Burglar Alarm System Manual

Model: BAS-GS

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Features

Auto Detect Open Door

When the system is being ARMED, if any door having Magnetic Switch (Wired or Wireless) is open, the system will alert the user with a intermittent Siren Sound. The same is true for all wired sensors.
During this time, if the Opened Sensor or the opened Wired Zone is closed, the system will get ARMED and the intermittent Siren sound will stop.
The main Panel display in this case is explained under the heading “Display explanations” – sub heading “while Arming the system”.

Always Armed Zones

Some sensors can be configured to work 24 Hours. Whether the system is ARMED or not, these sensors would initiate Siren hooting and Telephone dialing.
For example, a heat detector can be placed near Generator so that whenever generator heats due to a fault, the siren would alert the user & also inform on his Cell number.
For further details refer the heading “Wireless Sensor – Operating Mode” and “Wired Sensor – Operating Mode”

Auto ARM / DISARM

System can be programmed to ARM / DISARM at set time.

ARM Bypass

User has option to ARM all the Zones or selected Zones. This helps in ARMING the system while servants are present in some part of the building. For further details refer the heading “ARM Bypass”

Auto Dialer (Dialing through GSM SIM during intrusion)

The system dials up to 6 Telephone numbers and plays siren sound (pre-recorded message-Optional), during intrusion. After 10 secs of Siren Sound, it plays the message “Batt low, Wired Zone Open, Wireless Sensor Number, etc”
Each Telephone number can be programmed to dial from 1 to 14 times.
For further details refer the headings ”Telephone Numbers Entry” + “Telephone Number Redial Times” + “Telephone Number Display - ON / OFF”

Battery (Rechargeable) In-built Li rechargeable batteries for backup lasting up to 15 hours. Can be extended by connecting optional BAS-PS (Power Supply with 12V 7AH Maintenance Free Battery).

Battery Low warning – of Main Unit

When the in-built Batteries of the Main Unit goes low & the SYSTEM is in ARMED condition, it will dial the pre-fed Telephone number to inform the user with a Voice Message “Battery is Low”. It is possible to Listen-in and Disarm the system through Telephone.
In case the system is DISARMED then display will show “Main Batt is low” & it will give a beep every 15 secs. In this condition, the display back light keeps getting ON for 10 secs and then OFF for 10 secs.
Note: When Battery goes low and the system is ARMED, intrusion will not work.

Battery Low warning – of Wireless Magnetic / Vibration Sensors (MSW, VSW, VSW-T, PIRW, PIRW-T)

When the cell of any of the wireless Magnetic / Vibration Sensors goes low & the system is in ARMED condition, it will dial the pre-fed Telephone number to inform the user with a Voice Message “Battery is Low + ID Number”.
The user can Disarm the system & can also Listen-in.
When a new Cell is restored in the Sensor, the system registers that the sensor is now operative.
When the cell of any of the wireless Magnetic / Vibration Sensors goes low & the system is in DISARMED condition, the display gives a message and the display back light keeps getting ON for 10 secs and then OFF for 10 secs. During this condition, the system also gives a mild beep every 15 secs.

Note: However, SMS message is not to be relied upon and low battery LED indication on the sensor should be checked periodically.

Capacity: Can connect to 50 Wireless Sensors : Has 6 Wired zones & each Zone can connect to unlimited Wired Sensors

The system can work with up to 50 Wireless Sensors (including Wireless Remotes & Signal Repeaters) and any number of Wired Sensors as long as the total resistance of the Sensors and the wires is less than 200 Ohms.

Electrical Lights ON during Intrusion (Optional)

Selected Light load (not exceeding 200Watts) can be connected to it which gets ON whenever there is an intrusion.

Multilevel Passwords

The system has 1 Master & 5 User Passwords
Master Password can do all operations and programming as well. User level Passwords can ARM / DISARM their own defined Sensors, check balance in SIM, check system details.
The History records would show which Password had ARMED / DISARMED the system.

Remote Monitoring – Whenever user wants or during Intrusion.

User can make a Telephone call from anywhere and perform the following:
ARM or DISARM the system.

Set Siren ON / OFF
Listen to the Wired Zone / Wireless Sensors that are open during intrusion.

Record of History of last 20 events with date & time stamping, through SMS.
For further details, refer the heading "Record of History"

Siren - Built in
One Siren comes built into the system with option to connect an external Siren.
More than one External Sirens can be provided by using "BAS-PS" power supply.
Refer the main heading = Installation & sub heading = *Connector "*Siren" for External Siren
To disable the Siren sound during Intrusion, refer the heading "Siren ON or OFF "

Signal Strength of GSM through SMS
User can check the strength of GSM signals received at the location where the system is installed. This helps in locating suitable place of installation.

Signal Repeaters (Optional)
They are used for increasing the operating distance of Wireless Sensors from the Main Unit. It doesn't increase the range of Wireless Flashing Siren. For further details, refer the heading "Signal Repeater – Wireless"

Silent Panic
User has the option to press "Panic" or "Silent Panic" keys from Remote / Main Unit. In case of "Panic", the system activates the Siren as well as dial out on Tel Line. In case of Silent PANIC, the system only dials out on Tel Line.

