

# Quick reference guide



**ion**  
pro  
AUTOMATED EXTERNAL  
DEFIBRILLATOR  
WITH MANUAL FUNCTION

**ion**  
AUTOMATED EXTERNAL  
DEFIBRILLATOR

INSTRAMED

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# Manufacturer

## Instramed Indústria Médico Hospitalar Ltda.



Industrial unit:

Beco José Paris, 339 – Pavilhão 19  
Postal code: 91140-310  
Porto Alegre – RS, Brasil  
Phone/fax number: + 55 (51) 3073 8200  
E-mail: comercial@instramed.com.br  
www.instramed.com.br

**ANVISA** 10242950016

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## European representative



Obelis S.A.

Bd. Général Wahis 53, 1030, Brussels - Belgium  
Tel.: + 32.2.732.59.54  
Fax: + 32.2.732.60.03  
E-mail: mail@obelis.net



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**ATTENTION: Instramed assumes no responsibility for any damage caused to individuals or property brought by failure to use this product in accordance with the information, recommendations and warnings presented in the user manual, alterations made in the device, attempts of repair not provided by authorized technical assistance centers, operation by unqualified personnel, use of defective device or use of accessories and parts not supplied by the manufacturer.**

**For information about warranty or technical assistance, please contact Instramed's technical support.**

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Ion/Ion PRO Quick Reference Guide R1.8 English 2020-01-09

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# Battery use

**ATTENTION: observe the battery charge maintenance instructions.**

## Rechargeable batteries first use

The batteries of the Ion or Ion PRO are rechargeable Lithium-ion (Li-ion) batteries. Before the first use, the equipment must receive a full battery charge. For this, it needs to be connected to the electric current for at least 8 hours.

To charge the battery, disconnect it from the Ion/Ion PRO and plug the charger into the back of the battery. Then plug it in the power outlet.

Time to battery full charge = 5 hours.

**The device blocks any operation on the patient when connected to the electric current.**

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## Occasional use

Even when disconnected (stand-by), the Ion/Ion PRO executes internal routines checking the status of the equipment. In spite of this procedure entailing a low power consumption, the battery charge may be consumed.

Refer to the User Manual for the recommended periodicity for full battery charge (rechargeable batteries only).

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## Rechargeable batteries replacement

Every battery has a determined shelf life, which is the possible quantity of full charge and discharge cycles, without loss of performance (see battery specifications in chapter 8). When the device presents a drop in battery performance, with low autonomy, please request a new unit from Instramed's technical assistance.

The battery can be withdrawn through the rear opening through a quick-release system. Remove the old battery and replace the new battery, observing the correct docking position.

Battery replacement is recommended every 02 (two) years or when the runtime is less than 01 (one) hour.



**More information on this topic is available in the Ion/Ion PRO User Manual present on the CD which accompanies the product.**

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The Ion/Ion PRO is a new generation Semi-Automated External Defibrillator (AED). Using Neural Network technology, the Ion/Ion PRO guides by voice, makes the diagnosis, considers clinical variables and applies treatment safely with the touch of only a single button.

## ION PRO

In its PRO version, the Ion/Ion offers the flexibility of the manual mode, which allows the health care professional to select the parameters of shock delivery treatment, such as selecting charge up to 360 J.

Through a touch screen with excellent contrast and visualization area, the user selects the operation mode and charge, while visualizing the ECG curve. The interface is simple and self-explanatory.

## Characteristics

- Semi-automated.
- Artificial Intelligence: accurate diagnosis of the patient's conditions, indicating shock delivery or not.
- Safety precautions: prevents accidental use in cases in which shock treatment is not advisable or in healthy people.
- Operation with just one button.
- Orientation by voice and indicator lights. Internal recording of events.
- Audio recording (optional).
- PC connection via USB.
- Software for connection, download and data management via PC.
- Biphasic shock.
- Automatic self-diagnosis of functions and battery.
- Easy access to pads for use and replacement.
- ECG Monitoring (optional).
- Chest compression performance feedback, with the use CPR Maestro (optional).

## About this guide

This guide does not substitute the user manual. Its function is to familiarize the user with the main functions and ways of operating the equipment. For detailed information on the functioning of the Ion/Ion PRO, please consult the user manual on the CD which accompanies the product.

## Use criteria



**The Ion/Ion PRO, as well as any other Automated External Defibrillator, must only be used if the following circumstances, as a whole, are presented:**

- **Unconscious victim.**
- **Not breathing.**
- **No pulse (for professionals).**

Other important considerations regarding the use of the Ion/Ion PRO:

- Not recommended for children under one year old.
- Pacemakers may affect the device's efficiency.
- Medicines in adhesive form must be removed before starting defibrillation.
- Hypothermic patients may not respond well to defibrillation.
- Once the removal of the patient is started, the defibrillation must be interrupted.

## Qualified users

Shall be considered qualified users those who have had training in a recognized institution in the use of automated defibrillators and CPR techniques - Cardiopulmonary Resuscitation.

## Attention



**The following factors may cause ECG misinterpretation:**

- **Wrongly placed pads.**
- **Patient's movements.**
- **Pacemaker (it may lessen the precision of the cardiac arrest detector).**
- **Radio frequency interference, including mobile phones.**
- **Excessive hair or wet skin in the application area of the electrodes.**
- **Pieces of clothing between skin and pads.**

**Ion/Ion PRO ONLY works with battery.**



## Warnings



**IMPORTANT:** this equipment may only be operated by qualified technical personnel. Read this guide carefully before using the equipment.

**WARNING:** not recommended for patients younger than one (01) year old.

**WARNING:** Ion/Ion PRO can be used by patients over 01 (one) year old, regardless of their weight.

**WARNING:** the patient must be placed on non conductive surfaces. Do not use wet or metallic surfaces and, if necessary, dry the chest before applying the shock.

**WARNING:** do not touch the patient, the equipment, the accessories nor any metallic or conductive surface which is in contact with the patient during the defibrillation.

**WARNING:** the patient must be completely still during the cardiac rhythm analysis phase. Do not give cardiac massage at this point.

**WARNING:** risk of explosion if the equipment is operated in the presence of flammable liquids or gases.

**WARNING:** always check the general state of the equipment, the battery and the accessories before using it.

**NOTICE:** each and every repair to the equipment can only be done by instramed's authorized technical assistance centers.

**NOTICE:** the use of the Ion/Ion PRO is restricted to one patient at a time.

**NOTICE:** the applied parts are protected against defibrillation discharge; during discharge there may be baseline variation.

**NOTICE:** avoid connecting the patient to several items of equipment at the same time. The limits of current leakage may be exceeded.

**NOTICE:** the applied parts intended to come into contact with the patient have been evaluated and comply with the directives and principles of iso 10993-1.

