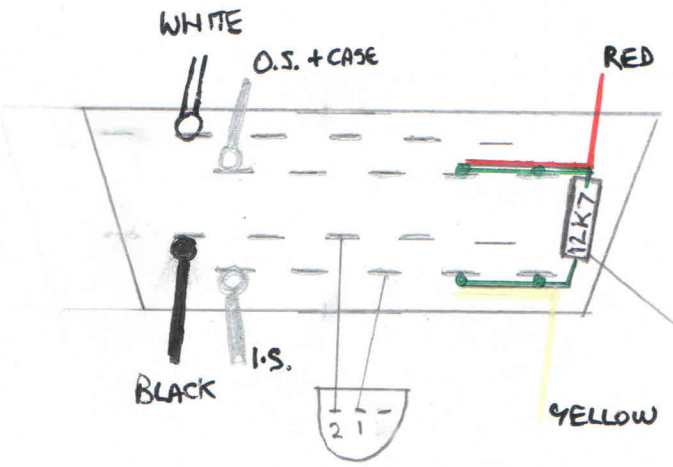
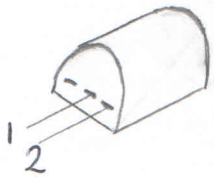
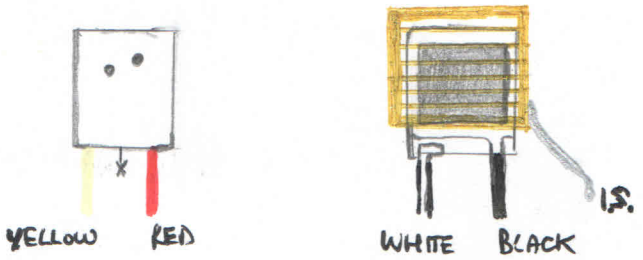
MASIMO 'RED' 20 PIN 0014495



REAR MDR 20 WAY
0030679

12K7 0032195





FRONT OF L.E.D.S

VIAMED

SpO_2 Finger Probe Assembly

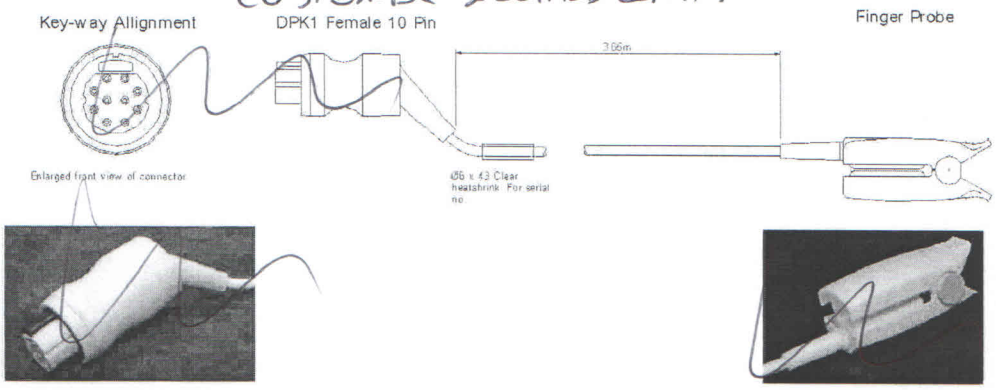
COMPANY OPERATING PROCEDURES

0018720 Datex P872RA

VM3/COP/32.17

Date: 14-Dec-01 **Revision date: 17-May-04** Issue: 3

CUSTOMER SPECIFIED LENGTH



Equipment required: Soldering iron (0060120), solder (0050012), Wire stripper (0060030), Flush Cutter (0060010), Snipe nose pliers (0060021), 'helping hand' (0060145), Heat gun (0060100).

