WT-1673
GSM Power Switch

USER MANUAL

INTRODUCTION

The GSM Switch operates on the GSM cellular network and allows owner to control an Equipment from a cell phone. The cell phone switch is factory pre-wired and once a SIM card has been installed and functional, all the network and power LEDs are visible from on the exterior of the enclosure. You only need to insert the SIM card, plug the unit into a main AC power socket and then plug in the Equipment into the Universal socket on the face of the unit. Now you are ready to control an Equipment by just a free telephone call to switch the device ON and another to switch the device OFF

The GSM remote switch will turn on by calling it. From any phone, it don't use any minutes because it doesn't answer the phone. The unit will automatically reject the call and trigger the 30A relay to switch on the equipment. One call switch the equipment ON permanently, another call will switch OFF the equipment permanently.

The system is fuse protected at both high and low voltages. The system has an on board power supply and will even report if the power fails at the location of the Hanger.

As an additional safety features, you can also programme to ignore calls if it does not recognize the caller ID. This means only the phone numbers which you program into the numbers can control ON / OFF an equipment now. If the number did not register into the white list, the unit will reject the call and will not switch on the equipment. Customizing and programming is simple – it's done by send it text messages.

By activate the safety features, the 30A output relay can be switched ON or OFF by calling its cell phone number and by sending an SMS command, there is still no call charges incurred when dialling the unit as it will recognize an authorised telephone number calling it and reject the call without answering.

Once you active the safety features, the GSM switch system will support timer function, the user can set schedule to turn on / off the switch. For example, put your equipment on a schedule. "Turn off in 5 minutes", "turn on at 17:00, "turn on 1 year later"

Another important feature for timer is to remind the owner to monitor the SIM Card expiry date. User can instruct the unit to send the SMS to the user to keep the SIM card active before expiry dates.

The system using CE and FCC approved industry internal power supply connected on board. A backup lithium battery can power up at least 8 hours and will sent a power down or power restored alerts in the event of any circuits power failure

The user also can download the FREE apps from Android and IOS stores as their easy monitoring and control tools. Just one touch on the apps, user smart phone will sent the SMS text commands to the unit. The users don't need to remember the commands code. .

SETTING UP AND PROGRAMMING

This system has been developed to minimize the need for over complicated programming.

Step 1 – Open Mode – Anybody can call to the unit to Switch OFF and Switch ON

1. Open the Cover, Insert the SIM card
2. Plug the wire into the AC sources
3. Plug the equipment into the universal socket
4. Call to Switch OFF, Call to Switch ON using any cell phone

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Green LED Lights at the Enclosure and it should light up when the GSM Network is applied to the unit.

The Green LED is the network Indicator and this will light up when attempting to log on to the network flash inconsistently until it locates the network.

A Phone Call to the SIM Card Number will now Latch the Relay permanently ON and Switch the device being Controlled On.

The Status of the Relay will remain as OFF, until the unit receives a second Call to the Unit of which will now Latch the Relay Permanently ON.

Both Calls used to Latch the Relay either on or off are automatically disconnected, once the relays are activated and never incur any Network Call Costs.

Beside calls to switch off or on, the unit also can be permanently switch off and on by sending the unit a text message command if you add Administrators Number

