HT-GSM remote controller Instructions (English)

I. Introduction:

SMS control function
Ringing Control Function (Free telephone charges, only the first channel)
Power off memory function (optional)
Power off reminding by SMS
Timer switch function
Fetion function

II. The module description:

HT-GSM remote control switch is mainly consisted of special industrial GSM module and a high-performance processors. This module has 1 channel 30A relay control, it can be expanded to four channels. The long distance(where GSM network coverage) data transportation and flexible unit control would achieved easily by the SMS service function of GSM network.

III. The installation operation

- 1.Insert the SIM card, access the antenna of the GSM module. (Note: SIM card is not hot-swap, otherwise it will damage the SIM card life.)
- 2.Turn on the power, when the indicator light blinks every second, the host is search network; when the indicator light blinks every 5 seconds, the host search network successful (About ten seconds, it depends on the local signal to availability. Then wait for one more minute, the main host gets into standby mode.

IV. The functional operation

(A) SMS control instructions

1. Encryption capabilities:

Host initial password is 1234, when users need to change the password, users can send the old password and XG (capital and small letter is ok) and the new password to the host, the host replies, "Change Password OK:XXXX!", Means changed password successful. For example: Send 1234XG5678 (no spaces), the password is changed from 1234 to 5678.

2. Binding mobile phone functions:

2.1 Binding feature setting:

Bind the cell phone number, just send your password and BD to the host. For example: the operator phone number is 13988888888, send "1234BD" to the host, the host replies, "Bind successful! 13988888888", which indicates that the phone number is bound succeed.

The control panel can bind up to eight phone numbers, after binding full, the host will replies "Binding space is full" message, indicating that the binding is full, we can not continue to add bound phones.

After the binding is successful, each control relay doesn't need adding cryptographic operations, simplifying the steps.

2.2 Unbundling functions:

Send password and QXBD, for example: 1234QXBD, the host replies, "Unbind phone ok!", means the disarmament of all bound phone number on the host is done. As already bound 8 phone numbers, continue to bind the phone, the host replies binding error: "SPACE FULL!" You should use the unbundling function, re-binding after unbundling.

3. Operations after binding:

3.1 Single channel control function:

Sending number and letter K, to turn on the relay, for example: send a message 1K, the 1st relay turns on; the host replies SMS "1:ON control ok", means the success of the 1st relay turns on; send message number and letters G, to turn off the relay, for example: send a message 1G, the 1st relay turned off; the host replies SMS"1:OFF control ok.", means the success of the 1st relay turned off.

3.2 Multi channels control function:

Sending numbers and letters K, G, to control multiple relays, for example: send a message 1G2k3g4K, without spaces or other characters; to control and turn on the 2nd, the 4th relays; and turn off No. 1, No. 3 relays. The host replies by SMS "2: ON 4: ON 1: OFF 3: OFF control ok", means the No. 2, No. 4 relay turned on successfully, the 1st, the 3rd relay turned off successfully.

3.3 Group control function:

- 3.3.1 All on/off control: Send QK, host replies the SMS "all on ok.", means the success of turn on all the relays; send QG, host SMS replies "all off ok!", means the success of turn off all the relay.
- 3.3.2 All inching control: Sending QD, host replies the SMS" ALL inching control ok!", means the relays are all inching control successfully. (Inching function relay turn on for one second, then shut down.)
 - 3.3.3 Mixed group control: Send 1D2D3K4K, the relays 1 and 2 inching; the 3

and 4 relays turned on. The host replies by SMS"1:inching 2:inching 3:ON 4:ON control ok". Means the action is finished.

3.4 Cancel SMS reply function

Referring 3.1,3.2,3.3 control functions, while sending control messages if with N on the rear of the control messages, such as 1KN, 1GN, 1DN, 1G2K3G4KN, QKN, the host performing a variety of control messages without a reply.

4. Operation of the phone is not binding:

Phone number is not binding, send password with operation code to control. For example: Send 1234 (space) 1k, to turn on the relay No.1.

5. Query function:

Sending 0000, to view the current status of the host relay. For example: sending 0000, Host message receipt "1: ON 2: OFF 3: OFF 4:ON control ok.", means the number 1,4 relay is turned on, 2,3 relay is turned off.

