

AED Trainer

iAED-S1T



User Manual

Product Warranty

I. Please fill in the warranty card below after purchasing the product. Read the following warranty terms carefully to ensure warranty coverage.

1. The warranty card should be stamped by the dealer. Please keep this warranty card for future service request.
2. This warranty card should be presented for repair requests.
3. The information written should be true, otherwise the card is invalid.
4. The warranty period is one year. Within the warranty period, if the product failure is caused by component quality or defects, Jousing Medical will provide free maintenance and replacement of the defective component.

II. Warranty does not cover product damage caused by the following reasons:

1. Failure to use and install the product in accordance with this manual.
2. Human error or force majeure.
3. Maintenance, modification or disassembly not approved by Jousing Medical.

III. If the product is outside of the warranty period, a paid maintenance service from Jousing Medical is available.



Product Warranty

Mr/Mrs/Miss	
Address	
Telephone Number	
Zip Code	
Reference ID	
Serial Number	
Purchase Date	
Dealer	

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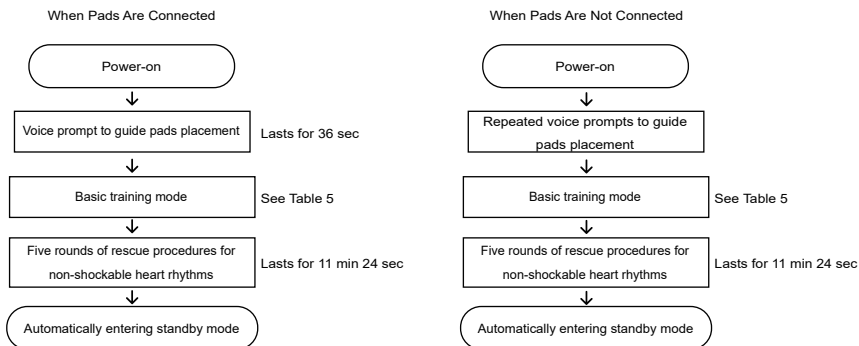
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6 Troubleshooting

Issue	Possible Cause	Recommended Action
When in shutdown or standby mode, the device cannot be switched into standby or basic training mode after pressing the ON/OFF button several times.	The battery box or the batteries are not well connected.	Remove the battery box, take out and reinstall the batteries, and put the battery box back.
	The battery power is low.	Replace the battery.
	Error exists.	Contact Jousing Medical for service.
The ON/OFF button is pressed in shutdown mode but the device does not operate, and all indicators flash repeatedly.	The battery power is low.	Replace the battery.
The ON/OFF button is pressed in shutdown mode but the device turns off after all indicators flash.	The battery power is low.	Replace the battery.
	Dedicated battery box is not used.	Check if the battery box used is the dedicated trainer battery box.
During training, a button (ON/OFF Button/Shock Button/Language Button) is pressed but the device does not respond.	A crash has occurred.	Remove and reinsert the battery box.
	Error exists.	Contact Jousing Medical for service.
After the pad connector is inserted, the device issues the voice prompt "POOR PAD CONTACT TO PATIENT, PRESS PADS FIRMLY; CHECK CONNECTOR".	The pad connector is not inserted well.	Insert the pad connector again.
	The pad connector has been damaged.	Replace the pad cable.
	A crash has occurred.	Remove and reinsert the battery box.
	Error exists.	Contact Jousing Medical for service.
All indicators do not light up when the battery box is inserted.	The battery power is low.	Replace the battery.
	Error exists.	Contact Jousing Medical for service.
During training, the device issues the voice prompt "BATTERY LOW; REPLACE BATTERY NOW" and the status indicator remains red.	The battery power is low.	Replace the battery.
During training, the device suddenly shuts down or switches to standby mode.	A crash has occurred.	Remove and reinsert the battery box.
	The battery power is low.	Replace the battery.
	Error exists.	Contact Jousing Medical for service.

4.6 Process and Time Requirements

The process of the Trainer from power-on to standby and the length of time required is as follows:



Note: The length of time may fluctuate slightly due to timing errors.

5 Maintenance

5.1 Storage Environment

Store the main unit and accessories (the remote control, pads and batteries) in a well-ventilated area with a suitable temperature. Keep them away from moisture, dust and corrosive gas. Specific requirements are as follows:

Temperature: 0°C~50°C; relative humidity: 5%~95%.

