Assignment

Parameter	Description	Default Configuration
Voice Device is assigned to areas	Voice device can be assigned to Area 1-4 or multiple areas	Area 1

Output Assignment

Parameter	Description	Default Configuration
Voice device is assigned to outputs	Voice device can be assigned to an output or multiple outputs	Note: This option is linked to selection of the commands Can Toggle outputs option in order to activate/deactivate an output

Commands

Parameter	Description	Default Configuration
Command disable	Commands , ARM , STAY ARMED and Can Toggle outputs are disabled	
Can ARM	Voice device can ARM area or multiple areas that assigned to the voice device , area or multiple areas can be armed by pressing and holding the disconnect button of the voice device for at least 5 sec	
Can Stay ARM	Voice device can STAY ARM area or multiple areas that assigned to voice device , area or multiple areas can be armed by pressing and holding the disconnect button of the voice device for at least 5 sec	
Can Toggle outputs	Voice device can turn on/off an output that assigned to voice device , output or multiple outputs can be turn on ot off by pressing and holding the disconnect button of the voice device for at least 5 sec	

Walk Test

A Walk Test is a method for testing sensors without causing false system alarms. During a walk test, you will go through and intentionally activate sensors so that they are recognized by the system. The faulted zones will be displayed, but no alarms will be reported to the central station.

Read more: <https://www.alarmgrid.com/faq/what-is-a-walk-test>

Parameter	Description	Default Configuration
Start Walk Test	Walk test mode is usable in installer mode. By going through all the detectors registered in the system and activating them, the associated zone examined will be displayed on the page of the overview screen page and in order to allow verification that all zones are functioning properly.	-
Start Maintenance Mode	The purpose of this function is to prevent alerts, reports, sounding of sirens or keyboards in areas when performing installer maintenance work such as battery replacement.	
Stop Maintenance Mode	Stop and exit from Maintenance Mode	-

Example of walk test screen

The screenshot displays the 'System Test' interface. At the top, there's a 'System Test' header with a checkmark icon. Below it are four buttons: 'Start Walk Test' (green), 'Stop Walk Test' (grey), 'Reset Check Marks' (red), and 'End Walk Test' (red). Further down are 'Start Maintenance Mode' (green) and 'Stop Maintenance Mode' (grey) buttons.

The interface is divided into three main sections:

- Areas:** A table with columns #ID, Name, Status, and Alarm. It lists three areas: Area 1, Area 3, and Area 4, all with a status of 'Disarmed' and 'No' alarm.
- Zones:** A table with columns #ID, Name, Serial, State, Type, RSSI, Check, and Active. It lists four zones: Zone 1 (Ready, Camera pir on ct 2035), Zone 2 (Ready, Air quality detector), Zone 3 (Open, Magnetic contact), and Zone 4 (Open, Magnetic contact). Each zone has a green checkmark icon in the 'Check' column.
- Outputs:** A section on the right with a table showing #ID and status icons (power and checkmark) for outputs 1, 2, and 5.

At the bottom right, there are sections for 'Keypads' and 'Repeaters', each with a table showing #ID and Name.

Walk test mode is usable in installer mode. By walking through all the detectors registered in the system and activating them, the associated examined zone will be displayed on the page of the overview screen page and in order to allow

verification that all zones are functioning properly by indicating a green check mark and a red dot.



pressing on STOP walk test /End walk test button, terminates the walk test process. The results of the walk-test will be show on the screen to verify which detectors were triggered during the walk-test mode.

NOTE: The device's indication LED light under test will flash green color during the walk test process.

An Output can be used for the Audible walk-test indication; the siren on the output will give a single tone for the chirp instead of the swept tone used for alarms.

In Addition, this page provides General Display information of Accessories (zone names, device serial #, state, device type, RSSI level , repeated zones, panel main communication (Ethernet, GSM/4G , WiFi) status, radio frequency , panel versions (panel firmware, RF module, DECT ULE SW version).

