

DARAY[®]

Medical



V60

Pulse Oximeter Manual

DARAY[®] Medical

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Tel: 0800 878 9864 Fax: 0333 321 0973
email: info@daray.com url: www.daray.com

INTRODUCTION

Thank you for purchasing the DARAY V60 Pulse Oximeter.

This manual is written and compiled in accordance with the council directive MDD93/42/EEC for medical devices and harmonized standards. In case of modifications and software upgrades, the information contained in this document is subject to change without notice.

The manual describes the V60 Pulse Oximeter's features and requirements, main structure, functions, specifications, correct methods for transportation, installation, usage, operation, repair, maintenance and storage and the safety procedures to protect both the user and equipment.

Please read this manual carefully before using the product. The user manual which describes the operating procedures should be followed strictly. Failure to follow the user manual may cause abnormalities in measuring, equipment damage and patient injury. The manufacturer is NOT responsible for the safety, reliability and performance issues, any monitoring abnormality, patient injury or equipment damage due to users' negligence of the operation instructions. The manufacturer's warranty service does not cover such faults.

WARNING:

- **Discomfort or pain may occur if using the device for prolonged durations. It is recommended that the sensor should be applied to the same area for no more than two hours.**
- **The light (the infrared is invisible) emitted from the device can be harmful to the eyes. Do not stare at the light.**
- **Please refer to the associated literature about the clinical restrictions and caution.**
- **This device is not intended for treatment.**

1. SAFETY

1.1. Instructions for safe operation

Check the main unit and all accessories periodically to make sure that there is no visible damage that may affect patient's safety and monitoring performance about cables and transducers. It is recommended that the device should be inspected once a week at least. When there is obvious damage, stop using the device.

Necessary maintenance must be performed by qualified service engineers ONLY. Users are not permitted to maintain it by themselves.

The oximeter cannot be used together with devices not specified in User's Manual. Only the accessory that appointed or recommendatory by manufacture can be used with this device.

This product is calibrated before leaving factory.

1.2. Warning

- **Explosive hazard—DO NOT use the oximeter in environment with inflammable gas such as some ignitable anaesthetic.**
- **DO NOT use the oximeter while the patient is being measured by MRI and CT.**
- **Do not use this device on a patient with an allergy to rubber.**
- **The disposal of scrap instrument and its accessories and packaging (including battery, plastic bags, foams and paper boxes) should follow the local laws and regulations.**
- **Please check the packaging before use to make sure the device and accessories are totally in accordance with the packing list, or else the device may have the possibility of working abnormally.**
- **Only use accessories and probes approved or manufactured by DARAY or the device may be damaged.**

1.3. Attention

- Keep the oximeter away from dust, vibration, corrosive substances, explosive materials, high temperature and moisture.
- If the oximeter gets wet, please stop operating it.
- When transported from a cold environment to a warm or humid environment, please do not use it immediately and allow the product to acclimatise to the area.
- DO NOT operate the buttons on front panel with sharp objects (e.g. pens).
- High temperature or high pressure steam disinfection of the oximeter is not permitted. Refer to User Manual in the relative chapter (7.1) for instructions of cleaning and disinfection.
- Do not have the oximeter submersed in liquid. When it needs cleaning, please wipe its surface with medical alcohol by soft material. Do not spray any liquid on the device directly.
- When cleaning the device with water, the temperature of the water should be lower than 60°C.
- The update period of data is less than 5 seconds, this can be altered to allow different pulse rates to be detected.
- Please read the measured value when the waveform on screen is displaying equably and consistently, this measured value is the optimal value. And the waveform at the moment is the standard one.
- If any abnormal conditions or results appear on the screen during the test process, please remove the measured part and then reinsert to reset and restore normal use.
- The device has an average product lifetime of three years since first use.
- The V60 has an alarm function, users can check and set this function according to the instructions in chapter 6.1 as a reference.
- The V60 has the functionality to allow settable alarm limits, when the measured data is beyond the highest or lowest limits, the alarm will sound automatically.
- The V60's alarm system can be paused or completely stopped according to user preference. This function can be adjusted through the menu system shown in chapter 6.1.