**NOTICE:** when removing the equipment from the package, carefully verify if there is any abnormality or visible damage in the device or its accessories, caused by impact or mishandling during transportation. In case of irregularities, please contact instramed.

**NOTICE:** disposable accessories and any other components must be disposed of according to the norms of hospital waste disposal.

**NOTICE:** do not modify this equipment without authorization from instramed.

**ATTENTION:** the adhesive pads cannot be in contact with the patient while Ion/Ion PRO is connected to the AC/DC external source.

The pads should not be placed on the patient while Ion/Ion PRO is connected to the mains via its AC/DC external source. The same way Ion/Ion PRO should not be connected to the mains via its AC/DC external source, while the pads are positioned on the patient. Under these conditions the leakage current limits defined in NBR IEC 60601-1 and NBR IEC 60601-2-4 for this class of equipment, may be exceeded.

**ATTENTION:** Ion/Ion PRO should not be connected to the AC/DC external source when in use.

Ion/Ion PRO was designed to operate only from its internal battery and when disconnected from its AC/DC external source, that is designated only to feed the charger's internal battery Ion/Ion PRO. Ion/Ion PRO does not work while connected to your AC/DC external source, turning itself off automatically when it detects this condition.

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## Adverse events or side-effects

Superficial burns may occur to the patient's skin on the area in contact with the electrodes. To minimize this effect, apply the pads soon after removing their protective envelope and press them firmly to the patient's skin.

Possibility of superficial skin burns. To minimize the effect, in the case of adhesive pads, apply them immediately after removal of the protective envelope and securely attach to the patient's skin. The patient's skin must be dry.

Possibility of reduction of treatment efficiency. The patient's skin must be dry, otherwise the electric discharge may leak. Never apply conductive gel.

Always use accessories with technical recommendation described in this User Guide.

Possibility of reddish and/or bruised skin at the application place (thorax) by the use of CPR MAESTRO. It is recommended for cases of resuscitation maneuvers of long duration, the use of a gauze between the skin and the CPR MAESTRO.

**Possible BURNED/REDNESS SKIN**, due to the HIGH VOLTAGE and HIGH CURRENT delivered. But it becomes more severe damaged as the progressive counting of the delivered shocks. This side-effects depends also on the quantity of delivered shocks.

**ECZEMAS** on the skin, due to a bad biocompatibility of the adhesive pads or ECG electrodes. The accessories supplied with the product are biocompatible according the ISO 10993 standard.

## Precautions



**Danger of EXPLOSION:** do not use the Ion/Ion PRO in the presence of flammable anesthetics.

**Risk of ELECTRICAL SHOCK:** never open the equipment. When necessary, this must be done by authorized individuals.

Do not use the equipment in the presence of magnetic resonance devices.

This equipment was designed to be resistant to electromagnetic interference. However, equipment performance can be affected if in the presence of strong sources of electromagnetic interference or radio frequencies, such as mobile phones, radio communicators, etc.

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## Important recommendations



Never immerse in liquid and never spill liquid of any kind on any part of the equipment.

Do not use any other cleaning products not recommended by the User Manual.

**ATTENTION: NEVER** sterilize any parts of the equipment, regardless of the sterilization method, as this would damage the mechanical structure and compromise the product's operation.

The above recommendations ensure that the device will support, without damage or deterioration of safety factors, the cleaning and disinfection process necessary.

The current versions of technical standards can be verified on the Product Conformity Certificate, available at [www.instramed.com.br](http://www.instramed.com.br).



More information on this topic is available in the Ion/Ion PRO User Manual present on the CD which accompanies the product.

## Front Panel - Models Ion and Ion PRO with LCD screen



1. Touch screen: presents operational information and allows for manual interaction with the device.

2. Operational status indicator.

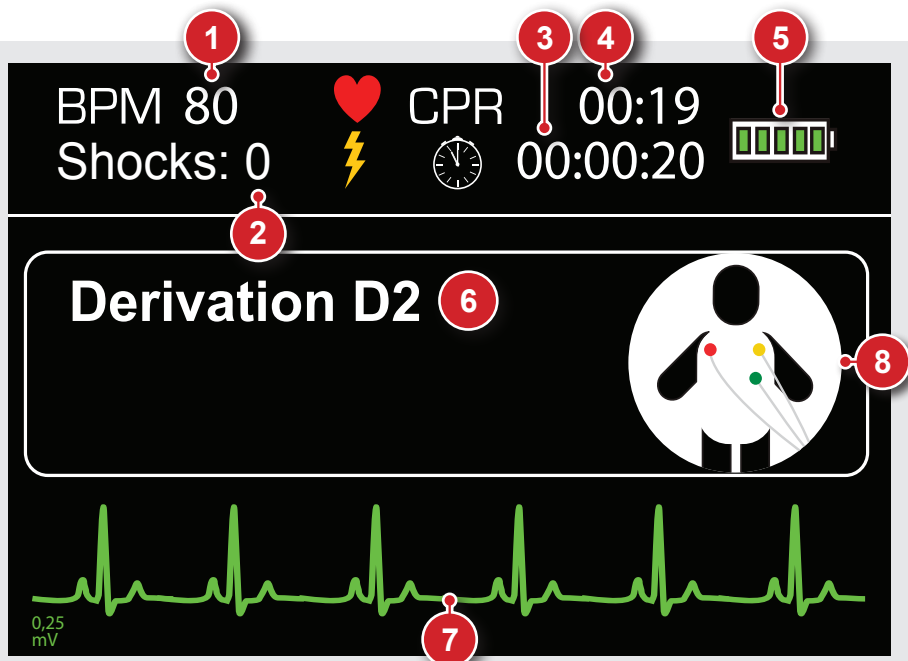
3. Speaker.

