

FEATURES

- Micro-controller based.
- 24 zones panel expandable up to 48 zones.
- 12 digital input zones expandable to 28 zones.
- 4 dedicated analog zones for temperature and lux sensors.
- 4 fail safe zones with EOL resistance monitoring.
- 2 monitored fire zones to connect up to 16 smoke detectors / heat detectors / manual call points per zone.
- 2 zones for mains AC and UPS Power sensing
- 1 dedicated tamper zone
- Separate Remote Keypad with 16x2 LCD display (optional and not included)
- Multiple status LEDs on pain panel.
- Dedicated Fire alarm LEDs and Buttons for Test, Reset, Ack functions.
- 20 users 1 admin user, 1 engineer user, 18 users.
- User wise zone allocation / partitioning.
- Multiple zones grouping for entry/exit delay time for zones.
- Inbuilt Ethernet port with 10/100 mbps support.
- Health status sent to CMS every 15 minutes.
- Event log with 500 alarm and status logs storage.
- Control panel can be configured through Windows application, mobile APP and optional remote keypad.
- Configurable IP and CMS settings: Panel IP address, Panel ID, Target IP, Local port, Destination port.
- Can configure two target IP's.
- Each zone can be configured as delay, immediate, 24H.
- Each Zone configurable as NO or NC.
- Any zone can be configured as an independent scheduled PIR zone.
- Zone wise alarm priority configurable as normal, high, critical.
- Each zone can be scheduled for independent arming and disarming.
- Any zone/s can be configured as silent zones.
- Zone wise sounder scheduling.
- Individual optional sounder delay for each zone.
- General sounder schedule with 6 schedules.
- Common sounder can be disabled.
- Global zones multiple users can access a common zone.
- Up to 6 relay outputs to switch on / off devices 6 programmable schedules for each relay.
- User passwords can be changed through Windows application.
- Users can be disabled by the admin user through Windows application.



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- Independent schedule for each user.
- Can arm and/disarm panel RFID, switch, third party device through external interface.
- Enable/disable option of magnetic lock for each user.
- Auto re-arming in select zones.
- Three step rearming delay for each user for applicable zones.
- Can check and clear pending tickets.
- Can configure Configuration or Display Only mode for Mobile APP.
- Control panel firmware remotely upgradable over the air.
- Automatic Arming and Disarming.
- Intelligent PIR ticket sending logics.
- Wrong code access alert.
- User menu access alert.
- Can check current zone status through Windows application.
- Can check all relays status through Windows application.
- Can switch ON / OFF relays through the windows utility or mobile APP.
- Can check which users are logged in to the system.
- Automatic hourly reset for fire zone detector and dedicated reset button.
- Router supply source provided in the control panel.
- Router power can be and controlled by and via the control panel Intelligent auto router reset in case of network issue.
- Control panel serve as a safety enclosure for DVR/NVR.
- DVR / NVR and CCTV cameras power source from control panel.
- Low battery indication and alert.
- Mains AC power detection and alert UPS power detection and alert.
- Provision for built in 12V 7AH and 12V 12AH battery (options of 1 or 2 batteries).
- Control panel goes into standby mode in case of low battery.
- Last status is retrieved on reactivation in case of panel stand by or complete power failure.
- Two dedicated relay for sounders.
- Dedicated relay for router.
- Dedicated relay for fire detector reset.
- Relay output for electromagnetic door lock.
- Separate password for door lock control.
- Can connect a Lux sensor and control panel can receive actual lux reading values.
- Non-volatile memory.
- In-built CMOS battery for real time clock.
- Inbuilt intelligent power management system with heavy duty 6amp SMPS.
- Advanced tamper detection with inbuilt vibration detector and door opening sensor.
- Four locks with keys in enclosure.



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- Enclosure has inbuilt fans for heat ventilation.
- Sturdy sheet metal housing.



Operations:

User + Engineering mode

- 1. Omit zone & Arm System
- 2. Panel logs
- 3. Change codes
- 4. Timer Settings
- 5. Zone settings
- 6. Zone status
- 7. Auto Arm/ Disarm Settings
- 8. User settings
- 9. General Arming Partition
- 10. Date & Time Settings

