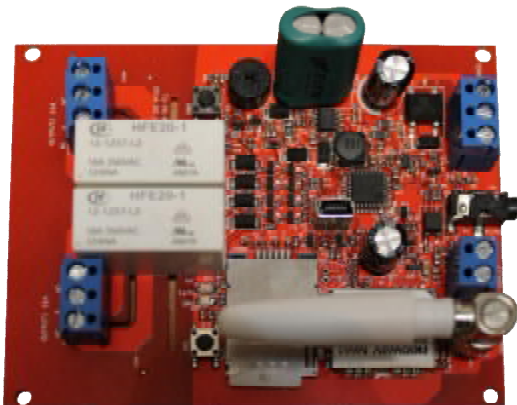


16-8755

Mobile remote control kit



User Manual

Manual version 1.0

16-8755 Mobile remote control kit

Thank you for purchasing the 16-8755.

The 16-8755 Mobile remote control kit is a remote power controlled device consisting of a GSM module. The power supply output of the board can be turned on or off remotely by the SMS (Short Message System) command or local controlled by pressing button. It is an intelligent power controlled board by users' mobile phone at anytime and anywhere.

16-8755 is suitable for controlling electrical appliances which power consumption less than 3000W in household or office.

With extended-connected temperature sensor, 16-8755 can switch on or off the power output according to the environment temperature. It's available for power control of the heating or refrigeration plant, to keep the environmental temperature within presetting range or at a fixed temperature value. Furthermore, a SMS notification will be sent to master's mobile phone if 16-8755 detects the rapid-changing or the reaching of pre-set alert value of surroundings temperature.

All services and functions need to be supported by the GSM network and a SIM card.

This brochure suits for **16-8755** model.

Details of the functioning and advanced operation of this device are described in this instruction manual.

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For your safety

- Before using this product, make sure that the mobile phones can be used well in the area, otherwise, do not put this product into operation.
- The power consumption of the appliances connected with the product cannot exceed **3000W** and the current cannot exceed **16A**.
- The electrical appliance which power consumption is higher than **1500W** must be grounded.
- The product doesn't guarantee safe power source disconnection, only functional switching of power is performed.
- The product must be mounted inside a suitable enclosure providing environmental protection.
- The product contains no serviceable parts, or internal adjustments. No attempt must be made to repair this product. Faulty units must be returned to supplier for repair. Improper use, disassembling or product modification causes warranty loss.
- This product must be installed by a qualified person. All electrical wiring must be carried out in accordance with the appropriate regulations for the place of installation.
- Before attempting any electrical connection work, please ensure all supplies are switched off
- This product is a wireless signal transmission device. Keep it away from electronic equipment likely to interfere with the wireless signals, in order to avoid signals interference.
- Keep the product and its accessories out of the children reach.

Exception clause

1. We operate on a policy of continuous development. We reserve the right to make changes and improvements to any of the boards described in this document without prior notice.

2. For the latest device information, please visit: <http://www.simpal.cn>. We don't guarantee for the document veracity, reliability or any content except regulate in proper laws. Including no guarantee for product suitable market or suitable area promise.
3. We hold no responsibility for the illegal use of this socket.
4. We hold no responsibility for any loss of income or any special, incidental, consequential or indirect damages howsoever caused.
5. The contents of this document are provided "as is". Except as required by applicable law, no warranties of any kind, either expressed or implied, including, but not limited to the accuracy, reliability or contents of this document. We reserve the right to revise this document or withdraw it at any time without prior notice.