4. Start button.

5. Microphone (optional).

**A) Model Ion (with LCD screen)**

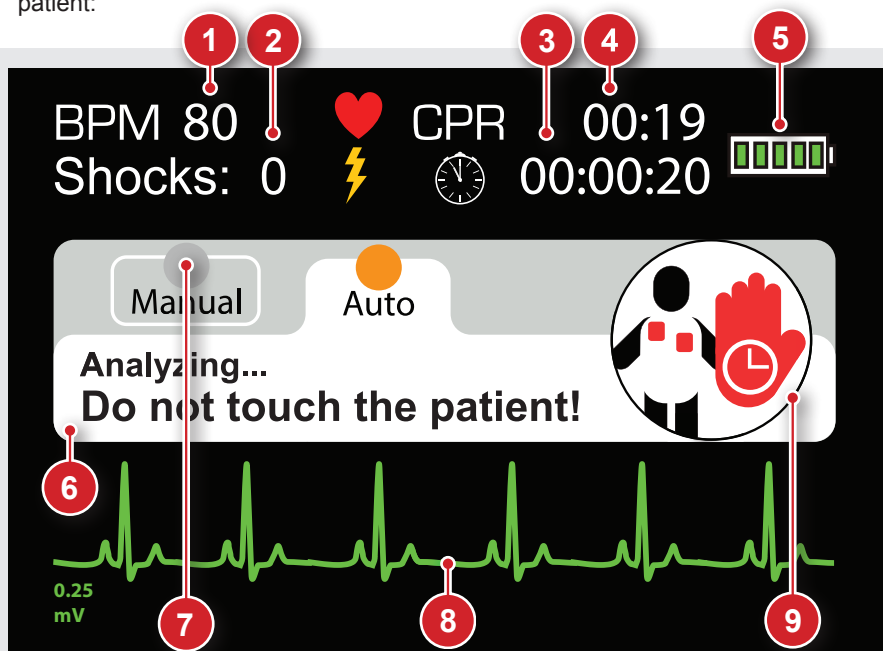
The Ion displays the following items on screen when connected to the patient:



1. Heart beats per minute.
2. Shocks counter: shows the total number of defibrillations successfully executed.
3. General timer: shows the total time of the equipment being on.
4. CPR interval counter: counts the interval between discharge delivery, helping in the CPR.
5. Battery status.
6. Orientation message.
7. ECG curve.
8. Icon indicating the defibrillation stage.

## B) Model Ion PRO - Automatic mode

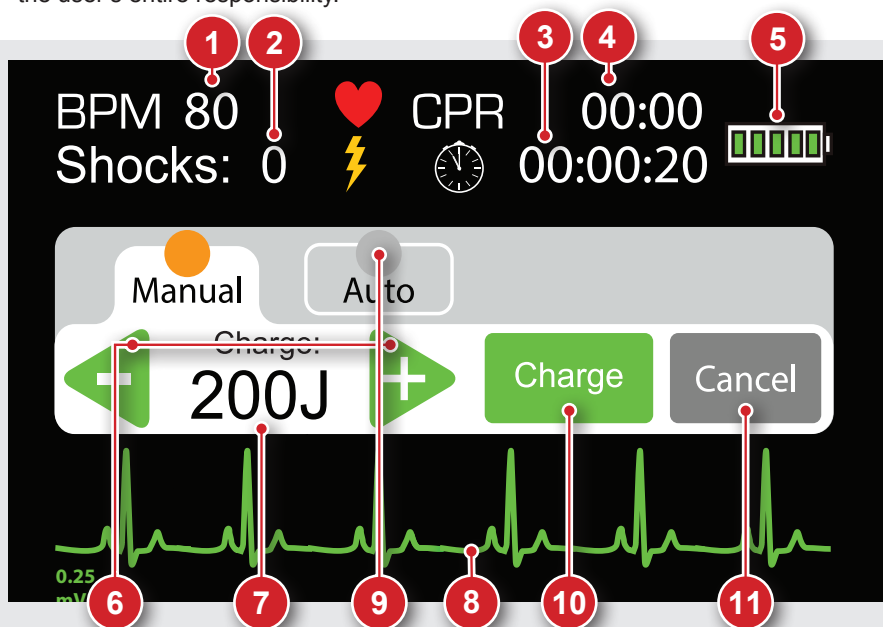
As default, the device starts operating in AUTOMATIC MODE. In this configuration, the Ion PRO presents the following items on the screen when connected to the patient:



1. Heart beats per minute.
2. Shocks counter: shows the total number of defibrillations successfully executed.
3. General timer: shows the total time of the equipment being on.
4. CPR interval counter: counts the interval between discharge delivery, helping in the CPR (Cardiopulmonary resuscitation) massage.
5. Battery status.
6. Orientation message.
7. Manual mode button.
8. ECG curve.
9. Icon indicating the defibrillation stage.

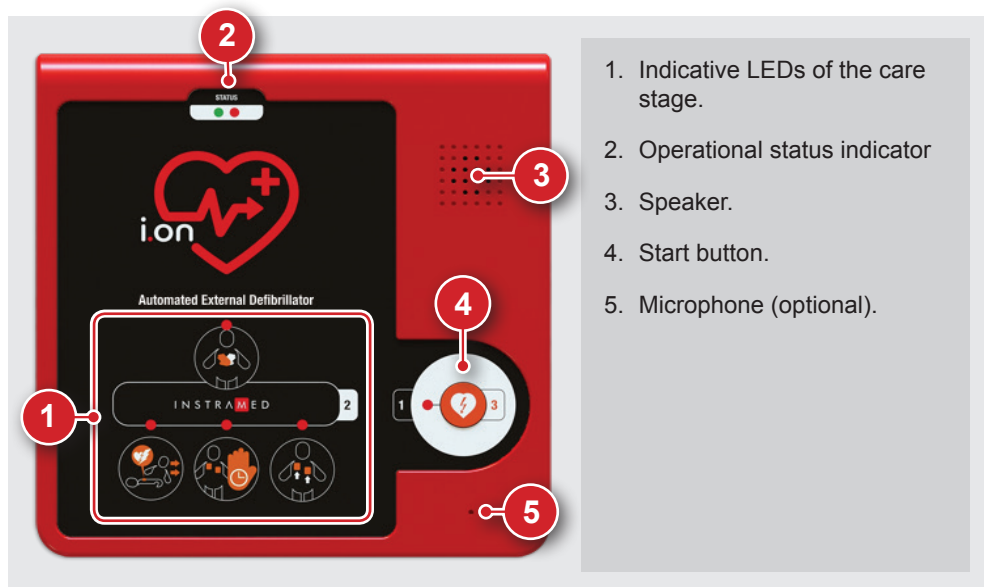
**C) Model Ion PRO - Manual mode**

If the user decides to switch to manual mode, the equipment will function as a standard defibrillator. In this situation, it will be necessary to select the appropriate charge according to the type of patient without the Ion PRO intervention or orientation. Energy charging, delivering the shock and CPR interval counting will be the user's entire responsibility.