SIM Balance Checking & various Programming through SMS
From Main Panel
Press 0 # - Enter the Balance Enquiry Codes of Service Provider (*123# in case of Airtel) – Press #.
Balance amount will be displayed.
Press "Quick Exit" to exit.
Through SMS
Through registered Mobile Numbers, user can send SMS to the SIM installed in BAS and get Reply with balance. Similarly various Programming can be done through SMS with Password. Refer heading "SMS Text for various programming"

Tamper Alert Main Unit
The main unit has in built tamper switch.
Whether the system is ARMED or DISARMED, if the main unit is removed from its bracket, the system will consider it to be an intrusion. It will sound the siren & dial out the telephone numbers.
Whenever the system is hanged on the wall bracket, it is registered. Thereafter, when the system is removed from the bracket it senses it as intrusion. In case, it is not hanged on the bracket then it does not consider it.

Tamper Alert in case of Vibration Sensors (VSW-T)
If VSW-T are installed with the system, it will alert the user in case of Tampering of these sensors, as explained below.
Whenever VSW-T is Tampered, the system will dial out and give intrusion message with ID of the Sensor. If the system was DISARMED at the time of Tamper, it will give mild beeps from the main unit. In case system was ARMED at the time of Tamper, it will sound siren as in case of Intrusion.

Voice messages in various operations. The system gives voice message prompts**:**
- When system is ARMED, DISARMED, during various programming modes, etc.
- When Battery goes low of the main unit in ARMED mode, the system dials Telephone Number and gives voice message = Zone 99 Battery Low
- When Battery goes low of any of the wireless Magnetic / Vibration Sensor in ARMED mode, the system dials Telephone Number and gives voice message = Wireless Sensor + <ID no> + Battery Low

Wireless Remotes
One Remote is included with the system but more of them can be used.
It has functions of Panic Alarm, Remote ARM/DISARM, Remote BYPASS ARM.
For further details, refer the heading **"**Wireless Sensors, Remotes & Panic Keys Registering/Deletion / Deletion"

Installation

This Burglar Alarm System is supplied with following items**:**
1. Main Unit with built-in Siren & Rechargeable Batteries - 1 No
2. Wireless Remote - 1 No
3. Power Supply Adapter (12V 500mA DC) - 1 No

A GSM SIM card is to be provided by the user.

Notes on Installation
- Wireless Sensors can be placed within 300 ft distance from the Main Unit if there is no obstruction in between. They have to be registered in the Main Unit as explained under the heading "Wireless Sensors, Remotes & Panic Keys Registering/Deletion ".
  The distance between the Main Unit and Wireless sensors would be maximum when there is minimum interference of concrete walls, electric appliances etc.
- Install the Main Unit in an open & ventilated area so that the signals from different Wireless Sensors are received properly by the Main Unit. It should be installed at least 0.5 meters from ground. It should be ensured that no liquid spills over it.
- Do not install the Main Unit near high frequency electric appliance in order to avoid interference of electromagnetic

waves.

Wireless Sensor's range checking method
Arm the system. Take the Sensor to maximum distance from BAS and trigger the sensor.
If there is intrusion in BAS-GS, that means the sensor can be installed up to that distance.

Connections

- There is a 2-pin connector at the back of the system named '+12V G'. This connector is for the Power and is connected to the Adaptor provided with the system.
- Another 2-pin connector named 'BAT' is connected to the Battery.
- The System will not Switch ON unless Power is given via the adaptor. The system will not Switch OFF if the adaptor is connected to the system. To Switch OFF, remove the adaptor and take out the BAT connector.
- There is a 10 pin Connectors provided at the back side of the main unit. Its corresponding female connectors with wires are also provided with the system.
- The wires from the female connectors are to be connected as per the tables given below**:**

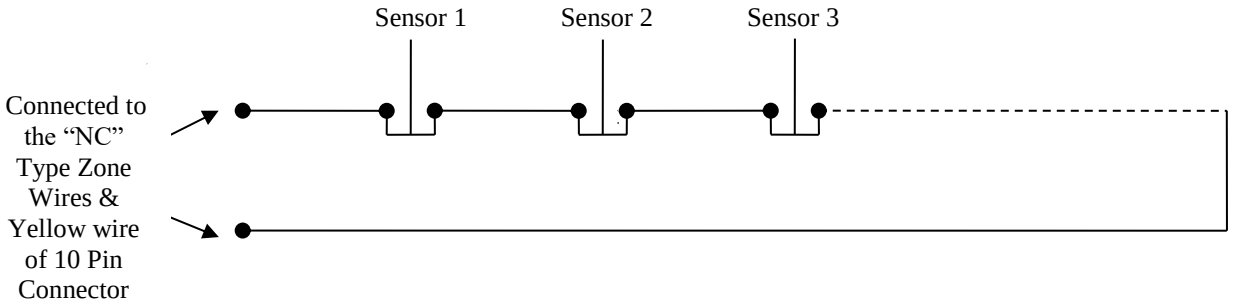
10 Pin Connector

Wire Color	To be connected to
Grey	External Siren +Ve Wire. Connect a 9 - 12V DC Type Siren (Max Wattage 300mA). If more than one external Siren is to be used than install BAS-PS and do the connections as per the BAS-PS Manual.
White	Auxiliary +Ve 8.5 V DC Supply for Sensors. Sensors that operate 8.5V DC can be connected to this connector & GND provided the total current drawn is less than 250mA.
Orange	NC Type Wired Zone no 1 wire.
Blue	NC Type Wired Zone no 2 wire.
Red	NC Type Wired Zone no 3 wire.
Green	NC Type Wired Zone no 4 wire.
Brown	NC Type Wired Zone no 5 wire.
Black	NC Type Wired Zone no 6 wire.
Yellow	GND One end of all the Wired Zones wires & - Ve of External Siren & - Ve of Auxillary Output & - Ve of External Peizo Buzzer

The product is supplied with NC (Normally Connected) type Wired Zones.