Parts list: Kit and parts required. (Continued over page)

DPK-1 female 10-pin Side			Finger Probe Side		
Qty	Description	Part No.	Qty	Description	Part No.
				BLACK STRAIN RELIEF	0030690 OR RECOVERED
1	DPK-1 female 10-pin kit	0010706	1	Top Shell (x25)	0010110
(1)	Rubber housing	kit	2	Pad Support (Tan) (x50)	0010165
(1)	Cable grip	kit	1	Top Pad (white)(x25)	0010130
(1)	Collar	kit	1	Bottom Pad (white)(x25)	0010131
(10)	Pins	kit	1	Bottom Shell (x25)	0010111
(1)	Upper casing	kit	1	Spring (x25)	0010140
(1)	Cable clamp	kit	2	Button (~~Blue~~ WHITE) (x50)	0010182
(1)	Pin housing	kit	1	Detector	~~0030690~~ RECOVERED
(2)	Screws	kit	1	LED/ I.R.	~~0030690~~
(1)	Lower casing	kit	1	Strain Relief	0010150
(1)	Grey Collar	kit		20 PIN CON	0014495

12K7 RESISTOR 0032195 OR RECOVERED

~~RECOVER~~ RECOVER CHIP, 12K7 RESISTOR, RED HOUSING + METAL BODY OF CONNECTOR AND BOTH LEADS

COMPANY OPERATING PROCEDURES

0018720 Datex P872RA

VM3/COP/32.17

Date: 14-Dec-01 **Revision date: 17-May-04** Issue: 3

1	20 kΩ Resistor	0032090			
1	150 pF Capacitor	0032250			
1	Ø6 x 43mm Clear heat shrink	0032331			
1	Ø1.6 x 20mm heat shrink	0032310			
1	Ø6 x 25mm heat shrink	0032321			

ASSEMBLY OPERATIONS

1. Pre Heat soldering iron temperature to 240°c.
2. Collect all required parts and equipment listed above.
3. Cut a 3.75 metre length of standard 6-core cable. (Details shown below).

CUSTOMER SPEC

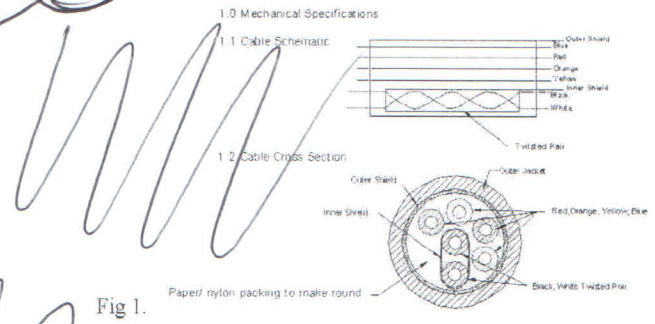


Fig 1.

DPK-1 female 10-pin side:

REPLACE WITH REAR CONN VIEW

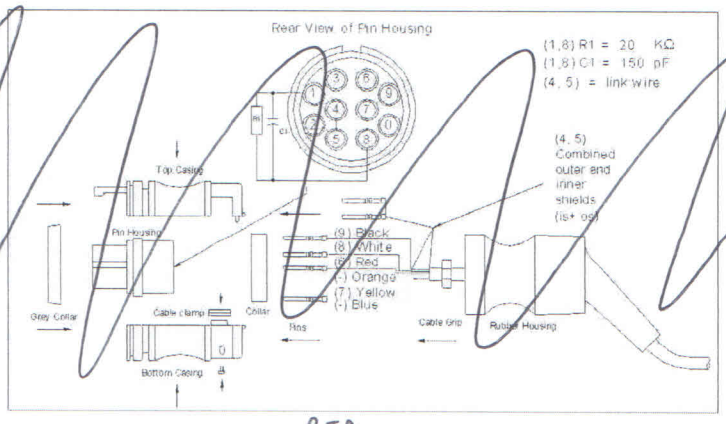


Fig 2.2

1. Feed Ø6 x 43mm (clear) heat shrink, ~~rubber~~ housing, ~~collar~~, ~~cable grip~~ and ~~Ø6 x 25mm (black) heat shrink over the end of the cable~~. + 0030690 RED STRAIN RELIEF BLACK