2. OVERVIEW

The pulse oxygen saturation (SpO₂) is the percentage of HbO₂ (Oxyhaemoglobin) in the total Hb (haemoglobin) in the blood, so-called the O₂ concentration in the blood. It is an important bio-parameter for measuring respiration. A number of diseases relating to the respiratory system can cause a decrease of SpO₂ in the blood, furthermore, various other illnesses can cause a decrease in SpO₂ such as a malfunction of the human body's self-adjustment to environments, surgical injuries and injuries caused by some medical assessments. Various issues can lead to difficulty of oxygen supply in the patient body. Corresponding symptoms of oxygen deprivation would appear as a consequence, such as vertigo, impotence, vomit etc.

Serious symptoms might endanger a patient's life. Therefore, the prompt and accurate display of a patient's SpO₂ is essential for doctors and practitioners in the clinical medical field.

The V60 is a small and portable device allowing convenient operation. The V60 uses a fingertip probe system for diagnosis and displays the results in a visual graph showing the measured value of SpO₂ which allows for high veracity and repetition.

2.1. Features

- Operation of the product is simple and convenient.
- The product is small, lightweight and easily portable.

2.2. Major applications and scope of application

The Pulse Oximeter can be used in measuring the pulse oxygen saturation and pulse rate through a patient's finger or ear and so on. It is recommended you use the device when the patient is still.

2.3. Environment requirements

Storage Environment

Temperature: -40°C ~ +60°C

Relative humidity: 5% ~ 95%

Atmospheric pressure: 500hPa ~ 1060hPa

Operating Environment

Temperature: 10°C ~ 40°C

Relative Humidity: 30% ~ 75%

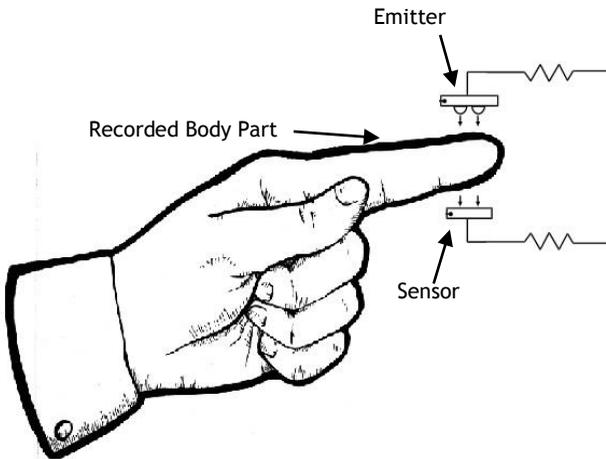
Atmospheric pressure: 700hPa ~ 1060hPa

3. PRINCIPLE OF OPERATION

The principle we use for our Oximeter calculations are based of the formula for the Lambert Beer Law according to the Spectrum Absorption Characteristics of Reductive Haemoglobin (Hb) and Oxyhemoglobin (HbO₂) in glow and near-infrared zones.

The operation principle of the device is: Photoelectric Oxyhemoglobin Inspection Technology - this is adopted in accordance with Capacity Pulse Scanning and Recording Technology. This provides two beams of different wavelength being focused onto the patient's finger or ear through the sensors reading point. The measured signal is received by a photosensitive element which is electronically processed and the results and subsequently displayed on the V60's screen.

Fig. 1



4. TECHNICAL DATA

4.1. Main performance

- SpO2 value display
- Pulse rate value display, bar graph display
- Pulse waveform display
- Low-battery indicator appears before abnormal operation due to low-voltage
- Screen brightness can be changed
- A pulse sound indication
- With alarm function
- Stored data can be uploaded to computers
- Real-time data can be transmitted to computers
- Review function
- Clock function

4.2. Main Parameters

Measurement of SpO2

Measuring range: 0% ~ 100%

Accuracy: SpO2 range 70% ~ 100% $\pm 2\%$, below 70% unspecified

Measurement of pulse rate

Measuring range: 30bpm ~ 250bpm

Accuracy: ± 2 bpm or $\pm 2\%$ (whichever is greater) .