[Control](#)

Parameter	Description	Default Configuration
ARM	Key button for Area ARM	-
DISARM	Key button for Area DISARM	-
STAY	Key button for Area STAY ARM	-

[Log](#)

Parameter	Description	Default Configuration
Log	Displays the logs events from C.P to cloud	
Get internal log	Displays the total logs events, from C.P. to cloud + C.P. internal events	-
Update log	Refresh the web page of the log events	-
Log on page	Ability to increase the number of display log events	1-30

[...More](#)

Parameter	Description	Default Configuration
Backup config/restore/save as Default	Ability to create new backup and restore/save as default of the panel configuration	-
Personal Page	Option of displaying the personal page from installer programming mode	-
Panel upgrade	Uses to upgrade the panel firmware, RF module, DECT module from Cloud or Local file, this action is protected by inserting installer code, in addition there are options to create Backup and/or Restore prior the upgrade process	-
Apply default	Ability to upload default configuration file from a list which created in save as default action in backup Config by installer	-
Reset Panel Connection	Reset the connection socket from C.P. to cloud server	-
Restart Panel	Restart the panel doesn't affect the panel settings	-

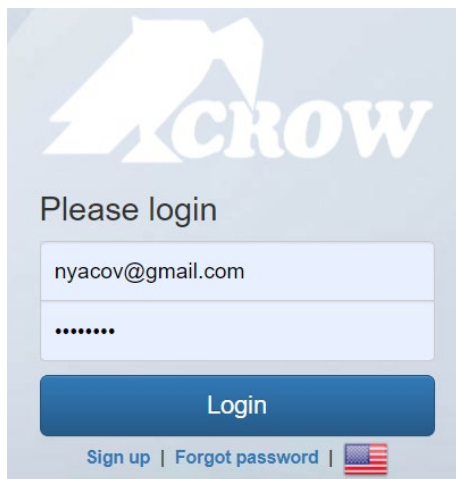
Disconnect

- Disconnect the remote connection from Panel

CrowCloud™ Web Services

Your SHEPHERD PLUS™ panel is configured by default for direct communication to CrowCloud™.

After configuration of your panel, go to <http://www.Crowcloud.com> and proceed with the user registration to your SHEPHERD PLUS™ panel.



The Crow Cloud personal user webpage allows the end user direct access to all of its registered control panels.

This personal webpage offers to the end user possibility to:

- Connect to its registered control panel
- Monitor and Control panel and connected devices
- Browse alarm pictures and request for immediate take picture
- Get panel connection info
- Manage cloud users

Login: If you already have an account on Crow Cloud, fill these form


Sign up: Click this link to start registration of new user

Forgot Password: Click this link to retrieve your password

Language: Select your preferred language

Email:

Enter end user's email address.



Create Account

Login (Email)

First Name

Last name

Type password

☐ Show password

Retype password

☐ Show password

Submit

First Name:

Enter the first name of the End User.

Last Name:

Enter the family name of the End User.

Type password:

Enter the password at least 8 alphanumeric characters

Retype password:

Confirm the password entered above

Submit:

Click this link to send form and create the user

Panels

Name	Version	MAC	Status
[REDACTED]	1.2.5.69	[REDACTED]	ONLINE
[REDACTED]	1.2.7.63	[REDACTED]	ONLINE
[REDACTED]	1.2.7.63	[REDACTED]	ONLINE

[Add Panel to Account](#)

Click on the desired control panel to access to its monitoring and control

Welcome page of the CrowCloud™

Information on:

Name of registered control panels

Firmware version

MAC address of control panels

Current Status of control panels

From this page you can:

Edit list of registered control panels

Add new control panel to user

Areas

This part enables control of SHEPHERD PLUS™ panel

Areas:

Selection of the area to monitor/control

ARM:

Arming of the selected Area

DISARM:


Disarming of the selected Area


STAY:

Stay Arming of the selected Area

PANIC:





Press 5 sec to generate immediate Panic Alarm

 159dxxxx

Zone 25  26 °C

[Areas](#) [Zones](#) [Outputs](#) [Keypads](#) [Users](#) [Troubles](#) [Pictures](#) [Settings](#)

Zones

ID	Name	Signal	Type	State	Areas	Status	Statistics	Temperature
1	Zone 1 Edit		Camera PIR on CT2035	ready	Area 1			25 °C
3	Zone 3-FW2-Right Edit		Magnetic contact	ready	Area 1			28 °C

Note: Only active zones will be listed

Zones

This part provides info/control on Zones

Names of the active zones

RSSI Signal of the zone

Type of connected device

State of the device

Related area of the zone

Status (Active/Bypass) of the zone




Statistic (if device compatible) for

Temperature, Air Quality, Humidity...

Add Zones: online learning of devices

[Areas](#) [Zones](#) [Outputs](#) [Keypads](#) [Users](#) [Troubles](#) [Pictures](#) [Settings](#)

Outputs

ID	Name	Signal	Type	State	Status	Statistics	Temperature
1	Output 1-IP CAM Edit		AC Outlet with Simple Power Metering	ready			

Outputs

This part enable control on Outputs

NAME:

Name of the outputs (ex: outdoor siren)

TYPE:

Type of Output: Wired, Siren, Smart Plug...

