



Wireless Two-way Intelligent Control System



Master Box



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ZGJ15-1



User Manual >>

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Introduction

This system is a smart control system adopting wireless transmission, MCU control, etc.. It is applicable to control of household lighting and electric appliances. The product consists of a number of LCD control panels and receivers. The Master box can be placed anywhere, while the receivers can be installed nearby the lights and electric appliances or within the ceiling. Wireless transmission is adopted for the Master box and receivers. The Master box can be accessed via telephone for inquiries, settings, control of states of lights and electric appliances. Operation of the keys on the Master box can control on and off of the switches within the receivers so as to control on and off of the lights and electric appliances. Up to 48 lights and electric appliances can be controlled.

Main features**1. Centralized control**

All the lights and electric appliances can be controlled by Master box.

2. Centralized display

The states of all electric appliances can be shown on the LCD screen of Master box.

3. Remote control

Wireless two-way transmission control system is adopted.

4. Two-way transmission

Two-way transmission is adopted for the Master box and receivers, and the states of all the lights and electric appliances can be viewed on the Master box.

5. Password setting

Passwords for the whole smart system and code of each receiver can be set on the Master box.

6. Lock function

A specific load can be locked and then cannot be operated.

7. All on and All off function

Switch on or off all the loads simply by a touch.

8. Scenes setting

Five different scenes can be set to accommodate different lighting environments.

9. Relay function

Relay function can be set to ensure normal communication.

10. Password reading

The password and code of each receiver can be displayed on the Master box through receiver and Master box.

11. Background lighting

EL lighting is adopted for LCD and shall be automatically switch off within 6 seconds of inactivity.

12. Telephone remote control

Remote control over all the loads is possible via telephone.

13. Message leaving

Memory of 80-second message is available in the Master box to provide convenience when you are out.

14. Timing control function

5 groups of timing switch with 5 circulation options are available in the Master box.

15. Clock display

24-hour clock and week display is available.

Definition

Loads refer to lights or electric appliances.

Product model

GKB7ME-3

Parameters

1. The voltage of Master box is DC12V, 40 mA.
2. Radio transmission frequency: 433.9MHz+10ppm
3. Maximal emission power 10 dBm, and reception sensitivity less than -103dBm
4. Telephone control mode: DTMF dual-tone multi-frequency
5. Low frequency: 697Hz, 770Hz, 852Hz, 941Hz
6. High frequency: 1209Hz, 1336Hz, 1477Hz, 1633Hz
7. Frequency deviation less than 1.57 Hz
8. Voice message no less than 80 seconds

Attention

1. Magnetic fields of certain frequency may influence reception sensitivity.
2. Some areas may be blind zones with lower reception sensitivity.
3. Please do not vibrate or hit the product.

Clean LCD screen

Clean the surface of LCD screen with LCD cleaning tools, including dust removal, etc...

Clean surface of Master box

Clean the surface of LCD screen with moistened soft cloth and then wipe the screen with dry cloth. Please do not use any solvent or it may damage the surface coating or casing.

Operation temperature

The working temperature of Master box is -10C-60C. It is recommended not to use it in a too cold or hot place. Unclear LCD display is normal if the temperature is below 0C. The operation humidity <90%