Resolution

SpO2 : 1%, Pulse rate: 1bpm.

Measurement Performance in Weak Filling Condition:

SpO2 and pulse rate can be shown correctly when pulse-filling ratio is 0.4%. SpO2 error is $\pm 4\%$, pulse rate error is ± 2 bpm or $\pm 2\%$ (whichever is greater).

Resistance to surrounding light:

The deviation between the value measured in the condition of man-made light or indoor natural light and that of darkroom is less than $\pm 1\%$.

Power supply requirement: DC 3.0V.

Optical Sensor

Red light (wavelength is 660nm, 6.65mW)

Infrared (wavelength is 880nm, 6.75mW)

Adjustable alarm range:

SpO2: 0% ~ 100%

Pulse Rate: 0bpm ~ 254bpm

5. INSTALLATION

5.1. View of the front panel

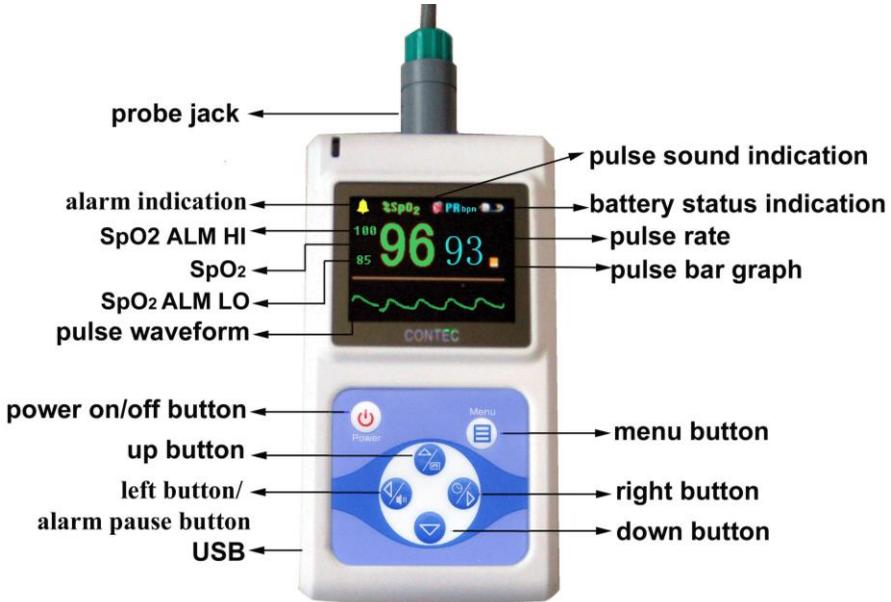


Fig.2 Front View

5.2. Underside View and Left View



Fig.3 Underside View and Left View

1. Probe socket: to connect the SpO2 sensor
2. USB port: for exporting trend data to a PC

5.3. Battery and probe installation

Refer to Fig. 4 and insert the two AA size batteries properly in the right direction.

Please take care when you insert the batteries as improper insertion may damage the device.



Fig.4 batteries installation

Replace the cover.

Insert the SpO₂ probe of the pulse oximeter in the upper socket.

If the alarm function is on, the device will provide high-priority alarm signal when the battery is in low power status. An intermittent alarm will occur and the battery icon turns flashes red.

High priority indicates that immediate operator response is required.

5.4. Accessories

- Battery (2 x AA)
- User Manual
- USB data cable
- PC software
- SpO₂ probe

6. OPERATION

6.1. Application method

Insert a suitable probe into the socket on the top of the oximeter.

Clip the probe onto the patient's finger or ear. Refer to Figure 5.

Press the power button until the device turns on.

Keep the patient still.

The data can be read directly from the screen on the measuring interface.

If the alarm function is on, the device will provide medium-priority alarm signal when probe is out. An intermittent alarm will occur and the user interface presents "SENSOR OFF".

Medium priority indicates that prompt operator response is required.

