**GKB**
DIGITHOME

**GKB**
DIGITHOME

*Wireless Two-way Intelligent Control System*

**User Manual**

ZQ107-1

EPRE
ISO 9001

C E  CQC  FC

**GKB** ®
DIGITHOME

**GKB** ®
DIGITHOME

## Wireless two-way intelligent control system

### Brief Introduction

DigitHome is an intelligent control system utilizing wireless transmission, MCU control etc., suitable for controlling household appliances. This intelligent system consists of LCD control panels and receivers etc. The battery-powered panels permit wireless connection and can be mounted on the wall or placed in any positions. Receivers can be fixed beside or inside electric appliances even inside ceilings.

The LCD control panels and receivers are capable of wireless transmission. Keys on the LCD control panels can control the switches inside the receivers, so that lights and electric appliances can be turned on/off. The product is able to control up to 48-line lights or electric appliances.

### Main functions

1. Central control — Any one of the panels can control all the electric applicances.

2. Central display — LCD control panels can display all the electric applicances status.

3. Multipoint control — An electric appliance load can be controlled by multiple control panels.

4. LCD controller — By RF wireless transmission control, the control panels can server as LCD controllers.

5. Two-way transmission — Control panels and receivers have two-way transmission. The control panels can display all the electricity status.

6. Lock functions — A certain load can be locked by a control panel and is not controllable by another controller

7. Setting passwords — Passwords for every intelligent system and serial numbers for every receiver can be set by control panels and receivers.

8. Full on/off function — Press the full on/off key to turn on/off all the loops.

9. Setting scenes — Five scenes can be set to adapt to various lighting environments.

10. Energy-saving mode — If no operation is performed or no signal is received on the panel within 20 seconds, the display will be automatically turned off and energy saving mode will be activated. You can restore the display by pressing any key.

11. Relay functions — Any of the receivers can be set as a relay to reinforce the accuracy of the signal received, but one system can only have one relay.

12. Luminous display — The background color of an LCD is blue at normal status.

13. Force start/shut down function — Press 2 keys on a receiver can force start or shut down a loop.

14. Reading password — With the control panels and receivers together, password and receiver codes of receivers displayed can be read on the control panels.

15. Control of curtain moving positions — Moving positions of a curtain can be controlled.

16. Dimmer functions — Intensity of light can be adjusted.

17. Telephone LCD controller — All loads can be LCD controllerled through telephone.

18. Control of an air-conditioner — Use the control panel to turn on/off the air-conditioner

* "load" means electric appliance such as air conditioners, curtains, electric cookers, washers , mini-fans and  incandescent lamps .

### Product models

| 1.Mobile panel models: | GKB7UIR-3B /50 |
| --- | --- |
| | GKB7UIR-3DB/50 |
| | GKB7UIR-3A1/50 |
| 2.Receiver models: | GKB7U-3B/50 |
| | GKB7U-3B/60 |
| | GKB7U-3/50 |
| | GKB7U-3/60 |
| | GKB7U-3/3/50 |
| | GKB7U-3/3/60 |
| | GKB7U/10/50 |
| | GKB7U/10/60 |
| | GKB7U-3C/50 |
| | GKB7U-3E/50 |

**Designs and specifications are subject to change without further notice.**

**Please carefully read the instructions before operations.**

## LCD panel
GKB7UIR-3B/50

## LCD controller
GKB7UIR-3DB/50

### Operation temperature

The operation temperature of the system ranges from 10-60℃.
It is recommended not to use the system in places too hot or too cold.
It is normal if the LCD is a little fuzzy below 0℃.
The operation humidity of the system is below 90℃.

