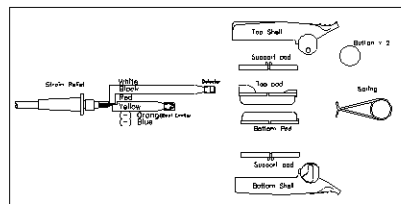
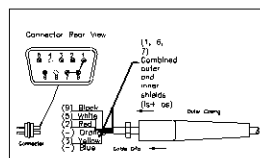
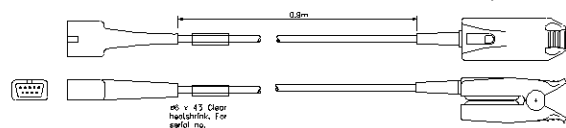


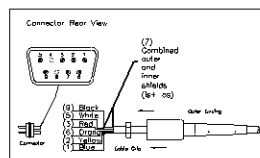
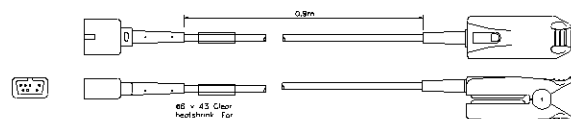
D-Type Male 9 Pin

Finger Probe

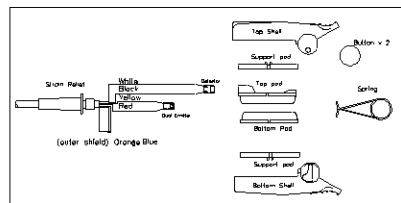


956E8 extension cable

Finger Probe

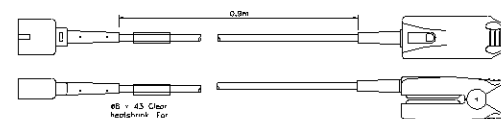


Pre-Manufactured cable and



956E8 extension cable

Finger Probe



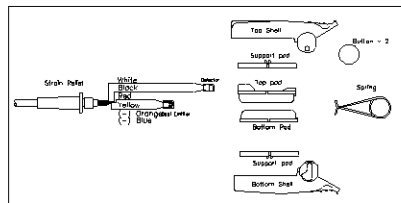
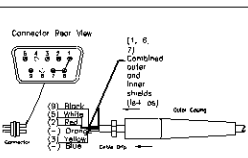
D-type male 9 pin



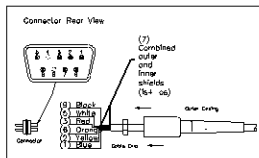
D1 - 7.5 v 25W 1% 1/2W RESISTOR

* RING SHIELD AND OUTER SHIELD TO BE TWISTED TOGETHER.

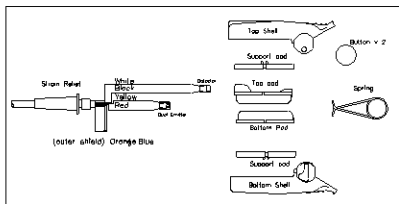
Finger Probe



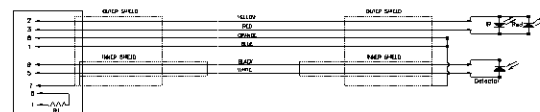
Finger Probe



Pre-Manufactured cable end



Finger Probe

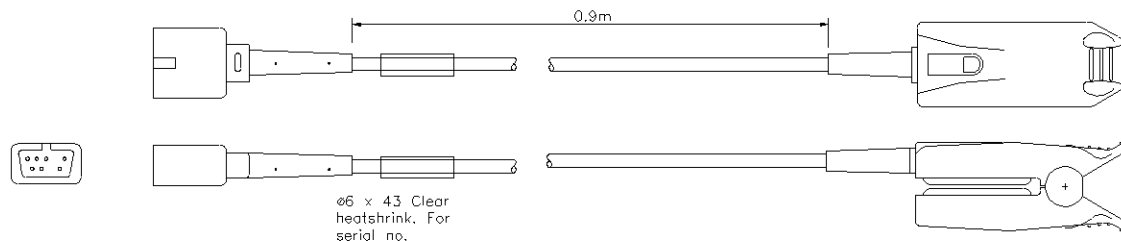


PM = 7.5 K OHM 1%, 1/8W RESISTOR

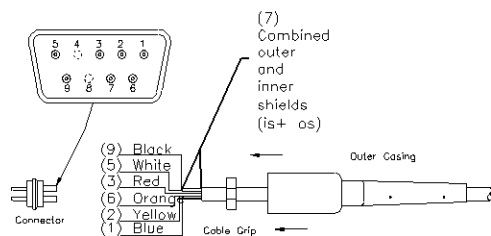
* INNER SHIELD AND OUTER SHIELD TO BE TIED TOGETHER

