

The iPAD SP1 Automatic External Defibrillator



OVERVIEW

SP1- LAYOUT

PATIENT MODE SWITCH:

- Easily switch from Adult to Child mode without changing pads
- Safety cover prevents accidental switching

INDICATOR LIGHTS:

Indicator Lights operate in time with the voice prompts to prompt the re-sponder with:

- Pad placement
- Staying clear of casualty
- CPR compressions

SPEAKER:

- Ambient noise detector measures level of background noise and adjusts the volume of the voice prompts accordingly.
- Ideal for noisy environments such as public places, factories, warehouses, schools etc.

INFORMATION BUTTON:

'i' button performs the following functions:

- Allows responder to select if CPR metronome is heard during CPR
- Checks for faults and errors
- Provides 'handover' information to Ambulance crew (usage time and shocks delivered)
- Allows the SP1 to be programmed with CPR protocols such as compression rate, number of compressions, breaths and cycles etc, ensuring that the SP1 is always up to date
- Downloads data for review
- Checks the units software version

VISUAL INDICATOR:

Visual Indicator shows at a glance:

- Battery Life
- Unit Status
- Pad Status

POWER BUTTON



iPAD SP1 semi-automatic

DATA RECORDING:

- IrDA Port - Wireless Transmission of data to PC
- SD Card Port - Data can be transferred easily
- Internal Memory (Nand-Flash) - ECG, Event
- Storage Capacity - Multi recording 5 events / max 3 hours
- Data review program - CU-EX1 Software (for PC)

SP1- LAYOUT

PAD CONNECTOR:

- Pre connected dual adult/child electrode pads

DISPOSABLE BATTERY PACK:

- High Capacity - Type DC 12 Volt 4.2Ah, Lithium Manganese Dioxide
- Capacity - Minimum 200 shocks (150J)
- Lifespan - 5 years - assumes unit is kept within operable temperature range and after the initial check, the unit is left in standby mode



iPAD SP1 fully-automatic



SHOCK BUTTON:

- The orange shock button will flash and need to be pressed if verbal prompt to do so is given. If pressed by accident it will not deliver a shock
- The fully-automatic model does not have a shock button. If required a shock will be delivered automatically

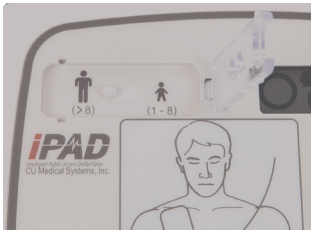
SMART PADS STORAGE:

- Electrode pads are stored, pre-connected, in a clear compartment on the under-side of the unit

KEY FEATURES: Trusted Technology. Proven Simplicity.

The iPad SP1 defibrillator is a nominated device of the British Heart Foundation and is placed nationwide in conjunction with the NHS Ambulance Service in to community projects and Community First Responder groups.

Designed to be used by minimally trained people, its user friendly responsiveness makes it suitable for use in any setting. Whether a workplace, school, shopping centre or hospital, the iPad SP1 makes save lives as simple as possible, saving seconds when every second counts.



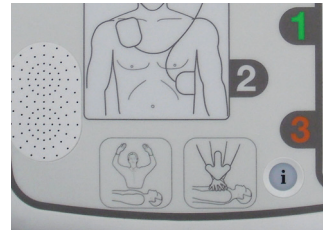
PATIENT MODE SWITCH

- Easily switch from Adult to Child mode without changing pads
- Safety cover prevents accidental switching
- Comes supplied with pre-connected dual adult/child electrode pads. Smaller child pads also available



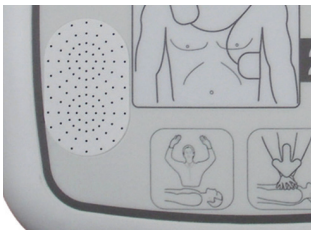
INTEGRATED ELECTRODE PAD STORAGE

- Electrode pads are stored, pre-connected, in a clear compartment on the underside of the unit
- Pads are easily removed by pulling on the exposed tab
- The pads are always ready for use and easily checked



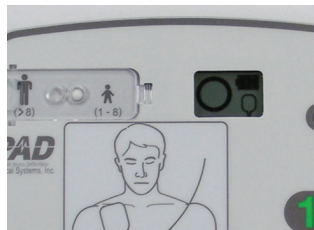
CPR DETECTION

- The iPad SP1 detects if CPR is being performed when appropriate
- If CPR is not being performed, voice prompts encourage the responder to 'perform CPR'
- If CPR is being performed, voice prompts encourage the responder to 'continue CPR'



AMBIENT NOISE DETECTOR

- Measures level of background noise and adjusts the volume of the voice prompts accordingly
- Volume increases up to 90 decibels



LCD STATUS INDICATOR SCREEN

- Operational status of the iPad SP1 always visible
- At a glance see the following:
 - Battery Life
 - Pad Status
 - Unit status



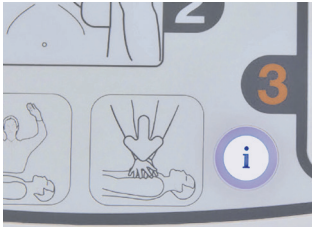
CLEAR ILLUMINATED ILLUSTRATIONS AND CALM VOICE PROMPTS

- Indicator lights operate in time with the voice prompts to give guidance at every step
- Pad placement
- Standing clear of casualty
- CPR compression rate