### Parameters

1. 2 high-energy alkaline batteries of 1.5V (No. 7) are used for the LCD panel (LCD controller).
2. The maximum load capacity of the receiver:
   1)Air conditioner: 10A-16A
   2)1-in-1 receiver: 7A
   3)3-in-1 receiver: 7A
   4)Curtain: 10A
   5)Dimmer receiver: 2A
   (Incandescent lights, fluorescence lights, air conditioners, electric curtains, electric cookers, etc. can be controlled.)
3. Voltage of the receiver: 110V-230V+10%; Frequency: 50Hz/60Hz.
   Red wire: wire under voltage; Black wire: zero line; White wire: load line
4. The transmission distance must not be less than 30 meters (in non-open area), and the transmission frequency is 433.9mhz+10ppm.
5. System transmission power: less than 10mw; receiving sensitivity: less than -103dBm

### Optional elements

1. Master box
2. LCD controller
3. Intel-switch
4. Smart socket
5. Receiver (III)
6. Dimmer receiver
7. Air conditioner receiver
8. Curtain receiver

### Accessories

- Plastic hanging plate          (1)
- Leather sheath                 (1)
- Screws                         (4)
- Dust-proof blind nut           (4)
- Instruction manual             (1)
- Installation card for service card  (1)

### Attention

1. Magnetic fields of specific frequencies may affect receiving sensitivity.
2. Signal blind area may appear in some positions and affect receiving sensitivity.
3. Do not shake or knock the product.
4. Do not install the receiver on a metal plate (net or rack, etc), which may affect receiving sensitivity.

### Cleaning an LCD screen

Use tools (not attached to the product) for cleaning the surface of LCD screens (such as removing dusts, etc.).

### Cleaning the surface of an LCD panel

Use a piece of soft cloth with a little water to clean the LCD panel (LCD controllerl), then wipe it with a piece of dry cloth. Do not use any solvent that may damage the surface coating or the housing.

**Notes:**
**As operations of the panel and the LCD controller are similar, this manual only demonstrates the operations of the panel. However, the operations of the LCD controller will be described when necessary.**

**Outside view of an LCD panel**
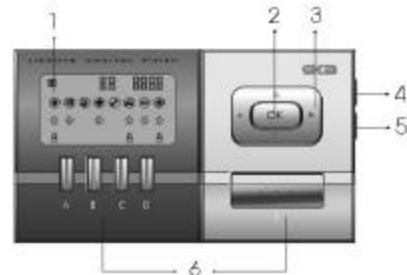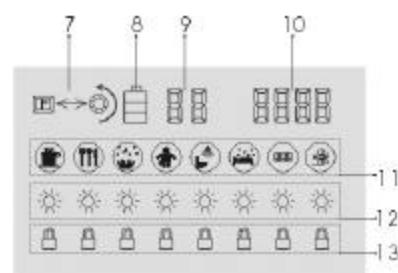
**Outside view of LCD controller**

1-LCD
2-OK key
3-Up/down/left/right movement keys
4-Full shut down key
5-Function key
6-Shortcut
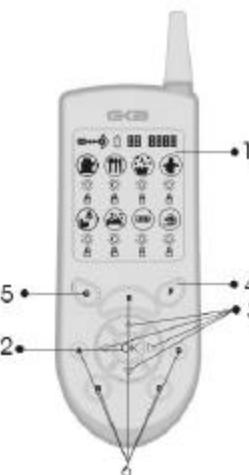
1- LCD
2- OK key
3- Up/down/left/right movement keys
4- Full shut down key
5- Function key
6- Shortcuts

7-Password setting pattern
8-Quantity of electricity
9-Page number
10-Password /receiver address code
11-Receiver position
12-On/off status
13-Lock/scene status
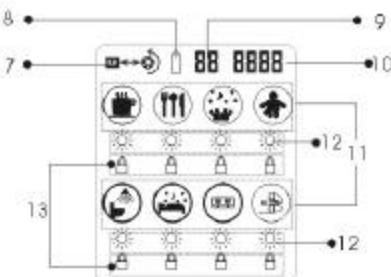
7- Password setting pattern
8- Quantity of electricity
9- Page number
10- Password /receiver address code
11- Receiver position
12- On/off status
13- Lock/scene status

## Installing a panel

The panel can be put on a table or mounted on a wall. It has a plastic plate that can be mounted on the wall. Mount the plate and hang the panel on it.