Connect all the "Normally Closed Type Wired Sensors" in series and terminate on any of the "NC Type" Zone wires of the Main Unit.

Any number of Wired Sensors can be connected as long as the total resistance of the Sensors and the wires is less than 200 Ohms.



***Wireless Remote* & Wireless Sensors should be registered in the Main Unit as described under the heading "Wireless Sensors, Remotes & Panic Keys Registering/Deletion"**

Front Panel LED Indications

There are 2 LEDs on the front panel marked as ARMED and READY.
ARMED LED glows in red color and READY in blue color.
Following table illustrates the various conditions:

LED	Status	Message
ARMED	OFF	System is DISARMED
	ON	System is ARMED
	Blinking	System is in Intrusion mode & Tel Number (if entered) is being dialed by the system. Also when any user (not Master) has ARMED it's Sensors.
Ready	ON	System is running on AC mains
	Blinking	System is running on battery

System Power ON / OFF

To switch ON the main panel, connect its adapter.
To switch OFF the main panel, disconnect the adapter and press the hidden push button located above "Z1" LED, on the white portion of panel front.

Sound Indications

- During Intrusion the Siren sounds to its maximum power
- Whenever the system fails to get ARMED for any reason, the Siren sounds for a very short time with a long gap in between. This continues until DISARMED.

Always ARMED Sensors

Any Sensor whether Wireless or Wired can be made to function 24 hours i.e., it would trigger intrusion in ARMED mode as well as DISARMED mode.
Programming**:**
: In case of Wireless Sensor, make its MODE = Always ARMED as explained under the heading "Wireless Sensor – Operating Mode".
: In case of wired sensor, its Zone is to be programmed as MODE = Always ARMED as explained under the heading "Wired Sensor – Operating Mode"
Operation**:** Whenever, the Sensor is triggered irrespective of the system being in ARMED or DISARMED condition, the Siren will starts hooting and the system will dial out the Telephone numbers

Arm

You can ARM the system and leave the Remote inside the premises, if required. In this case close all the sensors, ARM the system. Now leave the premises within 10 secs and close the door. This 10 secs can be decreased or increased up to 60 secs. Refer heading "Delay to ARM" for changing this time.

While moving out of the premises, ARM the system by any of the following method:
Press the "ARM" on the Wireless Remote
Or
Send SMS to the Panel XXXX+ARM
You will get a confirmation SMS in reply.
In ARM state, the indicator on the main unit would glow RED.
Now, whenever any sensor is triggered, the system will dial the preset telephone number and activate the siren after 10 secs.
Note: In case of PANIC button being pressed, there is no delay.

ARM Bypass

In this mode, one or more Zones can be programmed to remain Disarmed while rest of the Zones get ARMED. This feature is useful where some part of the building occupied by servants may be left Disarmed while keeping the rest of the building Armed.
Procedure to activate the system in Bypass mode is explained below.
If system is Armed normally through, then even the Bypass zones get Armed.
To program a Zone as a Bypass Zone refer "Wireless Sensor – Operating Mode" & "Wired Zones – Operating Mode".
To ARM the system in Bypass mode:
Press the "ARM Bypass" Key on the Wireless Remote.
Or
Send SMS XXXX+BYPASS

Auto Arm / Disarm Time

The system can be programmed to ARM and DISARM automatically at set time..
Programming**: Send SMS XXXX+AUTOj y aaaa dddd**
Where, XXXX = Master Password
j = Days (0= Sunday, 1= Monday,…., 6= Saturday, 7= All Days)
y = E/ D to Enable or Disable Auto Arming
aaaa = ARM time in 24 hours format
dddd= DISARM time in 24 hours format
Default: In default the system is not in Auto Arm / Disarm mode.
To disable this feature, send SMS XXXX+OFFAUTO
Note: In order to disable Auto Disarm Time, store the DISARM Time as 9999.

Date / Time Setting

Send SMS XXXX+DATE dd mm yy j hhmm
Where, dd = Date
mm = Month
yy = Year
j = Day (Mon=1, Sun=7)
hh = Hours (In 24 hours format)
mm = Minutes

Disarm

While entering the premises, DISARM the system with any of the following methods within 10 secs of entering the premises**:**

Press the "DISARM" Key on the Wireless Remote.
Or
Send SMS XXXX+DISARM
Where, XXXX = Master Password

Delay to ARM

This is the time delay after system takes action on getting intrusion from any Sensor. This delay also helps in Arming the system while leaving the premises. The user can ARM the system while being inside the premises and then leave within this time**:**

Send SMS XXXX+ARM DELAY tt
Where, tt = Time in Seconds (01 to 60)

Default**:** 10 secs.