Chapter 1 Features and accessories

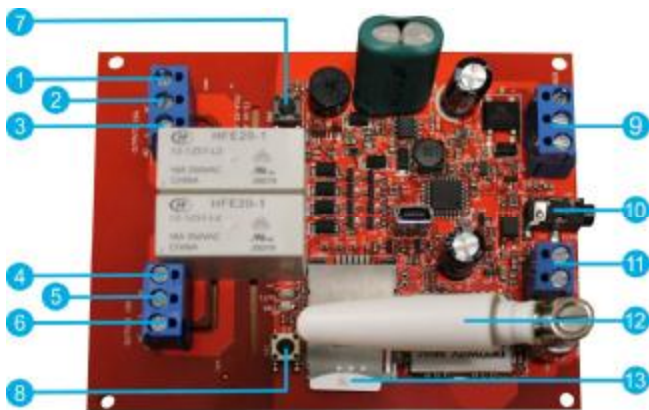
1.1 Main function

- This product is a kind of intelligent power socket, it comes in form of PCB board for both standalone use or embedded inside your product.
- This socket allows you to control any electric appliances connected to the device's two power relays remotely over GSM network.
- Remotely operate by SMS command: The socket be controlled and set by sending SMS commands.
- **Input: 110V-250V/50Hz.**
- **Output: Max.16A for long-duration operation.**
- M button: To manual control output power on/off.
- Delayed control socket output.
- Auto operates by preset schedule: Fixing-time control output power on/off.
- External temperature sensor supported: Send environmental temperature SMS to mobile phone.
- Auto operates by temperature: Available for power control of the heating or refrigeration plant, to keep the environmental temperature within presetting range or at fixed temperature value.
- SMS alarm when temperature rapid-changing or reaching the pre-set value: When it detects the rapid-changing or the reach of pre-set alert value of surroundings temperature, it can auto-send the SMS alarm message to master's mobile phone.
- Support 5 mobile phone users.
- Auto time-synchronization.
- SMS notification upon external power source changing.

1.2 Package contents

GSM power socket (1 unit)
Temperature sensor (1 unit)
User manual (1 unit)

1.3 Sockets instructions



1-6 Power output terminal block

7. Line 2 manual button

8. Line 1 manual button

9. GSM board AC/DC input

10. Temperature

sensor connector

11. Wired sensor connector

12.

GSM antenna

13. SIM card slot

Figure 1: 16-8755 instructions

1.4 Light indicator and “Beep” warning tone



1. Power Indicator 2. Line 1 Status LED 3. Line2 Status LED 4. GSM indicator 5. Wired sensor LED 6. Temp sensor LED (这个看能不能画一个线构图，标注指示灯位置?)

Indicator	Action	Status
Power (Green) light	Turning off	No power supply input
	Constant light	Has power supply input
GSM (Green) light	Constant light	Not installed SIM card, or do not recognize the SIM card.

	Flash slowly (1 time/ second)	Register GSM network and in standby mode.
	Flash Fast (2 times/second)	Processing SMS command or sending SMS.
Line1/2 Status light	Constant light	The socket outlet has power supply. (NO connector connected)
	Turning off	The socket outlet cuts power supply. (NC connector connected)
"Beep" warning tone (Default turning off)	One time	The socket outlet changes power supply status.
	Several times	16-8755 lost external power supply.
	Long Beep	16-8755 is successfully register GSM network, or it is successfully reset to its factory settings.

Note: The "Beep" warning tone can be turn on or turn off by SMS command. Refer to Chapter 3.9 for details.

Chapter 2 Installation

2.1 Installing the SIM card

- Put the SIM card inside card holder, ensuring that the beveled corner is inside and the golden contact area facing down.
- Firmly push the SIM card until hearing a lock sound.

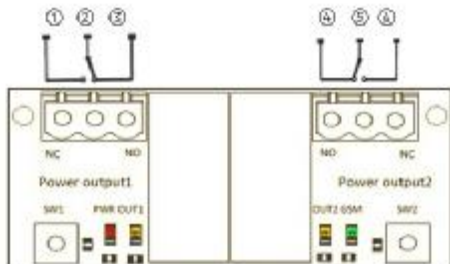
- To remove SIM from the socket, repeat the same steps.

% Note:

1. Purchase a GSM SIM card (mobile phone card) from GSM network service provider and install it in the socket. This SIM card number is referred as 16-8755 number on this brochure.
2. The user needs to activate the Caller ID Presentation function of SIM card, and deactivate PIN code of the SIM. Contact with GSM network service provider for support.
3. Change the original password at the beginning use. Be sure to keep the password and SIM card number secret. Do not disclose this information to anyone other than the authorized users in order to ensure your safety.
4. It is recommended to delete all received SMS messages, stored on the SIM card before using it in the socket.