### Steps:



screw hole

bayonet

1
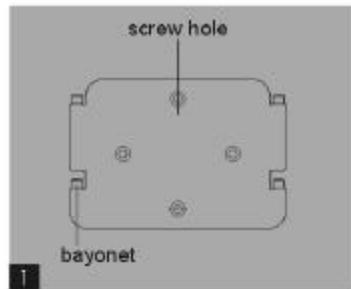
1.Drill holes on the wall according to the screw holes on the plastic plate. (Or mount on the Model 86m ounting box.)



Screw
Plastic plate
Hose
Wall

2
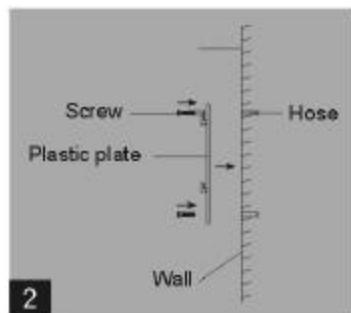
2.Mount the plastic plate on the wall with screws, and put on the dust-proof blind nuts.



3
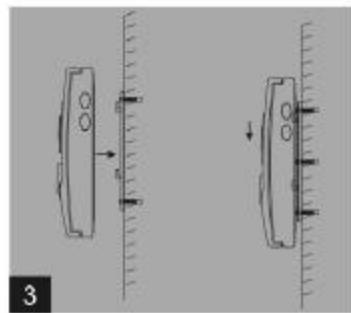
3.Secure the panel on the bayonets of the plastic plates.

## Installing a LCD controller

The LCD controller can be put on a table or mounted on a wall. It has a mounting box. Mount the box and insert the control in it.



outside view    front view    side view
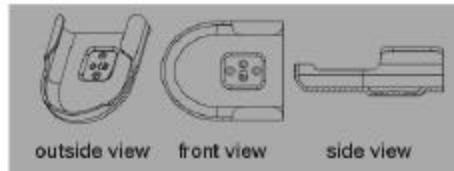
1.Drill holes according to the positions of the screw holes on the iron sheet.
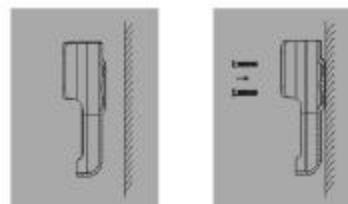


2.Fix the iron sheet on the wall with screws.
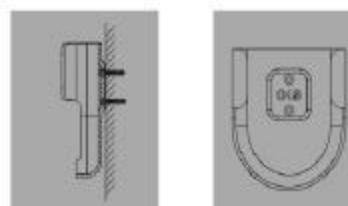


3.Insert the control directly into the mounted box.
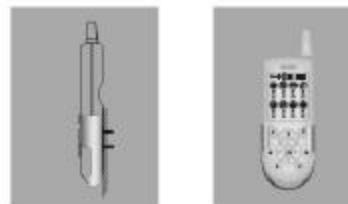


4.Completion of the installation is demonstrated in the pictures.

## Installing Batteries



1. Slide the battery cover towards the direction as indicated by the arrow, and open it.
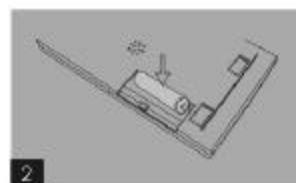


2. Put batteries in it. The +/- electrodes of the batteries must correspond to the marks in the battery box.

### Indication of battery volume

indicates insufficient battery volume and the batteries need to be replaced.
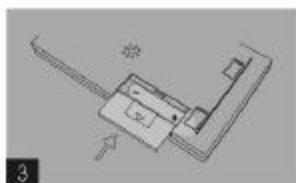


3. Press the batteries and put back the cover. A click indicates that the battery cover is in place.

Note:
In order to install the batteries of the LCD controller, refer to the above method and direction marks in the battery box.

## Receiver instructions

Notes:
A receiver( I ) is exemplified for the instructions, installation and operations of the receiver. Refer to the operation instructions of the receiver and this instruction with respect to other receiver models.
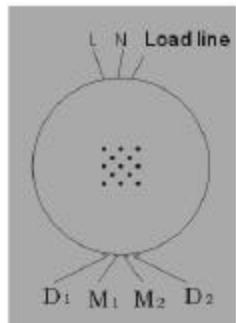


M1 The key to set system codes: set system codes with the panel.