Engineering mode Menu

- 11. IP Settings
- 12. Panel ID
- 13. Pending Transactions
- 14. Device Reset

Default factory Settings

| IP | 192.168.1.2 |
|-----------------------|-------------------|
| Port | 5000 |
| Utility Password | 1234 |
| RKP Admin password | ENTER + 00 + 1234 |
| RKP Engineer Password | ENTER + 99 + 4321 |

| Zone Number | Zone Name | Zone Type |
|-------------|----------------------|--------------|
| 01-12 | Digital Zone (NO/NC) | Programmable |
| 13 & 14 | Fire | Fixed |
| 15-18 | Fell safe zone | Dedicated |
| 19-22 | Analog Zone | Dedicated |
| 23-46 | Digital Zone (NO/NC) | Programmable |
| 47 | Tamper Zone | Dedicated |
| 48 | Silent Switch | Dedicated |



SYSTEM STATUS

DISARMED/DAY MODE

The system is in day mode when it is not armed. In this mode, only the panic and fire zones will be actively operational and can be triggered to raise an alarm. The time, day and date will be displayed on the remote keypad LCD screen. If any of the other zones are open, this will be indicated on the LCD screen.

ARMED MODE

The system is in the armed mode when all active* zones are operational and can be triggered to raise an alarm.

*Certain zones can be temporarily omitted from the system.

OPERATING PROCEDURES:

The Galaxy 4816lp can be operated through two procedures:

- 1. From the remote Keypads
- 2. Through Utility (Computer Software)

All functions can be executed through the remote keypads and all major functions can be operated through the utility.

ZONES:

There are five types of zones in the control panel:

Arm/Disarm: An Arm/Disarm zone will actively raise an alarm only if the system is armed. However, Arm/Disarm allows for a programmed delay during which the user can enter the code and prevent the alarm from sounding. If the user does not enter the code in the programmed amount of time, the alarm will sound. The main entry is usually the entry/exit zone so as to allow the user to enter the premises without raising the alarm. Entry/Exit zones are also referred to as delay zones.

Arm/Disarm mode can be converted into an immediate zone, it will actively raise an alarm only if the system is armed. If anyone enters the premises through an immediate zone while the system is armed, the alarm will sound immediately. Immediate zones usually include all the doors and windows other than the main entry, since the user is unlikely to enter the premises through these.

24*7/Panic: A Panic zone is a 24hour zone and will raise an alarm when the panic switch is pressed irrespective of whether the system is armed or disarmed.

Fire: A Fire zone is a 24hour zone and will raise an alarm in case a fire is detected irrespective of whether the system is armed or disarmed.

PIR: This zone type is dedicated to PIR, it has internal programming for PIR devices it is basically used for ATM Purposes.

Schedule: The selected Zone only activated for certain duration of time as per user configuration.

Disable: Selected zone will disable it will not give any alarm.

In the case of an alarm, the sounders will be activated, and Data sent over network to destination IP.



OPERATING PROCEDURE 1 - THROUGH REMOTE KEYPAD

TO ARM THE SYSTEM

Arming options:

FULL ARMING: The system is fully armed except login user zones (If user created).

FORCE FULL ARMING: The system will Arm completely even login user zones also gets activated. (If user created).

➢ FULL ARMING

Press **ENTER**

Press **ARM**

Press 4

All zones will be armed, and the screen will display:

ARMING

| 09:52 | 15/05/20 |
|-------------|----------|
| ADMIN ARMED | |

15/05/20

➢ FORCE FULL ARMING

Press ENTER

Press ARM

Press 3

All zones will be armed, and the screen will display:

ARMING....

FORCE FULL ARMED

09:52

> TO DISARM THE SYSTEM

Enter the Admin CODE to disarm all zones Press **ENTER**

Press 00+1234

All zones will be disarmed, and the screen will display:

09:52 15/05/20 ADMIN DISARMED

NOTE: The admin code is used to program the entire system as well as fully disarming it. The User code will only disarm the User zones.



MENU OPTIONS

To Access the Menu, enter the Admin CODE **ENTER** + **00** + **X X X X** and press **NEXT/PART** to change menu option, **ENTER** to select menu and press EXIT to exit menu.

The admin code is used to program the entire system as well as it will fully disarm it.

The following options are the main menu options.

- Omit zones & Arm System
- Panel logs
- Change codes
- Timer Settings
- Zone settings
- Zone status
- Auto Arm / Disarm Settings
- User settings
- General Arming Partition
- Date & Time Settings

Engineering mode Menu

Above menu option and other options are:

- IP Settings
- Panel ID
- Pending Transactions
- Device Reset

> OMIT ZONES & ARM SYSTEM

This option allows you to omit zones temporarily and arm the system.

OMIT ZONES & ARM SYSTEM

Press ENTER

| ZONE 001 | |
|-----------|---|
| DE-SELECT | < |

Press ARM/PART to change zone number

Press Next to swap between select/de-select

Select all zones as required and

Press Enter to omit zone.