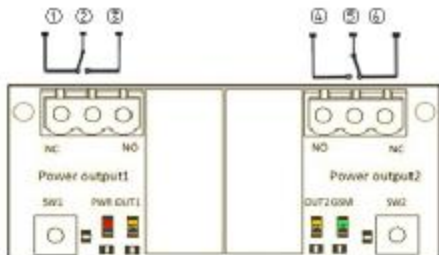
2.2 Outputs wiring

- Each output terminal block has three pins (SPDT/from relay switch).



Both lines output turn ON (NO mode)

- For device only need to control ON/OFF function, install Live line input to Pin③ and install Live line power output to PIN ②, then Turn on Line 1, it will turn on the power output.
- For device need switching control function (One line input and two lines switchable output) , install Live line input to Pin② and two switchable output lines to Pin① and ③. Turn ON means Pin③ line connected, turn OFF means pin ① connected.
- Turned On state means pins labeled as “NO” are connected; this is indicated by LED indicator labeled OUT1 for Output1 and OUT2 for Output2. Pin ② and PIN③ connected, PIN ④ and PIN ⑤ are connected.
- Turned Off state then means “NC” pins are connected and particular LED indicator is Off.

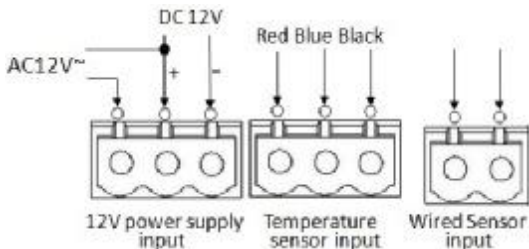


Both lines output turn OFF (NC mode)

% Note:

The maximum current rating of outputs – 16A for resistive loads. Do not overload your 16-8755.

2.3 GSM Power inputs wiring



(这个图中中间位置三个 PIN 帮忙换成耳机插座的状态)

- 12V power supply input:** This terminal has three pin terminal block for connection of external 12V DC or 12V AC power supply. **Typical average value is 20mA @ 12VDC.** Only two pins terminal block are needed for DC or AC power connection.

% Note:

1. Respect voltage rating of the external power supply voltage. Damage caused by over-voltage is not covered by warranty.
2. **Ensure GSM power supply is 12V, 1A, smaller power may caused the GSM board not working.**

- Temperature sensor input:** This terminal connects with the temperature sensor which is included in the product package.
- Wired sensor input:** This terminal has two pin terminal block for connection of external sensors. Connect any switch-based sensor such as relay contact, switch, magnetic door contact, PIR sensor,

etc to the Input pins. Resistance up to 5 kOhm can be used to invoke a state change.

- The detected state of each Input is indicated by a green LED located to the left of each Input terminal block.

2.4 GSM Power on

Power on:

1. Upon completion of wiring and installation, apply power via an external power supply. If using the supplied AC adapter, simply plug it into a live electrical socket.

You can verify operation by observing the LED indicators:

- When power is applied, all LED indicators will blink three times as internal diagnostics are performed. If diagnostic tests are successful, the PWR LED, located near Output1 terminal block, will turn solid Red.
- While searching for a GSM network, the GSM LED will blink green approximately once per second. When the device has successfully connected to a GSM network, the GSM LED will blink slowly, approximately once every three seconds.
- If the SIM card has PIN Authorization still active, the GSM LED will blink quickly, approximately three times per second.

Your 16-8755 is now ready for use.

The default state of the socket outlet is no power supply output.

% Note:

1. If the GSM indicator light is not constant lights, which imply the SIM card working abnormally, all functions of this socket are invalid.
2. Check GSM network signal of the using place:
 - The GSM network's signal strength may affect the socket feature. Therefore, before using, the user should ensure that 16-8755 is used in an area with a strong GSM network signal.

- For the first time use, the user should perform a test-run by sending SMS to the socket. This allows the user to check the GSM network connection of the socket.

