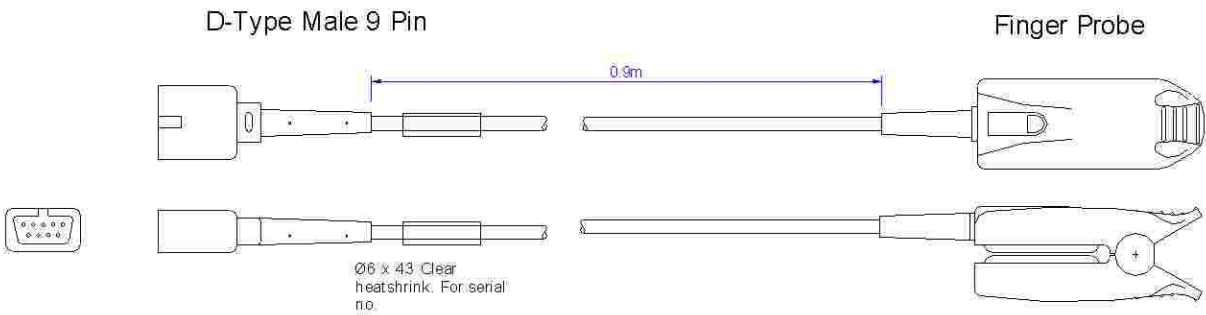


COMPANY OPERATING PROCEDURES

0018710                      Nonin                      P871RA

VM3/COP/32.16.1

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

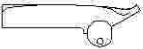










**\*NB: When there are no service cables available refer to document VM/COP/32.16**



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)


D-Type male 9-pin Side			Finger Probe Side		
Qty	Description	Part No.	Qty	Description	Part No.
1	D-Type male 9-pin kit	0009564	1	 Top Shell (x25)	0010110
			2	 Pad Support (white) (x50)	0010160
			1	 Top Pad (white)(x25)	0010130
			1	 Bottom Pad (white)(x25)	0010131
			1	 Bottom Shell (x25)	0010111
			1	 Spring (x25)	0010140
			2	 Button (White) (x50)	0010180
			1	 Detector	0030902
			1	 LED/ I.R.	0030953

COMPANY OPERATING PROCEDURES

0018710                      Nonin                      P871RA

VM3/COP/32.16.1

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

			1		Strain Relief	0010150
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ASSEMBLY OPERATIONS

- 1.     Pre Heat soldering iron temperature to 240°c.
- 2.     Collect all required parts and equipment listed above.

D-Type male 9-pin side:

- 1.     Pre manufactured cable, requiring connector to be cut off and ready for probe to be assembled.

Finger Probe side:

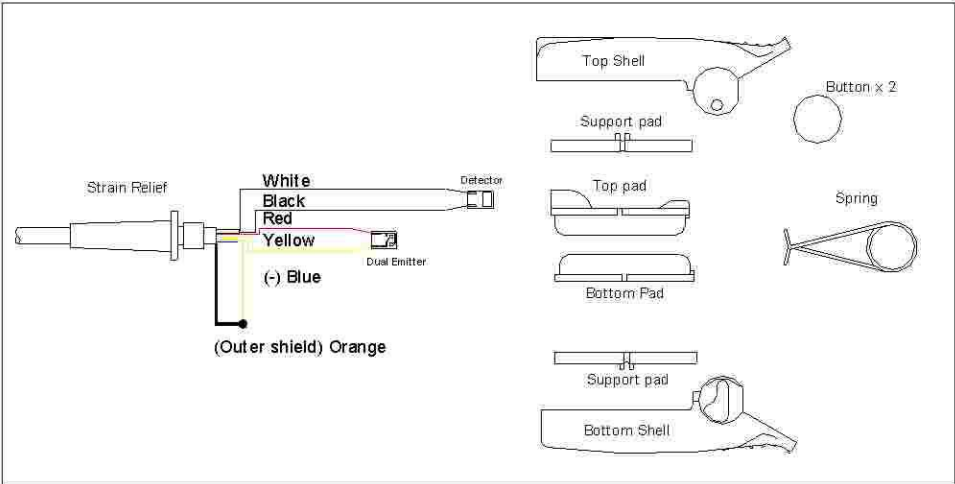


Fig 2.3

- 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 and blue wire.
- 4.     Cut red, blue, outer shield 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 and emitter as shown in fig 2.3. And the orange and outer shield together and cover naked wire in heat shrink.
- 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.

