

LCD VISION CHART'S

Operating Instruction



CE

FOREWORD

Product Introduction

LCD vision chart is a kind of precision instrument for testing the visual acuity of the human eye. It can be controlled by remote control LCD screen shows the test as the standard and an optometrist by the patient's subjective visual results as an aid to vision diagnosis basis. It provides accurate data reference for the preparation of glasses.

Security Precautions

Working environment

1. Without direct sunlight;
2. No strong interference electromagnetic field;
3. The temperature between +5°C and +35°C;
4. The relative humidity below 80%.
5. Degree
 - (1) Product degree: Medical device degree I
 - (2) Electrical shock: I level (ground)
 - (3) Electrical shock protection class: class B
6. Device type
 - (1) Anti shock type: class I ;
 - (2) The degree of protection against electric shock: part of the application of B type ;
 - (3) Non AP type equipment, non APG type equipment;
 - (4) Operation mode: continuous operation ;
 - (5) Equipment can not be used in the environment of flammable anesthetic gas ;
7. Service life: 10 year

Cautious

1. AC100V-240V
2. Do not place heavy objects on the instrument, so as not to cause damage to the casing;
3. Turn off the power switch if you stop using it for a long time;
4. Keep instruments and ambient air clean;
5. It is strictly prohibited in the sun drying;
6. Be careful of moving equipment;
7. It is prohibited to use chemical reagents to wipe the surface of the casing;
8. Please do not open the enclosure without the consent of our company.

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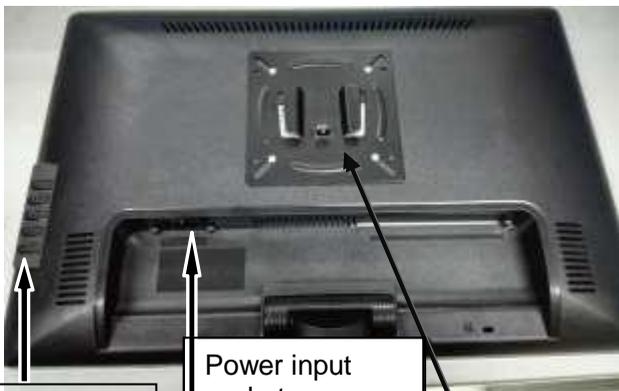
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1. Introduction to main engine



It's the receives of the window for the remote control

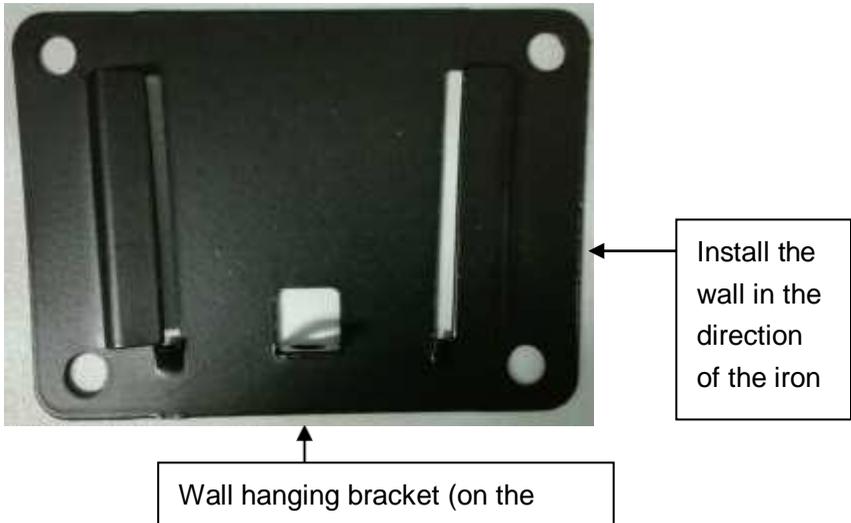
Notice: The power indicator is red for standby mode, and the green is the power supply.



Power switch button, menu key

Power input socket

Wall hanging bracket (on machine)



Note on the use of wall hanging bracket

1. The wall bracket is placed on the wall (up to the top of the opening), and the four expansion screws are arranged at the round hole;
2. Use four self tapping screws fixed wall bracket;
3. Align the back of the instrument to the hanging of the hanging wall bracket.

3. Usage of instrument

1. The selection of charts

Press the keys for charts to select the corresponding chart.

2. Function selection

A. Single line display.

By pressing “Functional key for horizontal switching” it can realize the single line display of corresponding charts.

B. Single row display.

By pressing “Functional key for vertical switching” it can realize the single row display of corresponding charts.

C. Single display.

By pressing “Functional key for single word switching” it can realize the single display of corresponding charts.

D. Red/Green display.

By pressing “Switching key for Red & Green” it can realize the single display of corresponding charts.

E. Cancel single display.

By pressing “Clearing key for tableau switching” it can cancel the single display of corresponding charts.

3. View working parameters:

In any state, by pressing “Functional key for specifications setting” it can check the work specification. The work specifications includes: lightness, contrast ratio, R, G, B value system language, work mode, work distance, automatic running time, screen protection parameters and so on.



Notice: If the background color of the menu is not blue, please press the reset option: restart, press the right button to restore the normal display.

4. Setting specifications

In any stage, by pressing “Functional key for specification setting” first, tune in the settings menu, again press the up or down arrow keys can be selected to adjust the parameters of the item, and then press left or right direction key, you can adjust the corresponding operational parameters.

5. Start or shutdown the system.

In the state of shutdown, press ON/OFF key to start the system; In the state of start, press ON/OFF key to shutdown the system.

CAUTIONS !!!

System shutdown is the machine software functions to stop running is not a machine off, only the system is shut down but the machine power is still on, for better protection of the machine, we suggest that when not in use, please be sure to cut off the AC power supply.