Chapter 3 Managing the socket

3.1 Add a master number to start the socket

If 16-8755 is being used for the first time, or 16-8755 has been reset to factory settings, the Master user's number must be programmed into the socket.

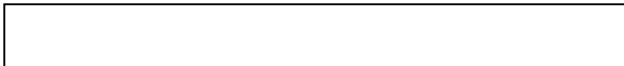
Method : The user edit and send the following SMS to socket via his/her mobile phone (the phone number will be the **Master** number) in order to:

Add a master number to the socket: #00#

3.2 Managing by SMS commands

The **Master** or **Family** users should edit and send the SMS commands to 16-8755 in order to manage the features of 16-8755. All the

- command is normally confirmed by a response SMS sent back
 - In case of an error is detected in a command, 16-8755 will respond with error message to the sender.
1. The “#” symbol must not be ignored when typing an SMS



command.

2. No space be allowed within the commands.

3.3 Define the users and password

There are two mobile phone user controlling levels:

Master user:

In order to enable all the functions on the socket, the **Master** user must store his/ her mobile number in the socket's memory. Only one **Master's** mobile number (**Master** number) is allowed for 16-8755 socket.

Family users:

Up to four **Family** users have authorization to use two commands of switch on or cut off the socket output.

The other mobile phone users have no authorization to use 16-8755.

Defining the users must be configured by using the commands per following table:

Category	Function	Command
Define the users	Add a master number to the socket	<u>#00#</u>
	Change the master user's number	<u>#14#NewMasterNumber#</u>
	Add a family number	<u>#06#FamilyNumber#</u>
	Check family number	<u>#06#</u>
	Delete a family number	<u>#15#FamilyNumber#</u>
	Delete all family numbers	<u>#15#</u>
Password	Change the password	<u>#04#Old#New#</u>

- The maximum digits that are allows for the phone number is sixteen.
- The password must be a four-digit number.
- The original password is 1234.

- 16-8755 should be reset to factory settings to remove old Master number before setting the new one. (Refer to Chapter 3.11)

3.4 Switching on/off the socket output

The output of both relay1 and relay2 can be controlled switching on/off by three methods as follows.

Method1 : By pressing M button manually

- Keep pressing **M** buttons located near to the output terminal blocks on the 16-8755 for half a second. The red OUTPUT indicator light will light constantly or turn off to indicate that the relay output is switching on or off.
- When the relay output is switching on, it offers power supply for electronic appliance which being connected with it; Otherwise, it has no power supply for electronic appliance.

% Note

If the socket relay output status is changed manually (including pressing the **M** button, sending SMS and making phone call), the preset timing, delaying or temperature control of the socket will be **invalid** automatically and a SMS notification message will be sent to the Master, but the setting time range and temperature range parameters will be saved until 16-8755 is reset to factory settings.

Method2 : By calling

If the **Master** user calls 16-8755, the socket output will be switched on or cut off automatically when the user hears the ring tone in the phone. The calling will be hung up automatically.

Behavior of 16-8755 to incoming calls must be configured in advance by using the commands as following table:

Category	Feature	Command
Set switching on/off relay	Set switching on/off both relay 1 and 2 by calling	<u>#10#1#</u>
	Set switching on/off both relay 1 by calling	<u>#10#2#</u>

Category	Feature	Command
output by calling	Set switching on/off both relay 2 by calling	<u>#10#3#</u>
	Set restarting both relay 1 and 2 by calling	<u>#10#4#</u>
Set switching on/off by calling	Active switching on/off by calling	<u>#09#1#</u>
	Disable switching on/off by calling (default)	<u>#09#0#</u>

Method3 : By SMS command

Category	Feature	Command
Switching on/off by SMS	Switching on Relay1 output manually	<u>#01#1#</u>
	Switching off Relay1 output manually	<u>#01#2#</u>
	Switching on Relay2 output manually	<u>#02#1#</u>
	Switching off Relay2 output manually	<u>#02#2#</u>
	Family user switches on Relay1 output manually	<u>#01#1#Password#</u>
	Family user cuts off Relay1 output manually	<u>#01#2#Password#</u>
	Family user switches on Relay2 output manually	<u>#02#1#Password#</u>
	Family user cuts off Relay2 output manually	<u>#02#2#Password#</u>

- **Password** should be 4 digits password number. Default 1234.
- SMS reply will be also sent to Master user when Family users use these two commands to change the socket output successfully.