M2 The key to set the receiver code. set receiver codes with the panel.

D1 The red indicator light for setting the system codes

D2 The red indicator light for setting the receiver code

M2+M1 Keys for force start

## Installing a receiver

The receiver has a piece of mounting iron sheet. Mount the sheet and connect the power cords. Then rotate the receiver into the sheet.
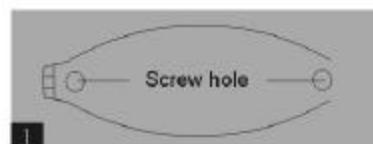


1. Drill holes on the wall according to the screw hole positions on the iron sheet.
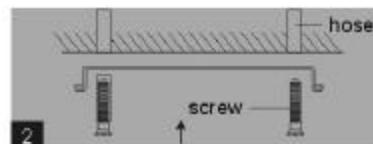


2. Mount the iron sheet on the wall with screws.
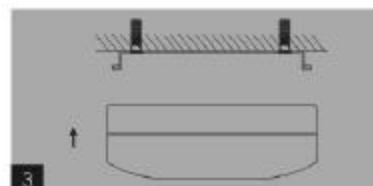


3. Secure the receiver on the bayonets on the iron sheet.
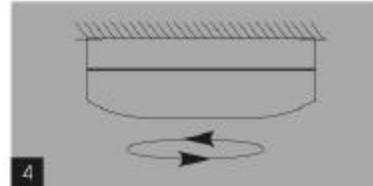


4. Rotate the receiver clockwise until you hear a click.

Note:
The panel is exemplified in the following four pictures. The operation of the LCD controller is similar to the LCD panel.

Before installation, set the system codes and the receiver code first.
The setting is as follows:

**System code setting**



1. Press the function key, then press ◄.
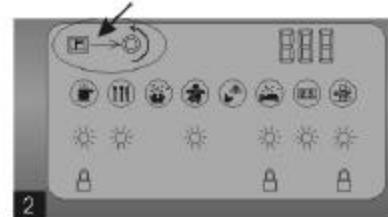


2. P→ appears and flashes, and appears.



3. Press A again and appears. Now system code numbers can be set.



4. Press ◄►▲▼ keys to set a four-digit system code number at your will.



5. Press OK, the system codes will be transmitted by the panel.
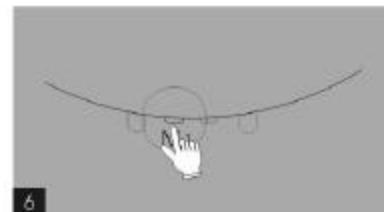


6. Press M1 (key for all receiver's system code).
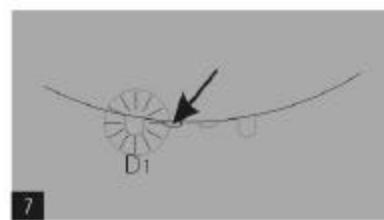


7. The corresponding red indicator light flashes. The light will go off if the receiving is over.



8. Press the function key to exit the setting.

Note:
All the panels and receivers in a system can only have one system code. The factory-set system code is , and it must be set again.

**Receiver code setting**



1. Keep pressing the function key and press ▶.



2. P →☼ appears and flashes. Now receiver code numbers can be set.



3. ▦▦▦ appears, the first digit indicates the page number, and the third digits indicate the address code.
For instance, a bathroom is indicated as 105.

4. Press ◀▶▲▼ to change the latter three-digit number, for setting the receiver code. For instance, 105 is set as ☼, and the receiver will be installed in ☼.