Panic Key

The Wireless Remote supplied with the system has a Bell Shaped engraved Key.
After 3 secs of pressing this key, the Siren will start hooting and the system will start dialing the Telephone Numbers.
This would happen whether the System is in ARMED mode or DISARMED mode.
If desired, more Panic Switches can be registered in the system. Following are the type of Switches that can be added:

Wireless Remotes (one is supplied with the system and more can be registered)
Wired Panic Switches

Programming**:**

: In case of Wireless Remote, add Wireless Remote as explained under the Heading "Wireless Sensors, Remotes & Panic Keys Registering/Deletion "
: In case of Wired Panic Switches, its Zone is to be programmed as MODE = Always ARMED as explained under the heading "Wired Sensor – Operating Mode"

Operation**:** Panic activation from the Remote.
Press Bell shape Key.
Siren starts hooting and the system dials out on the Telephone line.

Panic Key – Silent

User has the option to press "Panic" or "Silent Panic" keys from Remote.
In case of "Panic", the system activates the Siren as well as dial out on Tel Line.
In case of Silent PANIC, the system only dials out on Tel Line.
To activate "Silent Panic" from Remote, press Bell shape Key & then press Speaker Shape key within 3 secs. If this key is not pressed within 3 secs then the system will activate as Normal PANIC.

Passwords

The system has 6 Passwords.
1 Password is a "Master Password" which can do all the programing & all the operations.
5 Passwords are "User Passwords". They can ARM / DISARM the their own sensors, check status of system.
User Password can only be changed by Master Password.
The default Master Password = 1234
In default there is no User Password. Master Password has to enter the User Passwords.
System doesn't accept 0000 as User or Master Password.
All programming requires Master password.
All programming are to be done in DISARM mode of the system.
Note: The Master Password can change User's Password but cannot view their Passwords.

: While changing Password, if the Password being entered is used by someone, it will reply "Invalid Password". Same is true in case Password being entered is "0000".

Record of History

The system keeps a record of last 20 events of ARM, DISARM and Intrusions with date and time of events.
To View the records**:**

Send SMS XXXX+HISTORY z
Where, z = 0 for last 4 History, 1 for prior to last 4 Records, ... 4 for the first 4 of last 20 records.

Note**:** After 20 records, the very first record gets deleted to record the 21st event.

Explanation of the SMS**:** ZZ DDDD Date Time

Where, ZZ = Wired Zone Number / Wireless Sensor Number (01 to 50 in case of Wireless Sensors & 99 in case of Main Unit, 98 in case of Operations through Tel Line, W1 to W6 in case of Wired Zones)

DDDDDD= It either of the following action:

= Armed - means the system was armed at that time.
If, ZZ=99 then the system was Armed from the main unit.

= Disarm - means the system was disarmed at that time

= Intrus – means intrusion from the displayed wired Zone or wireless Sensor

= Panic – means Panic key was pressed

= Batlow – means battery is low of the displayed wireless Sensor or the main unit in case of ZZ=99

= Bypass – means the system was Armed in Bypass mode

= PwWrng – Wrong Password entered 3 times consecutively.

= Sl Pan – Silent Panic

= A.Fail (It means Auto ARM failed due to ZZ Sensor being Open. If ZZ= 00 that would mean that Auto ARM failed because of some condition like No Telephone Number stored, SIM Not connected, etc)

= Faulty (HHW is not working)

Remote monitoring through Telephone line

The system can be monitored through Telephone line from anywhere in the world. One has to dial the Tel number that is connected to the System. The system picks up the call after a set number of rings.
Voice message " Please input password" will be heard.
After the message is over, dial Master Password (1234) #
If password entered is wrong, a message "password is wrong" will be heard.
If wrong Password is entered 3 times then intrusion will be caused by the system after 5 minutes.
If correct password is entered, a confirmation message will be heard.
Press "2" to activate the siren
Press "3" to de-active the siren
Press 4 to ARM the system
Press 5 to DISARM
Press 7 to Force Arm the system, which allows arming of the system even if a sensor is left open.
Press "#" to exit

Number of rings after which the system picks up the call for remote monitoring

Send SMS XXXX+REDIALS tt where, tt = No of redials on each number (01 to 14)

Note**:** Default value = 4

Remote monitoring during intrusion

On receiving the call, the receiver will hear siren sound (10 seconds recorded message- optional).
Press★0★
A voice message "Welcome" will be heard
If a code is not dialed within 20 seconds, the call will disconnect and the system will then resume dialing.
Press 2 to activate Siren
Press 3 to deactivate Siren
Press 4 to ARM the system (The Whole system will get ARMED)
Press 5 to DISARM (The Whole system will get DISARMED)
Press 6 to Listen to the Zone Number / Sensor Number from where intrusion has taken place.
Press 7 to FORCE ARM the system (The Whole system will get ARMED even if a sensor is left open)
Press # to End Call

Note: The Telephone numbers are dialed by the system as per the sequence number in which they are entered.
: The system keeps dialing Telephone numbers unless any of the called party DISARMS by dialing 5.

Resetting to Factory Settings

All programming of the system can be reset to the default values.
Procedure**:** Send SMS XXXX+RESETSYS

SIM Balance Checking

To know the balance amount in a prepaid SIM card installed in the BAS, following is the procedure**:**

Send SMS **SIMBAL CCCCC . . .**

Where, CCCCC . . . . . = The Code to check SIM balance (given by the service provider)

Example: In case of AIRTEL, SIMBAL ∗123#

Siren Hooting time

This is the time for which the Siren will keep hooting during intrusion.
The default value is 30 Minutes and cannot be changed.