6. Setting boot information and cancellation functions:

Sending password and SZKJDX to the host, to set the host boot reply message, for example: 1234SZKJDX sent to the host, the host replies, "Boot prompt message set successfully"indicating successful binding adding boot information, whenever the host starts, the phone will receive a "GSM Controller switched on", means the host has started successfully. Cancel boot information function: send your password and QXKJDX to the host, for example: sent 1234QXKJDX to the host, it replies "Cancellation boot messages OK", indicating canceled boot information function successful.

7. Initialization function:

Sending "HONEST" to the host, to initialize the host, after it initialization, all the relays in the off state, the password back to the initial value :1234, all bound to lift the host phone number. Host replies "Restore the factory settings ok."

8. Open the power off memory function and cancel power off memory function: Send password and SZJY to the host, the host replies, "power-off memory setting ok", Which indicates the success of the opening power off memory function, the module is powered off, the system will retain the relay state, the relay recovery status when the modules are power on. Send password and QXJY, cancel this function.

(B) Ringing control instructions (only for the first channel)

1. Set the international dialing code:

When some individual areas of China Mainland ringing control function is not work, the dialing code should be deleted (the default is "+86"), simply send

"1234QXQH" to the control module, the module will reply "cancel code successful", that is done.Non-mainland users need to set the international code, to achieve ringing operation. Such as Taiwan, sending 1234SZQH00886, host replies "Setting international dialing code ok:00886". Sending 1234QXQH, host replies cancel code is successful, represents that the international code canceled. Mainland users do not have this feature.

2. SMS provisioning and cancel ringing free control function:

Sending password and "SZMF" to module, the open the ringing free control function, the module will reply "Setting call control OK.", means the function opened The relay actions(only for the first channel) can be control by ringing. Sending password and "QXMF", the host replies "Cancel Call Control OK!", to cancel this function. This function is not opened in default.

3. SMS opened and cancel reply function:

Send password and "SZHF" to module, to open the control reply message after phone function, replies "Boot prompt message set successfully", means the success of the setting, after the ringing operation, module sends the current status of the relay information to the control phone. Send password plus "QXHF", replies "Cancellation boot messages OK!", This function is canceled.

4. Ring Operation:

Only bound phone could operate the ringing operation, unbound phone can not control. After open the feature free function, the phone rings sound 3 times, (approximately ringing 9-15 seconds), the first road cancel the operation. Hang up at this point, the module card will not be charged. After hang up, after setting the reply function, relay current status SMS will be received. After rang 5 times, it will get in to the auto answer mode if you continue ringing, then enter to the voice control function. This function is effective only your SIM card with caller identification function (setting from the telecom operator)

(C) Description of timing switches function

Description of send information:

Timing Unit: "s"-second, "m"-minute, "h"-hour. Capital and small letter is ok.

Such as sending SMS "1K30s" to the host, the host will reply "1 channel timer 30 second to open". Means the timing sent successfully, the first relay turned on, and start timing, and when 30 seconds times up, relay Off, The host reply message "1 channel timer 30 second to close" to the phone of transmission timing information, means the timing time is up!. "1" represents the first channel ,"k" means on. The host turn on the relay, and timing, it turn off the relay and replies the message while times up. "30" represents the timer value, minimum of 1 up to 9999, should not exceed four digits, otherwise known as invalid timing command.

Description of canceling the timing operating:

If the user sent the timing SMS, but want to cancel, sending SMS "QXDS" to the host, it replies '**Timing has been canceled.** 'and turn off the relay.

(D)Power off reminding by SMS

When the host power off or power outage, the host will send a message to all the numbers is bound "GSM controller has been disconnected or a power outage!" That means the host is powered off.

Note: This feature is not including in the default functions, please ask for this addition function when order if you need it.

(E) Fetion functions operating instructions

Installed Fetion software on the computer. Add your host SIM card number as Fetion friend. Enter the system setting>SMS Settings>Display Settings Name option to not display. Then the same way as mobile phones SMS operating.

(F) Switching languages

The factory default is the Chinese version, the Chinese version is only suitable for use in mainland China. Hong Kong, Macao, Taiwan and foreign users need to use the English version, sending password and "English" to the host, such as sending "1234English". Host Reply "English version." Means it had switched to the English version. To switch to the Chinese version, to send password and "china" such as sending "1234china", host replies "Setting Chinese version, OK "represents the success of handover.