2. Strip 25mm off outer jacket of wire to reveal coloured wires, outer shield, and nylon/paper wire packing.
3. Cut all packing, blue and orange wires to the base.
4. Strip 20mm off inner jacket to reveal black and white wires and the inner shield.
5. ~~Twist together both inner and outer shields and solder to one pin. Solder a link wire from pin 4 to 5~~ KEEP INNER + OUTER SHIELDS APART, WITH HEAT SHRINK
6. Trim ends of wires to the same length.
7. Strip jacket of every wire 2mm to reveal copper core, and solder all ~~except white wire~~ WIRES to the rear of individual pins.
8. Cut each leg of the resistor ~~and capacitor to~~ 15mm each.
9. Bend legs of ~~both~~ resistor ~~and capacitor~~ to fit into the rear of two separate pins ~~and leg of each~~ then solder to pins.
10. ~~Insert all pins into correct locations except in pin 8 to which the white wire needs to be soldered to the same pin as that of the capacitor and resistor before inserting.~~
11. Insert pin housing into the bottom casing, and screw cable clamp over cable.
12. CLIP Push top casing OVER bottom casing, ~~and push the strain relief over the casing.~~
13. ~~Push rubber housing over wires and then the grey collar over the casing.~~ SLIP RED HOUSING OVER CONNECTOR

Finger Probe side:

REPLACE WITH LED VIEW

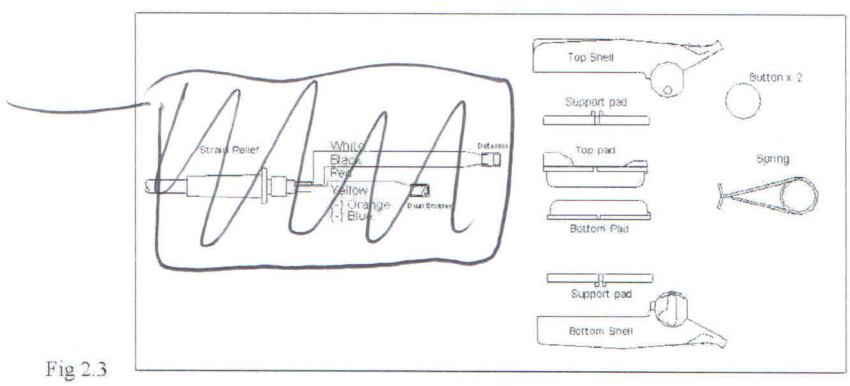


Fig 2.3

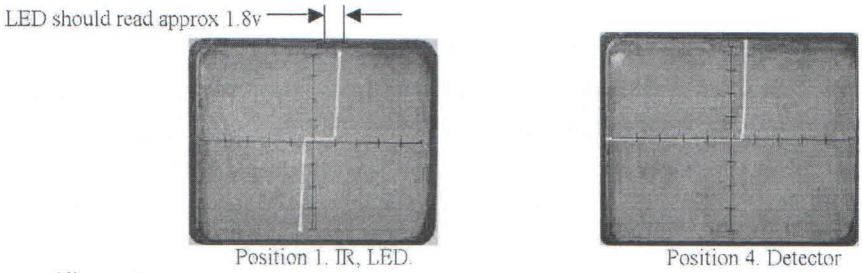
1. Apply loctite primer to the cable surface, and slide on the strain relief.
2. Apply a small amount of superglue on to the surface of the cable and push the strain relief over the glue to secure in place leaving approximately 80 mm of cable.
3. Strip outer jacket up to the strain relief and cut packing, outer shield, blue and orange wires.
4. Cut red and yellow wires to 15 mm, strip jackets off 2mm and apply a small amount of solder to the ends.
5. Strip 10 mm off inner jacket and cut off inner shield.
6. Strip jackets 2mm and apply small amount of solder.
7. Solder wires to the detector, LED/I.R as shown in fig 2.3
8. Place the assembly on the drying rack, and apply a small amount of clear silicon to the front of the detector and LED/I.R and mount into the pads (Led/IR in the top pad and Detector in

the bottom pad) allowing the sensors to be seen and central, and scrape excess silicon. Then place the drying rack in the drying cabinet and leave to dry overnight.