DATA STORAGE AND MANAGEMENT
















- Internal memory stores the last 5 events/3 hours of data
- Data can be transferred via the built in SD card and IrDA ports
- Data can be reviewed via the 'CU-EX1' software (for pc)
- Easy to export data to PDF file
- Data conversion service available



'I' BUTTON PERFORMS THE FOLLOWING FUNCTIONS

- Allows responder to select if CPR metronome is heard during CPR
- Checks for faults and errors
- Provides 'handover' information to Ambulance crew (usage time and shocks delivered)
- Allows the SP1 to be programmed with CPR protocols such as compression rate, number of compressions, breaths and cycles etc, ensuring that the SP1 is always up to date
- Downloads data for review
- Checks the units software version

VISUAL INDICATOR

INDICATOR	DESCRIPTION	NOTE
Status LCD Device Operation	The device is functioning normally.	
Status LCD Device Operation	The device has an error.	
Status LCD Battery Level Indicator	The battery is fully charged.	
Status LCD Battery Level Indicator	Less than half battery power remains.	
Status LCD Battery Level Indicator	Less than a quarter battery power remains.	
Status LCD Battery Level Indicator	Battery is low.	
Status LCD Pad Status	The expiration date of the pad is more than 3 months.	
Status LCD Pad Status	The pad will expire within 3 months.	
Status LCD Pad Status	The pad is used or expired.	
Do Not Touch Patient Indicator: Off	You may touch the patient.	
Do Not Touch Patient Indicator: Light	You may not touch the patient.	
CPR Detection Indicator: Light	Indicates that CPR is being performed.	
CPR Detection Indicator: Flashing	Indicates that CPR is not performed or not properly performed.	
i-Button: Flashing in Red	The device detected an error. Press the i-Button for more information.	
Shock Button: Flashing in Orange	The device is ready to deliver a defibrillating shock. Press the Shock Button to deliver a shock. NOTE the iPad SP1 fully automated model does not have a shock button. A shock is delivered automatically	

TECHNICAL SPECIFICATIONS

PHYSICAL

Category	Nominal Specifications
Dimensions	260mm x 256mm x 69.5mm (Width x Length x Height)
Weight	2.4kg (Including the battery pack and pads)

ENVIRONMENTAL

Category	Nominal Specifications
Operational Status (The device is in emergency use)	Temperature: 0°C ~ 43°C (32°F ~ 109°F) Humidity: 5% ~ 95% (non condensing)
Altitude	0 to 15,000 feet (operational and storage)
Drop	Withstands 1.2-meter drop to any edge, corner, or surface
Vibration	Operating: Meets MIL-STD-810G Fig.514.6E-1, random Standby: Meets MIL-STD-810G Fig.514.6E-2, swept sine (helicopter)
Sealing	IEC 60529: IP55
ESD	Meets IEC 61000-4-2:2001
EMI (Radiated)	Meets IEC 60601-1-2 limits, method EN 55011:2007 +A2:2007, Group 1, Class B
EMI (Immunity)	Meets IEC 60601-1-2 limits, method EN 61000-4-3:2006 +A1:2008 Level 3 (10V/m 80MHz to 2500MHz)

DEFIBRILLATOR

Category	Nominal Specifications
Operating Mode	Semi-automated or Fully-automated
Waveform	e-cube biphasic (Truncated exponential type)
Output Energy	150 J at 50 Ω load for adults 50 J at 50 Ω load for children
Charge Control	Controlled by an automated patient analysis system
Charging Time	Within 6 seconds of the voice prompt "Shock Advised".



Part number: 63124

SP1 ACCESSORIES

SP1 Disposable Adult/Child Smart Electrode Pads

SP1 Adult/Child "Smart" Pads, capable of 'talking' to the device to share expiry notice and previous usage.

These pads are useable with paediatric patients thanks to the intuitive adult/ paediatric switch on the device.



Part number: 63032

SP1 Disposable Battery Pack

This Lithium-Manganese Oxide (LiMnO₂) disposable battery.

With up to five years life or in excess of 200 shocks it is high performing while cost effective.



Part number: 63034

SP1 Orange Carry Case

This highly visible carry case is the perfect companion for your SP1 device. Currently available at no additional cost.

The bag has space for an additional set of pads, a spare battery and an AED Start Kit. There is also a detachable shoulder strap.

The case offers protection while still being able to use the device.

ADDITIONAL OPTIONS

Electrode Pad Adapters

These pad adapters will allow the electrode pads from Zoll, Phillips and PhysioControl to be used with the iPAD SP1.

This means the same pads can be unplugged from iPAD and plugged straight in to the defibrillator on the front line vehicle. This reduces risk, saves time, reduces trauma and is cost-effective.



Specific part no per unit 'required

SP1 Wall Bracket

This sturdy metal wall bracket is the perfect means for keeping the i-PAD at hand, ready to use.

The SP1 is securely cradled and held in place, with a Velcro strap for quick release.



Part number: 63138

SP1 Wall Cabinet

This rigid, high quality metal cabinet is ideal for holding your i-PAD within an indoor environment. The device is held firmly in place until required. There is also a battery operated alarm, which is triggered when the door is opened.



Part number: 63043