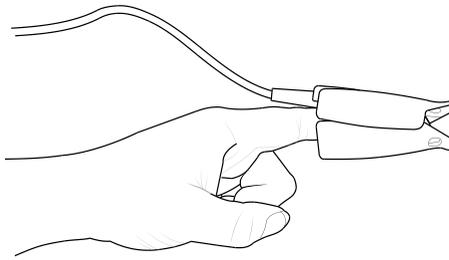


Fig.5

Pause alarm

(including data out of limits alarm, low-voltage alarm, probe off alarm)

When the alarm is on, press the "alarm pause button" to pause the alarm, it can renew alarm in about 60s, and if pressing the "alarm pause button" again with in 60s, it can renew alarm.

If you want to turn off the alarm for good, you should enter the menu for operation.

Review screen

Whilst in the Measuring Screen, press the up button \uparrow to enter the Review Screen (mode 1), as shown in figure 6:

In the Review Screen, press the menu button \equiv to switch between Review Screen (mode 1) and Review Screen (mode 2). Press the down button \downarrow to enter the Review Screen for the next or previous hour.

In Review Screen (mode 1), press the left button \leftarrow or the right button \rightarrow to move the trend graph for storage data. When the trend graph cannot be moved any more, the sign "<" or ">" at the bottom of the LCD screen disappears.

In Review Screen (mode 2), press the left or right button to move the arrow. Press the up button to exit.

In Review Screen (mode 1), the trend waveform from stored data is displayed. Each screen shows 114 seconds of data. The yellow line shows the SpO2 trend waveform and the red line shows the PR trend waveform. The time underneath is the start time of the displayed data.

The centered "+" and "-" at the bottom of the screen indicate the down button's operation.

- Press the right button, "+" is displayed. Press the down button to go to the next hour.
- Press the left button, "-" is displayed. Press the down button to go to the previous hour.

The Review Screen (mode 2) shown is based on Review Screen (mode 1). The stored SpO2 value and PR value for each second can be viewed here. Underneath are the time, SpO2 value and PR value. When the stored data exceeds the upper and lower limit set by user, the relevant value turns green.

Clock interface

On the measuring interface, press the "right button" can enter the clock interface of figure 8. Press the "right button" again can return to the measuring interface.

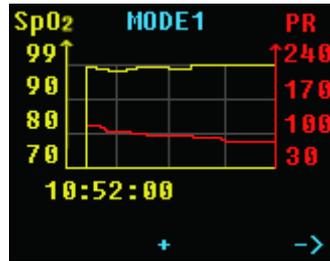


Fig.6 Review Screen (mode 1)

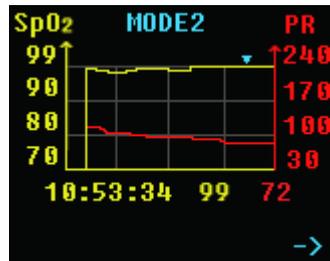


Fig.7 Review Screen (mode 2)



Fig.8 Clock interface

Menu operations:

On the measuring interface, press the “menu button” can enter the menu of figure 9. Users can adjust the settings through the main menu, such as alarm, pulse sound indication, backlight, data storage, data transmission (with the use of data line), the specific method is as follows:



Fig.9 Main Menu Interface

Alarm setting

On the main menu interface, press the “up button” or “down button” to select “Alarm”, then press the “left button” or “right button” to enter the alarm setting menu of figure 10:

The highest/lowest alarm limit setting

Press the “up button” or “down button” to choose the parameter to be adjusted, then press the “left button” or “right button” to change data. Each press of the “left button” or “right button”, the data will raise or descend for one time accordingly.



Fig.10 Alarm Setting Menu

If the alarm function is on, the device will provide medium-priority alarm signal when the data of SpO2 or pulse rate is beyond the limit. Intermittent alarm will occur and the measurement shows in yellow.

Medium priority indicating that prompt operator response is required.

The alarm state setting

Press the “up button” or “down button” to select “Alarm”, then choose the alarm state (on/off) by pressing the “left button” or “right button”, choose “on” to turn on the alarms, and choose “off” to turn off the alarms for good.