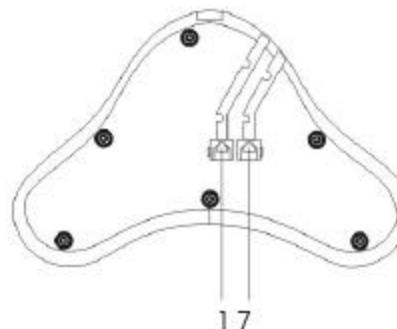
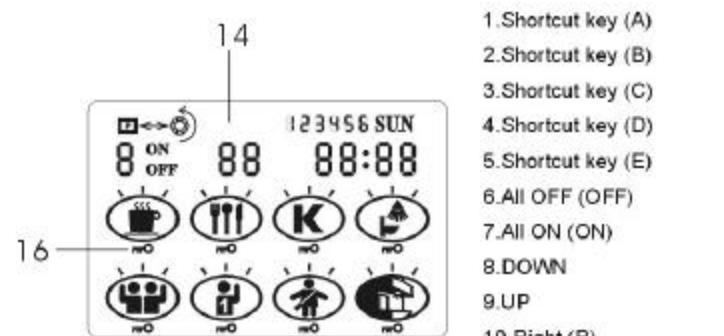
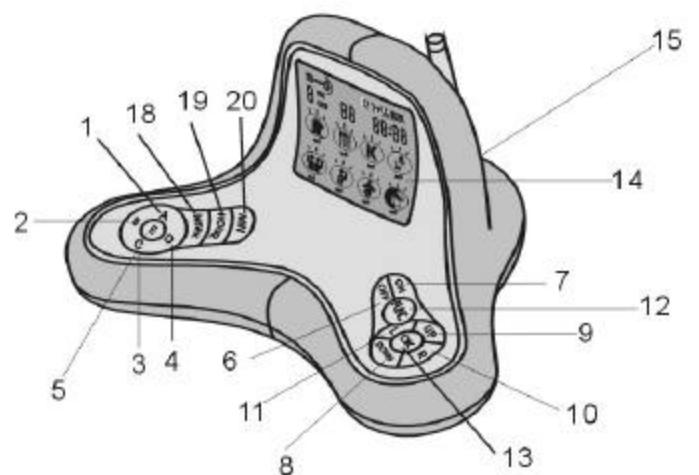
Optional parts

1. LCD controller	2. LCD panel
3. Smart socket	4. Wireless controller
5. Dimming receiver	6. One-to-one receiver
7. One-to-three receiver	8. Smart socket
9. Curtain receiver	10. Air-conditioner receiver.

Accessories

1. AC/DC transformer for Master box
2. One telephone cable

Profile/LCD screen/Master box base frame



1. Shortcut key (A)
2. Shortcut key (B)
3. Shortcut key (C)
4. Shortcut key (D)
5. Shortcut key (E)
6. All OFF (OFF)
7. All ON (ON)
8. DOWN
9. UP
10. Right (R)
11. Left (L)
12. Functional key (FUNC)
13. OK
14. LCD screen
15. Power socket
16. Lock state
17. Telephone line socket
18. WEEK
19. HOUR
20. Minute (MIN)

Installation and debugging steps

Open the packaging and connect the supplied AC/DC adapter. The LCD of Master box displays normally. Enter the steps of Master box installation and debugging :

Step 1: Relay function. In case of relay, enter "Switch on or off relay function of Master box" (see P6) (Note: In case of Master box relay, other products cannot be set as relay). In case of no relay, move to step 2.

Step 2: Enter "Setting system code of Master box" (see P7)

If the states of receivers cannot be controlled, check setting of system password or relay password. If incorrect, please re-enter "Setting system code of Master box" (see P7). Continue with step 3 if correct.

Step 3: Enter "Control of existing units" (see P8-P9)

Step 4: Enter "Setting of time adjustment" (See P14-P15)

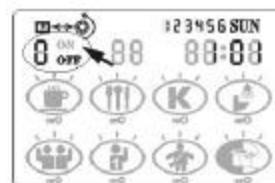
Step 5: Enter "Setting of timing on/off" (See P16-P18)

Step 6: Enter "Enabling or disabling timing setting" (See P18)

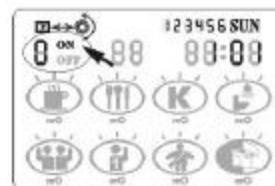
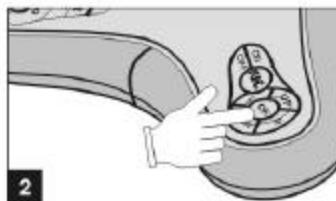
Step 7: Enter "Setting of telephone control" (See P19-P23). The page of "Setting of telephone control" includes the following:

- A. "Password setting" (see P19)
- B. "Setting of number of rings" (see P19)
- C. "9-unit position recording" (see P22)
- D. "Setting of message playing" (see P23)
- E. "Control unit testing" (see P20-P22), which includes other functional operations and control:
"Control a unit", see P20
"All on", see P22
"All off", see P22
"Inquiry", see P22

Switch on or off relay function of Master box



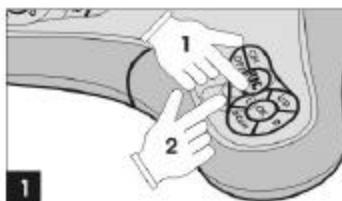
1. Press and hold FUNC and then press OFF.