Do not store the device in direct sunlight.

Do not store the device near high-voltage electrical lines, substations, and Wi-Fi base stations or other facilities with strong electromagnetic field.

5.2 Cleaning

5.2.1 Main Unit Cleaning

Periodically clean the device and its carrying case, and keep them away from dust or dirt. Recommended cleaning products: Soapy water and chlorine bleach (10ml/L).

Follow the steps below to clean the device:

- (1) Turn off the device, remove the battery box, and disconnect all cables.
- (2) Use a soft cloth dampened in the cleaning agent mentioned above to clean the device surface. Do not immerse the device in water or allow fluids to spill onto it.
- (3) Clean the excess agents with a dry cloth if necessary.

5.2.2 Pads Cleaning

Make sure the pads are stuck back onto the liner for storage rather than any other surface to avoid damage.

Keep the pads clean from dust, oily or sticky substances to maintain pads adhesiveness.

If the adhesiveness of the pads is reduced due to exposure to dirt/dust, the user can rinse the pads with a small amount of water and gently wipe them for several seconds using their fingers and then wait until the pads become dry and temporarily sticky. Do not use too much water or it will decrease the pads adhesiveness.

Do not use tissue paper or a cloth to clean the sticky face of the pads.

Do not scratch the sticky face of the pads with fingernails or brushes.

Do not wash the pads frequently or use detergent or hot water for cleaning.

1 Introduction to iAED-S1T

1.1 Overview

The iAED-S1T (hereafter called “the Trainer”) is a training device which exclusively teaches first responders (trainees or operators) how to operate the iAED-S1 (hereafter called “the AED”). It is able to fully simulate the AED in terms of operation procedures and is designed to help responders quickly learn the AED’s general operation skills.

1.2 Highlights

Discharge Simulation

The Trainer can simulate discharge procedures but does not deliver high-voltage discharges, to ensure a safe operation experience for trainees.

Note: Please be careful when using the AED which delivers discharges. See more information in the iAED-S1 Automated External Defibrillator User Manual.

10 Training Modes

The Trainer provides 10 training modes which cover common sudden cardiac arrest (SCA) scenarios by combining shockable/non-shockable heart rhythms, proper/improper pads placement, single/multiple shocks and low battery power. It can effectively enable operators to master necessary AED operation skills.

2 Device Package

2.1 Package Contents

Main unit of iAED-S1T	1
Battery box (including six AA batteries)	1
Remote control (including two AAA batteries)	1
Adult pads for training	2 sets
Child pads for training	1 set
Pad cable	1
User manual	1
Quick reference guide	1
Package list	1
Product certification	1
Carrying case	1

Table 1 Package Contents

2.2 Technical Specifications

Product name	AED Trainer
REF	iAED-S1T
Power rating	DC9V, six AA batteries
Size	198mm (L) X 197mm (W) X 67mm (H)
Working current	<300mA
Shutdown current	<10μA
Weight	0.73±0.1kg

Table 2 Main Unit Specifications

Product name	AED Trainer Remote Control
REF	S1T-RC
Power rating	DC3V, two AAA batteries
Effective range	2 m
Working current	≤10mA
Quiescent current	≤5μA

Table 3 Remote Control Specifications

2.3 Description of Buttons, Indicators and Labels

2.3.1 Description of Main Unit Buttons, Indicators and Labels

The buttons, indicators and labels on the main unit are shown in Figure 1 and their corresponding functions are described in Table 4.

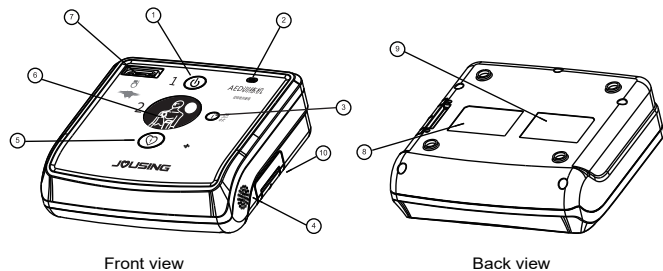


Figure 1 Main Unit Buttons, Indicators and Labels

4.2 Placing the Pads

Operation Steps

Unpack the pads and place them on a manikin as shown in Figure 9.