STATE:

Info on output trouble

STATUS:

Activation / Deactivation of the output

Areas
Zones
Outputs
Keypads
Users
Troubles
Pictures
Settings

Users

Add user

ID	Name	Action
1	User 1-Master	Edit
2	User 2-A1	Edit

Users

List of active users into the control panel.

ID:

User position registered in control panel

NAME:

Name of the user saved in control panel

Areas
Zones
Outputs
Users
Troubles
Pictures
Settings

Troubles

Smoke DECT (zone 36): Tamper alarm

Troubles

Information on current troubles detected

ID: 2239497
(CAM WLED 15)
Created: 02-09-2019 - 15:02
Delete

Pictures

This part of the personal page gives to the end user information and control of connected PIRCAM detectors with the possibility to display pictures of all devices or select device from which you want to see saved pictures.

The End-User has also the possibility to Take Picture from selected PIRCAM detector.

Panel Info

Connected via Ethernet

Ethernet

Ip: 192.168.1.62
Mac: 0013A120159D
Mask: 255.255.252.0
Gateway: 192.168.0.240
Id: ethernet

Radio

Software version: 0.41
Hardware version: 4.07
Failure: false
Module id: 19816146
Freq: 868.85
Id: radio

GSM

Status: 0
No voice: false
Roaming: false
Ip: 10.49.3.242
Id: gsm
Mask: 255.255.255.255
Status desc: OK
Mobile rssi: -91
Band: 42501
Module hwr: SARA-U201-04B-00
Dns: 80.179.82.179
Provider: Partner IL
Imei: 358887096466287
Rssi: -91
Net: HSDPA
Gateway: 10.49.3.242

Wi-fi

Ssid: Crwlangu
Ip: 192.168.30.58
Wifi rssi: -44
Mask: 255.255.255.0
Id: wifi
Mac: 94E36D81693B
Dns: 8.8.8.8
Rssi: -44
Gateway: 192.168.30.240

Reset panel connection

Panel Info

This part provides info of current communication status:

Display of the current connection method

Ethernet:

IP: internal IP of the panel in your network

MAC: Ethernet MAC of the SHEPHERD PLUS™

Mask: Network subnet mask

Panel: IP of the router

ID: Name of the communication method

Radio:

Information on the Two Way wireless RF module for wireless ISM devices

GSM:

Information received from cellular provider on the current GSM/GPRS/4G connection

Wi-Fi:

Information on the Wi-Fi connection status inside your personal network

Reset panel connection:

Restart panel communication methods

Areas Zones Outputs Keypads Users Troubles Pictures Settings

Notifications

Receive Push Notification	
Alarm	<input checked="" type="checkbox"/>
Troubles	<input checked="" type="checkbox"/>
Arm	<input checked="" type="checkbox"/>
Information	<input checked="" type="checkbox"/>
Take picture	<input checked="" type="checkbox"/>
Configuration	<input checked="" type="checkbox"/>
User association	<input checked="" type="checkbox"/>
All	<input checked="" type="checkbox"/>

Receive Pictures by Email	
Receive pictures	<input checked="" type="checkbox"/>

Notification language: English(US)

Submit

Notifications will be sent automatically to your account email address.
You can set up other email addresses to get notified

Add New email address

Details

You can easily set up events notifications and select type of events sent to each emails addresses registered

Information: All type of information.

Alarm: Alarm occurs

Troubles: When the panel reports troubles

Take picture: In case of picture is requested

User association: When a new user is registered on the panel

Configuration: Enter in installer mode

Arm: When arming the system

You can also select which email is allowed to receive alarm pictures.

Details

This tab gives possibility to change control panel name in the cloud

Mobile Applications



Friendly user guide will help you register and set up the Panel.
Install the Crow Pro application on your smartphone (iOS / Android)

or open your web browser <http://www.CrowCloud.com>



All information and data contained in this document are proprietary and confidential. CROW Electronic Engineering Ltd. shall not be liable, in any event, for any claims for damages or any other remedy in any jurisdiction whatsoever, whether in an action in contract, tort (including negligence and strict liability) or any other theory of liability, whether in law or equity including, without limitation, claims for damages or any other remedy in whatever jurisdiction, and shall not assume responsibility for patent infringements or other rights to third parties, arising out of or in connection with this document.