### COMPANY OPERATING PROCEDURES

0018710

Nonin

P871RA

VM3/COP/32.16.1

Date: 14-Dec-01

Revision date: 17-May-04

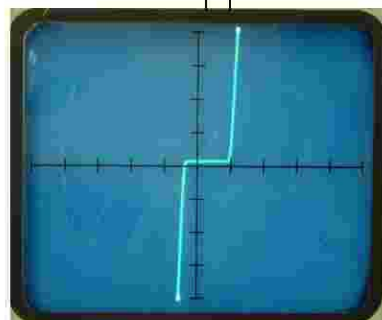
Issue: 3

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 (use a little super glue) into place and glue buttons onto the sides.

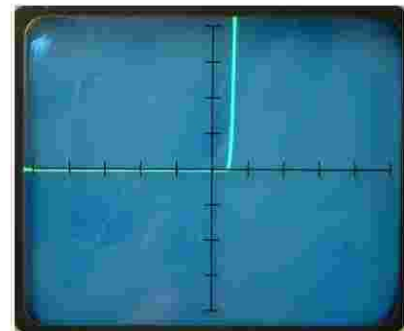
### TESTING

1. Attach D-Type male 9-pin side to the test box connector marked 'A'.
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. Attach D-Type male 9-pin side to a Nonin 8500 monitor and the probe on to the finger to check SpO<sub>2</sub> 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
  - 1x Orange 'Do Not Throw Away' Label (correct one of two is dependant of country unit is being sold to).

### COMPANY OPERATING PROCEDURES

0018710

Nonin

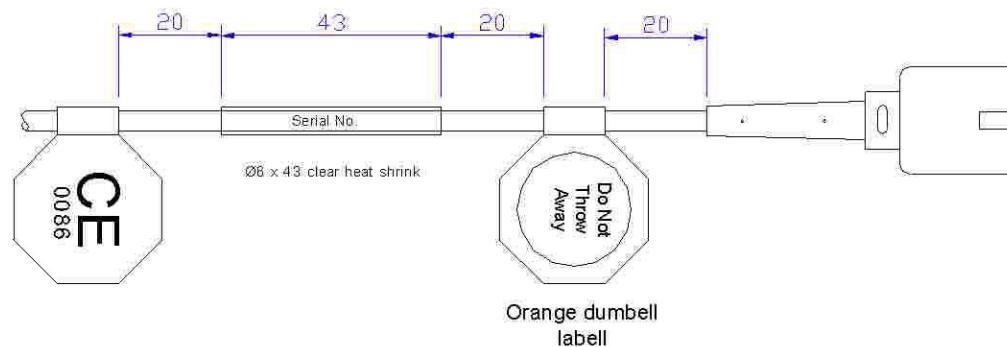
P871RA

VM3/COP/32.16.1

Date: 14-Dec-01

Revision date: 17-May-04

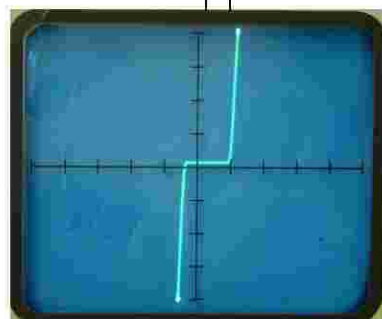
Issue: 3



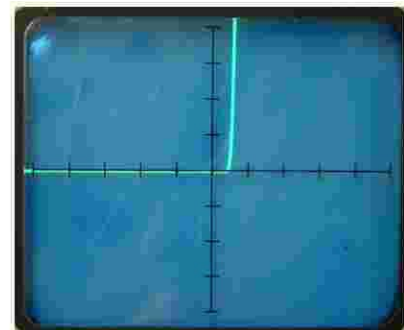
### Quality Assurance (QA)

1. Attach D-Type male 9-pin side to the test box connector marked 'A'.
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. Attach D-Type male 9-pin side to a Nonin 8500 monitor and the probe on to the finger to check SpO<sub>2</sub> level. (Ideal reading 95-100.)
8. Fill and sign attached paperwork.
9. Test 10 % of batch on DL3000 simulator.
10. Log all results on compatibility sheet.

### Packaging



COMPANY OPERATING PROCEDURES

0018710                      Nonin                      P871RA

VM3/COP/32.16.1

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

- 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.