3.5 Restarting the socket output

When the relay output be restarted, if it was switching on, it will be switched off for 5 seconds and then be switched on again automatically; otherwise, if it was switching off, it will be switched on for 5 seconds and then be switched off automatically.

The output of both relay1 and relay2 can be controlled restarting immediately by two methods as follows.

For delayed and timing restarting, refer to chapter 3.6.2 and 3.7.2.

Method1 : By calling

Category	Feature	Command
Restarting immediately by calling	Set restarting relay 1 by calling	<u>#10#5#</u>
	Set restarting relay 2 by calling	<u>#10#6#</u>

Method2 : By SMS command

Category	Feature	Command
Restarting immediately by SMS	Restarting relay1	<u>#01#3#</u>
	Restarting relay2	<u>#02#3#</u>

- **Minutes** are time parameters, its range is 0-720,
- When **Minutes** is 0, the “delayed restarting by SMS” function will be invalid, but the current output status won’t be changed.

3.6 Delayed control

3.6.1 Delayed switching on/off the socket output

- The output of 16-8755 can be set to delay switch on or off for a period with SMS commands.
- When the “delayed-switch on/off the socket” function is applied, the

preset “timing switching on the output” function will be invalid at once.

- When the “delayed switch on the socket” command is received and if the socket output is switched on, the socket output will be switched off immediately and be switch on again as the setting delayed time is reaching. Contrarily, if the socket output is switched off, the output will remain switching off until the setting delayed time is reaching.
- When the “delayed switch off the socket” command is received and if the socket output is switched on, the socket output will remain the switch on state and be switched off as the setting delayed time is reaching. If the socket output is switched off, it will be switched on immediately and be switch off again when reaching the setting delayed time.

The **Master** user sends following SMS message:

Category	Feature	Command
Delayed switching on/off	Set relay 1 switching on after * minutes.	<u>#11#1#Minutes#</u>
	Set relay 2 switching on after * minutes.	<u>#11#2#Minutes#</u>
	Set both relay 1 and 2 switching on after * minutes.	<u>#11#3#Minutes#</u>

- **Minutes** are time parameters, its range is 0-720,
- When **Minutes** is 0, the “delay switching on/off the socket” function will be invalid, but the current output status won’t be changed.

3.6.2 Delayed change the socket output

The **Master** user sends following SMS message:

Category	Feature	Command
Delayed-change	Set relay 1 change status after * minutes.	<u>#12#1#Minutes#</u>
	Set relay 2 change status after	<u>#12#2#Minutes#</u>

Category	Feature	Command
	* minutes.	
	Set both relay 1 and 2 change status after * minutes.	<u>#12#3#Minutes#</u>

3.7 Timing setup

3.7.1 Enable timing switching on the output

- The output of 16-8755 can be set to switch on for a duration and then be switch off after the duration.
- After successful setting of time duration to switch on the socket output, the schedule parameter will be saved on the socket until 16-8755 is reset to factory settings. But the “timing switching on the output” feature is applied only when “enable timing switching on the output” be set.
- If the socket output status is changed manually (including pressing **M** button, sending SMS and making phone call), the preset timing, delaying or temperature control of the socket will be invalid automatically, but the setting time range

The **Master** user sends following SMS message:

Category	Feature	Command
Time	Set time	<u>#20#WorkDay#StartTime#EndTime#</u>

- WorkDay**: one digit, the values lie in the range of “0” to “8”.
The following table contains the descriptions of each value:

Value	Corresponding day
0	Everyday
1	Monday
2	Tuesday

3	Wednesday
4	Thursday
5	Friday
6	Saturday
7	Sunday
8	Monday to Friday
9	Weekend

- **StartTime** and **EndTime**: Be consists of 4 digits (hh:mm) and works on a 24 hour clock. The **StartTime** and **EndTime** should be in the same day, and the **EndTime** must be later than **StartTime**.
- The socket output will switch on at the **StartTime** and cut off at the **EndTime**.
- For example: #20#1#0000#2130# , 0000 means time 00:00AM, 2130 means time 9:30PM.