Step 2 - Secure Mode

If you feel that Open Mode is not secure. You can program up to 5 phone numbers into the unit. Only the person in the white list can switch OFF/ ON - Applied the "KISS Principle", keep it simple, stupid.
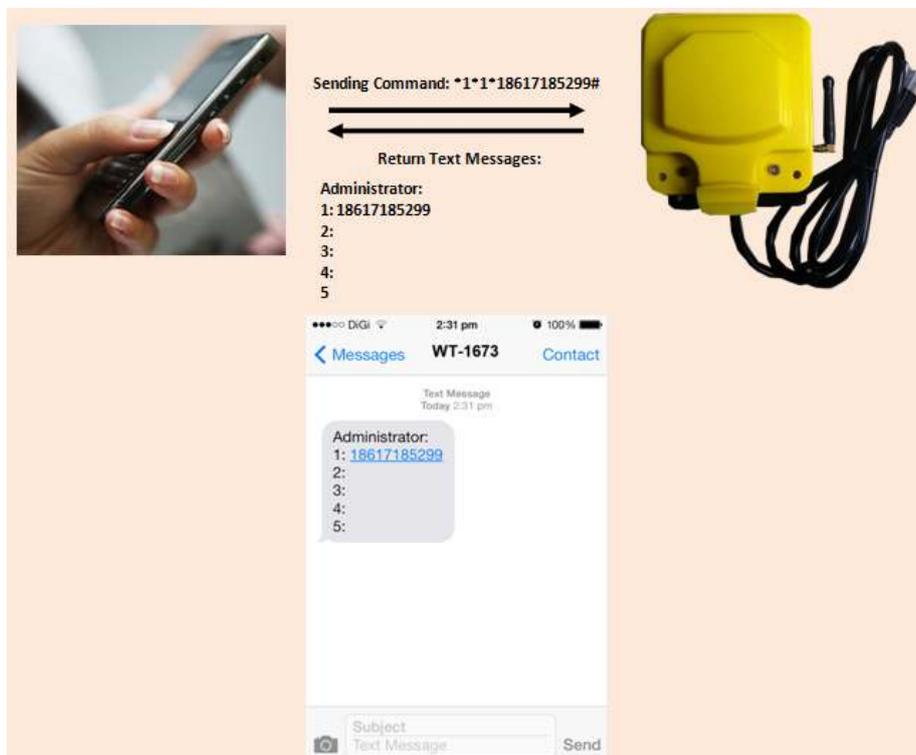
1. Open the Cover, Insert the SIM Card
2. SMS Text *0*1234# into the unit
3. SMS Text *1*1*your phone number#
4. Call to Switch On / Call to Switch OFF using your phone number only

If you need to program the 2nd – 5th phone numbers, just change the text command *1*1*phone number# to *1*2*phone number#, *1*3*phone number# *1*4*phone number# and *1*5*phone number# and sent to the unit

Once you SMS Text to the unit, you will receive the following SMS message from the unit –

Administrator:

    1: 18617185300 (your phone number)

    2:

    3:

    4:

    5:

Factory Reset in the Secure Mode

When you active the safety features and if you required to change the administrator number in the future, simply press the button "FACTORY" at the mother board until you hear the "du~" . This means the unit back to the factory default

Press until you hear a "di~" sound

This means you already reset the unit to factory default. Now you can start to texts again to set the administrator.

You already finish the set up. Now, you can use your mobile phone call to the SIM Card number switch the device on permanently. Another call to the SIM Card will switch the device off permanently.

If you do not required to go through details setting, please process to STEP3 – Final Installation and Wiring.

Details Set Up

NO.	Description	Programming Code	SMS Texts Respond	Function
1	First Step of programming, you must enter the factory passwords of 1234 and go inside the programming mode. You only can perform the next commands after enter into programming mode	*0*1234#	**You get administrator privileges!** **2013-10-09 00:33 Wed**	When you enter *0*1234#, you enter into the programming mode. You must perform the next command in 10 minutes. If you did not do anything, the system will exit from programming mode.
2	Change Password	*0*1234*new password# For example if you need to change to the new PW of 1212. *0*1234*1212#	**New password<1212>** **2013-10-10 16:07 Thu**	Maximum 4 digits of passwords If you decide to protect your privacy, you can change the factory password to your new password. Enter the factory password follow by your new password.
3	Add telephone number into the admin list.	*1*1*telephone number# For example set Admin number 18617185300 into admin 2 *1*2*18617185300#	**Administrator:** **1: 15989427391** **2: 18617185300** **3:** **4:** **5:** **2013-10-10 16:08 Thu**	Set Admin Numbers ; *1*1* - set 1st admin number *1*2* - set 2nd admin number *1*3* - set 3rd admin number *1*4* - set 4th admin number *1*5* - set 5th admin number Only the number in the list can receive alarm texts message and active the relay output. You can add up to 5 telephone number into the admin list.
4	Check phone number you program in the list	*2*	**Administrator:** **1: 15989427391** **2: 18617185300** **3:** **4:** **5:** **2013-10-10 16:08 Thu**	