Remarks:

- 1. When sending wrong or useless instruction, the host response error, indicate malformed or mishandling, when the SMS beyond numbers and letters, will be treated spam message, not reply, filter!
- 2. The above letter to all content sent by the module are not case sensitive.
- 3. When one message is sent, it is the best to wait for completion of message receipt and then send another control message, in order to avoid the accumulation of information.
- 4. The host power on, it will delete all SIM card information in order to prevent the accumulation of messages, safe the important information in advance.
- 5. The attached wiring diagram with 220V and 380V. Not a host to support two voltages, please check the voltage before using.

SMS COMMAND TABLE

SMS command	Perform operations	Need password	Remark
1234BD	Binding current phone number	Need password	
1234QXBD	Release all bound phone	Need password	
1234XG5678	Change Password to 5678	Need password	Password must be four figures
12341K	Turn on the relay of the first channel	Unbound Phone Need password	
12341G	Turn off the relay of the first channel	Unbound Phone Need password	
1234QK	Turn on all the relays	Unbound Phone Need password	
1234QG	Turn off all the relays	Unbound Phone Need password	
12341KN	Turn on the first channel without SMS feedback	Unbound Phone Need password	
12341GN	Turn off the first channel without SMS feedback	Unbound Phone Need password	
12340000	Check all relay status	Unbound Phone Need password	
1234SZKJDX	Set power-on SMS	Need password	
1234QXKJDX	Cancel power-on SMS	Need password	
HONEST	Reset	No password is required	
1234SZJY	Power off memory switch status	Need password	~
1234QXJY	Cancel Power off memory switch status	Need password	
1234SZ00886	Set 886 as the international area code	Need password	This feature with caution!
1234QXQH	Unset international code	Need password	This feature with caution!
1234SZMF	Setting ON Ringing	Need password	
1234QXMF	Ringing Close	Need password	
1234SZHF	Check status after opening the ringing	Need password	
1234QXHF	Check status after closed the ringing	Need password	
12341K30S	Timer: turn on the first	Unbound Phone	

	channel for 30 seconds	Need password	
12341K15M	Timer: turn on the first	Unbound Phone	
	channel for 15 minutes	Need password	
12341K12H	Timer: turn on the first	Unbound Phone	
	channel for 12 hours	Need password	
1234QXDS	Cancel all the timers	Unbound Phone	
	12) 10	Need password	\ \

Remark: The above examples are base on the case of default password 1234. If the password is changed, some of commands no need to with 1234 in the binding state.

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II. The module description:

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III. The installation operation

- 1.Insert the SIM card, access the antenna of the GSM module. (Note: SIM card is not hot-swap, otherwise it will damage the SIM card life.)
- 2. Turn on the power, when the indicator light blinks every second, the host is search network; when the indicator light blinks every 5 seconds, the host search network successful (About ten seconds, it depends on the local signal to availability.

Then wait for one more minute, the main host gets into standby mode.

IV. The functional operation

(A) SMS control instructions

1. Encryption capabilities:

Host initial password is 1234, when users need to change the password, users can send the old password and **XG** and the new password to the host, the host replies, "**Change Password OK:XXXX**", Means changed password successful. For example: Send 1234XG5678 (no spaces), the password is changed from 1234 to 5678.

2. Binding mobile phone functions:

2.1 Binding feature setting:

Bind the cell phone number, just send your password and **BD** to the host . For example: the operator phone number is 13988888888, send "1234BD" to the host, the host replies, "bind with the:+8613988888888", which indicates that the phone number is bound succeed.

The control panel can bind up to eight phone numbers, after binding full, the host will replies "Binding space is full" message, indicating that the binding is full, we can not continue to add bound phones.

After the binding is successful, each control relay doesn't need adding cryptographic operations, simplifying the steps.

2.2 Unbundling functions:

Send password and QXBD (capital and small letter is ok), for example: 1234QXBD, the host replies, "Unbind phone ok!", means the disarmament of all bound phone number on the host is done.

As already bound 8 phone numbers, continue to bind the phone, the host replies binding error: "SPACE FULL! " You should use the unbundling function, re-binding after unbundling.

