BIX-CPR480
Advanced Automatic Computer CPR Simulator

Shanghai Chinon Medical Model & Equipment

Manufactoring Co., Ltd

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Maintenance

1. The simulation of people after the use of disinfection, such as skinned, nose and mouth, chest skin, breathing pipe, intake valve and other can be used cleaning fluid to scrub, disinfection.

2. Air bag rupture to be replaced, you can open the chest skin , put ou the nail head that connect the skin on the top of the lung pouch and sensor blowing rod, remove the diaper, turn out the connecting nut of the air bag, replace the new lung bag, according to the sample original assembly, to restore the original.

3. Simulator and computer monitors, need placed in a ventilated place,do not put in the wet or sun exposure place, to protect the product.

Attention

1. Mouth to mouth artificial respiration, must be padded with disinfectant gauze towel,one piece/person, to prevent cross infection.

2. Operation should be clean hands, women please erase lipstick, to prevent dirty dough and chest, but not allowed to use the ball pen or other color pen painted.

3. Press the operation, must be based on the operating frequency of the rhythm press, can not be chaos, in order to avoid disorder, if there is a program disorder, turn off the computer monitor's main power switch immediately, re-open, to prevent the impact of computer monitor life.

Cardiopulmonary resuscitation, the international CPR, is a professional emergency medicine, but also the core of modern ambulance content, is the most important first aid knowledge and skills, it is in the dying period to take effective first aid measures. In daily life, healthy people due to cardiac arrest (such as electric shock, drowning, poisoning, aerial work, traffic accidents, travel accidents, heart disease, myocardial infarction, natural disasters, accidents caused by cardiac arrest), and must Take the airway release, chest pressing, artificial mouth and nose breathing, defibrillation in vitro and other rescue process, so that patients in the shortest possible time to get ambulance. In the rescue process is the release of the airway, chest pressing position, press the intensity is correct, artificial respiration into the tidal volume is enough, regulate the action is correct, etc., is the key to the success of the patient. Cardiopulmonary resuscitation, is for the sudden heartbeat and breathing to take the "life-saving technology." The study of cardiopulmonary resuscitation, which is the basic life support technique, is therefore the technology that everyone has to master the cardiopulmonary resuscitation.

Cardiopulmonary resuscitation (CPR)

Advanced Automatic Computer CPR Simulator
Performance Feature

The latest generation of advanced automated computer CPR simulators is according to 《American Heart Association (AHA) 2015 International Cardiopulmonary Resuscitation (CPR) & Emergency Cardiac Care (ECC) Guidelines》, develop an up-to-date first aid training model to improve trainees' ability to respond to disasters and accidents.

1.Features :

■ Simulated standard airway opening;

When the artificial hand is pressed outside the chest

    1、The bar code indicator dynamically displays the pressing strength;

    2、Digital count display；

    3、Voice prompts:

■ When the mouth of the mouth responds (blows):

    1、The bar code indicator shows the tidal volume dynamically;

    2、Digital count display；

    3、Voice prompts:

■ Press and artificial respiration ratio: 30：2 (Single or double)

■ Operation cycle：First press and then artificial blowing 30：2Five cycles CPRoperating.

■ Operating frequency: Latest international standards：100 to 120 Times /min.

Operating mode: C-A-B

■ Operation method: Training operation; assessment; customization.

■ Operating time: Counted in seconds

■ Language setting: You can set the language prompt and prompt the volume adjustment settings; or turn off the language prompt settings.

■ Results Print: Thermal print, two models print out short transcripts and long transcripts.

■ Check the pupil response: Before the completion of the assessment operation and after the completion of the examination procedure, the simulated pupil is reflected by the large and narrow automatic dynamic change process.

■ Check carotid artery response: Hand touch inspection, simulation of the carotid artery during the operation of the automatic pulsating reaction; and the completion of the examination procedure after the operation of the carotid artery automatic pulsating response to the true embodiment.

■ 2. Material characteristics:

Hair, facial skin, neck skin, chest skin using imported thermoplastic elastomer mixed plastic material, made of stainless steel touch, injection molding machine from high temperature injection, hair, facial skin, neck skin, chest skin can be free to replace.

Common Trouble shooting

Phenomenon ① : the equipment fails to start up or the voice indication shows that *"check the cable with the manikin and press'rese' "*

[Inspection 1]: inspect whether the power indicator is on

[Inspection 2]: inspect whether the cable of the manikin is connected

[Inspection 3]: inspect whether the plug of power cord is plugged or detached

[Inspection 4]: inspect whether the voice button switch is turned on

[Inspection 5]: inspect whether the protective tube is fusing

Phenomenon ② : the controller display or the voice indication is abnormal after blowing

[Inspection 1]: inspect whether the airway is open

[Inspection 2]: inspect whether the method of blowing is correct

[Inspection 3]: inspect whether the air inlet pipe is detached (after getting down the face skin, the white inlet pipe can be seen under the jaw)

[Inspection 4]: inspect whether the lung bag leaks (after getting down the chest skin, the white lung bag can be seen under the compression plate)

Phenomenon ③ : the controller display or the voice indication is abnormal after   compression

[Inspection 1]: inspect whether the connection wire of compression plate or the sensor breaks down

[Inspection 2]: inspect whether the compression extension spring in the sensor breaks down

[Inspection 3]: inspect whether there is some dust within the sensor

[Inspection 4]: inspect whether the compression position is correct

[Inspection 5]: inspect whether the compressing strength is correct

[Inspection 6]: inspect whether the compressing frequency is in accordance with the frequency requirements

Phenomenon ④ : Grade report card can not print or print exception

[Inspection 1]: Check if the printer light is on

[Inspection 2]: Check whether the printed surface is installed (normal for smooth operation)

[Inspection 3]: Check whether the front of the paper is exposed outside the print box, self-test paper is normal

[Inspection 4]: If the paper is used up or jammed, replace the paper with the print paper facing up. After troubleshooting, restart.

Phenomenon ⑤: insufficient compression language indications

[Inspection]: open the chest and lift off the screws in the middle part, then press the black sensor under it by hands to check whether it owns elasticity. If yes, the fault is probably caused by the dusts. Please open the black sensor and then brush the dust clearly with brush. The screws shall not be too tight or loosen when installing sensor. It needs to restart after shooting the trouble.

Phenomenon ⑥: insufficient compression language indications
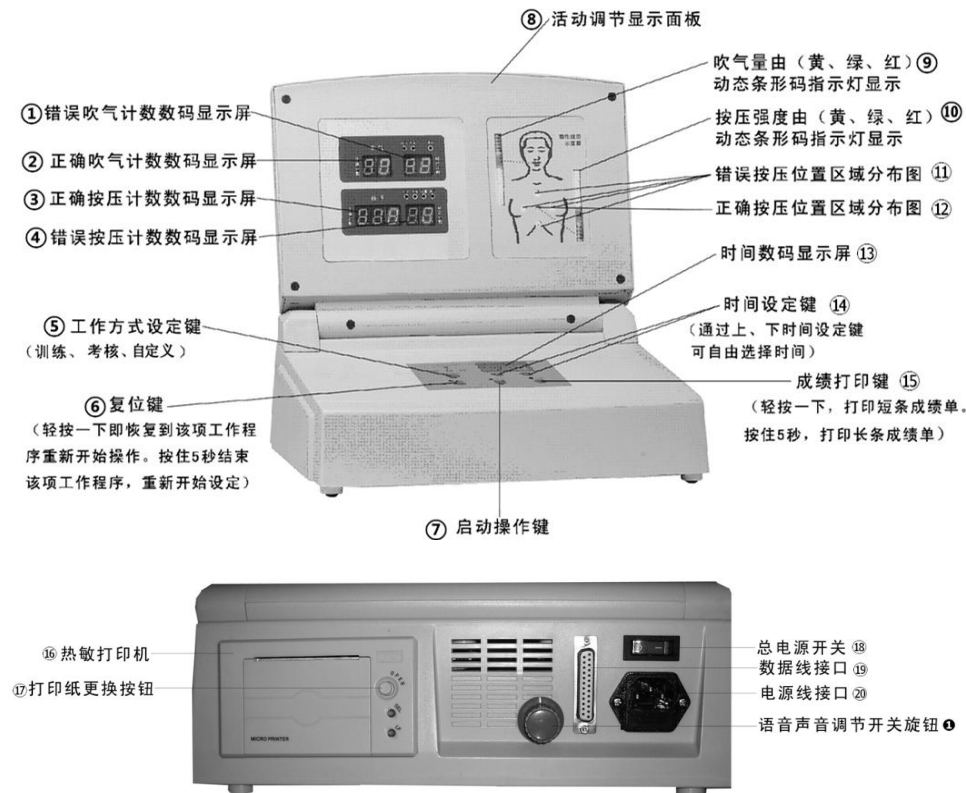
[Inspection]: open the chest and lift off the screws in the middle part, then press the black sensor under it by hands to check whether it owns elasticity. If yes, the fault is probably caused by the dusts. Please open the black sensor and then brush the dust clearly with brush. The screws shall not be too tight or loosen when installing sensor. It needs to restart after shooting the trouble.

Phenomenon ⑦ : there is no voice indication between the connection of host and simulated man

[Inspection]: inspect whether the power cord falls out or not well plugged, whether the power is normal. Inspect the sound volume at the back of host to check whether it opens or is loosened. It needs to restart

after shooting the trouble

CPR Simulation Construction Diagram

⑥. Reset button(Tap to restore the work program to resume operation, Hold down for five seconds to end the work procedure, start again)

⑦.Operation start key

⑧. Activity adjustment display panel

⑨. The blowing amount is displayed by the dynamic bar code indicator (yellow,green,red)

⑩.The press force is displayed by the dynamic bar code indicator (yellow,green,red)

⑪. Error by pressing the position area

⑫.Correctly by pressing the position area

⑬. Time digital display

⑭. Time setting key(The time can be freely selected by the up and down time setting keys)

⑮.Grade print key(Tap to print a short note, hold down 5 seconds, print long transcripts)

⑯. Thermal printer

⑰. Print paper replacement button

⑱. Total power switch

⑲. Data line interface

⑳. Power cord interface

❶. Voice sound adjustment switch knob

①.Error blow count digital display

②.Correctly blow count digital display

③.Correctly press count digital display

④.Error press count digital display

⑤.Work mode setting key(Training, Assessment, Customize)

Single evaluation will refer to the examination standar specification procedure operated by the computer steps:

Step1----then carry out single person correct chest compression for 30 times (the compression display on the display will be 30)

Step2---carry out single person correct blowing for twice .

Step3---carry out correct chest compression successively for 30 times and 5 circulations (including one circulation in Step1 and 2) of twice correct artificial respiration (that is 30:2)

Step4---the correct compression on the display finally will be 150 and the correct air-blowing will display 10. That means the solo operation with procedure operation is successful and the person is saved.

<div align="center">

Operation mode

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(special instructions: according to the latest revised standard of international emergency, the solo cardiopulmonary-resuscitation emergency standard procedure shall be implemented fully and the compressing frequency adopts 100 times/ minute.)
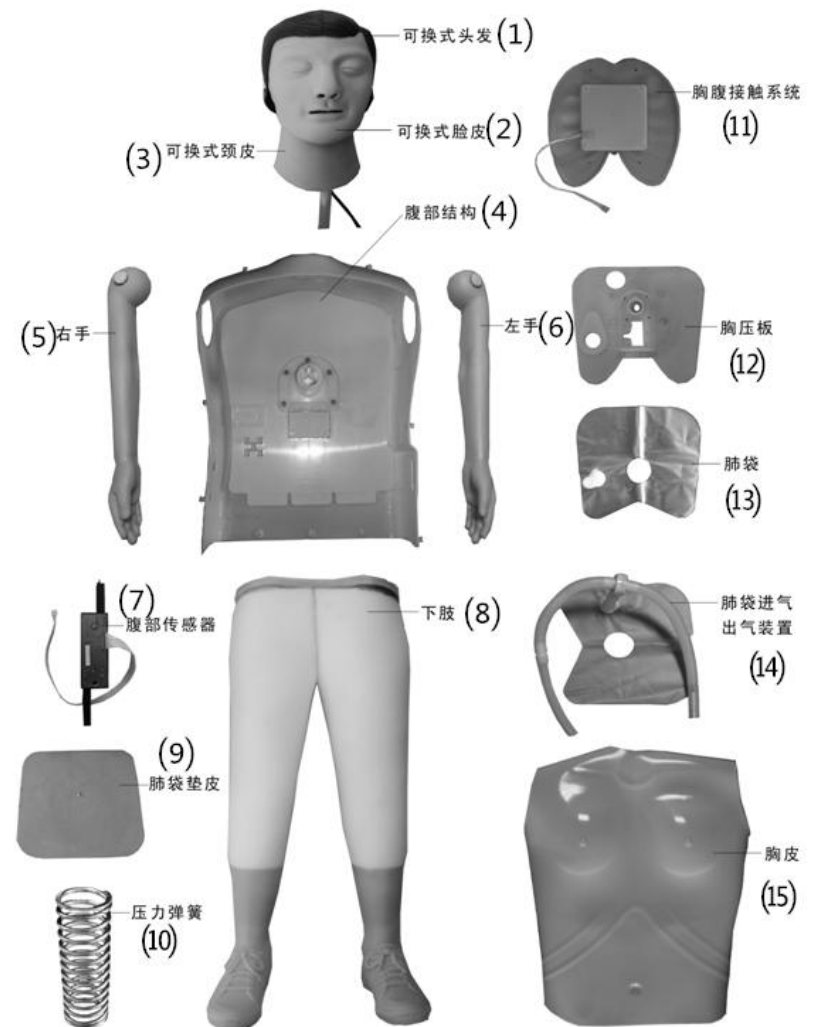
Training: this operation means to make the students get familiar with basic essentials and various procedures of operation. When the functions are set up, the students can carry out Respiration or chest compression. There will be various types of functional digital display and voice indication to show whether the operation is right or not.

Test: the evaluation standard is established against the training staff. The students will take examination on the basis of grasping the emergency operation after operation training. Students must follow the examination standard procedure . Press the international standard to press the blowing ratio of 30: 2, that is, correct chest pressing 30 times (not including the wrong number of times), the correct artificial breathing 2 times (not including the number of wrong blowing) for chest compression and artificial respiration. It is required to complete the five cycles of 30: 2 in continuous operation within the time of assessment setting. Finally, the correct number of presses is displayed as 150 times and the correct number of blows is displayed as 10 times. You can successfully complete the assessment. If you can not set the time to complete the operation, the first aid failure, need to re-assessment. Successful completion of the assessment, there will be voice prompts: "first aid success", continuous carotid artery pulse, the pupil from the original automatic recovery back to normal. At this point the simulation has been saved, you can press the print button to print the operating transcripts for assessment results and archiving.

Custom: custom assessment mode is a free mode of operation, it is not limited in the assessment of the operation of the students only in the correct 30 to blow or 2 times after the correct blow to press.mode of operation: boot select a good custom mode, press the start button to operate; According to international standards. Push the chest 30 times (Less than 30 presses for blowing, voice

prompts please press), and then artificial breathing 2 times (less than 2 workers blowing, voice to please please blow) for chest compression and artificial respiration. It is required to complete 5 cycles of 30: 2 in continuous operation within the set time. A total of 150 times, blowing 10 times the operation. After the operation is completed, press the printer to print the transcript. (Note: need to be more rigorous assessment, please turn off the voice).

可换式头发 (1)
可换式脸皮 (2)
(3) 可换式颈皮
腹部结构 (4)
(5) 右手
左手 (6)
(7) 腹部传感器
下肢 (8)
(9) 肺袋垫皮
压力弹簧 (10)
胸腹接触系统 (11)
胸压板 (12)
肺袋 (13)
肺袋进气出气装置 (14)
胸皮 (15)

CPR Simulation Construction Diagram

(1). Replaceable hair

(2). Replaceable face skin

(3).Replaceable neck skin

(4). Abdominal structure

(5). Right hand

(6).Left hand

(7). Abdominal sensor

(8). Lower limbs

(9). Lung bag Pad

(10). Pressure spring

(11). Thoracic and abdominal contact system

(12). Chest plate

(13).Lung bag

(14). Lung bag into the air outlet device

(15). Chest skin

Installation process of the manikin

Firstly, take the manikin out from leather suitcase and then lie it on the operating platform, and then connect the controller to the power cord. Finally, connect the cable between the controller and the artificial human body. Thus all the connection processes are finished.

Function setting and application method before operation:

After finishing connecting wires, turn on the power switch at the back of controller, at this time, the display will release voice indication: "*Welcome to use the manikin, please select working mode*". The product possesses two kinds of working modes: ① training: user can carry out Respiration and External Chest Compression operation arbitrarily to get familiar with its technologies. ② Popularizing Assessment carry out operation according to the evaluation mode set up upon the latest standard,but the operating time is shorter than the Professional Assessment.,For not-professional rescue personnel . ③ Professional Assessment arry out operation according to the evaluation mode set up upon the latest standard,For professional rescue personnel.

After finishing the working mode selection, the voice indication will be released: "*Please press the button start*". Operation can be implemented at this time.

Other keying functions:

Reset function: that means to select working mode and begin to operate according to the procedure. If it needs operation again duo to unsuccessful operation or other reasons, please press button "start" for more than 3 seconds to reset and operate again.

Print function: After operating,pressing the Print bottom, When the training or assessment of the operation after the end, you can carry out long and short results print. Press, blow the correct number of errors, the

required operating time and other functions to print, for test scores and archives. Before the operation, first check the print outlet, print paper is exposed to print port, If not, you can press the print button, you can print the paper out of the print port, so that after the end of the smooth results of the print. Replace the paper, open the rear cover, remove the printer, and replace the paper.

During the operation, you must master the specification action and precautions:

Airway open : Lay down the manikin ,The operator pinned the man's nose with one hand, the other hand from the back neck or chin to hold up the head,make the head 70-90 degree backward, forming open airway, easy to breathe.

Artificial respiration tips: while carrying out mouth-to-mouth Respiration, if the quantity of the insufflates air reaches 500/600-1000 ml, the green light will display(correct area) and the air-blowing correct number will be counted once. When the quantity of the insufflates air is less than 500 or more than 1000 ml, the yellow light will display(insufficient) or red one display (excessive) and the wrong number of blowing will be counted once with voice indication: "*not enough*" or "*too much*" etc. It needs to correct the mistakes to operate again.

Function indication of chest compression: firstly, find the correct position on the chest which is in the middle of the nipple line two-fingers width in the upper of sternum undercut ,and this is the correct compressing area. Overlap and cross two hands, and the arms shall be vertical to the chest compressing area of the manikin   to carry out chest compression. If both of the compressing area and strength are correct (the correct compressing depth is 5-6 cm), the green light will display and the correct compression number will be counted once. While if the compressing area is not correct, there will be voice indication: "*wrong compressing position*". If the compressing area is correct while the compressing strength is wrong, the yellow light led of human body compression bar code lamp (insufficient) or red light led (excessive) will display with voice indication "not enough" or "*too much*" etc. The compression wrong number will be counted once. It needs to correct the mistakes to operate again.