Press **EXIT**

Display will show Arm system

Press Arming command to Arm and selected Zone will be omitted.

Example

User wants to omit zone number 3, first enter admin code to open menu option, press enter on omit zone and arm system, Select Zone 3 by pressing Arm button, than Press Next button to select option and enter to confirm, Exit from menu option and Arm system will display on keypad, now enter arming command zone 3 will be omitted and system will ARMED.

> PANEL LOGS

The panel log displays the last five hundred logs in which the alarm and event was triggered.

Users can select to read and clear alarm and event log

PANEL LOGS

Press ENTER on panel logs.

(Panel Logs consist of two options Alarm Log and Event Log.

ALARM LOG consists all alarm type log 's like Normal & Alert.

EVENT LOG consists All events type log's like arming and disarming of system, hooter blown etc.)

PANEL LOGS ALARM LOG <

Press **NEXT** to change between alarm and event log Press **ENTER**

223 READ LOG < CLEAR LOG

Press **NEXT** to change between Read log and clear log Press **ENTER**

(Alarm log display)

12:02:42 18MAY20 Z003 N ARM

FORMAT: date and time Zone number Alert Type (Normal/alert) Zone type (Arm/24h)

(Event log display)

10:02:42 18MAY20 00ARM

FORMAT: date and time User number Event Type (ARM/Disarm/hooter/EML/Ack etc.)

> Change codes

This option allows the user to change the Admin Code or USER Code:

The admin code disarms the entire system. And to open the menu and all programmable features can



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only be accessed with the admin code.

USER CODE used to log in/log out user. Which only disarms the USER allotted zones.

CHANGE CODES

Press ENTER on change code

It will show two option ADMIN CODES and USER CODES

| ADMIN CODES | |
|-------------|--|
| USER CODES | |

Press **NEXT** to select user

Press ENTER to change Admin code

ENTER OLD CODE

ENTER NEW CODE

RE- ENTER NEW

Enter old code first and press ENTER

Enter new code press ENTER

Re- enter new code press **ENTER**

After entering code Press **ENTER** Code changed screen will display

CODE CHANGED

Press ENTER to change USER code Press ENTER Enter user between 01-18, 99

> ENTER USER NO 03

Press **ENTER**

Enter old code first and press ENTER

| ENTER OLD CODE | |
|----------------|--|
| **** | |



Enter new code press ENTER

Re- enter new code press ENTER

ENTER NEW CODE

RE- ENTER NEW

After entering code Press **ENTER** Code changed screen will display

CODE CHANGED

➢ TIMER SETTINGS

The user can set and change Hooter timer settings as per personal requirement.

HOOTER TIME: The sounder time is the duration for which the alarm will sound in case of an intrusion or fire. This time is programmed by the admin and can vary from 0000 to 9999 Seconds.

TIMER SETTINGS

Press ENTER

Enter time between 0000-9999



Press ENTER

> ZONE SETTINGS

This option allows to user change all zone setting like select zone type /sensor type /hooter / ticket and all type of delay settings.

Enter zone 001-012 and 023-47

ZONE SETTINGS

Press **ENTER**

Zone types

User can make zone types as choices available

ARM DISARM

DISABLE

24X7

PIR



FIRE

SCHEDULE

Press next to change between Zone type options

| ZONE TYPE | |
|------------|--|
| ARM DISARM | |

Press ENTER

Sensor type

User can select sensor type like NO and NC

To change sensor type

Press **NEXT**

| | Senso | r TYPE | |
|------|-------|--------|--|
| NO < | NO | < | |

Press **ENTER**

Schedule time setting for zone.

User can select zone alert time as Zone

A Start Time And A END Time in enter time only zone will give alert.

Alert schedule Start time Alert schedule end time

| A Start Time | <u>0</u> 0:00 |
|--------------|---------------|
| A END Time | 23:59 |

Press ENTER to move cursor and enter time from keypad

Press ENTER after entering time

Send ticket out of schedule

User can select ticket will send to destination IP when zone is out of schedule

Press NEXT to change between YES/No

SEND TICKET OUT OF SCHEDULE <u>YES</u> <

Press **ENTER**

Hooter Setting

User can also select which hooter will sound after alert Hooter 1/2 or both and even user can also select Hooter Disable for dedicated zone.

| Hooter Sett | ing |
|-------------|-----|
| Hooter 1 | < |

Press ENTER

Hooter schedule

User can Select Hooter blowing time only for Desired time hooter will blow

Hooter start time

Hooter end time

H.S. TIME 00:00 H.E. TIME 23:59



Press **ENTER** to move cursor and enter time from keypad Press **ENTER** after entering time.