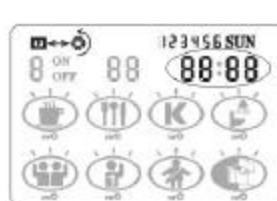
2. Then release the two keys. Press OK to switch on or off relay. OFF indicates relay is switched off, while ON indicates that the Master box acts as a relay (Note: If the Master box acts as a relay, the receivers cannot act as relays). Finally press FUNC to exit setting.

Setting system code of Master box

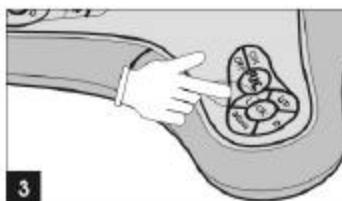
Note: The system code for all the Master boxes, receivers, panels, etc. Must be the same (sole) and the factory setting shall be 0000. The system password must be re-set.



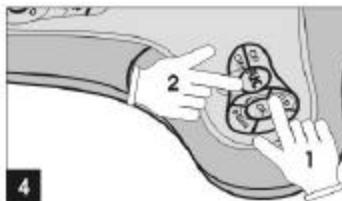
1. Press and hold FUNC and then press L.



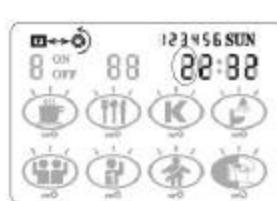
2. Then release FUNC and L. Press A to enter setting of system password.



3. Press L (R, DOWN, UP) to change the password.



4. Press OK to save the changed password. Then press FUNC to exit setting (Directly press FUNC without pressing OK will not save the changed password)



Operation instructions

Control of 8 positions within one page

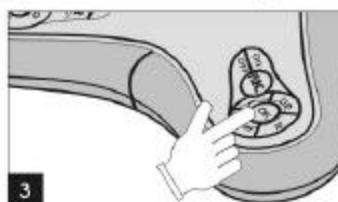
For example, to turn on the lights in the children's room



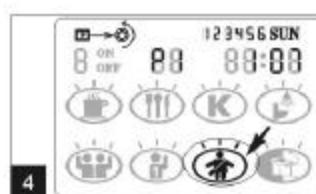
1. Press L or R up to (Note: Do not press them simultaneously).



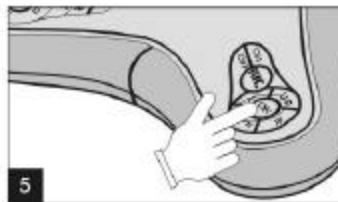
2. flashes.



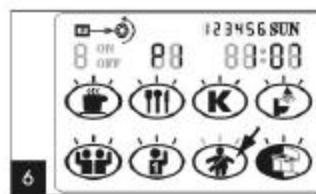
3. Press OK.



4. is displayed to indicate that the lights have been turned on.



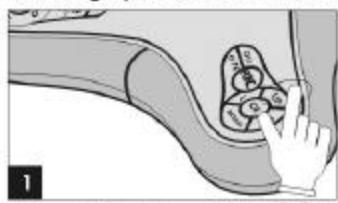
5. Press OK again.



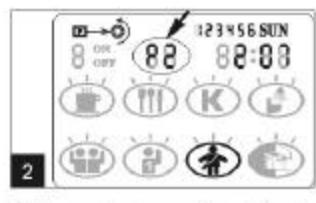
6. disappears to indicate that the lights have been turned off.

Control of over 8 positions

If there are more than 8 control positions, such as 12 positions, 8 positions can be set on page 1, while the remaining 4 positions can be set on page 2. The setting for 8 positions on page 1 can be as per steps 1-6, and the control of the remaining 4 positions can be as follows:



1. Press UP to change 88 to 88 (as shown on the right picture)

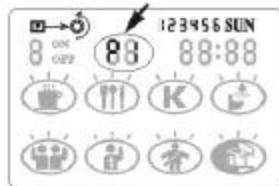
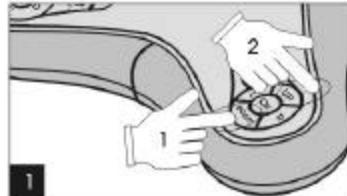


2. The control operation of the four positions of P2 is the same as steps 1-6.

Control of rooms on multiple floors

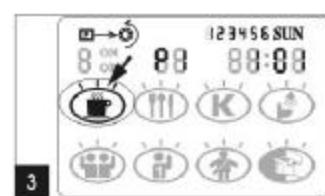
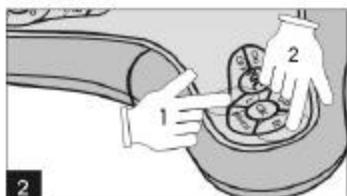
The Master box can control up to 48 loads, 8 on one page and totally 6 pages (P1-P6), for example, switch on the lights in the  on Fl. 1, in the  on Fl. 2 and in the  on Fl. 3.