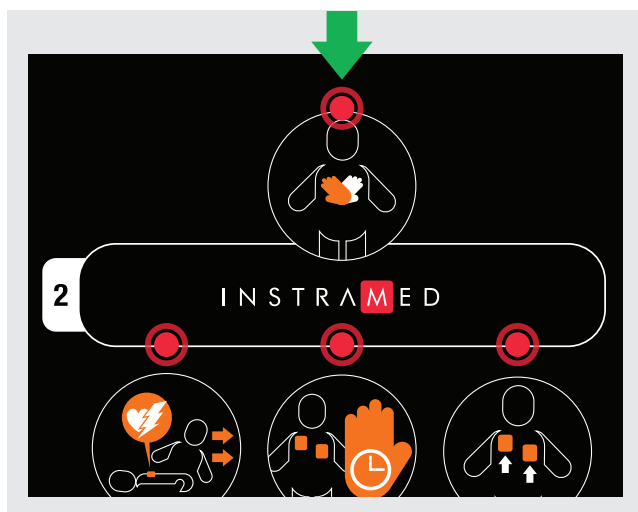
1. Heart beats per minute.
2. Shocks counter: shows the total number of defibrillations successfully executed.
3. General timer: shows the total time of the equipment being on.
4. CPR interval counter: in manual mode this indicator shows the continuous counting since the beginning of the operation.
5. Battery status.
6. Charge selector: allows the user to select the desired energy charge.
7. Selected charge.
8. ECG curve.
9. Automatic mode button.
10. Charge button: charges the defibrillator to the selected energy setting.
11. Cancel button: disarm the stored charge. Charge may be disarmed at any time, whether the charge is ready or not.

## Front panel - Model Ion without LCD screen



### 1 - Indicative LEDs of the care stage.

Visual accompaniment LEDs of the care stage: light up in sequence.





## 2 - Operational status indicator

\*Check availability for daily, weekly or monthly auto-test configuration.

### VISUAL INDICATOR

**STATUS**



Indicates that the equipment is operational and ready for use.

**STATUS**




Indicates that the unit has **NO SUFFICIENT BATTERY CHARGE TO OPERATE** or another internal defect. In case of non-rechargeable battery, replace the battery immediately. In case of rechargeable battery, charge the battery immediately. After changing or recharging the battery, turn on the power to perform the auto test. If the indicator remains red, contact Instramed Technical Support or an authorized representative..

**STATUS**



Indicates that the unit has **NO SUFFICIENT BATTERY CHARGE TO OPERATE** or another internal defect. In case of non-rechargeable battery, replace the battery immediately. In case of rechargeable battery, charge the battery immediately. After changing or recharging the battery, turn on the power to perform the auto test. If the indicator remains red, contact Instramed Technical Support or an authorized representative.

**NOTE: EVEN AFTER THE BATTERY HAS BEEN COMPLETELY CHARGED, the operational status indicator may continue to show an  or some time.**

**The display will only change from  to  when the Ion/Ion PRO performs the auto-test routine or if the device is turned on/of by the user.**

**ATTENTION: remember to check the status of the operational status indicator at least every 30 days.**

## SOUND INDICATOR

Along with visual indication, the Ion/Ion PRO emits electronic beeps.

**ATTENTION: the device will not turn on in case of low battery or presenting general failure. In this case only the audible beep warning will be issued.**

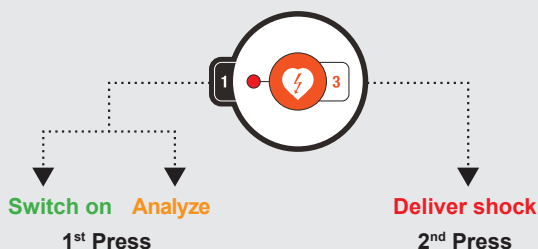
## 3 - Speaker

The Ion/Ion PRO is a highly complex equipment which, from the moment of activation, assesses the steps of the operation and the general state of the patient. Based on this analysis, the device guides the user through verbal commands which may be warnings, instructions or status messages. Therefore **it is extremely important that the speaker is unobstructed and the Ion/Ion PRO is in a position which allows the user to hear its instructions.**

**ATTENTION: do not use the equipment inside bags which may prevent the user from hearing the spoken instructions.**

## 4 - Start button

The Ion/Ion PRO offers a unique technology that allows the operation of the device to be performed with just one button, completely safe.



The start button has the functions of:

- Turning on the device.
- Starting the automatic process of the patient's clinical analysis.
- Applying shock therapy (active only when the automatic clinical analysis of the patient indicates the need for it).

**NOTE:** it is not necessary to switch the Ion/Ion PRO off. Fifteen seconds after the removal of pads from the patient or disconnection of pads from the equipment, the device switches itself off, saving battery charge. In this moment the following message will be heard: “The device is being turned off. Press the button in order to turn the machine back on”.

Still, there are two ways of switching it off manually: pressing the start button for three seconds and removing the pads (after 30 seconds without the pads, the equipment will turn off automatically).

### 5 - Microphone (optional)

The Ion/Ion PRO has the functionality of storing ambient sound. The maximum storage capacity of ambient sound is 10 hours.

## Side connectors



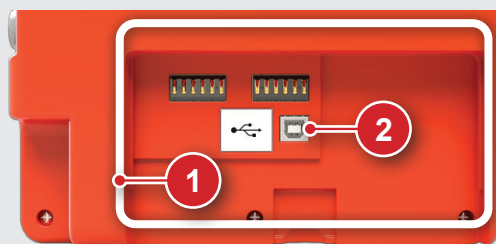
1. ECG connector (only in the models with LCD screen).
2. CPR Maestro connector.
3. Disposable pads connector.

**ATTENTION:** whenever the pads set is replaced, remember to keep the new pair already connected.

**ATTENTION:** disposable pads have defined expiration date. Check the enclosure for limit date for use and, if it is not used within this time, replace them with a new pair.

**ATTENTION:** only use original pads, supplied by Instramed. Failure to do so may result in malfunction.

## Rear connectors



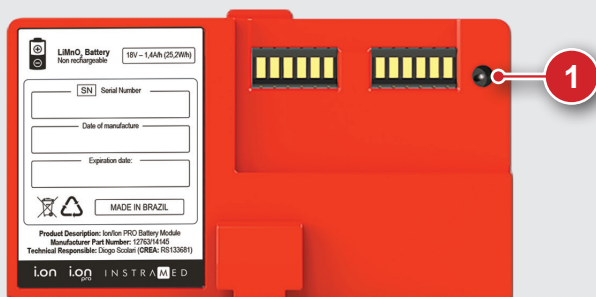
1. Battery compartment.

2. USB connector.

**ATTENTION:** in case of battery replacement, use original replacements from Instramed supplied by its authorized distributors.