9. Superglue loose cable to the pads and fill the rears with white silicon.
10. Glue pads onto the pad supports (prime first).
11. Place spring around pads and into place.
12. Clip upper and lower shells (apply a little super glue) into place and glue caps onto the sides.

TESTING

1. ~~Attach DPK-1 female 10-pin side to the test box connector marked 'M'.~~
2. Check display is showing correct characteristics as shown below. (At correct switch positions)



Position 1. IR, LED.

Position 4. Detector

Alignment

3. If the LED signal is at the bottom then it is wired incorrectly.
4. 'Play' with wire at connections to see if any change in the display (i.e. flickering etc).
5. If there is any movement of signal, the cable must be taken apart and all connections checked and re-soldered. Then tested again until results are satisfactory.
6. Check the cable is of correct quality standard. (See VM/COP/30.11 for details).
7. Connect male 9 pin side to the Datex monitor and attach probe on finger to check SpO_2 level. (Ideal reading 95-100.)

Labelling

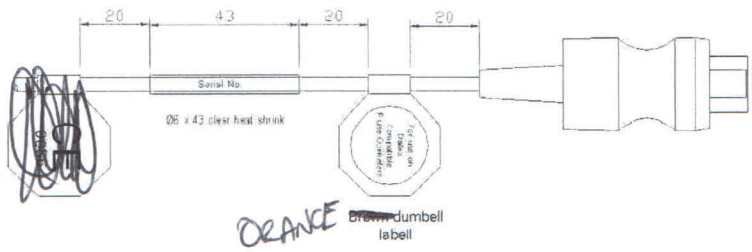
1. Labels: to be attached facing upwards as looking at the top of the probe.
   - ~~1 x CE Label~~
   - 1 x Viamed shell label on probe lower shell.
   - 1 x Serial no. Label
   - ~~1 x Brown Datex dumbbell label~~

COMPANY OPERATING PROCEDURES

0018720 Datex P872RA

VM3/COP/32.17

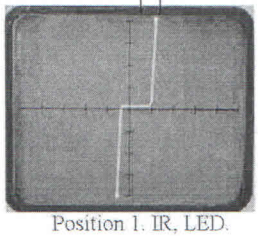
Date: 14-Dec-01 **Revision date: 17-May-04** Issue: 3



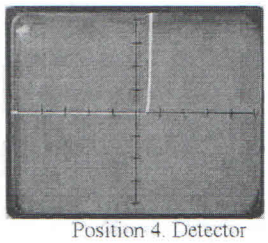
Quality Assurance (QA)

1. ~~Attach DPR-1 female 10-pin side to the test box connector marked "M".~~
2. Check display is showing correct characteristics as shown below. (At correct switch positions)

LED should read approx 1.8v



Position 1. IR, LED.



Position 4. Detector

3. If the LED signal is at the bottom then it is wired incorrectly.
4. 'Play' with wire at connections to see if any change in the display (i.e. flickering etc).
5. If there is any movement of signal, the cable must be taken apart and all connections checked and re-soldered. Then tested again until results are satisfactory.
6. Check the cable is of correct quality standard. (See VM/COP/30.11 for details).
7. Connect male 20 pin side to the ~~Datex~~ monitor and attach probe on finger to check SpO_2 level. (Ideal reading 95-100.) SAADAT
8. Fill and sign attached paperwork.
9. Test 10 % of batch on DL3000 simulator.
10. Log all results on compatibility sheet.

Packaging – REPAIR BOX

1. Visually check all labels are attached properly
2. Using a twist tie (bunny clip) wrap the cable and place in a small blue ~~Viamed plastic box~~, ensuring the cable is inserted in a neat and tidy presentable manor.
3. Place a serial number sticker (supplied with the batch) on the front face of the box.
4. Place a packed and tested sticker (also containing initials of the individual who is packing) on the right hand side top left corner of the box. Do not close box.

Final QA

1. Final inspection. Visually ensure cable sit neatly within the box and is in a presentable state.
2. Boxes are ready to stock in stores.