6. Visual standard browsing

In any state, press up, down, left and right direction keys, you can make the corresponding pictures of the cycle of playback.

7. Restore initial settings

In visual acuity chart pattern of any state, the pressing parameter setting

function keys, press down the direction key selected reset option, and then press the right arrow key, you can achieve to restore the initial settings. When modifying the parameters resulting in inability to display properly, make the system to restore the initial settings, and then according to their own requirements modification

4. About the remote control

Use the remote control should be pointing to a remote receiver, between the remote controller and the receiver placed objects may will hamper the normal operation.

Do not allow the remote control by severe vibration, in addition, never allow remote splashed liquid. Don't make remote put in moist places.

Do not under direct sunlight set or place the remote control.

Heat will lead to the deformation of the remote controller. Remote receiver under direct sunlight will lead to failure of the remote controller. So please don't be remote receiver is placed in direct sunlight.

When installing the remote controller battery please according to the following steps: 1. Open the battery compartment cover.

2. Loaded two batteries.

Batteries are installed, please note that the battery polarity should be corresponds to the marker +.- of the remote control case.

3. Close the battery compartment cover.

5. Maintenance

Before using this product, please read the following notes in detail, and please keep them properly for future enquiries.

Cleaning note:

1. Please clean the LCD screen with soft downy cloth, to remove dust and dirt on the screen.

2. Wipe LCD screen surface do not put pressure on it.

3. Please do not use water and other chemical cleaning agents to wipe the surface of the LCD screen, chemical agents may scratch the surface of the screen.

Use matters needing attention:

1. Please don't hide or block the body behind the cooling hole, so as not to interfere with the body heat.

2. Please do not use sharp objects, metal or liquid into or touch signal connector or cooling hole, so as to avoid damage to the circuit and products.

3. Please do not attempt to disassemble the product decomposition, any parts of such behavior may damage the product and to harm the human body, and make you enjoy the product warranty.
4. Please do not direct contact with the surface of the screen finger, this may damage the screen surface, and the oil on the skin if it is very difficult to remove in the screen.
5. Please do not put pressure on the LCD screen, LCD screen is very delicate.
6. Please use the special power transformer manufacturers in order to avoid the damage caused by the products.
7. In the following conditions please unplug the power line for this product:
 - A. if you will have a 1 period of time does not use this product if the power supply
 - B. Line or a power supply socket / plug is damaged.
8. Please don't let any object compression of the cord.
9. Please don't let the power line through the aisle, or people may often

walked, line so as to avoid being stepped on.

10. Please don't let the power socket or a power line overload.

11. Please don't let the power line is placed in a humid place.

12. For a long time when not in use, please take out the batteries of the remote controller, so as not to damage the remote controller.

6. Simple fault phenomenon and its elimination

For safety and effect use on the machine, we suggest not attempting to make the maintenance for ordinary user. If the machine can't work properly, please extract the power wire in time, and consult professional or inform the manufacturer to do it.

The instruction of fault and maintenance is only for the reference in maintenance.

Before looking for after-sale service you can check by the following methods, it may help you solving the occurring problems.

1. There is a stain on the picture

Screen surface is not clean, wipe with a special mirror paper .

2. Image is not clear

Screen parameters are not correct, adjust LCD brightness and contrast parameters.

3. Remote control failure

Individual key failure, please replace the remote control;

All keys failure, to replace the remote control batteries.

4. Boot does not work

Indicator light does not light, check the power supply and power cord;

The indicator lights, please repair.

5. Menu interface background color

To enter the menu settings, into the reset option, press the right button to restart.

7. Performance parameter

1. Power supply: AC100V-240V/50HZ/60HZ
2. Standard power: 60VA
3. Standby power: less than 2W
4. DPI of monitor: 1440×900/60Hz
5. Dot pitch of monitor: 0.284mm
6. Type of monitor: TFT
7. Ratio of monitor: 16:9 or 16:10 (Slightly different according to the actual batch)
8. Size of monitor: 19"
9. Max brightness: 300CD/M²
10. Maximum contrast: 2000:1
11. Corresponding signal time: 5MS
12. External dimensions: 480mm*320mm*50mm
13. Unit weight: 5.0Kg
14. Measuring distance: 2m-7m
15. Recording methods of vision: Decimal & Imperial fraction
16. Control distance: not less than 8m for maximum
17. Installation method: can be installed on the wall hanging bracket

8. Transportation and storage

1. Instruments in the handling of storage and transportation process, should meet the following conditions:

Transportation condition: $-40^{\circ}\text{C} \sim 70^{\circ}\text{C}$

Humidity: 30%~85%

Atmosphere: 700 hPa~1060 hPa

2. Packaging requirements

(1) It requires packing list, certificate of conformity and operating instruction.

(2) Product packaging does not allowed to ship with flammable, explosive, easy corrosion products; loading should be neat, smooth, firm, does not allow ultra-high overweight; transportation should be anti rain and snow and to prevent sunlight, anti impact and anti drop measures.

(3) Product packaging should be stored at normal temperature, dry and well ventilated warehouse, and can not be stored with chemicals, acid and alkali substances and other harmful substances.

9. Environmental protection

1. To dismantle the battery, please don't discarded carelessly, please handle according to the local laws and regulations unified.
2. To have been scrapped to stop using the instrument should be in accordance with the requirements of the relevant laws and regulations of the local processing or returned to the manufacturer.

10. Attachment list (spare parts)

1. Main machine 1pcs
2. Remote control 1pcs
3. Battery (SIZE AAA 1.5V) 2pcs
4. Wall hanging bracket 1set
5. Power lint 1pcs
6. Operating instruction 1pcs
7. Guarantee card 1pcs
8. Certificate of conformity 1pcs