Steps

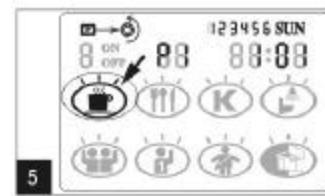


Press UP and DOWN to change from **88** to **88**, or **88** or **88.88**, **88** and **88** indicate Page 1 (first floor), Page 2 (second floor) and Page 3 (third floor) respectively.

Control of rooms on multiple floors



2. When **88** is displayed, press L to shift from  to , and press R to shift back to Living Room.



4. Press OK.

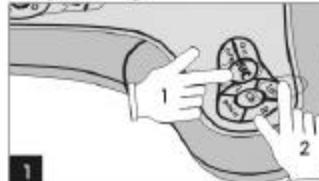
5.  is displayed to indicate that the lights in the living room have been turned on.

6. Repeat steps 1-5 to control the lights on page 2 and page 3.  and  are selected this time.

Scene control

Five types of scenes are available in this system (such as party, reading, dinner, audiovisual, warm)

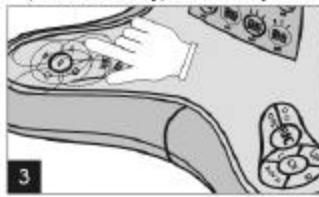
Only one light for one scene



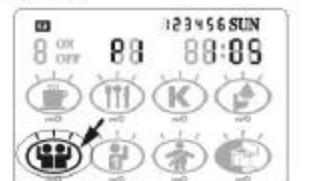
1. Firstly press and hold FUNC (functional key) and then press UP.



2.  appears, and then release FUNC (functional key) and UP.



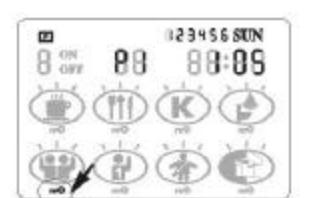
3. Press any of A, B, C, D or E (such as A). Note: A means Load 1, B means Load 2, C means Load 3, D means Load 4 and E means Load 5.



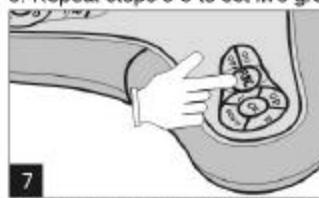
4. Press L, R, UP and DOWN to select position of control unit. For example, press L/R to select .



5. Press OK and  under  flashes to indicate selection.



6. Repeat steps 3-5 to set five groups of scenes A, B, C, D and E.



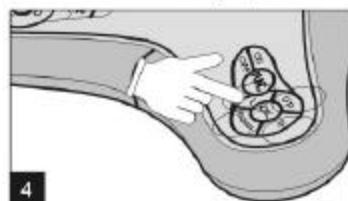
7. Press FUNC to exit and setting is completed.



8. Press A, B, C, D, E then control 5 scene respectively.

Several lights in one scene

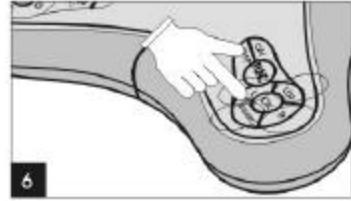
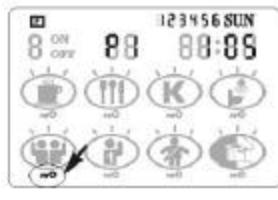
The operations of steps 1-3 are the same as the steps 1-3 under "scene control" (B is taken as an example).