Further, CROW Electronic Engineering Ltd. reserves the right to revise this publication and to make changes to its content, at any time, without obligation to notify any person or entity of such revision changes. These materials are copyrighted and any unauthorized use of these materials may violate copyright, trademark, and other laws. Therefore, no part of this publication may be reproduced, photocopied, stored on a retrieval system, or transmitted without the express written consent of CROW Electronic Engineering Ltd. Any new issue of this document invalidates previous issues.

© CROW Electronic Engineering Ltd. 2018. All rights reserved.

Information in this document is subject to change without notice.

No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, without express written permission of CROW Electronic Engineering Ltd.

Appendix 1: Installer Event log messages

AC Fail	Loss of AC power from the main panel
AC Restored	AC power restore on main panel
%O activated by %U	Output number %d activated by user number %U
%O activated by remote control	Output number %d activated remote control
*%Z Alarm in %A	Zone number %Z Alarm in Area number %A
Area Edited in %A by %S1	Area number %A label was Edited by Cloud user %S1
*%A Arm Failed	Area number %A arm operation failed
*%A Armed by Keypad %d	Area number %A armed via Keypad number %d
*%A Armed by Time Zone %d	Area number %A armed via Time zone number %d
*%A Arm Fail by Time Zone %d	Area number %A Arm fail by time zone number %d
Automatic Test Connect	Automatic communication test process finish successfully.
*%Z Bypass	Zone number %Z bypassed
*%Z Bypass Restore	Zone number %Z bypass restore
%U Bypass all Pendant Battery Low	User number %U is Bypassed all Pendants that at Battery Low status
Code Attempts Alarm	False code alarm
Code Attempts Restore	False code alarm restore
Communication (%Y) Fail	Communication method (IP/ GPRS/Wi-Fi) (%Y) Fail
Communication (%Y) Restore	Communication method restore on main panel
Control Panel Added to User %S1, By %S2	Control Panel Added to Cloud user %S1 By Cloud user %S2
Control Panel Deleted from User %S1, By %S2	Control Panel Cloud user %S1 deleted By Cloud user %S2
Control Panel User Edited for %S1, By %S2	Control Panel Cloud user %S1 edited By Cloud user %S2
%O deactivated by keypad %d	Output number %O deactivated by keypad number %d
%O deactivated by remote control	Output number %O deactivated by remote control
DECT Delete Headsets by %S1	DECT Headset device deleted by Cloud user %S1
DECT Pair Canceled by %S1	DECT device pair cancel by Cloud user %S1
DECT Pair Started by %S1	DECT device pair process started by Cloud user %S1
%A Delinquency Alarm	Delinquency alarm in Area number %A
%A Delinquency Restore	Delinquency report Area number %A Restore
*%A Disarmed by %U	Area number %A disarmed by User number %U
*%A Disarmed by Keypad %d	Area number %A disarmed by keypad number %d
*%A Disarmed by Keyswitch %d	Area number %A disarmed by Keyswitch number %d
*%A Disarmed by Time Zone %d	Area number %A disarmed by time zone number %d
%U Duress Alarm	Duress Alarm from User Number %U
Duress Alarm Reset	Duress Alarm restored
Enter Installer Mode	Entering installer programing from installer web interface or installer app.