## Charging the battery

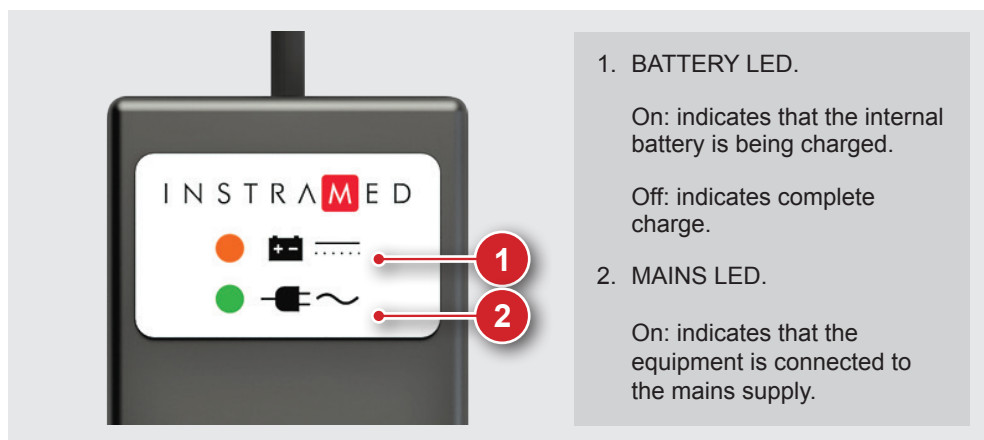
To recharge the rechargeable battery, only remove it from the equipment and connect it to the charger, using the input indicated below.



1. Battery charger connector.

## VISUAL INDICATOR

Visual indicators of the charging process may be found in the charger.

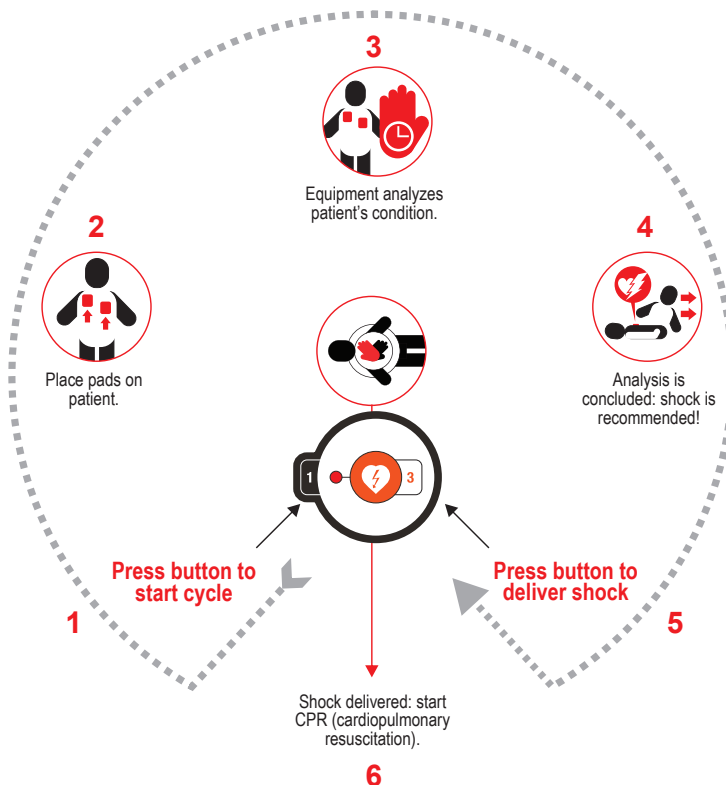


More information on this topic is available in the Ion/Ion PRO User Manual present on the CD which accompanies the product.

# Operating in AED mode

# 4

When in AED mode (Automated External Defibrillator), the Ion/Ion PRO identifies arrhythmias and selects the energy charge automatically. Ion/Ion PRO, on AED mode, is in accordance with American Heart Association 2015 Guidelines.



The energy is pre adjusted according the values shown below.  
The user can only change this protocol using SoftDEA.

**For adult electrodes: 1st shock: 150 J, the following: 200 J.**  
**For child electrodes: 50 J.**

After disposing of used pads, always leave a replacement pair already connected to the equipment, avoiding having to replace them at the moment of the emergency.

**ATTENTION:** this device has electronic safeguards and will not operate in inadvisable situations.

**ATTENTION:** check patient's condition. Only use the equipment if the patient is not breathing.

**ATTENTION:** the area in contact with the pads must be dry.

**ATTENTION:** the presence of too much hair in the contact area may affect scanning. In this case, shave hair.

**ATTENTION:** the pads must be applied directly over the skin. **DO NOT** place pads over clothes.

**ATTENTION:** the pads are disposable and for single-use, cannot be reused under any circumstances.

**ATTENTION:** after opening the wrapping, the adhesive pads should be used within 24 hours.

**ATTENTION:** in case of use for long periods, the pads should be replaced every 24 hours.

**ATTENTION:** the patient must be on a steady surface. Any movement during the process of clinical analysis will result in mistaken scans.

**ATTENTION:** the pads are disposable and can be used in only one patient at a time. Remember to always keep extra ones with the equipment. For replacements, please contact Instramed.

**ATTENTION:** the user must not touch the patient or conductive surfaces in contact with him/her during shock delivery, under risk of suffering a powerful electric discharge.

**ATTENTION:** disconnect other equipment which do not have defibrillation protection before defibrillating the patient.

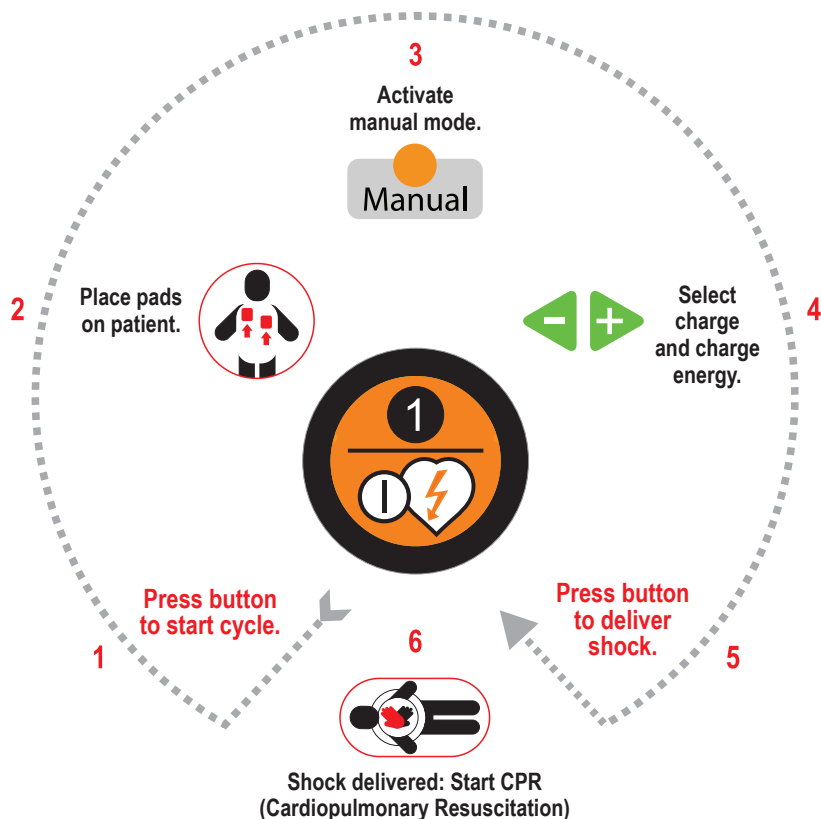


More information on this topic is available in the Ion/Ion PRO User Manual present on the CD which accompanies the product.