Signal Strength test of GSM

User can check the strength of GSM signals received at the location where the system is installed. This helps in locating suitable place of installation.
The system cannot be ARMED when the signal strength is less than level 15.
If Signal strength is between Level 15 and 18, system will dial out & also send SMS in case of intrusion but may not accept all DTMF digits dialed by the user. Above level 18, the system would work perfect for all features.
Procedure**:**

Send SMS XXXX+SIGNAL
The reply SMS will be reg0,1 csq**:**YY,0
Where, YY = Signal Strength (0 to 31)
Reg0,1 means the SIM has been registered with the Service Provider.

Alternatively, there is a hidden push button on the panel located above “Z1” LED, on the white portion.
Upon pressing this button, if the GSM signal strength is less than 15, the ARM LED of panel will blink red.
If signal strength is above 15, the LED will glow constantly for two seconds..

SMS Text & Android Application for Various Programming

Programming by SMS:

Following are the SMS Text messages that need to be sent to the SIM installed in the system for various actions**:**

	Action	Command	Description
1	Arm system	XXXX+ARM	The system will be ARMED
2	Disarm system	XXXX+DISARM	The system will be DISARMED
3	Bypass Arm system	XXXX+BYPASS	The system will be ARMED in BYPASS mode
4	System details - Short	XXXX+SYSTEM	System will send SMS giving following details**:** System Status**:** ARMED or DISARMED Power**:** On Mains / On Battery Date**:** DD/MM/YY Time**:** HH:MM in 24 Hours format Tel**:** X (X= no of Tel Numbers stored) Wired Zones Active**:** X (No of Wired Zones that are Enabled out of 8 Wired Zones) Wireless Sensor**:** X (No of Wireless Sensors Registered, except Remotes) Remote**:** X (No of Remotes registered)
5	System details – Detailed	XXXX+SYS DETAIL	System will send SMS giving following details**:** System Status**:** ARMED or DISARMED Power**:** On Mains / On Battery W STAT**:** This shows the Modes in which 8 Wired Zones are Enabled. DS means Disabled. NA= Normal ARM, AA= Always ARM, BA= By Pass WL Stat**:** This shows the ID, Type and Mode of the registered wireless sensors. MS= Magnetic Switch, VIBR= Vibration Sensor, RMT= Remote, PIR= Motion Sensor, TAMP= Tamper Sensor, PAN= Panic, HEAT= Heat Detector, SMK= Smoke Detector, GAS = GAS Detector, HHW= Heat and Humidity Detector, BEAM= Beam Sensor, WKBD= Wireless Key Board, M+S= Magnetic Sensor with Switch DS means Registered but Disabled. NA= Normal ARM, AA= Always ARM, BA=By Pass.
6	Registered telephone number list	XXXX+TEL	All the registered Telephone numbers will be listed.
7	Change Master Password	XXXX+CHANGE PW z YYYY	XXXX = old Master Password , z = 0 to 5 (0 = Master, 1 to 5 = User Nos, YYYY = New Master Password / User Password
8	SIM balance check	SIMBAL ccccc	ccccc = Service provider’s SIM balance code. E.g. for Airtel , it is *123#. You will get a SMS stating the balance in SIM of BAS.

9	Add telephone number	XXXX+ATELjkz ttttttttt	j = Tel location from 1-6 , k = E for SMS commands enable/ D for SMS commands disable , z = 0 to 5 (0 = Master, 1 to 5 = User Nos, ttttttttt = telephone number (max 11 digits)
10	Delete telephone number	XXXX+DTELj	j = tel location from 1 – 6
11	Set Auto Arm/Disarm	XXXX+AUTOj y aaaa dddd	j = Day (0 = Sunday, 1 = Monday, … , 6 = Saturday, 7= All Days), y= E/ D for Enable or Disable, aaaa = arm time in 24hr format , dddd= disarm time in 24hr format.
12	Disable Auto Arm/Disarm	XXXX+OFFAUTO	Auto ARM/DISARM will be disabled for all days.
13	Delete all wireless sensors	XXXX+WLALLDEL	All Wireless Sensors will be deleted.
14	Delete specific wireless sensor	XXXX+WLDEL nn	nn= wireless ID to delete.
15	Add wireless sensor	XXXX+WLADD nn y	nn=wireless ID, y = type of sensor. Refer table below for values.
16	Change mode of specific wireless sensor	XXXX+WLMOD nn y	nn = wireless ID , y = mode of sensor(0=Normal Arm , 1 = Disable, 2= arm bypass , 3 = always armed , 4= Silent Normal , 5=Silent Always)
17	Disable all wired zones	XXXX+WRALLDIS	All Wired Zones will be disabled.
18	Set mode of specific wired zone	XXXX+WRMOD n y	n = wired zone (1 to 6), y = mode of zone (0=Normal Arm , 1 = Disable, 2= arm bypass , 3 = always armed , 4= Silent Normal , 5=Silent Always)
19	Set name of wired zone	XXXX+WNAMEn pppp	n = wired zone (1 to 6), p= name of wired zone (up to 15 characters). This name will be used in SMS sent to users & CMS.
20	Set name of first eight wireless sensor	XXXX+WLNAMEn pppp	n = wireless sensor (1 to 8), p= name of wireless sensor (up to 15 characters). This name will be used in SMS sent to users & CMS.
21	Set system name	XXXX+SYSNAME qqqq	q= name of system (up to 15 characters). This name will be used in SMS sent to users & CMS.
22	To Force Arm System (only by Master Password)	XXXX+FOARM	Arms the system even if a sensor is left open.
23	Date & Time setting	XXXX+DATE ddmmyy j hhmm	dd = date, mm=month , yy=year , j = day (Mon=1…Sun=7), hh=hours, mm = minutes
24	No. of rings to pick up incoming call	XXXX+RINGS n	n= number of rings to be assigned (1 to 8)
25	System reset	XXXX+RESETSYS	All data will be erased including the Telephone Numbers and their SMS configuration.
26	History Checking	XXXX+HISTORY z	z = 0 to 4 (0 = To view last four history, 1 = To view history before last four, and so on. Total number of histories that can be viewed= 20)
27	Set User for Wired Zone	XXXX+WUSER j y	J = 1 to 6 (Wired Zone no), y = 0 to 5 (0 = Master & 1 to 5 = User no)
28	Set User for Wireless Sensor	XXXX+WLUSER nn y	nn = Wireless ID (01 to 50), y = 0 to 5 (0 = Master, 1 to 5 = User Nos)
29	ARM delay setting	XXXX+ARM DELAY tt	tt = Time in secs (01 to 60)
30	No of redials setting	XXXX+REDIALS tt	Tt = No of redials on each Telephone number. (01 to 14)
31	Enable CMS	XXXX+CMS y xx ttttttttttt	Y = E/D to Enable or Disable CMS , xx = ID of System (00 - 99) , ttttttttttt = Telephone Number of CMS (max. 11 digits)
32	Siren ON Time	1234+SIREN xx	xx= 01- 99 (In Minutes)
33	Signal Strength check	XXXX+SIGNAL	To check signal strength of the SIM
34	Software Version check	XXXX+VERSION	To check the software version of panel
35	Sensors Open	XXXX+OPEN SENS	Displays all the sensors which are open
36	Switch OFF System	XXXX+SWITCH OFF	To switch off the system when it is in Battery mode. It will not switch OFF if it is running on Mains.