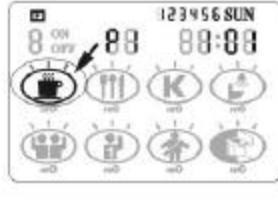
4. Press L (R, UP or DOWN) to enter the area of Master Room



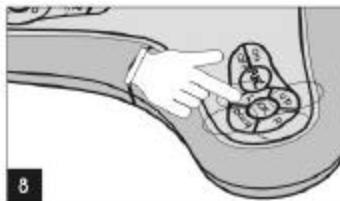
5. Press OK and $\text{m} \circ$ under flashes to indicate selection.



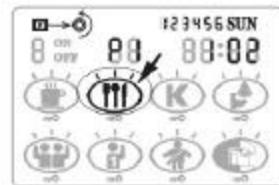
6. Press L, R, UP and DOWN in combination. For example, press L to enter Living Room.



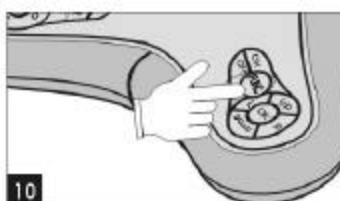
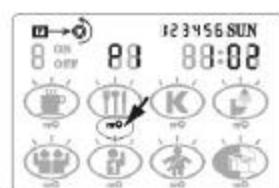
7. Press OK and $\text{m} \circ$ under flashes to indicate selection.



8. Press L, R, UP and DOWN in combination. For example, press R to move rightward to select Dining Room.



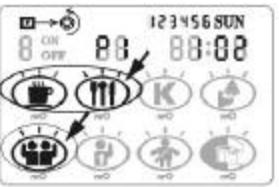
9. Press OK and $\text{m} \circ$ under flashes to indicate selection.



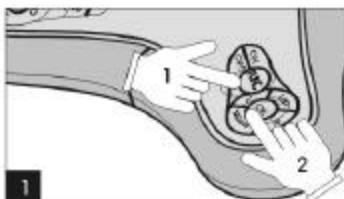
10. Press FUNC (functional key) to exit and setting is completed.



11. Press B to control the lights in the Master Room, Living Room and Dining Room simultaneously.



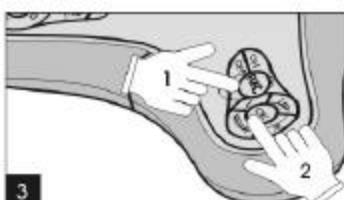
Lock function



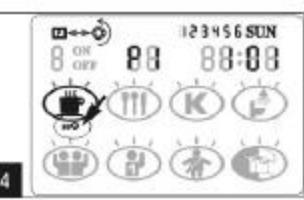
1. Press and hold FUNC (functional key) and then press OK. Then release both keys to lock a unit. For example, if the lights in the living room are turned on, the following steps shall be followed to lock the lights:



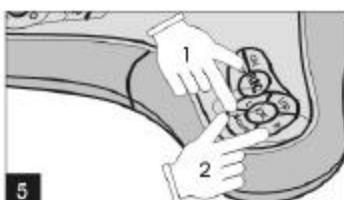
2. Press L or R to move the cursor to .



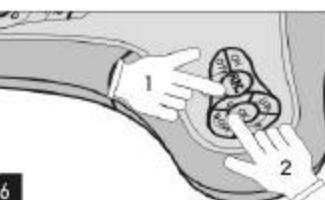
3. Press and hold FUNC (functional key) and then press OK.



4. The symbol  is displayed below the Living Room to indicate the  is locked (The state of lights in the living room cannot be changed through other controllers)



5. To unlock, press L or R to move to the locked position.

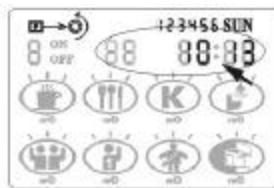


6. Press and hold FUNC (functional key) and then press OK to release lock.

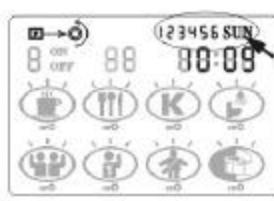
Setting of time adjustment



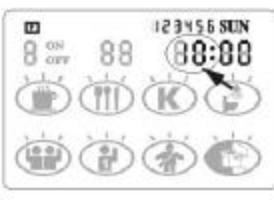
1. Press and hold FUNC then press Benter time adjustment (Second is not adjusted and is reset as 00).