# Operating in manual mode

# 5

The Ion/Ion PRO enables manual mode operation, as a conventional defibrillator. In this situation, the device does not interfere with the treatment, and the user is responsible for choosing the energy, charging the charge and delivering the shock. After confirming the mode change, the Ion/Ion PRO ceases to emit sound and visual orientation, in addition to the automatic safeguards against shocks.



**ATTENTION:** the use of the manual mode is the user's entire responsibility. The use by non-qualified professional may cause severe damage and even the patient's death.



## Step 1



Before starting the operation, please call the emergency service.

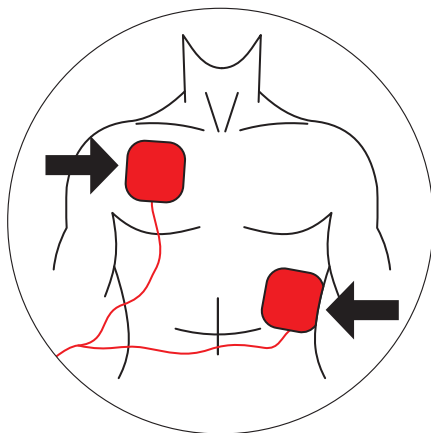
If the disposable pads have not been connected to the Ion/Ion PRO yet, attach the connector to the plug on the right side of the equipment.

After disposing of used pads, always leave a replacement pair already connected to the equipment, avoiding having to replace them at the moment of the emergency.

**ATTENTION:** this device has electronic safeguards and will not operate in inadvisable situations.

Check patient's condition. Only use the equipment if the patient is not breathing.

## Step 2



Remove pads from their wrapping and peel off the film protecting the adhesive.

Place pads on the patient according to the picture above, keeping adhesive area in contact with the skin.

*This position allows the electric current to circulate from one pad to the other, thus reaching the whole thoracic cage.*

**ATTENTION:** the area in contact with the pads must be dry.

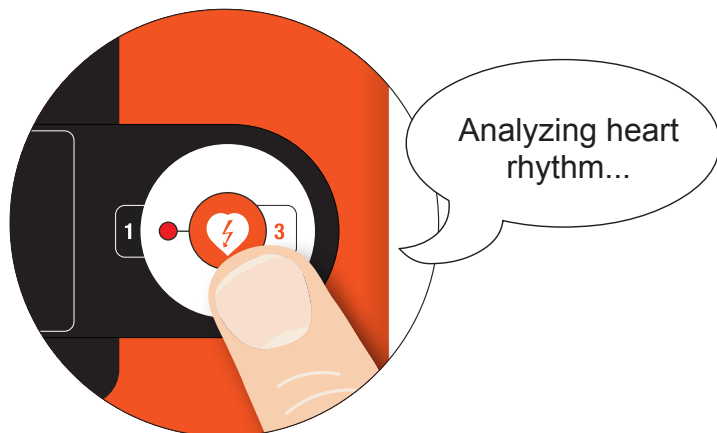
**ATTENTION:** the presence of too much hair in the contact area may affect scanning. In this case, shave hair.

**ATTENTION:** the pads must be applied directly over the skin. **DO NOT** place pads over clothes.

**ATTENTION:** the pads are disposable and for single-use, cannot be reused under any circumstances.

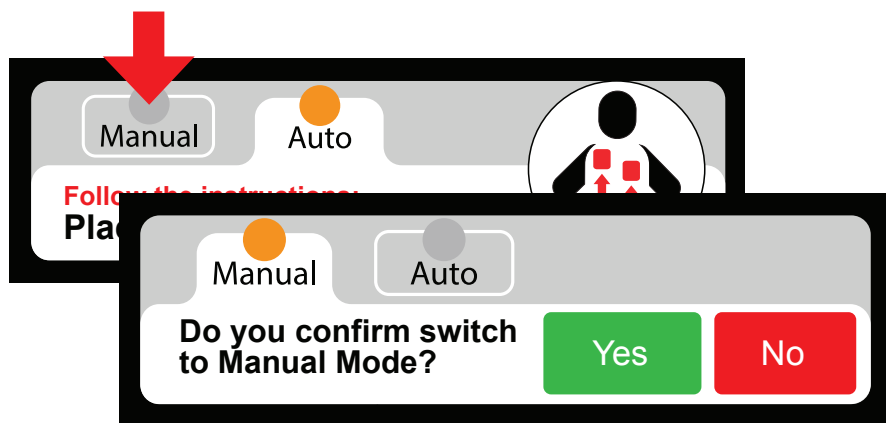
**ATTENTION:** after opening the wrapping, the adhesive pads should be used within 24 hours.

### Step 3



**Press "START" button.**

Press the MANUAL button on the device screen. Confirm this choice on the following screen. The Ion/Ion PRO will switch to manual mode.



## Step 4

On the device screen, use  and  buttons to select the desired charge.

On the device screen, use  button to start energy charging.

Press .

*The shock will be delivered.*

**ATTENTION:** the user must not touch the patient or conductive surfaces in contact with him/her during the shock delivery, under risk of suffering a powerful electric discharge.