Note: Messages are case sensitive. Enter in **Capital letters only**.

: XXXX in the above table refers to 4 digit Master Password

Programming by Android Application:

The free android application named 'BAS-GS' is available on Google Play Store.

Steps to add your BAS-GS panel in the application are as follows:

Press 'LOGIN' displayed on home screen of app
Press 'ADD'
Enter System Name- a suitable name for the BAS-GS System
Enter System Number- the number of SIM Card installed in BAS-GS
Press 'DONE'

The system name will now be displayed on the app.

Similarly, multiple systems can be added by pressing the 'ADD' option on top right corner

On pressing the name, you are shown options to Arm, Disarm, By Pass Arm, etc.
Press the desired option, and enter your password for the BAS-GS panel.
For all other programming, press 'Settings', choose the desired programming, and enter your password to Confirm
A confirmation SMS for the same will be received from the panel.

Wireless Sensor Type Table			
Type	**Code**	**Type**	**Code**
MS	0	HEAT	6
VSW	1	SMOKE	7
RMT	2	GAS	8
PIR	3	HHW	9
TAMP	4	BEAM	A
PANIC	5		

Telephone Numbers Entry & SMS Controls

User can enter up to 6 telephone numbers that can be dialed by the system. Each Telephone number can be individually configured for sensing & receiving SMS.

You can set a Telephone number for SMS in all events (i.e., ARM, DISARM, PANIC, Batt. Low, Tamper, Intrusion, etc + user can send SMS from that Telephone number to ARM, DISARM, Change Pass Word, etc).

First Telephone Number Entry:

At the back of panel, press switch SW3 located above the SIM socket on the right. While keeping switch pressed, call the System from the number to be registered. There will be a confirmation siren sound. Disconnect the call and release the switch.

To enter Telephone numbers that are to be dialed during intrusion:

Send SMS from registered telephone number XXXX+ATELjkz ttttttttt

Where, j = Tel location from 1-6 , k = E for SMS commands enable/ D for SMS commands disable , z = 0 to 5 (0 = Master, 1 to 5 = User Nos, ttttttt = telephone number

Note**:** The Telephone numbers are dialed by the system as per the sequence number 1 to 6.

: If no Telephone number is entered, the system cannot be ARMED.

Deleting a Telephone number:

Send SMS from registered telephone number XXXX+DTELj

Where, j = tel location from 1 – 6

Telephone Number Redial Times

To set the number of times the system should dial each of the 6 Telephone numbers:

Send SMS XXXX+REDIALS tt

Where, tt = No of redials on each Telephone number. (01 to 14)

Note**:** If 3 is entered then System will dial each Telephone Number 3 times unless any of the called party dials # or DISARMS by dialing 5.

: In default the number of Redial Times = 02

Wireless Sensors, Remotes & Panic Keys Registering/Deletion

Maximum 50 Wireless Sensors (including Wireless Remotes & Signal repeaters) and unlimited Wireless Sirens can be used in a system.

Every Wireless Sensor / Remote / Panic has a unique security code & has to be registered in the Main Unit in order to make it functional.

Process: Send SMS XXXX+WLADD nn y

Where, nn=wireless ID, y = type of sensor. Refer table below for values.

Wireless Sensor Type Table			
Type	**Code**	**Type**	**Code**
MS	0	HEAT	6

VSW	1	SMOKE	7
RMT	2	GAS	8
PIR	3	HHW	9
TAMP	4	BEAM	A
PANIC	5		

There will be a short siren sound in the system. Now trigger the Wireless sensor (either Open the Sensor or Close the sensor). Upon registration of the sensor, system gives a short confirmation siren sound.

Note: Whenever the intrusion take place, the SMS sent by the system will show the ID number of the Sensor and its Name.
For example: If a Magnetic Wireless Sensor is installed on the Main Door and is registered with nn=03, then the SMS will show WL11: MS. Here, WL stands for Wireless & MS for Magnetic Sensor.

: Five short beeps means a wrong setting & display shows "This Zone ID is already allocated".

: During the programming, the system auto cancels the operation if it doesn't receive the input from Wireless Sensor within 20 seconds.

: Smoke, Heat, Heat/Humidity, Signal Repeater, GAS & Tamper Type automatically gets registered in "Always ARMED" mode and cannot be hanged to any other mode except to DISABLE mode.

Deletion of Single Wireless Sensor registration

Send SMS XXXX+WLDEL nn
Where, nn= wireless ID to delete.

Deletion of All Wireless Sensor registration

This process deletes all the Wireless Sensors, including Signal Repeaters & Wireless Remotes, connected to the system.
Send SMS XXXX+WLALLDEL

Wireless Sensor – Operating Mode

To change mode of any wireless sensor:
Send SMS XXXX+WLMOD nn y
Where, nn = wireless ID , y = mode of sensor(0 = Normal Arm , 1 = Disable, 2 = arm bypass , 3 = always armed, 4 = Silent Normal , 5 = Silent Always)

Mode	Function of Sensors in the Zone
Normal ARM	These Wireless Sensors will function in case of system being ARMED or "BY Pass ARMED."
Disable	This Wireless Sensor will not work.
ARM Bypass	These Wireless Sensors will function only when System is ARMED & not when "By-Pass AREMD".
Always ARMED	These Wireless Sensors will always remain in ARMED condition whether the system is ARMED or DISARMED.
Silent Normal	These Wireless Sensors will function in case of system being ARMED or "BY Pass ARMED." But there will be no siren sound.
Silent Always	These Wireless Sensors will always remain in ARMED condition whether the system is ARMED or DISARMED. But there will be no siren sound.

Note: All modes will not be selectable for all type of Sensors. The availability shall be as per the table given below**:**

Sensor Type	Modes					
	Normal ARM	Disable	ARM Bypass	Always ARM	Silent Normal	Silent Always
Remote						
Magnetic Sensor	•	•	•	•	•	•
Vibration Sensor	•	•	•	•	•	•
PIR	•	•	•	•	•	•
Panic						
Gas		•		•		•
Smoke		•		•		•
Heat		•		•		•
Heat/Humidity		•		•		•
Beam Sensor	•	•	•	•	•	•
Tamper		•		•		•
Wireless Key Board						

Wired Zones – Operating Mode

To change mode of any wired zone:
Send SMS XXXX+WRMOD n y
Where, n = wired zone (1 to 8), y = mode of zone (0 = Normal Arm , 1 = Disable, 2 = arm bypass , 3 = always armed , 4 = Silent Normal , 5 = Silent Always)

Mode	Function of Sensors in the Zone
Normal ARM	All Sensors of this Zone will function in case of system being ARMED or "BY Pass ARMED."
Disable	No Sensor of this Zone will work
ARM Bypass	All Sensors of this Zone, will function only when System is ARMED & not when "By-Pass ARMED".
Always ARMED	All Sensors of this Zone will always remain in ARMED condition whether the system is ARMED or DISARMED.
Silent Normal	All sensors in this zone will function in case of system being ARMED or "BY Pass ARMED." But there will be no siren sound.
Silent Always	All sensors in this zone will always remain in ARMED condition whether the system is ARMED or DISARMED. But there will be no siren sound.

Note: In default, all Wired Zones are in "Disable" mode.
If wired zones are not being used, physically short the wired zone wires with ground so that no LED on display glows. This increases the battery backup of the main panel.

Precautions

- **While installing any Wireless Sensor, do not open the Antennae of Main Unit or the Sensor. The distance of the Sensor from Main Unit should be such that it works without opening either of the Antennae.**
- Check working of all the sensors, built-in siren, the auto dialing at regular intervals.

Trouble Shooting

Problem: System not dialing on Telephone line when any sensor is triggered.
Reasons could be: - System is not Armed.
- There is no Telephone number entered.
- The sensors or the detectors are incorrectly installed, or the distance is too long between sensors/detectors and main panel.
- ID code not matching between the sensors and the main panel.

Problem: False Alarm from PIR.
Reasons could be: There are many PIR of different quality. In the summer, a PIR can get triggered due to high Temperatures and variations. They can also get triggered due to the movements of curtains or mouse or pets.
Solution: - Choose the PIR with better quality.
- Install the PIR in a different place.
- Shorten the detecting area of the PIR.

Problem: The Wireless Remote does not work.
Reasons could be: - The power of the cell has gone low.
- ID code not matching between the remote controllers and main unit.
Delete the Wireless Remote and register again as explained in this manual.

Problem: The Sensing Distance is too short between the Wireless Sensors and the Main Unit.
Reasons could be: - Some other transmitting equipment in the area could be effecting the wireless range of the system
- The Mains AC voltage is too low or the battery of the Wireless Sensor is low.

Problem: Siren not working.
Reasons could be: - The wires to the siren are short or broken.
- The Siren Hooting time might be set at 00.
- The +ve / -ve wires of the Siren might be connected in reverse polarity.

Technical Specifications

Input	AC 100V to 280V
Frequencies used / Modulation Type	866 MHz / ASK
Distance covered by wireless sensors	Approximate 300 ft in open area.(In case of SW / FSW it is 165 ft)
Standby current	26 mA at 12V DC
Working current	43 mA at 12V DC without Siren

	506 mA at 12V with Internal Siren
Ambient Temperature	10°C to +45°C
Ambient Humidity	95% Maximum
Power Adapter	12V DC 1A
Built-in Battery Backup	Rechargeable 7.4V 500mAh Lithium Battery
Capacity	Can connect to 50 Wireless Sensors. (including Wireless Remotes & Signal Repeaters). Has 8 Wired zones & each Zone can connect to unlimited Wired Sensors as long as the total resistance of the Sensors and the wires is less than 200 Ohms.
GSM Module	Dual Band - GSM 900 / DCS 1800 MHz RF Out Put: 33dBm / 30dBm RF Receive Sensitivity: < 1108dBm Operating Volatge:4.2V Support SIM Card**:** 1.8V/3.0V

Terms of Warranty

Copper Connections Pvt. Ltd warrants that this product is manufactured under stringent quality standards, making it free from defects in material and workmanship, as per the following terms and conditions**:**

1. The limited warranty for the system is valid for a period of twelve months from the date of purchase or fifteen months from the date of manufacture which ever is earlier.
2. The limited warranty extends only to the original consumer/ purchaser of the product and is not assignable or transferable to any subsequent purchaser/ end user.
3. During the limited warranty period, Copper Connections Pvt. Ltd or its authorised service network will repair or replace, at Copper Connections Pvt. Ltd option, any defective product or parts thereof with a new or factory rebuild replacement items and return the product to the consumer in working conditions. No charge will be made to the consumer for either parts or labour in repairing or replacing the product. All replaced parts shall becomes the property of Copper Connections Pvt. Ltd.
4. Repaired product will be warranted for a balance of original warranty period.
5. Upon request from Copper Connections Pvt. Ltd or its authorised service center, the consumer must provide purchase receipt or other information to prove the date and place of purchase.
6. This Burglar Alarm System (like any other commercial or residential alarm system) does not guarantee protection against burglary, fire or other emergency because of variety of reasons.
   A properly installed and maintained system may reduce the risk of a burglary, robbery, fire or other events, but it is not an insurance or a guarantee that such will not occur or that there will be no personal injury or property loss as a result.
7. In no case shall seller be liable to anyone for any consequential or incidental damages for breach of this warranty, even if the loss or damage is caused by the seller's own negligence or fault. Consequently, seller shall have no liability for any personal injury, property damage or other loss based on a claim "The product failed to give warning / alarm". However, if seller is held liable, whether directly or indirectly, for any loss or damage arising under this warranty or otherwise regardless of cause, seller's maximum liability shall not in any case exceed the purchase price of the product.
8. The consumer shall have no benefit or coverage if any of the following conditions are applicable:

a) The product has been subjected to abnormal use, abnormal condition, improper storage, exposure to excessive Temperature, moisture, dampness or fire etc., unauthorised modifications, unauthorised connections, unauthorised repairs.
b) Copper Connections Pvt. Ltd was not notified by consumer of the alleged defect or malfunction of the product during the limited warranty period.
c) The product was used with or connected to equipment not fit for use with Copper Connections Pvt. Ltd system or used in other than its intended use.
d) INCASE HIGH VOLTAGES APPEAR ON EARTH.
e) THE DAMAGE IS CAUSED BY LIGHTENING OR DUE TO SPIKES/ SURGES/ HIGH VOLTAGES FROM AC MAIN SUPPLY.

9. The consumer may contact the authorised dealer to call the service personnel for carrying out repairs or maintenance and the same would be attended within a reasonable response time assigned to the dealer. The consumer will be billed for parts or labour charges not covered by this limited warranty.
10. The consumer will be billed for parts or labour charges not covered by this limited warranty.
11. If the product is brought to Copper Connections Pvt. Ltd for repairs, after the warranty period , Copper Connections Pvt. Ltd normal service policy shall apply and customer shall be charged accordingly.
12. In no event shall Copper Connections Pvt. Ltd or their authorised dealer be liable for special or consequential damages or any delay in the performance of this warranty due to causes beyond their control. Copper Connections Pvt. Ltd shall not be liable for incidental or consequential damage or a loss of anticipated benefits or profits, loss or impairment of privacy of conversation, work stoppage or loss or impairment of data arising out of the use or inability to use the product. Company's liability in no event and under no circumstances shall exceed the price paid to the company for goods stated in the invoice.
13. Copper Connections Pvt. Ltd neither assumes nor authorises any authorised service center or any person or entity to assume for it any other obligation or liability beyond what is expressly provided by this limited warranty. All warranty information, product features and specifications are subject to change without prior notice.
14. Any dispute arising out of this warranty shall be subjected to jurisdiction of the arbitrator within the city of Delhi.
15. The decision of Copper Connections Pvt. Ltd on defects, damages etc shall be final and binding on the parties and no dispute regarding this, could be agitated before any civil court.

Part No**:** CC-BAS-GS-16

An ISO:9001:2008 Certified Company

Copper Connections Pvt. Ltd

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