2. Press WEEK continually to shift from Monday to Sunday and then change the setting of week.

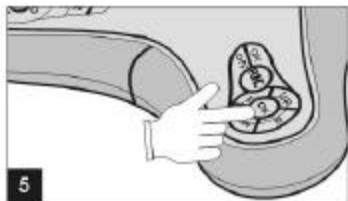


3. Press HOUR to shift from 0 to 23 and change the setting of hour. Press HOUR long to increase the hour continually.

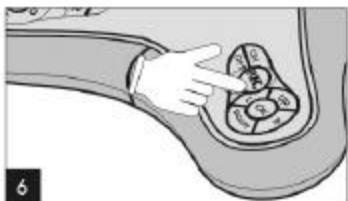




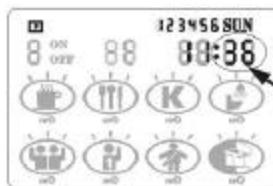
4. MIN is used to set minutes, and press MIN to change from 0 to 59 and then change the setting of minute. Press long to increase the number of minute continually.



5. Press OK to save the above setting and exit.



6. Press FUNCT to cancel setting change and exit.

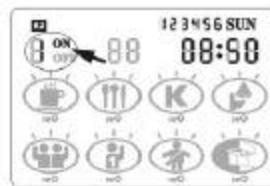


Setting of timing on time

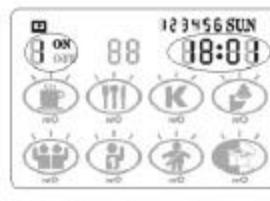
Note: Timing setting only requires one operation. Press and hold FUNC then press C to complete settings of five groups.



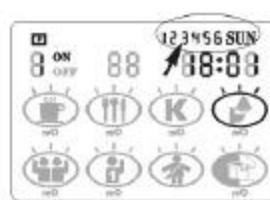
1. Press and hold FUNC then press C to set timing switch adjustment. Meanwhile, 'ON' is displayed on the first line of LCD screen to indicate start of time setting for group 1. ON indicates the design time to switch on the load, while 1 indicates time setting of group 1.



2. Press HOUR and MIN to set the time (press HOUR to change the hour setting and press MIN to change the minute setting).

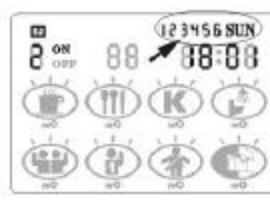


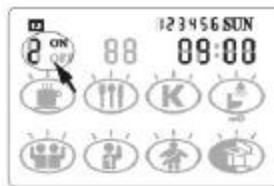
3. Then press WEEK to set way of circulation.



4. Continually press WEEK to select the following ways of circulation

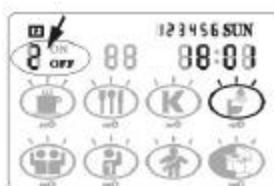
- ◆MO-TU-WE-TH-FR-SA-SU
(dailycirculation)
- ◆MO-TU-WE-TH-FR-SA
- ◆MO-TU-WE-TH-FR
- ◆SA-SU
- ◆MO-WE-FR
- ◆TU-TH-SA





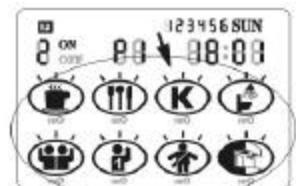
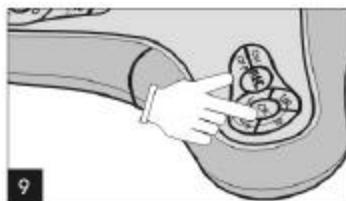
5. Continue to press B and **2^{ON}** will be displayed on LCD. ON indicates the design time to switch on the load, and 2 indicates group 2. (Likewise, press A, B, C, D, E, Group 1, Group ...Group 5, to display **1^{ON}**, **2^{ON}** ... **5^{ON}**).

6. Repeat steps 2-4 to set the time of **1^{ON}**, **2^{ON}** ... **5^{ON}** And ways of circulation.



7. Then press OFF again. Press A/B/C/D/E and **1^{OFF}**, **2^{OFF}**, **3^{OFF}**, **4^{OFF}** and **5^{OFF}** will be displayed on LCD screen.

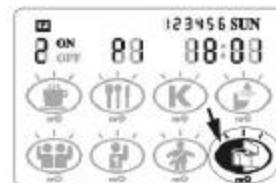
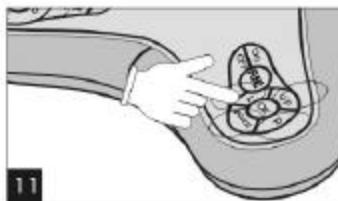
8. Repeat steps 2-5 to set the time of **1^{OFF}**, **2^{OFF}** ... **5^{OFF}** and ways of circulation.