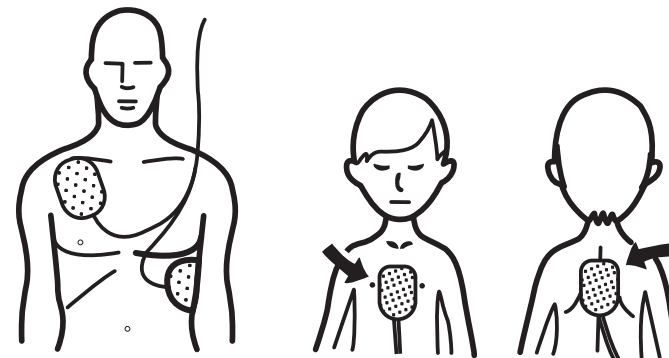


Figure 9 Pads Placement Illustration

4.3 Choosing a Training Scenario

Use the remote control to choose a training scenario.

Press one of the numbers 0-9 on the remote control (see Figure 2 Description of Remote Control Buttons) to choose a basic training mode;

Press one of the buttons outside numbers 0-9 on the remote control (see Figure 2 Description of Remote Control Buttons) to choose a special simulation scenario.

4.4 Following Voice and Light Prompts

Follow the Trainer's voice and light prompts to operate.

4.5 CPR Mode

When rhythm analysis has determined no shock is required or a shock has been delivered, the Trainer will prompt "IT IS NOW SAFE TO TOUCH THE PATIENT, BEGIN CPR, DA, DA...", the user should compress the manikin's chest following the beat. When the device prompts "BREATH", the user should make artificial respiration to the manikin.

When the Trainer prompts "STOP CPR", it will restart to analyze the heart rhythm.

After the completion of the CPR coaching process, the Trainer will continue to perform 5 rounds of rescue procedures for non-shockable heart rhythms and then enter standby mode automatically.

4 Usage Steps

The basic steps to use the Trainer are as follows:

1. Turn on the Trainer.
2. Apply pads to a manikin's chest.
3. Choose a Training scenario.
4. Follow the voice and light prompts.

4.1 Turning on the Trainer

Precondition

Make sure that the Trainer has been correctly installed.

Operation Steps

1. Press the ON/OFF button (see Figure 8).
The device will enter basic training mode.
2. The prompt "CALL FOR HELP NOW" issued.
3. Wait for the completion of pads connection check.

If the pads are not well connected, the Trainer will keep issuing voice prompts, reminding the user to check connection between the pads and the socket, and the pads placement indicator will flash.

If the pads are well connected, move on to the next step.

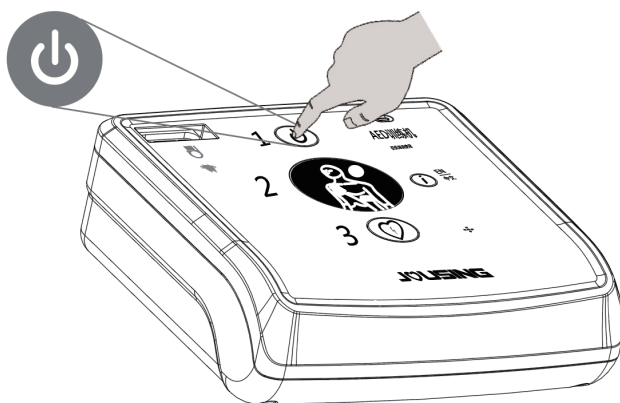


Figure 8 Powering on the Trainer

No.	Name	Use
①	ON/OFF Button	Press the ON/OFF button to enter basic training mode; the power indicator will switch on. Press the ON/OFF button for 3 seconds to exit basic training mode and enter standby mode; the power indicator will switch off.
②	Status Indicator	Indicate the status of the device: In standby mode, if the indicator flashes green – the device is ready for use; the indicator flashes red – the device operates abnormally. In basic training mode, if the indicator remains green – the device is ready for use; the indicator remains red for 10 seconds and then turns off – the battery is low.
③	Language Button	Press to change the prompting language.
④	Speaker	Issue operation instructions.
⑤	Shock Button and Indicator	Press to deliver a shock; when the indicator is flashing, the device is ready for a shock delivery.
⑥	Pads Placement Indicator	Indicate the status of pads placement: The indicator flashes – pads are not properly applied to a manikin or pads are not well connected to the device. The indicator will turn off once pads are correctly applied to a manikin.
⑦	Pads Socket	Connect the pads to the main unit.
⑧	Product Label	Display the product name, REF, serial number and other information.
⑨	Safety Warning	Provide safety information about how to use the device.
⑩	Battery Holder	Hold the battery box.