3. Operations after binding:

3.1 Single channel control function:

Sending number and letter K, to turn on the relay, for example: send a message 1K, the 1st relay turns on; the host replies SMS"1:ON control ok", means the success of the 1st relay turns on; send message number and letters G, to turn off the relay, for example: send a message 1G, the 1st relay turned off; the host replies SMS"1:OFF control ok.", means the success of the 1st relay turned off.

3.2 Multi channels control function:

Sending numbers and letters K, G, to control multiple relays, for example: send a message 1G2k3g4K, without spaces or other characters; to control and turn on the 2nd, the 4th relays; and turn off No. 1, No. 3 relays. The host replies by SMS "2: ON 4: ON 1: OFF 3: OFF control ok", means the No. 2, No. 4 relay turned on successfully, the 1st, the 3rd relay turned off successfully.

3.3 Group control function:

- 3.3.1 All on/off control: Send QK, host replies the SMS "all on ok.", means the success of turn on all the relays; send QG, host SMS replies "all off ok!", means the success of turn off all the relay.
- 3.3.2 All inching control: Sending QD, host replies the SMS" ALL inching control ok!", means the relays are all inching control successfully. (Inching function relay turn on for one second, then shut down.)
- 3.3.3 Mixed group control: Send 1D2D3K4K, the relays 1 and 2 inching; the 3 and 4 relays turned on. The host replies by SMS"1:inching 2:inching 3:ON 4:ON control ok". Means the action is finished.

3.4 Cancel SMS reply function

Referring 3.1,3.2,3.3 control functions, while sending control messages if with N on the rear of the control messages, such as 1KN, 1GN, 1DN, 1G2K3G4KN, QKN, the host performing a variety of control messages without a reply.

4. Operation of the phone is not binding:

Phone number is not binding, send password with operation code to control. For example: Send 1234 (space) 1k, to turn on the relay No1.

5. Query function:

Sending 0000, to view the current status of the host relay. Host message receipt "1: ON 2: OFF 3: OFF 4:ON control ok.", means the number 1,4 relay is turned on, 2,3 relay is turned off.

6. Setting boot information and cancellation functions:

Sending password and SZKJDX to the host, to set the host boot reply message, for example: 1234SZKJDX sent to the host, the host replies, "Boot prompt message set successfully"indicating successful binding adding boot information, whenever the host starts, the phone will receive a "GSM Controller switched on", means the host has started successfully. Cancel boot information function: send your password and QXKJDX to the host, for example: sent 1234QXKJDX to the host, it replies "Cancellation boot messages OK", indicating canceled boot information function successful.

7. Initialization function:

Sending "HONEST" to the host, to initialize the host, after it initialization, all the relays in the off state, the password back to the initial value :1234, all bound to lift the host phone number. Host replies "Restore the factory settings ok."

8. Open the power off memory function and cancel power off memory function: Send password and SZJY (capital and small letter is ok) to the host, the host replies, "power-off memory setting ok", Which indicates the success of the opening power off memory function, the module is powered off, the system will retain the relay state, the relay recovery status when the modules are power on. Send password and QXJY, cancel this function.

(B) Ringing control instructions (only for the first channel)

1. Set the international dialing code:

Non-mainland users need to set the international code, to achieve ringing operation. Such as Taiwan, sending 1234SZQH00886, host replies "Setting international dialing code ok:00886". Means the 00886 setting is successful. When some individual areas of China Mainland ringing control function is not work, the dialing code should be deleted (the default is "+86"), simply send "1234QXQH" to the control module, the module will reply "cCancel the international code OK.", that is done.

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3. SMS opened and cancel reply function:

Send password and "SZHF" to module, to open the control reply message after phone function, replies "Boot prompt message set successfully", means the success of the setting, after the ringing operation, module sends the current status of the relay information to the control phone. Send password plus "QXHF", replies "Cancellation boot messages OK!", This function is canceled.

4. Ring Operation:

Only bound phone could operate the ringing operation, unbound phone can not control. After open the feature free function, the phone rings sound 3 times, (approximately ringing 9-15 seconds), the first road cancel the operation. Hang up at this point, the module card will not be charged. After hang up, after setting the reply function, relay current status SMS will be received. After rang 5 times, it will get in

to the auto answer mode if you continue ringing, then enter to the voice control function. This function is effective only your SIM card with caller identification function (setting from the telecom operator)

(C) Description of timing switches function

Description of send information:

Timing Unit: "s"-second, "m"-minute, "h"-hour. Capital and small letter is ok.