Category	Feature	Command
Timing switching on	Enable timing switching on the both output of relay 1 and 2	<u>#19#1#</u>
	Enable timing switching on t output of relay 1	<u>#19#2#</u>
	Enable timing switching on output of relay 2	<u>#19#3#</u>

After these settings, 16-8755 will keep switching on or off the output automatically according to the schedule settings.

3.7.2 Enable timing restarting the output

The output of relay1 and relay2 can be controlled timing restarting by following SMS commands:

Category	Feature	Command
Timing restarting	Enable timing restarting both relay 1 and 2	<u>#19#4#</u>

Category	Feature	Command
	Enable timing restarting relay 1	<u>#19#5#</u>
	Enable timing restarting relay 2	<u>#19#6#</u>

Refer to chapter 3.7.2 “Set time period”. The socket output will restarting for up to two times at the **StartTime** and **EndTime** on the **WorkDay**.

3.7.3 Disable timing control

Both timing switching on and timing restarting features can be disabled by following SMS command:

Category	Feature	Command
Disable Timing control	Disable Timing control	<u>#19#0#</u>

3.8 Auto-control the output by temperature

3.8.1 Enable auto-controlled by temperature

- The external temperature sensor must be connected with 16-8755. The output status of the socket can be controlled by the environmental temperature automatically.

- If “timing switching on the socket” or “delayed switch on/off the socket” is enabled, the temperature control function will only be valid when power output is switch on (including timing switching on or delayed switch on time period).
- For example: 16-8755 is used for the power control of the heating

off the output according to indoor temperature automatically from 9am to 5pm duration.

The **Master** user sends following SMS message:

Category	Feature	Command
Temperature control range	Set temperature control range	<u>#24#A#B#</u>

- **A** is the lower temperature value and **B** is the higher temperature value. The values can be set within the range of -10 to 50 centigrade degree. If **A** equals to **B**, constant temperature control will be activated.
- After successful setting of temperature range, the temperature parameter will be saved on the socket until 16-8755 is reset to factory settings.
- The “Auto-controlled by temperature” feature is applied only when the following command be set.

Category	Feature	Command
Enable temperature control	When temperature lower than A , then relay 1 & 2 switch on, when it higher than B , relay 1 & 2 switch off.	<u>#23#1#1#</u>
	When temperature lower than A , then relay 1 switch on, when it higher than B , relay 1 switch off.	<u>#23#1#2#</u>
	When temperature lower than A , then relay 2 switch on, when it higher than B , relay 2 switch off.	<u>#23#1#3#</u>
	When temperature higher than B , then relay 1 & 2 turn on, when it lower than A , relay 1 & 2 turn off.	<u>#23#2#1#</u>
	When temperature higher than B , then relay 1 turn on, when it lower than A , relay 1 turn off.	<u>#23#2#2#</u>
	When temperature higher than B , then	<u>#23#2#3#</u>

Category	Feature	Command
	relay 2 turn on, when it lower than A , relay 2 turn off.	

After these settings, 16-8755 will switching on or off the output automatically according to the temperature range setting.

- Example 1: set commands: #24#10#20# and #23#1#1#, if the environmental temperature is 9 degrees (bellow the limitation of 10 degrees on the command), the socket output will be all switched on to power heating apparatus; and if the environmental temperature is 21 degrees (above the limitation of 20 degrees in the command), the socket output will be switched off and the heating apparatus stops working;
- Example 2: set commands: #24#10#20# and #23#2#1#, if the environmental temperature is 21 degrees (above the limitation of 20 degrees in the command), the socket output will be all switched on to power cooling apparatus; and when the environmental temperature is 9 degrees (bellow the limitation of 10 degrees in the command), the socket output will be off, cooling apparatus stops working.