**ATTENTION:** disconnect other equipment which do not have defibrillation protection before defibrillating the patient.

## Step 5

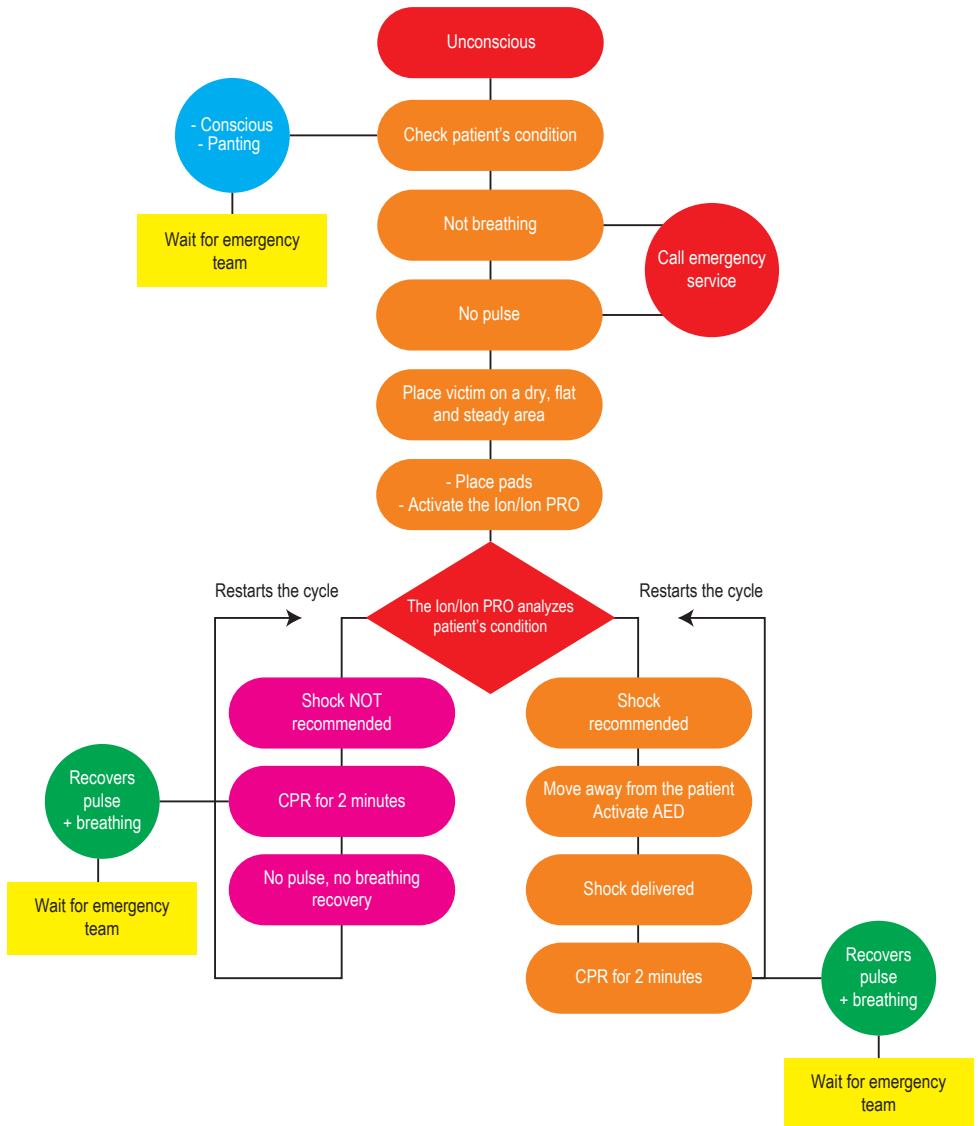
After the shock, start the CPR procedure.



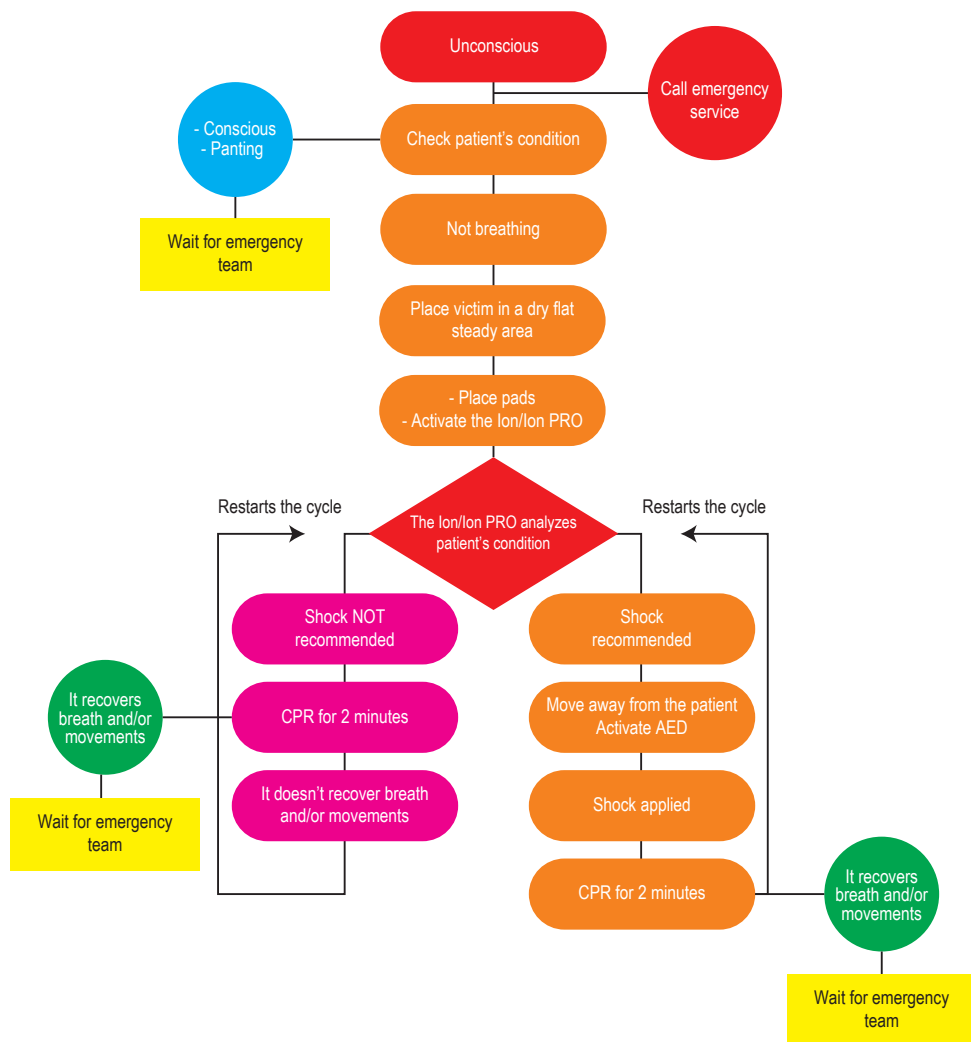
More information on this topic is available in the Ion/Ion PRO User Manual present on the CD which accompanies the product.

## Simplified diagram of procedure in adults

Healthcare professional



## Layperson



More information on this topic is available in the Ion/Ion PRO User Manual present on the CD which accompanies the product.

ECG monitoring is available with the use of the 3-leads ECG cable (optional) on models with an LCD display. The Ion/Ion PRO monitors only the DII ECG derivation. The ECG sweep speed is fixed at 25 mm/s.

The device may operate in 3 distinctive ways:

- **Only adhesive pads connected:** the device works as an automated external defibrillator, using the AHA protocol.
- **ECG cable and adhesive pads connected:** the device will give priority to use of adhesive pads, operating as an automated external defibrillator, using AHA protocol.
- **Only ECG cable connected:** the equipment silently monitor the patient's ECG (always in DII derivation) and alarms when it detects a cardiac arrest situation. In this situation and in case of shock indicated, the adhesive pads must be connected.