ENTRY DELAY (000-999)

Enter entry delay time for zone by numerical key.

| ENTRY DELAY |
|-------------|
| 000 |

Press ENTER

EXIT DELAY (000-999)

Enter exit delay time for required zone by numerical key.

EXIT DELAY 000

Press **ENTER**

HOOTER DELAY (000-999)

Enter Hooter delay time after desired second hooter will blow by numerical key.

HOOTER DELAY 000

Press **ENTER**

LONG OPEN DELAY (000-999)

Long open delay is a time setting if a zone is open for a long time it will give alert to destination IP.

LONG OPEN DELAY 000

Press ENTER

Note : All time setting are in Seconds

Zone Status

User can find out which zones are open, It will show all Open zone numbers.

| User can Also check open zone by pressing ENTER + NEXT DIRECTLY FROM REYPAD WITHOUT OPEN MEND |
|---|
|---|

OPEN ZONES 01 03



> AUTO ARM/DISARM SETTINGS

Press **ENTER**

Enter Auto arm time

AUTO ARM/DISARM SETTINGS

AUTO 00:00 ARM TIME

Press ENTER to move cursor and use numerical key to enter time

After enter time

Press ENTER

Select Auto Arm Enable/Disable setting

AUTO ARM DISABLE <

Press **NEXT** to change enable/disable option

Press **ENTER**

Enter Auto disarm time

AUTO 00:00 DISARM TIME

Press ENTER to move cursor

After enter time

Press **ENTER**

Select Auto Disarm Enable/Disable setting

AUTO DISARM DISABLE <

Press NEXT to change enable/disable option

Press **ENTER**

Week off one enable/disable

| WEEK OFF ONE | |
|--------------|---|
| DISABLE | < |

Press NEXT to change enable/disable option

Select week off 1

| SELECT WEKKOF | F1 |
|---------------|----|
| MONDAY | < |

Press **NEXT** to change DAY Press **ENTER**



Week off Two enable/disable

WEEK OFF ONE DISABLE

<

Press NEXT to change enable/disable option

Select week off 1

| SELECT WEKKC | OFF 1 |
|--------------|-------|
| MONDAY | < |

Press **NEXT** to change DAY Press **ENTER**

USER SETTINGS

ARMING TYPE

USER SETTINGS

Press **ENTER**

Enter User Number whom settings you want to change (00-18).

ENTER USER NO 05

Press **ENTER**

Select User authentication mode

Options are:

Direct Authentication

CMS Authentication

Arming Authentication

USER MODE ARMING <

Press **NEXT** to change options

Press ENTER

Enter User code

ENTER CODE 1234

Press numerical Keypad to change code

Select Schedule start time and end time for user, i.e. for certain time interval only, user can excess, and code is valid.

START TIME 00:00 END TIME 00:00



Allotting zones to user

ZONE 001 DE-SELECT <

Press **ARM/PART** to change Zone numbers.

Press **NEXT** to change select/deselect

Select all zones as required and

Press **ENTER**

USER SETTINGS CMS AUTH./DIRECT AUTH. TYPE

Enter User Number whom settings you want to change (00-18).

ENTER USER NO 05

Press ENTER

Select User authentication mode

Options are:

Direct Authentication

CMS Authentication

Arming Authentication

USER MODE CMS AUTH.

Press **NEXT** to change options ' Press **ENTER** Enter User code

> ENTER CODE 1234

Press numerical Keypad to change code

Select Disarm Duration

This time allow user to disarm panel for desired time

SELECT DISARM DURATION

00

Press **ENTER** to move cursor After enter time



Press ENTER

Rearm delay Settings

After entering again code it will Arm for extended time

Rearm delay -1 00:05

Press ENTER to move cursor

After enter time

Press **ENTER**

Rearm delay -2 00:05

USER SCHEDULE SETTING

Select Schedule start time and end time for user, i.e. for certain time interval only, user can excess, and code is valid.

START TIME 00:00 END TIME 23:59

Press ENTER to move cursor and numerical key to enter time

After enter time

Press **ENTER**

EM LOCK SETTING

After activation user can open EM lock when code will enter or vis-versa

EM LOCK OPEN ACTIVATE <

Press NEXT to change Activate/deactivate option

Press **ENTER**

Allotting zones to user

ZONE 001 DE-SELECT <

Press **ARM/PART** to change Zone numbers.

Press **NEXT** to change select/deselect

Select all zones as required and

Press ENTER.