5	Delete the admin number in the list.	*3*N# N = Admin number 1- 5 For example, if you want to delete admin no 2. just enter *3*2#	**Administrator:** **1: 15989427391** **2:** **3:** **4:** **5:** **2013-10-10 16:08 Thu**	**Delete Admin Number** Delete 1st admin *3*1# Delete 2nd admin *3*2# Delete 3rd admin *3*3# Delete 4th admin *3*4# Delete 5th admin *3*5#
6	Check the relay status in ON or OFF Mode.	*4*	**AC <ON>** **2013-10-10 16:10 Thu**	The unit will return AC <ON> if the relay is on. The unit will return AC<OFF> if the relay is off.
7	Check Signal Strength	*5*	**CSQ<28>** **2013-10-10 16:11 Thu**	You must confirm the signal strength at site before you install the unit. If the signal too weak, the unit will not function properly. CSQ 5 – 12 Signal too weak, system not function CSQ 13 - 24 Signal Good. System function well CSQ 25 – 32 Signal Excellent. System working well
8	To receive SMS Reply Message or not to receive SMS Reply Message when the system trigger by phone call	*22*N#	When sending command *22*0# **Status switch <OFF>** **2013-10-10 17:10 Thu** When sending command *22*1# **Status switch <ON>** **2013-10-10 17:08 Thu**	N=1 means after make the phone call to the system, it will return the SMS for the status to the caller N=0 means after make the phone call to the system, it will not return the SMS for the Status to the caller Factory Default as return SMS for the status after make the phone call ** If you decide not to allow the system to text you for any acknowledgement after you call to the unit. You can switch OFF the text message. Some Customer request this function because texts reply involved call cost

9	SMS Text Message to Switch On/Off Relay	*24*N#	When Setting as *24*1# **AC <ON>** **2013-10-10 17:13 Thu** When Setting as *24*0# **AC <OFF>** **2013-10-10 17:13 Thu**	N=1 means switch on the relay by SMS Message N=0 means switch off the relay by SMS Message
10	Setting the year, month, day, hours, minutes, week	*12*YYYYMMDDHHMMX#	**Time change OK!** **2013-10-10 16:05 Thu**	YYYY=4 digit for Year MM = 2 digit for Month DD = 2 digit for Date HH = 2 digit for Hour MM = 2 digit for Minutes X = 1-7 (Day of the Week) Example set as *12*2013101016054# which means 2013-10-10 16:05 Thu If reprogram the date, it will take the last as the accurate date. The date have to be correct (if setting 2014-2-29 or 2013-11-31) this is the incorrect date which is not occur, the system will verify the date, time, day if correct, the date have to be after year 2013
11	Setting Time for the unit to SMS reminder to the Administrator for the SIM Card balance	*34*XX#	When sending the command of *34*01# **Warn frequency: 1 month** **2013-10-10 17:18 Thu**	XX=00, Switch off the Time Reminder for SIM Card Balance XX=01 to 12, which means after setting this command, the unit will start from the 1st of the following month, to sent a SMS reminder for the SIM Card balance for every 1 month. **Please note that the phone SIM card balance!** **2013-10-10 00:00 Sun**

Step 2 - Installation

Insert the SIM card, to access the SIM card holder gently push the button adjacent to it, insert the SIM card and carefully close the holder.

Switch on the power supply , the red power LED will light indicating power is present, the Green network LED indicator will initially flash quickly, once logged onto the network, it will flash more slowly approximately one every 3 -4 seconds

You only need to insert the SIM card, plug the unit into a main AC power socket and then plug in the Equipment into the Universal socket on the face of the unit

It is recommended that the GSM Remote Control Switch be programmed to operate as required before final installation.