At the moment, the setting of the receiver code has been completed, and it must be sent to the receiver. Steps are as follows:



5. Continue the fourth step above, press OK. The signal of the receiver code will be automatically sent Into the air.
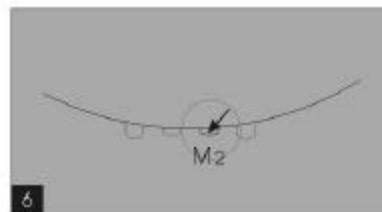


6. Simultaneously press receiver code M2 of a certain receiver to receive the signal.
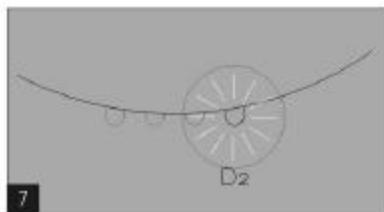
7. The corresponding red indicator light D2 flashes and then goes off, indicating the setting of the receiver code is completed.

8.Press the function key to exit setting.



9.Repeat steps 1-8, set all the receiver codes of the receiver. Do not repeat the receiver codes.

## Force start/shut down
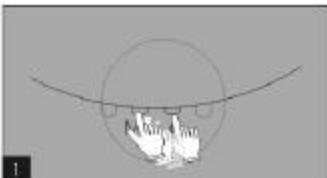


1.Keep pressing M2 of the receiver, and press M1 (system code key), then release the two keys simultaneously. The load is automatically started or shut down by the receiver.

## Reading a receiver code



1. Keep pressing the function key and press ▼ key once, then the function is activated.
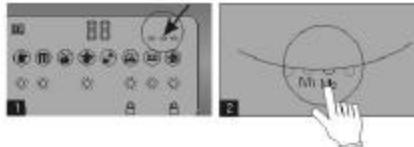


2. --- Appears on the right upper corner of the panel, indicating the serial number can be read now.
3. Press M2 on the receiver needed to be read.
4. The receiver code of the receiver is displayed on the right upper corner of the panel.
5. Press the function key to exit.

## Reading a system code

1. Keep pressing the function key on the panel and press ▼ key, and then the function is activated.
2. - - - - appears on the right upper corner of the panel, indicating the system code can be read now.
3. Press M1 of the receiver which needed to be read.
4. The system code (a four-digit number) is displayed on the right upper corner of the panel.
5. Press the function key to exit.

## Setting a relay

In an individual application, the receiving effects of a system may be affected by the environment. In this case, you can set any one of the receivers as a relay. All the communication between the panel and receivers can be transmitted through the relay. Steps are as follows: (It is suggested that the receiver to be set as a relay be installed in the center of a house, and only 1 relay can be set.)

Steps:
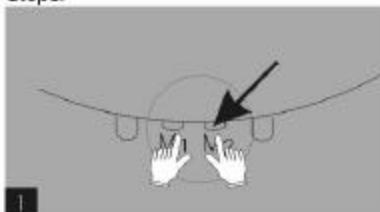


1.First press M1, and then press M2, then release both of them.
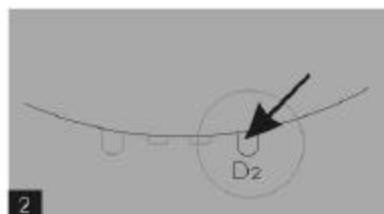
2.The lamp D2 comes on.

3.The setting is completed and the receiver has become a relay.
(Attention: One system can only have one relay.)

**Operating instructions**

Controlling 8 positions in a page

For instance, to open the lamp in a kid's room.

Steps:

1. Press ◀▶ to go to 🌲 .

2. 🌲 Flashes.

3.Press the OK key.

4. ☼ Under 🌲 is on, indicating the lamp has been turned on.

5.Press the OK key again.

6. ☼ Goes off, indicating the lamp has been turned off.

7.In order to control other positions, please repeat steps 1-6.

## Control over eight positions

If there are more than 8 positions to be controlled, for instance, 12 positions, the other 4 positions can be set in another page, with 8 in the first page and 4 in the second one. Refer to the above steps 1-6 for controlling 8 positions in a page.