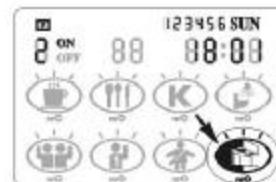
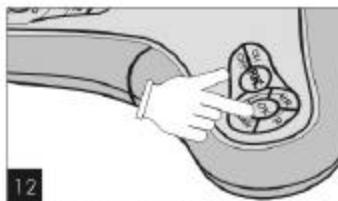
9. Select time and way of circulation and then press OK to enter the setting of the unit to be turned on.

10. Press A/B/C/D/E to select group 1/2/3/4/5. Operate ON/OFF to select to switch on/off the load.

Setting of timing off time



11. After selecting group and on/off action, press any of L (or R, DOWN, UP) to move to the desired unit.



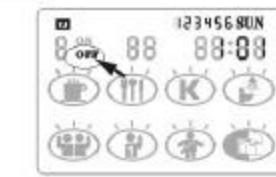
12. Then press OK to confirm and the locked icon flashes to indicate selection. (Note: Balcony lights are turned on automatically at 18:01 from Monday to Sunday).

13. Repeat steps 10-12 to select all the required units.

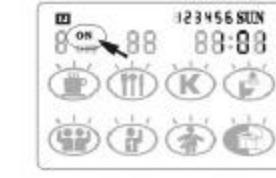
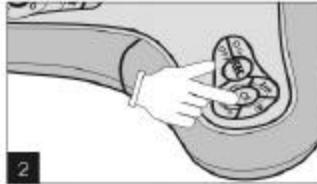


14. After unit setting, select HOUR to complete setting.

Enable or disable timing setting



1. Press and hold FUNC (functional key) and then press E to enable or disable timing setting.

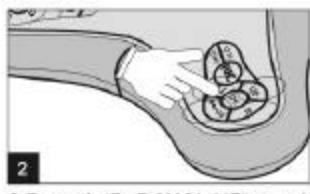


2. Press ON/OFF to change timing setting. When LCD displays ON or OFF, it means timing is enable or disabled.

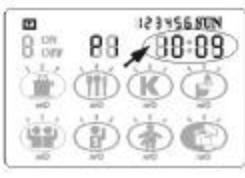
Telephone password setting



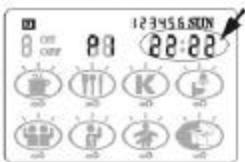
1. Press FUNC (functional key), hold on and then press D, 0000 will be displayed on the upper right corner.



2. Press L (R, DOWN, UP) to select a 4-digit password randomly.



3. Press OK to save the password and exit, or press FUNC to cancel setting and exit.



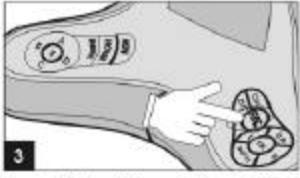
Setting of number of rings



1. Press FUNC (functional key), hold on, and then press HOUR to set number of rings.



2. Press UP and DOWN to set number of rings (Note: The number of rings can be from 1 to 9. For example, in case of 2, the system will automatically switch to GKB DigitHome if nobody answers the call after two rings.)



3. Press FUNC (functional key) to save setting and exit.

Remote telephone operation instructions

1



1. After the telephone rings for several times (number of rings can be set as per P18), it enters GKB DigitHome automatically.

A

A. There is voice prompt:
press 0 to enter
GKB DigitHome



B

B. "Press 1 to leave
message"



A-1

Press 0 and you will hear the voice prompt "Welcome to GKB DigitHome. Please enter a 4-digit password". There is voice confirmation of each entered digit and authentication of password after 4 digits are entered. In case of correct password, you will hear the voice prompt: "Press 0 to switch on/off and check an electric appliance. Press 1 to switch on all the electric appliances. Press 2 to switch off all the electric appliances. Press 3 to check all the electric appliances switched on. Press 4 to play the message. Press 5 to record electric appliance position." In case of incorrect password, you will hear voice prompt: "Incorrect password. Please reenter the password". In case of three incorrect passwords, it will automatically exit and hang up after playing the voice prompt: "Thank you for using GKB DigitHome". In case of correct password, it is waiting for the user to press a key.