Product Specifications

Operation Voltage	12 volts DC
Operating Current	Maximum 500mA, typically 55mA
Relay Contacts	1 x Normally Open and Normally Closed Contacts maximum switching capacity 20 amps @230v ac per relay
GSM Frequency MHz	GSM 850, GSM 900, GSM 1800, GSM 1900
Humidity	Less Than 80% RH
Operating Temperature	-20c to 55c
Physical Size	130 x 100 x 50mm
Protection	IP 65 Weather Proof Casing
Approvals	C.E, FCC, ETSI

Preparing the SIM card

All new SIM cards have to be registered with the network provider before they can be used, usually by calling the network provider or registering on their website please refer to the instructions supplied with your SIM card.

During the registration procedure a confirmation code or text message is usually sent to the SIM cards telephone number, to be able to read and react to the message you will need to insert the SIM card into an unlocked mobile phone.

After successfully registering the SIM card, ensure there is sufficient credit on the card for programming confirmation texts to be sent from the GSM Remote Control Switch.

You MUST ensure that the PIN request is disabled from the SIM card before inserting it into the GSM Remote Control Switch. If you do not disable the PIN request the GSM Remote Control Switch will not work. If the PIN request is not disabled and the unit is switched on more than 3 times you will have to reset the PIN using the PUK code which will have to be obtained from the service provider.

To check the PIN request status of your SIM card, place the card in an unlocked mobile phone, switch the phone on. If you are able to make calls without entering a PIN number the PIN request is disabled. If a PIN number is requested refer to the instructions supplied with the SIM card and then look through the phones options for the 'disable PIN request' and disable it.

You MUST disable any voicemail that is set up on the SIM card; the codes shown below are for UK networks only, please refer to your network operator if outside the UK

Vodafone: 1210 >Send - you will hear 'order is accepted and confirmed'

O2 - Call 1760 >Send - you will hear 'order is accepted and confirmed'

T-Mobile - Call 222 and follow instructions

Orange - Call 450 and follow instructions

The SIM card is now ready to use

We recommend that if you are using a 'pay as you go' (PAYG) SIM card that you choose to automatically 'Top-Up' when the cards credit falls below a certain limit please contact your network provider or visit their website for more details.

Most but not a using post-paid SIM cards will be de-activated by the network if not used to make an outgoing voice call or send an SMS text message within a specific period. To prevent this simply send the GSM Remote Control Switch a text command *0*PW#, then *2*, it will reply by text message, do this once a month to keep the SIM card active.

Troubleshooting

1. Red power LED not alight	Ensure that your DC power supply is connected correctly, positive (+) to terminal 220v and negative (-) to terminal N. Verify 12 volts is present using a volt meter
2. Green network LED flashing every one second and not every 3 seconds	Ensure your SIM card has been activated and that the PIN request has been disabled. If the unit is in a low signal strength area consider using an external GSM antenna or changing to another network provider
3. I am not receiving confirmation test messages when program the administrators number	Ensure your telephone number is in the Administrator list and that sending text messages to your number is enabled.
4. I am not receiving any text messages when initially programming the unit	Ensure the unit is connected to the GSM network by observing the blue network LED; it should be flashing once every 3 seconds (see 2 above). Ensure the SIM card has credit
5. The unit has been working for several months and has now stopped responding to calls and text commands	Most but not all PAY SIM cards will be de-activated by the network if not used to make an outgoing voice call or send an SMS text message within a specific period. To prevent this simply send a txt command *0*pw#, then *2*, it will reply by text message, do this once a month to keep the SIM card active

Warranty

Witura Technology Sdn Bhd warrantees the WT-1673 GSM Power Switch against defective parts and workmanship. Witura Technology Sdn Bhd shall, at its option, repair or replace the defective equipment upon the return of such equipment to any Witura branch. This warranty applies ONLY to defects in components and workman-ship and NOT to damage due to causes beyond the control of Witura, such as incorrect voltage, lightning damage, mechanical shock, water damage, fire damage, or damage arising out of abuse and improper application of the equipment.

Note: Wherever possible, return only the PCB to Witura Service Centres.

DO NOT return the enclosure.

The WT-1673 is a product of

Witura Technology Sdn Bhd

And is manufactured by

Shenzhen Witura Telecommunications Co., Ltd.

WARNING

For safety reasons, only connect equipment with a telecommunications compliance label. This includes customer equipment previously labelled permitted or certified.