Table 4 Uses of Main Unit Buttons, Indicators and Labels

2.3.2 Description of Remote Control Buttons

The remote control is used to operate the Trainer. For most effective use, point the remote directly at the black label on the lid of the main unit.

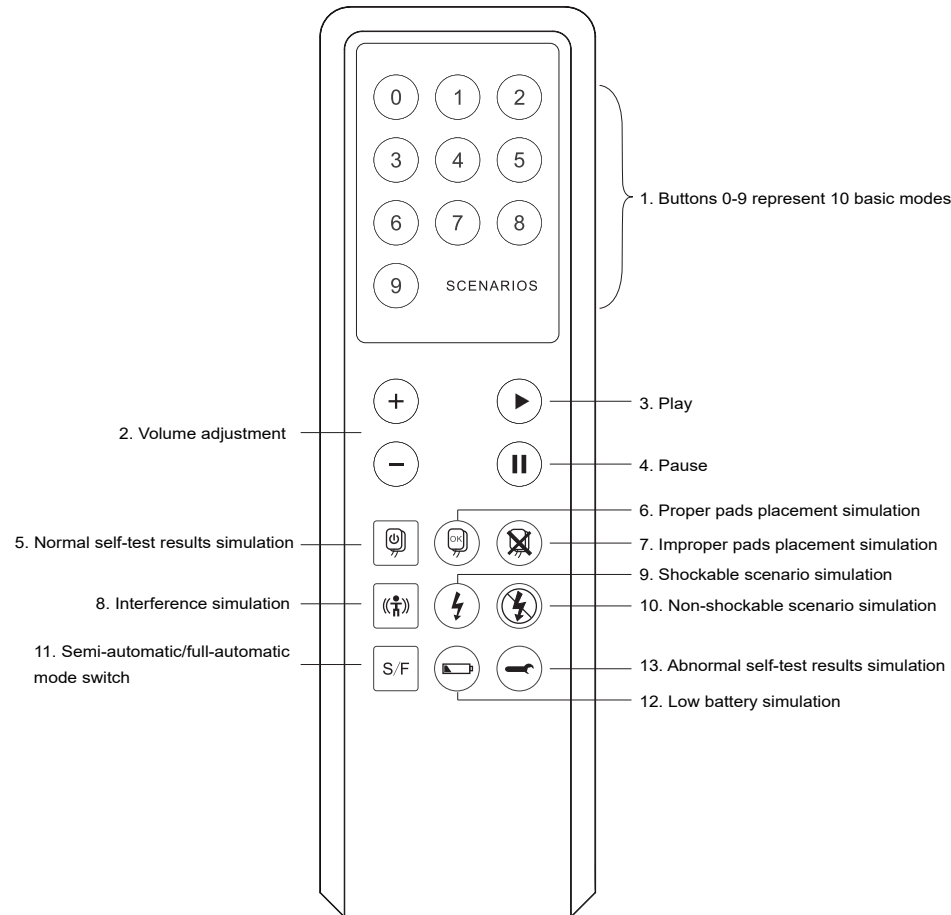


Figure 2 Description of Remote Control Buttons

1. Basic Training Modes

Buttons 0-9 represent 10 basic training modes. These modes can simulate almost all typical SCA rescue scenarios, including different combinations of shockable/non-shockable heart rhythms, proper/improper pads placement, single/multiple shocks and low battery power.

3.3 Battery Replacement

Scenario Description

If the device issues the voice prompt "BATTERY LOW", replace the battery immediately.

Operation Steps

Press the spring-loaded button on the right side of the device and pull out the battery box.