## Using ECG

Connect the ECG patient cable to the equipment, using the input indicated below, located on the side of the equipment.



More information on this topic is available in the Ion/Ion PRO User Manual present on the CD which accompanies the product.

The CPR Maestro is an accessory from Ion/Ion PRO, created to help rescuers perform compressions in accordance with the latest CPR recommendations. Its sensors measure the frequency and depth of chest compressions, providing the user with real-time feedback. These information are displayed on CPR Maestro and Ion/Ion PRO screens and through sound recommendations.



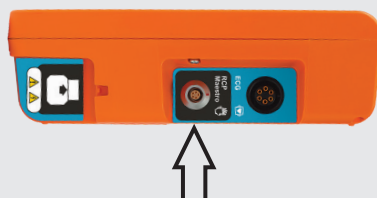
**NOTE:** because it is an accessory, it can not be used by itself. Only connected to Ion/Ion PRO.

Screen and audible messages will only be displayed after the “Perform CPR for 2 minutes” guidance. To turn off the CPR Maestro, just press the ON/OFF button for 3 seconds.



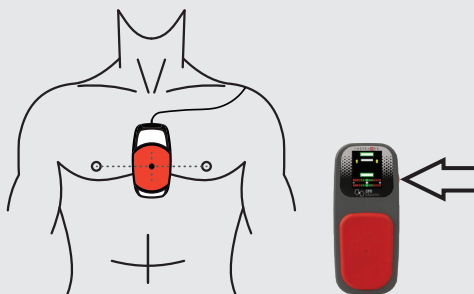
## Using the CPR Maestro

1 - Connect the CPR Maestro to Ion/Ion PRO, using the input shown beside, located on the side of the equipment.



2 - Place the device on the patient's chest, according to the image on the side.

3 - Press the ON/OFF button, on the side of the equipment. At this moment, the equipment is not ready to be used yet.



4 - A message on the CPR Maestro will be displayed to confirm that the device is positioned correctly in the patient's chest, where compressions will be performed. If it is, press the ON/OFF button again and start compressions.

**This step is important and must always be followed. When the device is initialized, the sensors of the CPR Maestro are calibrated, allowing the evaluation of the compressions. Initialization with the device out of the recommended position may cause incorrect compression evaluations.**

**CAUTION:** for long-lasting CPR in naked chest, place a gauze between the skin and the CPR Maestro to avoid risk of skin abrasion.

**Do not use CPR Maestro in patients under 08 years of age or 25 Kg.**



More information on this topic is available in the Ion/Ion PRO User Manual present on the CD which accompanies the product.

## Requirements

Connecting the Ion/Ion PRO to a PC requires installation of the SoftDEA application in the computer to which a connection will be made. This software is in the CD which comes with the equipment.

To install SoftDEA, observe the following requirements:

- Windows 7 or Windows 10 operating system.
- CPU of 500 MHz or faster.
- Minimum 1GB RAM or more.
- Minimum 4 GB free hard disk space or more.

For physical connection to the PC:

- One available USB port.

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## SoftDEA installation using CD

- Insert the software CD in the CD/DVD ROM drive.
- If the installer does not start automatically, find the file which the name starts with the word SoftDEA and extension exe in the program CD and double-click it.
- Follow the installation instructions which will show up on the screen.

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## Installation of SoftDEA through the site

- Download the installer on link: <http://www.instramed.com.br/software.html>
- Locate the downloaded file (name with word SoftDEA and extension exe) in the "Downloads" folder of your computer and double-click it.
- Follow the installation instructions that appear on the screen.

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## Connecting the Ion/Ion PRO to a PC

- Connect the equipment only after installing SoftDEA.
- After the installation connect the device through the USB cable given.

**To access the USB connector, the user must remove the battery and plug the USB connector into the product and PC. The product will use the USB power to turn on.**

- Start the SoftDEA application.
- On the language selection screen, choose among Spanish, English or Portuguese. You only have to select a language the first time you start the software.
- After the software reads the Ion/Ion PRO data (see following section), the ECG and the events list will appear on the software's screen.

**ATTENTION: the equipment must not be connected to the patient when communication via USB with the SoftDEA application occurs.**

**ATTENTION: the equipment blocks any operation on the patient when communication via USB with PC occurs.**



More information on this topic is available in the Ion/Ion PRO User Manual present on the CD which accompanies the product.

## Preventive Maintenance

Instramed recommends that the Ion/Ion PRO be examined by a qualified technician every 12 months. We recommend that you contact the manufacturer for more information about qualified and trained personnel in your area to perform preventive maintenance.

It is recommended that periodic inspections be performed on the equipment's power supply charger, cables and connectors in order to determine possible isolation or internal conductor ruptures.

Remember to check the status of the operational status indicator at least every 30 days.

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## Corrective Maintenance

If the equipment needs repair, this can only be done by INSTRAMED or its authorized representative, otherwise this Warranty certificate may no longer be valid.

**No internal parts are to be fixed by the user.**

**ATTENTION: periodic maintenance is needed independently of the equipment's use frequency.**



**More information on this topic is available in the Ion/Ion PRO User Manual present on the CD which accompanies the product.**

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# Warranty certificate

# 10

Instramed Indústria Médico Hospitalar Ltda. warrants the equipment described in this Certificate for 12 (twelve) months, starting from the delivery date. This warranty covers manufacturing or material defects that prevents proper functioning according to the specifications stated herein, as long as the conditions presented in this certificate are respected.

During the warranty period, Instramed Indústria Médico Hospitalar Ltda. or its representative will repair or replace defective parts, at no expense to the equipment's owner.

**This warranty will no longer be valid if any damage occurs due to accident, natural disaster, improper connection to a power source, use distinct from that described in the User manual, or irregular working conditions.**

**Any attempt to violate, adjust or repair this equipment by individuals not authorized by Instramed Indústria Médico Hospitalar Ltda. will automatically invalidate this warranty. This also applies in case of alterations made to this contract, the fiscal receipt, or to the equipment's serial number.**

Instramed Indústria Médico Hospitalar Ltda. is not responsible for the improper use of this equipment, by people who are not familiar with its function or the techniques recommend for its proper use.

**EQUIPMENT :** \_\_\_\_\_

**SERIAL NUMBER:** \_\_\_\_\_

**PURCHASE DATE:** \_\_\_\_\_

**FISCAL RECEIPT NUMBER:** \_\_\_\_\_

**i.on**  
**pro** AUTOMATED EXTERNAL  
DEFIBRILLATOR  
WITH MANUAL FUNCTION

**i.on** AUTOMATED EXTERNAL  
DEFIBRILLATOR

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[www.instramed.com.br](http://www.instramed.com.br)

+55 (51) 3073 8200