Exit the Alarm settings

Press the “menu button” to exit the Alarm Settings Menu.

Pulse sound indication setting

On the main menu interface, press the "up button" or "down button" to select "Pulse Sound", then Press the "left button" Or "right button" to choose to have the Pulse Sound (heart beat)"on" or "off ".

Backlight adjustment

On the main menu interface, press the "up button" or "down button" to select "Brightness", then press the "left button" or "right button" to change the number in order to adjust the brightness of screen.

Data storage setting

This device has the ability to store 24 hours worth of data .It can store the measured pulse rate and SpO2 value accurately, transfer the data to the computer, display the data and print reports (with the included SpO2 Software - Green Heart)

On the main menu interface, press the "up button" or "down button" to select "Record", then press the "left button" or "right button" again to enter the dialog box of figure 11 or finger 12;if it is not in recording state, will come into figure 11; if it is in recording state, will come into figure 12.



Fig. 11

In the status shown in Figure 11, press "left button" or "right button" can change the setting of the item, then press "menu button" to exit the status in Figure 11, and perform setting. YES for starting recording, NO for do not recording.

In the status shown in Figure12, press "left button" or "right button" can change the setting, press "menu button" will exit the Figure12, and perform setting. YES for stopping recording, NO for continue recording.

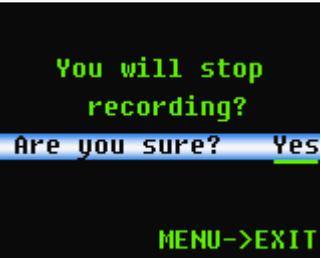


Fig. 12

If the data storage function is being turned on, when return to the measuring interface, a red "REC" sign and a flashing red dot would appear on screen, which means the device is in a state of storing.

In the state of storing, whatever interfaces the device is on (measuring interface, menu interface), the sign "Recording" would appear on the screen in 30 seconds, and then the screen will be automatically shut down. If pressing any button (power on/off excluded) at this moment, the sign "Recording" would appear on the screen, and then the screen will be automatically shut down again; if pressing the "power on/off button", the device would return to the former interface.

If turning on the data storage function, the former data storage will be automatically removed.

In the state of data storing, after the screen is automatically shut down, the pulse sound indication would be off for saving power.

When the storage space is full, it displays “Memory is full” on the screen, and then shut down in a few seconds. But it will still display “Memory is full” by the next time you turn on the device on the purpose of warning the user, if press any button (power on/off excluded) again, it will enter the measuring interface.

Stored data transmission setting

Firstly, please install the affiliated software into the computer, and then two icons would appear on the desktop after installation. The icon of SpO2 is a program for receiving real-time data which is shown as figure 13; the icon of SpO2 Review is a program for receiving stored data which is shown as figure 14.



Fig. 13 SpO2 program



Fig. 14 SpO2 Review program

Connect the device with computer by the data line which is affiliated with the device, then double click "SpO2 Review" icon to open "SpO2 Review" program, click the 'New Session' Icon in the software, enter the patient data and then click 'ok'. The Software will then display "device connected, waiting for data".

On the main menu interface, press the "up button" or "down button" to select "Upload". Press the "left button" or "right button" to select "on" then the data will be transferred to your computer.

In the state of storing, it is not applicable for the users to upload the stored data to computer.

When the stored data is being uploaded, "ON" will be shown behind the upload item.

When the upload of stored data is finished, "OFF" will be shown behind the upload item.

Setting the time and date

On the main menu interface, press the "up button" or "down button" to select "Clock", then enter the clock setting interface by Press the "left button" or "right button".

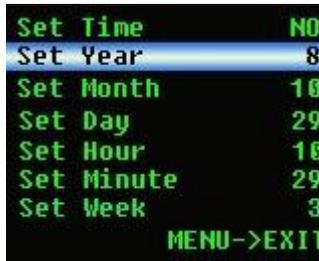


Fig. 15 clock setting interface

When entering the clock setting menu, the menu choice bar would be on the item of "set time", and the state would always be "no" whenever it enters the clock setting menu on the purpose of avoiding unexpected changes of time due to improper operation. You can change the state by press the "left button" or "right button", choose "yes" to reset the time, choose "no" to forbid time resetting.