3.8.2 Disable auto-controlled by temperature

The **Master** user sends following SMS message:

Category	Feature	Command
Disable temperature control	Disable temperature control	<u>#23#0#</u>

3.9 Temperature alarm

3.9.1 Over-temperature alarm

A range of temperature can be pre-set onto the socket. In this case, if the surroundings temperature is detected out of the pre-set temperature range, the 16-8755 will auto-send the SMS alarm message to master's

mobile phone. (Refer to Chapter 3.10.3 to choose the notification method when alarm).

This feature depends on the temperature sensor.

The **Master** user sends following SMS message:

Category	Feature	Command
Over-temperature alarm	Set temperature limits when alarm	<u>#22#C#D#</u>
	Enable over-temperature alarm	<u>#21#1#</u>
	Disable temperature alarm	<u>#21#0#</u>

- **C** is the Min-temperature value and **D** is the Max-temperature value. The values can be set within the range of -10 to 50 centigrade degree.
- Default **C** is 20 and **D** is 30 centigrade degree.

3.9.2 Temperature rapid-changing alarm

A time period value and temperature changing value can be pre-set onto the socket. In this case, if the surroundings temperature change to the pre-set value within the pre-set time period, a SMS alarm message will be auto-sent to master's mobile phone. (Refer to Chapter 3.10.3 to choose the notification method when alarm)

This feature depends on the temperature sensor.

The **Master** user sends following SMS message:

Category	Feature	Command
Temperature rapid-changing alarm	Set temperature changing parameters	<u>#26#Temp#Time#</u>
	Enable rapid-changing alarm	<u>#25#1#</u>
	Disable rapid-changing alarm	<u>#25#0#</u>

- **Temp**: The values lie in the range of 1 to 50 centigrade degree.
- **Time**: The values lie in the range of 1 to 300 minutes.
- Default Temp is 2 degree and Time is 1 minute.

3.10 SMS notification and Beep tone

3.10.1 SMS notification and Beep tone upon the socket output changing

16-8755 will default notify the user when the state of the socket output is changed with a SMS notification. The Master user can enable/disable this SMS notification.

“Beep” warning tone will be sounded if the work state of 16-8755 is changed. The “Beep” warning tone is default turning off.

The **Master** user sends following SMS message:

Category	Feature	Command
Output changing notification	Enable SMS notification (Default)	<u>#03#1#</u>
	No SMS notification	<u>#03#0#</u>
	Enable the “Beep” warning tone	<u>#13#1#</u>
	Disable the “Beep” warning tone (Default)	<u>#13#0#</u>

3.10.2 SMS notification upon external power supply changing

16-8755 when the state of the external power supply is changed with a SMS notification.

The **Master** user sends following SMS message:

Category	Feature	Command
Power supply changing SMS notification	SMS notification (Default)	<u>#05#1#</u>
	No SMS notification (Default)	<u>#05#0#</u>

Lost external power supply:

If 16-8755 is disconnected from external AC power or lost of the AC power occurs, all operating on 16-8755 is de-activated, including M button and all SMS commands.

Resume external power supply:

If the AC power of 16-8755 is available again, the SMS notification will be sent to the user.

When the external power supply is resumed, the output of 16-8755 will keep its previous working status. For example, if the output is switched on before the external power supply cut off, the output will be switched on when the external power supply is resumed.

If the power supply is switched on and off frequently, 16-8755 will send reminding SMS messages.

3.10.3 SMS notification upon sensor alarm

When sensor triggers the socket alarm, two notification methods can be choose, such as sending a SMS message or making a call to master's mobile phone.