Such as sending SMS "1K30s" to the host, the host will reply "1 channel timer 30 second to open". Means the timing sent successfully, the first relay turned on, and start timing, and when 30 seconds times up, relay Off, The host reply message "1 channel timer 30 second to close" to the phone of transmission timing information, means the timing time is up!. "1" represents the first channel ,"k" means on. The host turn on the relay, and timing, it turn off the relay and replies the message while times up. "30" represents the timer value, minimum of 1 up to 9999, should not exceed four digits, otherwise known as invalid timing command.

Description of canceling the timing operating:

If the user sent the timing SMS, but want to cancel, sending SMS "QXDS" to the host, it replies '**Timing has been canceled.** 'and turn off the relay.

(D)Power off reminding by SMS

When the host power off or power outage, the host will send a message to all the numbers is bound "GSM controller has been disconnected or a power outage!" That means the host is powered off.

Note: This feature is not including in the default functions, please ask for this addition function when order if you need it.

(E) Fetion functions operating instructions

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Remarks:

- 1. When sending wrong or useless instruction, the host response error, indicate malformed or mishandling, when the SMS beyond numbers and letters, will be treated spam message, not reply, filter!
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- 3. When one message is sent, it is the best to wait for completion of message receipt and then send another control message, in order to avoid the accumulation of information.
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- 5. The attached wiring diagram with 220V and 380V. Not a host to support two voltages, please check the voltage before using.

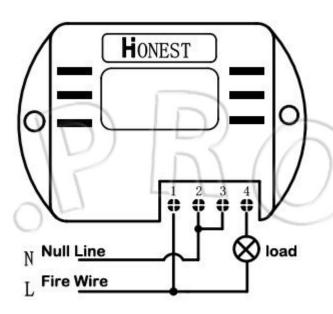
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12341G	Turn off the relay of the first channel	Unbound Phone Need password	
1234QK	Turn on all the relays	Unbound Phone Need password	
1234QG	Turn off all the relays	Unbound Phone Need password	
12341KN	Turn on the first channel without SMS feedback	Unbound Phone Need password	
12341GN	Turn off the first channel without SMS feedback	Unbound Phone Need password	
12340000	Check all relay status	Unbound Phone Need password	
1234SZKJDX	Set power-on SMS	Need password	
1234QXKJDX	Cancel power-on SMS	Need password	
HONEST	Reset	No password is required	

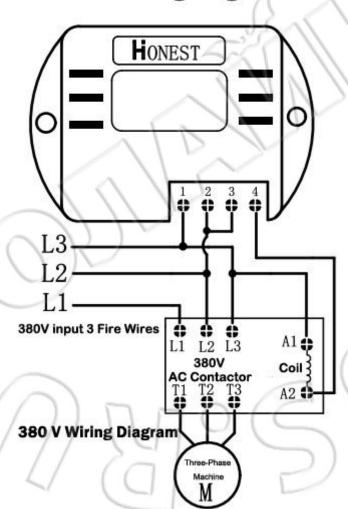
1234SZJY	Power off memory switch status	Need password	
1234QXJY	Cancel Power off memory switch status	Need password	
1234SZ00886	Set 886 as the international area code	Need password	This feature with caution!
1234QXQH	Unset international code	Need password	This feature with caution!
1234SZMF	Setting ON Ringing	Need password	
1234QXMF	Ringing Close	Need password	/ / /
1234SZHF	Check status after opening the ringing	Need password	
1234QXHF	Check status after closed the ringing	Need password	
12341K30S	Timer: turn on the first	Unbound Phone	
	channel for 30 seconds	Need password	
12341K15M	Timer: turn on the first	Unbound Phone	011
/	channel for 15 minutes	Need password	
12341K12H	Timer: turn on the first	Unbound Phone	
/	channel for 12 hours	Need password	
1234QXDS	Cancel all the timers	Unbound Phone	3
		Need password	

Remark: The above examples are base on the case of default password 1234. If the password is changed, some of commands no need to with 1234 in the binding state.

Wiring Diagram



220 V Wiring Diagram



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