Press the "up button" or "down button" to select the parameter that you want to change, then adjust the data by press the "left button" or "right button".

Exit the clock setting menu directly by press the "menu button" .If you have reset the time or date, when exiting the clock setting menu, firstly the renewed time and date would be displayed on the screen, then it returns to the main menu; if you didn't reset the time and date, when exiting the clock setting menu, the device would return to the main menu directly.

Exit the main menu

On the main menu interface, press the "menu button" to exit the main menu.

Real-time data transmission

Connect the device with the computer using the USB cable supplied.

Open the "SpO2" program.

Shortly, the data is displayed in the program.

When you unplug the USB cable, a dialog box "Save data at view" appears, where you can enter some basic information.

6.2. Attention for operation

Please check the device before using, and confirm that it works normally.

The measured part should be in a proper position (see the attached illustration of figure 5 for reference), or else it may result in inaccurate measure.

The SpO₂ sensor and photoelectric receiving tube should be arranged in a way with the subject's arteriole in a position there between.

The SpO₂ sensor should not be used at a location or limb tied with arterial canal or blood pressure cuff or receiving intravenous injection.

Do not fix the SpO₂ sensor with adhesive or else it may result in venous pulsation and inaccurate measure of SpO₂ and pulse rate.

Excessive ambient light may affect the measuring result. It includes fluorescent lamp, dual ruby light, infrared heater, direct sunlight and etc.

Strenuous action of the subject or extreme electrosurgical interference may also affect the accuracy.

Please clean and disinfect the device after operating according to the User Manual (7.1).

6.3. Clinical restrictions

As the measure is taken on the basis of arteriole pulse, substantial pulsating blood flow of subject is required. For a subject with weak pulse due to shock, low ambient/body temperature, major bleeding, or use of vascular contracting drug, the SpO₂ waveform (PLETH) will decrease. In this case, the measurement will be more sensitive to interference.

For those with a substantial amount of staining dilution drug (such as methylene blue, indigo green and acid indigo blue), or carbon monoxide hemoglobin (COHb), or methionine (Me+Hb) or thiosalicylic hemoglobin, and some with icterus problem, the SpO₂ determination by this monitor may be inaccurate.

Drugs like dopamine, procaine, prilocaine, lidocaine and butacaine may also be a major factor blamed for serious error of SpO₂ measure.

As the SpO₂ value serves as a reference value for judgment of anemic anoxia and toxic anoxia, some patients with serious anemia may also report good SpO₂ measurement.

7. MAINTENANCE TRANSPORTATION AND STORAGE

7.1. Cleaning and Disinfecting

Using medical alcohol to disinfect the device, nature dry or clean it with clean soft cloth.

7.2. Maintenance

Clean and disinfect the device before using according to the User Manual (7.1).

Change the battery when the screen shows.

Take out the battery if leave the equipment unused for long time.

The device should be calibrated once a year (or according to the calibrating program of hospital).

7.3. Transportation and storage

The packed device can be transported by ordinary conveyance or according to transport contract. The device can not be transported mixed with toxic, harmful, corrosive material.

The packed device should be stored in room with no corrosive gases and good ventilation.
Temperature: -40°C - 60°C ; Humidity: $\leq 95\%$

8. Troubleshooting

Problem	Possible Reason	Solution
The SpO2 and Pulse Rate do not be display normally	<ol style="list-style-type: none">1. The measured part is not properly positioned.2. The patient's SpO2 is too low to be detected.	<ol style="list-style-type: none">1. Place the measured part properly and try again.2. Try again; Go to a hospital for a diagnosis if you are sure the device works all right.
The SpO2 and Pulse Rate are not stable	<ol style="list-style-type: none">1. The measured part is not placed inside deeply enough.2. The measured part is shaking or the patient is moving.	<ol style="list-style-type: none">1. Place the measured part properly and try again.2. Keep the patient still.
The device can not be turned on	<ol style="list-style-type: none">1. The battery is drained away or almost drained away.2. The battery is installed incorrectly.3. The malfunction of the device.	<ol style="list-style-type: none">1. Please change batteries.2. Please install the battery again.3. Please contact the local service center.
The display is off suddenly	<ol style="list-style-type: none">1. The battery is drained away or almost drained away.	<ol style="list-style-type: none">1. Please change batteries.