Steps to control the other 4 positions are as follows:



1. Press ▲ to change P1 to P2.
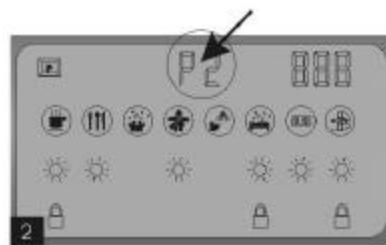


2. To control the four positions in P2, follow the above steps 1-6.



Up to 48 terminals can be controlled via the LCD panel of the system, with 8 in one page and 6 pages totally (P1-P6).

## Controlling rooms in multi-floor houses.

For instance, to turn 🔆 the lights in, 😴 and ⚡ on the first, second and third floor respectively.

Steps:



1. Press ▲ ▼ to change the display 88 to P1 (or P2 or P3, all of which indicating the first, second and third page respectively.



2. In the display P1, press ◀ ▶ to go to 🔆.



3. 🔆 Flashes.

4.press OK.



5. ☀ under 🏠 indicates that the lamp in the living room is has been turned on.

6.repeat steps 1-5 to control lamps in pages 2 and 3.
(Select 😊 and 🔆 this time.)

Five typical scenes can be set with this system.
(For instance: party, reading, dinner, audio-video, romantic time)

Scene setting---Only one lamp in a scene



1. First keep pressing the function key, and press ▲ .



2. P appears, and release both of the keys.
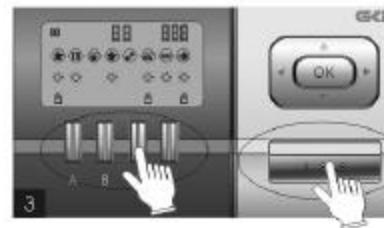


3. Press any one of A, B, C, D and E. (For instance, A)



4. Press ◄▶▲▼ to select a position for storage, for instance the master's room 😊 .



5. Press OK, and 🔒 under 😊 flashes.

6. Press the function key to exit, and the setting is completed.

7. The lamps in the master's room can be controlled by the key A.

Scene setting---More than one lamp in a scene

Steps 1-3 are the same with the above ones 1-3. (A is exemplified.)



4. Press ◀▶▲▼ to select the master's room.



5. Press OK, and 🔒 under 🌀 flashes.



6. Press ◀▶▲▼ to select the living room.



7. Press OK, and 🔒 under 🌀 flashes.



8. Press ◀▶▲▼ to select the dinning room.



9. Press OK, and 🔒 under 🌀 flashes.



10. Press the function key to exit, and the setting is completed.
(The scene is automatically stored.)

11. The lamps in the master's room, the living room and the dining room can be controlled by the A key.

It is suggested that the E key be set as standard. If there are more than one LCD controller panels in the room, set the E key to control the lamp in the same position as the panel. For instance, the E key on the panel in the master's room is set to control the lamp in the master's room. This will make operation more convenient.

## Shortcut functions

### ALL ON/OFF

ALL ON

ALL OFF

All loads can be turned on by simultaneously pressing F and ① ,(Refer to the picture on the left). All loads can be shut off by only pressing ① (Refer to the picture on the right.).

### Lock functions

Keep pressing the function key and press OK, then release both of them to lock a certain unit.

If the lamp in the living room has been turned on, steps to lock it are as follows:

1. Press ◄► to move the cursor to 🔦.

2. Keep pressing the function key and press OK once.

3. 🔒 under 🔦 flashes, indicating that the lamp in the living room has been locked.

## Dimmer functions



1. Press ▲ ▼ ◄ ► key or the scene key to select a position for dimmer control. (The cursor flashes.)



2. Keep pressing ▲ key for over 2 seconds to make the lamp brighter. Release it to stop adjusting.



3. Keep pressing ▼ key for over 2 seconds to make the lamp dimmer, Release it to stop adjusting.

Attention:
The lamp intensity can be adjusted only when the load is turned on.

## Controlling curtain positions



1. Press ▲ ▼ ◄ ► key or the scene key to select a position where curtain need to be open. (The cursor flashes.)



2. Keep pressing ▼ key for over 2 seconds to close the curtain. It will stop moving after releasing the key.



3. Keep pressing ▲ key for over 2 seconds to open the curtain. It will stop moving after releasing the key.