➢ GENERAL ARMING PARTITION

There is Two partition option in system, user can a lot particular zones to particular partition while entering partition code select zone would Arm only. User can divide whole system in two partitions.

GENERAL ARMING PARTITION

Press **ENTER**

Select partition

SELECT PARTITION PARTITION 01 <

Press **NEXT** to change partition option 01/02

Press ENTER

| ZONE 001 | |
|-----------|---|
| DE-SELECT | < |

Press **ARM/PART** to change Zone numbers.

Press **NEXT** to change select/deselect

Select all zones as required and

Press ENTER.

DATE & TIME SETTINGS

DATE & TIME SETTINGS

Press **ENTER**

Enter DATE

By pressing numerical key change user can change date Press **ENTER** to move cursor

DATE 19.05.2020

Press **ENTER**

Enter Time

By pressing numerical key change user can change time

Press ENTER to move cursor



Press ENTER

TIME 10:53

ENGINEERING MODE

Engineering mode is for technicians which allow them to access some features like editing panel IP settings and whole device reset option

Default Engineering code ENTER + 99 + 4321

IP Setting

Allow engineer to change IP settings of panel like Device IP & target IP'

BUTTONS USED TO EDIT IP SETTINGS

PANIC: Clear display

NEXT: dot

ARM: cursor move

IP SETTINGS

Press ENTER

Options available in IP settings are:

DEVICE IP

Target -1

Target -2

IP SETTINGS DEVICE IP <

Press **NEXT** to change IP options

Press ENTER

User can change device IP by numerical keys

| DEVICE IP | |
|-------------|--|
| 192.168.1.2 | |

Press **ENTER**

Subnet Mask

User can change device subnet by numerical keys

SUBNET MASK 255.255.255.0



Default gateway

User can change device Default gateway by numerical keys

DEFAULT_GATEWAY 192.168.100.1

Press ENTER

DNS-1

User can change device DNS-1 by numerical keys

| DNS1 | |
|---------------|--|
| 192.168.100.1 | |

Press ENTER

DNS-2

User can change device DNS-2 by numerical keys

| DNS2 | |
|---------|--|
| 8.8.8.8 | |

Press **ENTER**

DEVICE PORT SETTING

| DEVICE PORT NO | |
|----------------|--|
| 05000 | |

Press ENTER

All Options of other IP settings are same.

> PANEL ID

PANELID

Press **ENTER**

Engineer can change panel id setting by numerical key

Press ARM to change cursor

Use numerical key to edit

| PANEL ID |
|---------------|
| <u>999999</u> |

Press ENTER

> PENDING TRANSACTION

PENDING TRANSACTION



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User can see count of pending tickets stored in device and can clear it by pressing ENTER

| | 001 PENDING |
|---------------------------|----------------|
| | CLEAR COUNT < |
| Press ENTER | |
| | PRESS ENTER TO |
| | CLEAR COUNT |
| Press ENTER | |
| | CLEARED |
| | SUCCESSFULLY |
| | |
| | |
| > DEVICE RESET | |
| | |
| | DEVICE RESET |
| User can reset Panel defa | ult |
| Options available | |
| WITHOUT IP | |
| IP DEFAULT | |
| ZONE DEFAULT | |
| USER DEFAULT | |
| RELAY DEFAULT | |

FACTORY DEFAULT

REBOOT



PRESS **NEXT** to change options and **ENTER** to select



OPERATING PROCEDURE 2 – THROUGH UTILITY

User Can control whole panel with the help of utility, which is a computer Software, By the help of GUI it is easy to access and control all settings and features of System.

Screen as Show below:

| PANEL ID FIRMWARE MAC ID | |
|---|------|
| | |
| 99999 V0.1.4 004145098006109122 | |
| Panel ID Setting Destination IP Setting Panel IP Setting Relay Automation Setting Relay Automation Status Users Setting User Status | JS |
| Zones Setting Zones Status Pending Tickets Date - Time Setting ModBus Setting Power Control Setting Health Status Set | ting |
| Auto Arm Setting Factory Resetting Alarm Log Event Log RTD TLS Partition Zone Omit Zone General Settings | |
| | |
| | |
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| | |
| | |
| | |

To connect Panel with utility

User, must have LAN cable and Desktop/laptop

- 1. Connect system and Laptop via Cat6 cable
- 2. The system and Laptop must be in a same network series. (If System IP is 192.168.1.2 than system must be in 192.168.1.X)
- 3. Enter system IP in utility enter port and password
- 4. Click on connect.

User must click Refresh option after changing any settings of system. To exit any utility option user must click on first close button.