9. SYMBOLS

Symbol	Description
	Warning - Read User Manual
%SpO2	Oxygen saturation (%)
PR	Pulse rate (BPM)
	Alarm sound muted
	Alarm sound paused
	Alarm sound active
	Pulse sound muted
	Pulse sound active
	Battery power full
	Battery power low
	Power on/off
	Left button/alarm pause button
	Menu button
	Right button
	down button
	Up button
	USB
	Type BF
SN	Serial number
	1. Don't find measured part 2. Probe error 3. Signal inadequacy indicator
IPX1	Ingress of liquids level
	WEEE (2002/96/EC)

10. TECHNICAL SPECIFICATION

Information		Display Mode
Pulse Oxygen Saturation (SpO2)	2-digit digital - OLED display	
Pulse Rate (PR)	3-digit digital - OLED display	
Pulse Intensity (bar-graph)	bar-graph - OLED display	
SpO2 Parameter Specification		
Measuring range	0% ~ 100%, (resolution: 1%)	
Accuracy	70% ~ 100% : ±2%, below 70% unspecified	
Average value	Calculate the Average value in every 4 measure value. The deviation between average value and true value does not exceed 1%.	
Pulse Parameter Specification		
Measuring range	30bpm ~ 250bpm, (the resolution is 1bpm)	
Accuracy	±2bpm or±2% (select larger)	
Average pulse rate	Calculates the average pulse rate every 4th cardio cycle. Deviation between average value and true value does not exceed 1%.	
Safety Type	Interior battery, BF type	
Pulse Intensity		
Range	Continuous bar-graph display.	
Battery Requirement		
2 x AA		
Oximeter Probe		
Wavelength:660nm 880nm		
Dimensions and Weight		
Dimensions	110(l) × 60(w) × 23(h) mm	
Weight	About 180g (with batteries)	

Appendix

State	Alarm condition delay	Alarm signal generation delay
Low voltage alarm	1s	20ms
Spo2 alarm	330ms	20ms
Pulse rate alarm	330ms	20ms
Probe error alarm	16ms	20ms

Returns Policy

IMPORTANT!
Before returning your item, you must call us on 0800 878 9864

We want you to be completely satisfied with your purchase. If you need to return goods purchased from DARAY Ltd, please read the following information carefully.

The DARAY Ltd returns policy provides guidance on when you can return goods we have supplied, and what you can expect from us once you do. To see our detailed returns policy and procedure visit www.daray.co.uk/returns.

TYPE OF RETURN	REMEDY
DAMAGED GOODS Goods which are physically damaged on delivery	We must be notified within 24 hours of receipt.
Dead On Arrival (DOA) Goods which do not work	Goods which do not work on arrival or develop a fault within 28 days, we will advance replace the item.
GOODS DEVELOPING A FAULT Goods which have developed a fault within the warranty period.	If the fault develops after 28 days, but within the warranty period, we will initiate the returns procedure.
NON WARRANTY Goods which have developed a fault outside the warranty period.	If a fault develops outside the warranty period, we will initiate the returns procedure charges may be applicable.
OTHER Any situation which is not covered by any of the above.	We will always try to help, but we cannot normally offer a refund.

For additional clarification, please refer to our terms and conditions at www.daray.co.uk/terms.

In a small number of cases, we may determine that a replacement would not work any better than the original product we supplied. In such cases we will only offer a refund rather than a replacement for qualifying returns.

Replacement bulbs and spare parts ordered on our website or from supplied part codes are not eligible for credit. We will accept returns and exchange for the correct item.