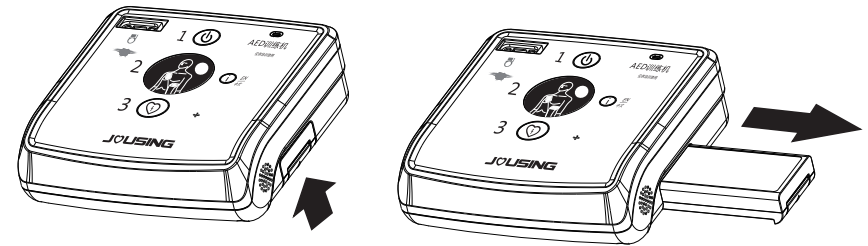


Figure 7 Replacing Battery

3.2 Pads Connection

3.2.1 Description

After connecting to the pad cable, the pads can be applied to any manikin. Place the pad connector into the pad socket of the Trainer. The Trainer will automatically run self-test, simulating a scenario where the AED pads are applied to a patient, and proceed to the next step of first aid.

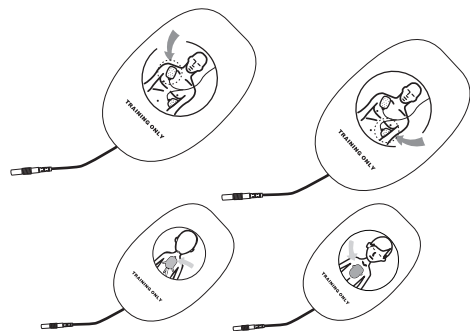


Figure 5 Adult and Child Pads

Note: 1. AED training pads are similar to AED pads, with the exception of their product material. AED training pads cannot deliver high-voltage shock therapy.

2. AED training pads are for training only. Do not connect them to an AED for clinical use.

3.2.2 Operation Steps

1. Connect pads to the pad cable.

Adult/child pads should be manually connected to the pad cable.

Note: The AED pad cable and pads are pre-connected, and therefore no extra step is required.

2. Place the pad connector into the socket on the main unit and make sure it is completely inserted, as shown in Figure 6.

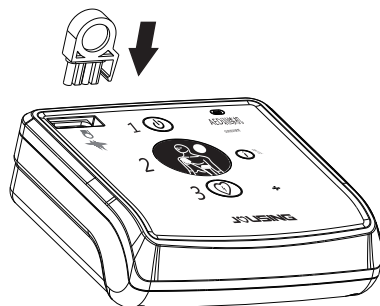


Figure 6 Inserting Pad Connector

2. Volume Button

Press the \oplus button to increase volume and the \ominus button to decrease volume.

3. Play Button

Press to continue, if the Trainer is paused.

4. Pause Button

Press to pause, if the Trainer is operating.

5. Normal Self-test Results Simulation (currently not available)

6. Proper Pads Placement Simulation

Press to simulate the proper pads placement scenario. After the status indicator of the main unit flashes twice, follow the instructions to start training.

7. Improper Pads Placement Simulation

Press to simulate the improper pads placement scenario. After the status indicator of the main unit flashes twice, follow the instructions to start training.

The trainee should check pads placement and correct insertion of the pad connector.

8. Interference Simulation

Press to simulate the motion interference scenario. After the status indicator of the main unit flashes twice and the Trainer prompts "STOP MOTION", follow the instructions to start training.

The trainees should immediately stop moving the manikin or equipment.

9. Shockable Scenario Simulation

Press to simulate the shockable scenario. After the status indicator of the main unit flashes twice, follow the instructions to start training.

10. Non-shockable Scenario Simulation

Press to simulate the non-shockable scenario. After the status indicator of the main unit flashes twice, follow the instructions to start training.

11. Semi-automatic/Full-automatic Mode Switch (currently not available)

12. Low Battery Simulation

Press to simulate the low battery power scenario. After the status indicator of the main unit flashes twice and the Trainer prompts "BATTERY LOW", follow the instructions to start training.

The trainees should replace the batteries. It is recommended that all six batteries be replaced.

13. Abnormal Self-test Results Simulation (currently not available)

Basic training modes can be chosen and altered using the remote control. All scenarios and required times are shown in Table 5.

Number on Remote Control	Simulated SCA Scenario	Voice Prompt (Follow the instructions to operate)	Time
①	Proper pads placement Single shock Shock success	Shock advised Single shock No shock advised	2 min 30 sec
①	Proper pads placement Four shocks Shock success	Shock advised Four shocks No shock advised	9 min 40 sec
②	Improper pads placement Pads placement corrected Single shock Shock success	Improper pads placement Shock advised Single shock No shock advised	3 min 6 sec
③	Proper pads placement Two shocks Shock success	Shock advised Two shocks No shock advised	4 min 54 sec
④	Proper pads placement Three shocks Shock success	Shock advised Three shocks No shock advised	7 min 18 sec
⑤	Improper pads placement Pads placement corrected Two shocks Shock success	Improper pads placement Shock advised Two shocks No shock advised	5 min 24 sec
⑥	Motion interference Motion interference resolved Single shock Shock success	Motion interference Shock advised Single shock No shock advised	2 min 36 sec
⑦	Low battery power Proper pads placement Three shocks Shock success	Battery low Shock advised Three shocks No shock advised	7 min 31 sec
⑧	Low battery power Improper pads placement Pads placement corrected Single shock Shock success	Battery low Improper pads placement Shock advised Single shock No shock advised	3 min 7 sec
⑨	Low battery power Improper pads placement Pads placement corrected Two shocks Shock success	Battery low Improper pads placement Shock advised Two shocks No shock advised	5 min 36 sec

Table 5 Basic Training Modes and Their Corresponding Number on the Remote Control

Note: The total time required might be longer or shorter depending on the speed of pressing the shock button or timing accuracy.

3 Installation Instructions

3.1 Battery Installation

1. Separate the upper and lower covers of the battery box (attached using magnetic posts) to open the battery box.

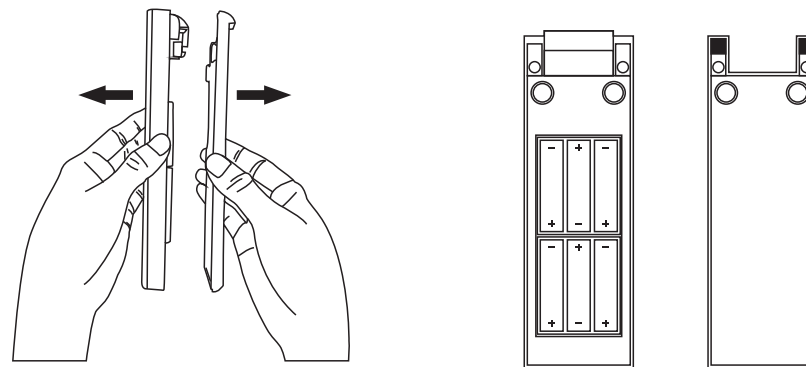


Figure 3 Opening Battery Box

2. Insert six AA batteries and close the battery box.

Note: Please ensure the battery polarity is correct.

3. Close the upper and lower covers of the battery box.

Note: Unlike the Trainer, the AED uses a non-rechargeable battery – JOUBAT (REF: JXB1242). Please be careful not to use the wrong battery.

4. Insert the battery box into the battery holder of the main unit as shown in Figure 4, label side facing up.

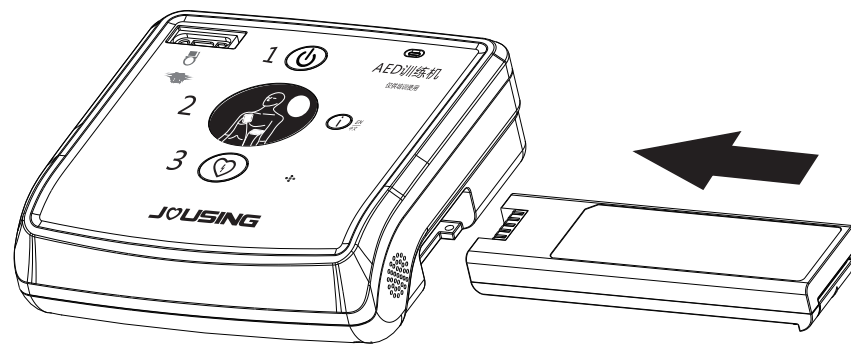


Figure 4 Installing Battery