The **Master** user sends following SMS message:

Category	Feature	Command
Sensor alarm notification	SMS notification (Default)	<u>#17#1#</u>
	No SMS notification	<u>#17#0#</u>
	Calling notification (Default)	<u>#18#1#</u>
	No calling notification	<u>#18#0#</u>

3.10.4 SMS notification upon weak GSM signal alarm

When GSM signal is weak, the socket cannot keep on the GSM network,

The **Master** user sends following SMS message:

Category	Feature	Command
Sensor alarm notification	Weak GSM signal alarm function on (Default)	<u>#27#1#</u>
	Weak GSM signal alarm function off	<u>#27#0#</u>

3.11 Check status

The **Master** user sends following SMS message:

Category	Feature	Command
Check output status	Relay 1 Status	<u>#01#</u>
	Relay 2 Status	<u>#02#</u>
Check socket operating status	Socket operating status	<u>#07#</u>
	Check calling switching on/off status	<u>#10#</u>
Check GSM	GSM network signal strength	<u>#27#</u>
	Timing control content and parameters.	<u>#19#</u>
Check timing control	Check current temperature value	<u>#21#</u>
Check temperature	Check temperature alarm status and range	<u>#22#</u>
	Check temperature control status and range	<u>#23#</u>

3.12 Resetting the socket

This function resets all programmed settings to their original values, including cleaning all user number, timing parameter and temperature parameter. So this function needs to be used carefully as it also erases all setting values.

If the setting status is wrong or the malfunctions can't be corrected, users can restore the socket to its original status to make it work normally.

Method 1: Press the side **M** button of the device for 5 seconds.

Method 2: The **Master** user sends following SMS message:

Category	Feature	Command
Reset the socket	Reset to factory settings	<u>#08#Password#</u>

A long "Beep" tone (if enabled) will be heard and it means resetting the

socket successfully.

Chapter 4 Maintenance

- If 16-8755 does not in use for long time, it should be powered off.
- Store and use the remote socket in suitable temperature. Too high or too low temperature will likely to damage the socket.
- Try to keep the 16-8755 and all its accessories dry. Do not store and use it in the bathroom, or other place with high humidity. Do not allow pour water or other liquids into the socket, otherwise, it might cause malfunctions.
- Do not store and use the socket in dusty.
- Do not use alcohol, acetone and other similar solvents to clean it. Wipe it with soft-wet cloth.
- Do not attempt to open it except as instructed. If the socket does not work normally, try to resolve it as the guide of the "general troubleshooting", if to the problem can not be solved, contact with the dealer immediately.

Chapter 5 General Troubleshooting

No.	General Trouble	Possible Reason	Solution
1	Power indicator light turns off	No power input.	Check 16-8755's external AC power is available.
2	GSM indicator light turns off	Can't find or identify the SIM card. The power switch is OFF.	SIM card no install properly: Power off the socket and check it again. Power on the socket.
3	Socket output cannot be changed by M button.	No power input. The power switch is OFF.	Check 16-8755's external AC power is available. Power on the socket.
4	All functions disable (Indicator is working)	Caller ID presentation do not active, insufficient fee of the SIM card.	Contact network provider to active SIM card function. Pay for the card.
5	Socket didn't response of any operation.	16-8755 work abnormally.	Switch off the power, check SIM card, or reset factory setting.
6	After power on the socket, GSM indicator keeps flashing.	Network signal weak or network busy.	If mobile phone's signal is weak too, place the socket at other place with strong signal and try again.

No.	General Trouble	Possible Reason	Solution
		SIM card PIN code actives.	Close the PIN code.
		SIM card invalid.	Contact with local operator to check of it.
7	The master number already exists.	Other master is already set in the socket.	Change Master number or recover to factory default setting.
8	Invalid format. Please check and try again.	Invalid command.	Refer to the user manual.
9	No authorization user		Use the Master mobile phone to try the command again.

Note: If the problem can't be solved with above guidelines, contact to your local distributor or after service center.

Chapter 6 Main Technical Parameters

GSM power Supply	12V AC/DC 1A
Relay type	Latching relay 16A 250V AC
Connecting type	Terminal block wiring
Operating temperature	-10°C~+50°C
Store temperature	-20°C~+60°C
Relative humidity	10-90%, without condensation
Communication protocols	GSM PHASE 2/2+ (including data operation)
Data interface	GSM SIM 1.8V/3.0V socket
External temperature sensor	-30°C~100°C
GSM working band	850/900/1800/1900Mhz

16-8755

GSM Power Socket