If your purchase an item incorrectly you can return it within 14 days and it can be exchanged for another product of equal or higher value, excluding transportation charges incurred. Goods and packaging must be returned in their original condition. Under no circumstances will goods be accepted for return if they are damaged, have been subjected to improper handling or abuse or have been used.

If you send us goods that do not qualify for return, you will invalidate your claim to any refund, and you will be obliged to compensate DARAY Ltd for the cost of return postage and any other reasonable costs incurred processing the goods.

Your statutory rights are not affected.

Warranty

TERMS AND CONDITIONS OF WARRANTY

1. To qualify for this warranty you must register on www.daray.co.uk or return to Daray Ltd (Daray) the duly completed warranty-registration form accompanying the product.
2. Daray warrants this product (excluding lamp) against faulty material and workmanship during the period of the warranty. The period of warranty is the period stated on your warranty card and commences on the date of purchase of the product. In the event that the product is not in good working order Daray will provide, during the warranty period, a free repair service within the United Kingdom. The warranty is subject to proof of purchase being provided; therefore, you should retain your original receipt.
 - 2.1 The repair service consists of the provision of spare parts and/or replacement products (at Daray's discretion) which will be provided on an exchange basis and will either be new, equivalent to new or reconditioned. All replaced spare parts and products shall become the property of Daray.
 - 2.2 Daray's only obligation under this warranty is the provision of the service as set out above.
 - 2.3 All products are returned to Daray at the customer's cost and risk. Products to be returned should be adequately packed. For the address to send returns to please visit www.daray.co.uk
3. Daray's arrangements for providing service provided under this warranty may include the use of sub-contractors.
4. This warranty does not cover damage or defects in the Product caused by or resulting from:
 - Wilful neglect or negligence by anyone other than Daray;
 - Improper use, storage or handling of the product;
 - Use of non-Daray approved parts (such as replacement lamps) not compatible with the Product;
 - Fire, accident or disaster;
 - Use of non-Daray modifications other than in accordance with Daray's instructions;Attachment of fittings and accessories not approved by Daray;
Repairs, modifications carried out by service personnel not approved by Daray;
 - Damage caused by chemical corrosion from cleaning agents not approved by Daray.
 - Failure to use or install the product in accordance with the manufacturer's instructions.
5. Nothing in this warranty shall have the effect of restricting or excluding the liability of Daray in respect of:
 - a) Death and personal injury caused by the negligence of Daray, or for fraud;
 - b) Under the *Consumer Protection Act 1987* to a person who has suffered damage caused by a defective product or to a dependant or relative of such a person;
 - c) Direct damage to your property caused by the proven negligence of Daray.
6. This agreement does not give any rights other than those expressly set out above and in particular, Daray will not be responsible for any loss of income, profits or contracts or any direct or indirect consequential loss, damage caused to or suffered by the purchaser as a direct result of this agreement.
7. This warranty is offered (subject to these terms and conditions) in addition to, and does not affect your statutory rights.
8. Daray may disclose your details and other personal information to companies within the Daray group including any subsidiary company or sub contractor of Daray for the purposes of performing our obligations hereunder.
9. You must not resell outside the UK any products supplied by Daray and covered by the *Export of Goods (Control) Order 1992* (or any law that replaces it) without obtaining all necessary licences. You also agree not to sell the product in the UK if you know or think that the person buying the product intends to export it without getting the necessary licences. You agree to impose similar conditions to these on anyone you sell the product to.
10. These conditions shall in all respect be governed and construed in accordance with English law and the exclusive jurisdiction of the English courts.



Alternatively register online at www.daray.com

Warranty Registration
Please complete and return to our
freepost address.

1 Year Warranty

Name:

Company:

Email:

Phone:

Fax:

Freepost plus RRAS-YGXE-SLBC
Daray Ltd
Marquis Drive
Swadlincote
DE12 6EJ

Address:

Purchased from:

Date of purchase:

Occasionally Daray would like to send you information about our special offers and promotions. If you do not wish to receive such information please tick here:

Privacy statement: DARAY will not pass on your details to any third party.

Please note:

Warranty includes parts and labour (return to base)

Product:

Serial No:

