

# Walnut GSM Switch

## GSM Remote Controller

### User Manual

GSM Remote Control is an interesting device with help of this device you can use Mobile Phone as your Universal Remote Control. It is activated by calling its cell phone number; and switch ON or OFF the device connected to it.

Forget the conventional remote control, you can now open your auto gate, garages, switch On & Off the heaters, machines, air conditioner, lights, Pumps, computer servers with your Mobile Phone. Just 'dial' a secure telephone number which identifies you as an Authorized User and the electric devices will turn on/ off.

There are no call costs if the device use in miss call mode, all other incoming calls are rejected once authorized.



### Walnut GSM Switch

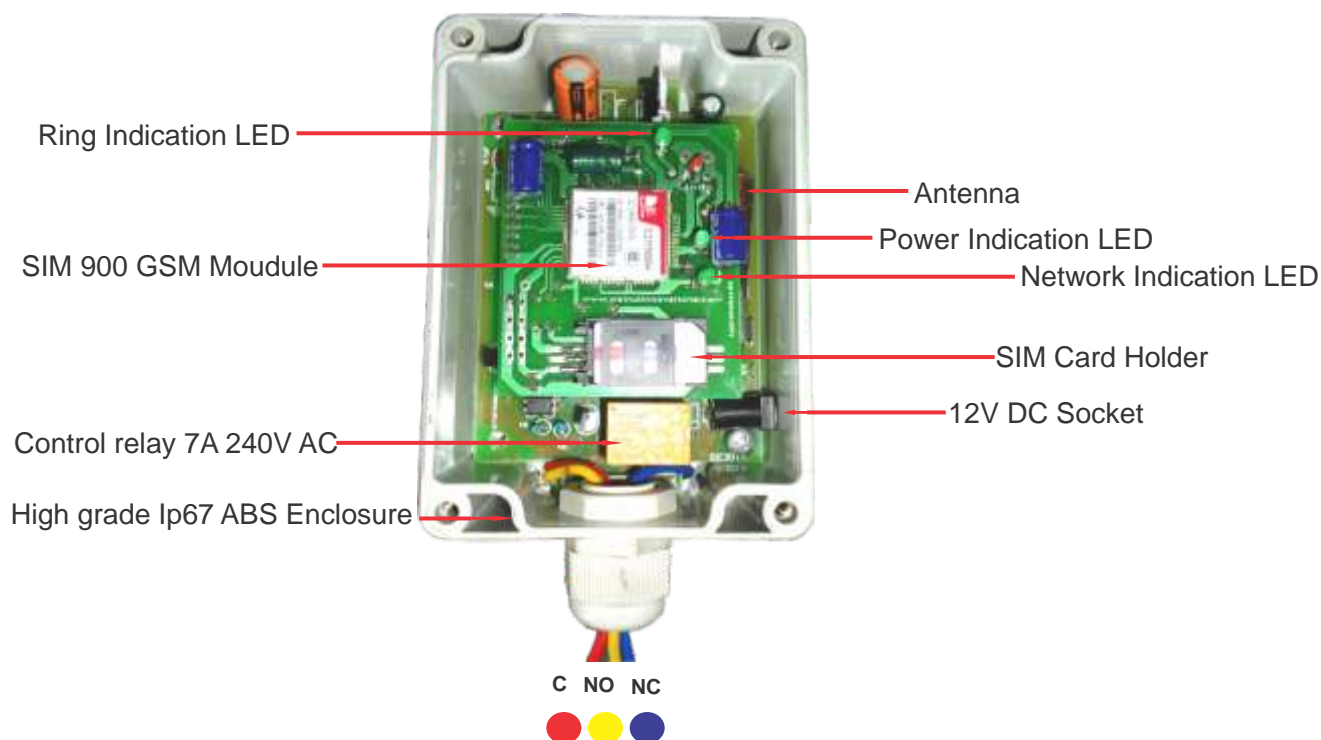
This device can be very useful for short term rent or commercial rental property. When their customer did not pay for the rental, they will call to switch off the power supply, machines, any electrical appliance. This is the solution to control their customer continuous to pay for their rent or bill.

The system is able to load up to 21 numbers in the white list as authorized users. The single output relay can be programmed to switch on or off for a pre-determined length of time whenever the GSM-SWITCH is called.

The GSM Switch incorporates a professional industrial grade GSM engine that receives calls at its SIM number, as any ordinary GSM phone. The system operates in the GSM module Quad-band 850/900/1800/1900Mhz.

Save money on providing everybody with a remote control, let them use their mobile phone. Everybody has a mobile phone, let it be a universal remote control !

## GSM Switch Technical specifications



**GSM Switch Schematic View**

- Micro controller Based
- SMPS Power Supply 12 DC 1 Amp
- DTMF Based functioning / Call based
- Ip67 water proof ABS 110x85x55mm wall mount packaging.
- Operating temperature -20°C to 60°C
- Up to 20 Numbers Authorization
- Weight 255gm
- Optically Isolated Control
- Optional - up to 4 digital inputs possible for external sensors.
- Can be operated from anywhere, no distance limit
- Multifunction programable
- Control 1 Relay 7A 240V AC 50Hz
- Programable relay latching 1 sec. to 18 hours
- Sim900A Quad band GSM850/900/1800/1900 MHZ
- Relay output C NO NC
- SMS Alert / Beep indication
- Quick response time
- 6 user selectable operating modes
- Complete secured in authorized mode unknown callers are ignored.
- Based on GSM Network, applied to many application.

\* Please read the User Manual carefully before you install the Control Unit and set the Unit.

## GSM SWITCH (Multi function Programmable)

GSM Switch allows switching almost any Industrial or household appliances On or OFF remotely via mobile network.

Requirement :

- (a) 12 V DC 1 Amp. external Power Supply (Provided with GSM switch Package)
- (b) An active mobile phone Sim card with sufficient balance to send confirmation SMS when programming the GSM switch. The unit accept any Global Network Sim Card as the system fitted with Quad Band Modem.

After Installing the GSM Switch Insert the Sim card in card Slot as indicated & the power supply can be connected & switch on.

The Network LED on the board blinking infrequently until it find network & will then flash in every three seconds constantly & if it does not happen then the unit has not logged any network it may be required re seat the SIM Card in the Slot or Restart GSM Switch.

### Programming the GSM Switch

#### Step I          Device registration (Master registration)

Call the device and press the corresponding keys one by one in a sequence with following the beep sound in every digit pressed. These 10 digit numbers will be registered as Master numbers. (after the 10th digit call will end automatically). System send the confirmation SMS. Now only calls from master number will be entertained by the system.

During registration if pressed wrong number or any mistake has done (before 10th digit pressed), cut the call & repeat the registration procedure from the start.

Only master has access to select the mode, register the other authorized numbers, set the time, & reset the GSM switch etc. The device always receive calls from master even in missed call mode.

**Note: Please be careful while completing 1st step as once the device registration is done, it cannot be undone.**

#### Step II          Mode selection

The GSM switch has 6 user selectable Modes, Master can select & activate any mode as per his requirement.

##### **1. Open Mode + SMS On**

In open mode the device can be operated by any number, any one can call the device & give ON/OFF command by his phone, only master will receive status SMS.

To select this mode Master has to call the device & press '1#'

##### **2. Open Mode + SMS OFF**

In this mode device can be operated by any number, any one can call the device & give ON/OFF command by his phone. Status SMS is completely OFF.

To select this mode Master has to call the device & press '2#'

### **3. Authentic Mode + SMS On**

To select this mode Master has to call the device & press '3#'

The call will automatically get disconnected.

In this mode only authentic users will be able to operate by calling and receive status sms.

Please see StepIII for detailed information on user authentication.

### **4. Authentic Mode + SMS OFF**

To select this mode Master has to call the device & press '4#'

The call will automatically get disconnected.

In this mode only authentic users will be able to operate by calling . no status sms will be received.

Please see StepIII for detailed information on user authentication.

### **5. Missed Call mode + SMS On**

In missed call mode the GSM switch works only on missed calls, any registered authentic users which are permanently saved in the device memory (Except Master) ,can call the device & perform operation. User will receive status SMS.

To select this mode Master has to call the device & press '5#'

### **6. Missed Call mode + SMS OFF**

In missed call mode the GSM switch works only on missed calls, any registered authentic users which are permanently saved in the device memory (Except Master) ,can call the device & perform operation . Status SMS is completely OFF.

To select this mode Master has to call the device & press '6#'

## **Step III Authentic Users registration**

The master can register up to 20 numbers at the time of registration to make them authentic by calling the device. When device pick the call, press the users mobile numbers one by one in a sequence (Mater user can hear a confirmation beep sound on every number digit pressed).

If Master user finds that device missed beep sound(mostly due to low network) in any particular digit, press the digit again & confirm the beep sound & continue.

When all numbers are pressed confirm the registration with # key (call will be ended automatically with three beeps).

During registration if pressed wrong number or any mistake cut the call and repeat the registration procedure from the Mode Selection Step.

Master will now get an SMS from the device for successful registration following the list of authentic user's mobile numbers in sequence. Please cross check the registered numbers & if error found in any number :

- A. 'RESET' the device & when reset message is received, repeat the registration procedure from the 1st Step.
- B. If the Master is able to track the sequence of wrong number registered, go to the last page and see instructions under heading: **'Replacing the Numbers of authentic users list'**

**Note** :- In open mode 1 & 2, user don't need to register any numbers, this step will deactivated automatically .

## Step IV      SETTING THE LATCHING TIME

Only Master user can program the device relay latching for the period of 1 second to 18 hours. Using this phase, the master user can make device relay ON/OFF after a desired period of time.

To set this mode master user has to call the device and when call picked press '\*'key & then press the digit keys for time in seconds & confirming by '#' key. The device will save the time in seconds for delay operations and call will be ended automatically & timer mode activated.

User can call and operate the system but cannot change the time period.

### **Examples -**

For **ON** delay: - The relay will set ON after a set period of time. If User wants 10 minutes ON delay, Master should call the device and on call establishment press '\*600' for time in seconds (60 sec x 10 min =600 seconds) & confirming by '#' key.

The device will save the time in system for delay operations. Now the master can call the device and press **2** and end the call. The device relay will ON after 10 minutes delay.

For **OFF** delay: - The relay will set OFF after a set period time. If master wants 1 hour OFF delay, master should call the device and press '\*3600' for time in seconds (60 sec x 60 min. = 3600 seconds) & confirming by # key.

The device will save the time in system for delay operations. Now the master can call the device and press **1** and end the call. The device relay will OFF after 1 hour.

For Disabling the timer mode master should call the device and when call received press '\*0#'

### **Pulse mode :**

To use relay output as pulse, in miss call mode, set time for minimum 1 sec. and activate the mode by calling the device from master number and press **1** key.

### **Important :**

The Device Registration Procedure should be follow step by step as per instructions.

### **ON/OFF Commands:**

The default commands for ON is **1** & for OFF is **2** (Except in missed call mode).

## **RESETTING THE DEVICE**

Only master can reset the device and the all authentic numbers including master number and timer value will be deleted from the device memory.

For Resetting the Device master has to Call the device & after call receive press '#' key, device confirm the reset with a beep sound, wait for confirming reset message then restart the device .

## Replacing the Numbers of authentic users list

Master can change or replace any authentic user number whenever he need to do, for this he has to call the device & after receiving the call press '\*\* serial number of user \* new number #'

### *Example*

if master want to replace the new number '9414830933' in place of authentic user No 6 the command is '\*\*6\*9414830933#' after the completion of this process, the master will receive an SMS from the device with an updated list of authenticated users.

## Changing Master number

Once device registered the master number, it cannot be Changed or replaced. If master number is needed to be changed, Please call our customer support number. For Indian Territory the Customer support number is: +91-9414830933. This service can be chargeable subjected to the location of the device.

## Warranty

1. This system is warranted to be free of defects in material and workmanship for one year from the date of purchase.
2. This warranty does not extend to any defect, malfunction or failure caused by abuse or misuse by the Operating Instructions. In no event shall the manufacturer be liable for any alarm system altered by purchasers.