B-1

Press 1 to enter message leaving state and leave a message by speaking towards the telephone. Then press 9 to exit. The maximum time for message leaving is 81 seconds.

When time is up, it will hang up after playing the voice prompt: "Message leaving time is up and please hang up".





A-1-1

Press "0" and you will hear a voice prompt: please enter the code of electric appliance.



A-1-3

Then press "*", "#" or "0" and you will hear the voice report of states "Electric appliance is working" or "Electric appliance has been switched off" or otherwise "operation failure".



A-1-5

Press "#" to switch off

A-1-7

Then there is voice prompt again: "Please enter the code of electric appliance. Press '9' to return to the previous menu or hang up if operation is completed." "Thank you for using GKB DigitHome."



A-1-2

Enter 3-digit code and you will hear a voice position report if there is position recording (for example, press 101 and you will hear the voice prompt of living room) (Note: The user can record, see P?).



A-1-4

Press "0" to switch on.



A-1-6

Press "0" to inquire.



A-2

Press 1 and all the loads will be turned on with voice prompt "Electric appliances are working"



A-3

Press 2 and all the loads will be turned off with voice prompt "Electric appliances have been turned off"



A-4

Press 3 and the codes of electric appliances turned on will be reported with voice prompt "Electric appliances 101...102 are working" or "Electric appliances have been turned off".



A-5

Press 4 and you will hear the message.

Position recording setting of 9 common units

A-6

Press 5 and there will be a voice prompt "Please enter the code of electric appliance for recording". Only 9 coded positions (0-8) can be recorded. Four digits shall be entered. The first digit indicates recording number and the other three digits indicates the code of electric appliances. For example, if you enter 0101, 0 indicates the first recording, and 101 indicates the code of electric appliance. Record after one tick, and finish speaking within 3 seconds (such as living room and air-conditioner). A tick will appear 3 seconds later to indicate completion.



A-6-1

After recording, there is a voice prompt "Please re-enter the code of electric appliance for recording". Press 9 to return to the previous menu. Continue to enter four digits until you complete recording of 9 units.

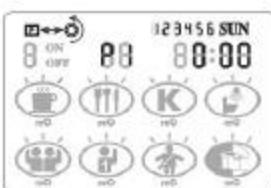
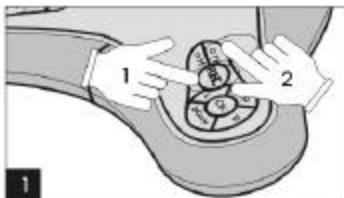


A-6-2

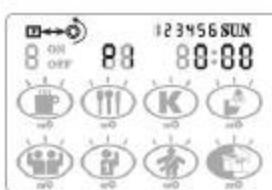
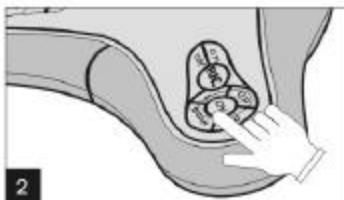
Ten-second waiting time is available after each voice prompt and then it will exit and hang up.



Setting of message playing



1. Press and hold FUNC (functional key) and then press ON to enter Message Playing mode (Note: Message can be played only if you pick up the telephone connected in parallel with the Master box)



2. Press OK to play the message.

Common faults and troubleshooting

No	Common faults	Causes	Troubleshooting
1	Master box cannot control loads	Signal not strong enough	Pull the antenna to the maximal length
		Two relays in one system	Remove one relay (P6)
2	Loads cannot be controlled via telephone	Poor contact of telephone wire	Reconnect the telephone wire
		Incorrect password	Re-set telephone password as per instructions (P19)
3	It fails to record 9-unit position info or enable message leaving	Incorrect operation	Speak only after the tick during recording
4	Background lighting is always on	There are two Master box with the same password nearby	Change the relay code or system password of one of the Master box (P6)
5	Timing does not work	Timing function is not enabled	Enable timing as per instructions, with ON displayed on LCD. (P16)
6	Too low volume of telephone	Poor line or improper extension box of small switch board	Reconnect the telephone wire or connect directly to the main network without small switch board
7	Master box does not respond in time of telephone call	Excessive number of rings	Re-set the number of rings as per instructions (P19)