Exit Installer Mode	Exiting installer programming from installer web interface or installer app.
*Fire Alarm from keypad %d	Fire Alarm from keypad number %d
*Fire Alarm Reset	Fire Alarm Restore
Full CFG View by %S1	Full configuration view by Cloud user %S1
*%Z 24 Hour Alarm	Zone number %Z 24 hour Alarm
*%Z 24 Hour Fire Alarm	Fire Alarm from Zone Number %Z
*%Z 24 Hour Fire Restore	24 Hour fire alarm restore zone number %Z
*%Z 24 Hour Restore	24 Hour alarm restore zone number %Z
*%Z Inactivity Alarm	Inactivity alarm from zone number %Z
*%Z Inactivity Restore	Zone number %Z inactivity alarm restore
Keypad %d Tamper	Keypad number %d tamper alarm
Low System Battery	Low battery fault from the main panel
*Medical Alarm from keypad %d	Medical alarm from KP number %d
*Medical Restore	Medical alarm restored
*%Z Near Alarm in %A	Zone number %Z near Alarm in Area number %A
*%Z Near Restore in %A	Near alarm restore zone number %Z in Area number %A
Output Deleted in %O by %S1	Output number %O deleted by Cloud user %S1
Output %d Fail	Output number %d operation failed
Output %d Tamper	Output number %d tamper alarm
*Panel Tamper	Panel Tamper alarm
Panel upgraded to new version	Panel upgraded successfully to new version
*Panic Alarm by pendant %U	Panic alarm by pendant User number %U
*Panic Alarm from keypad %d	Panic Alarm from keypad number %d
*Panic Alarm Reset	Panic Alarm Restore
*Pendant %U Battery Low	Low battery fault from pendant number %U
*Pendant %U Battery Restored	Pendant User %U Battery Restored
*Perimeter %Z Alarm in %A	Perimeter Alarm from Zone %Z in Area %A
*Perimeter %Z Restore in %A	Perimeter Alarm restore from Zone %Z in Area %A
Peripheral Battery Low	Battery Low was occurred in mail panel peripheral device
*Radio %O Battery Low	Low battery fault from output number %O
*Radio %O Battery Restored	Output number %O Battery Restored
*Radio %Z Battery Low	Low battery fault from Zone number %Z
*Radio %Z Battery Restored	Low battery restore fault from Zone number %Z
*%A Remote Disarm	Area number %A remote disarmed
*%A Remote Stay Arm	Area number %A remote stay armed
Report Channel %d failed	Report Channel number %d communication failed
%Z Restore in %A	Burglary alarm restore zone number %Z in Area number %A
RF module upgraded	RF module upgraded successfully
%A Stay Armed by Keypad %d	Area number %A stay armed by keypad number %d
%A Stay Disarmed by %U	Area number %A stay disarmed by User number %U
%A Stay Disarmed by Time Zone %d	Area number %A stay disarmed by time zone number %d
Supervised Radio %Z Restore	Supervision restore event from zone number %Z
System Battery Dead	Empty battery of the main panel
System Peripheral Trouble	Trouble was occurred in mail panel peripheral device

System restarted	The control panel has reset
Take Picture in %Z Started by %S1	Take picture from PIRCAM Zone %Z started by Cloud user %S1
Take Picture in %Z Success	Take picture from PIRCAM Zone %Z Succeed
%Z Tamper	Tamper alarm from zone number %Z
%Z Verified Alarm in %A	Verified Alarm from Zone %Z in Area %A
Upgrade Failed by %S1	Panel upgrade failed by Cloud user %S1
Upgrade Started by %S1	Panel upgrade started by Cloud user %S1
User Deleted in %U by %S1	User number %U deleted by Cloud user %S1
Walk Test Started by %S1	Walk test started by Cloud user %S1
Zone Edited in %Z by %S1	Zone number %Z label was Edited by Cloud user %S1
Zone Params Edited in %Z by %S1	Zone number %Z parameters were Edited by Cloud user %S1
Zone %Z to Output %O Edited by %S1	Assign Zone %Z to Output %O was done by Cloud user %S1

* Event log display cannot be suppressed, as specified by EN50131-1-2006

Compliance Standards

- EN/IEC 50131 Level 2
- EN 301489-1
- EN 301489-3
- EN 301489-52
- EN 61000-6-3
- EN 50130-4
- EN 300220-1
- EN 300220-2
- EN 62368-1
- EN 50130-5
- EN 50131-1
- EN 50131-3
- EN 50131-6
- EN 50131-10
- EN 50136-1
- EN 50136-2
- EN 50131-5-3
- Certification body: Telefication B.V.

Pass-through operation feature:

The control panel working with pass-through mechanism.

The SPT shall not acknowledge the alarm to the AS before receiving an acknowledgement from the RCT. When the SPT receives an acknowledgement from the RCT, the acknowledgement shall be forwarded to the AS.

REDUNDANCY / DUPLICATION:

All events are transmitted and received via TCP/IP interface (primary). In case of primary channel fail, the event will be transmitted via the secondary back-up channel (GPRS).

ATS UNAVAILABILITY:

The ATS sends all faults to ARC(s) in any case except case then the ATS unavailable due to maintenance by accredited person with appropriate access level

ARC - alarm receiving centre

AS - alarm system

ACE – ancillary control equipment

AE – annunciation equipment

ATP – alarm transmission path

ATS - alarm transmission system

CIE - control and indicating equipment

HAS - hold-up alarm system(s)

IAS - intruder alarm system(s)

I&HAS – intrusion and hold-up alarm system(s)

WD – warning device

PS- power supply

RCT – receiving center transceiver

SPT - supervised premises transceiver