956E8 extension cable

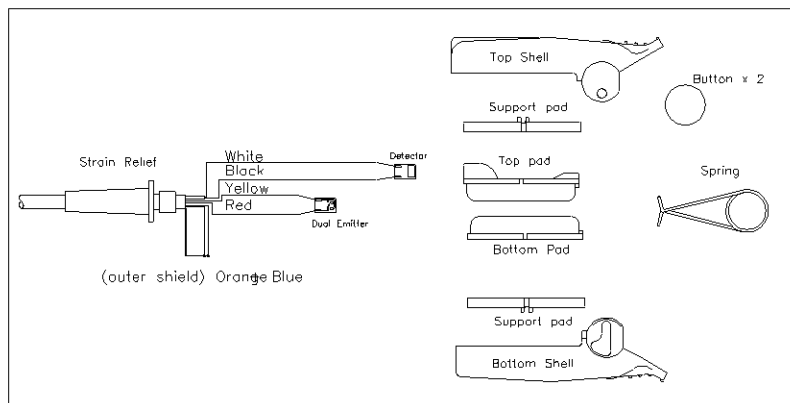
Finger Probe



Connector Rear View



Pre-Manufactured cable end



Title P861RA
BCI (UDT)



Dim in mm

Tol ± 0.2

Drawn J.Nirwan

Scale Not To Scale

Date 29/01/02

Dwg No.

SPF-861.1

VIAMED

Ltd.

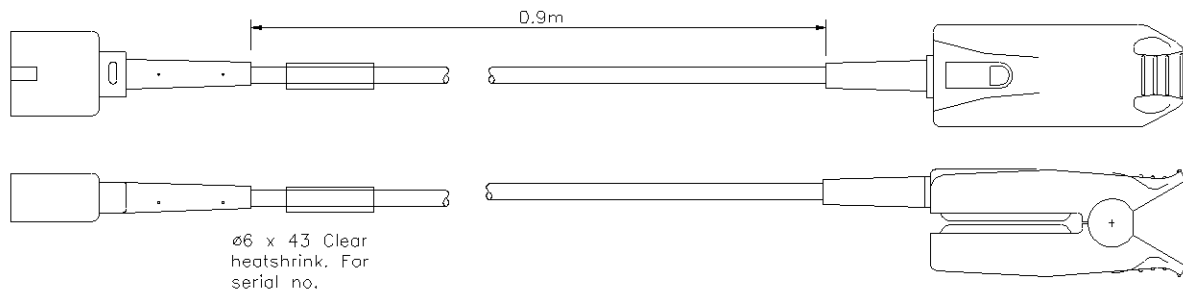
15 Station Rd
Cross Hills, Keighley
West Yorkshire
BD20 7DT

Material :

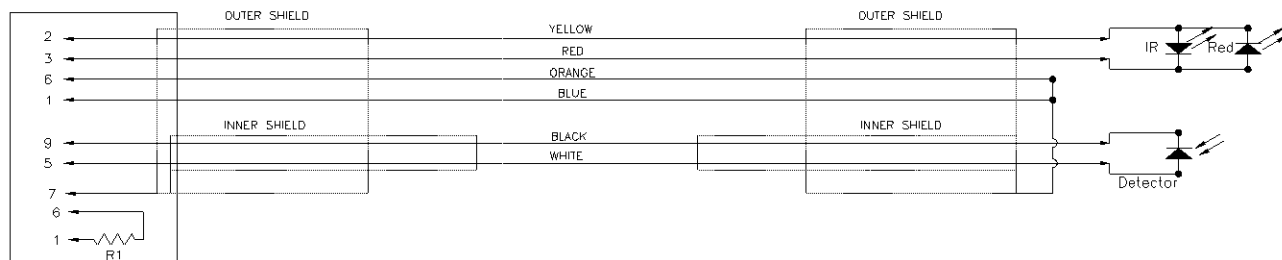
REV Date N° Drawn Approv Part No. 0018610

956E8 extension cable

Finger Probe




D-type male 9 pin



R1 - 7.5 K OHM 1%, 1/8W RESISTOR

* INNER SHIELD AND OUTER SHIELD TO BE TWISTED TOGETHER.

REV	Date	N°	Drawn	Approv	Material :
					Part No. 0018610

Title P861RA BCI (UDT)			
Scale	Not To Scale	Dim in	mm
Date	17/02/03	Tol	± 0.2
Dwg No.	SPF-861.2	Drawn	J.Nirwan

VIAMED Ltd.
15 Station Rd
Cross Hills, Keighley
West Yorkshire
BD20 7DT

SpO2 Assembly Instructions				
1/29/995/3/01		P860RA	Issue 1	ver 1
03 May 2001		Simed/Baxter	Page 1	Of 3

Equipment type: Finger probe Part Number:		
Batch Size		
Nos	Viamed Part number	Description
1	0010100	Viamed SpO2 finger probe servive kit
1	0032030	Resistor - 1K3, metal film
1	0010601	9 pin cable plug kit, grey (includes connector/cable clamp/strain relief)
3.65m	0030513	SpO2 cable - version D (production)
30mm	0032331	Heatshrink tubing - clear, 6.0mm, 7m reel
15mm	0032321	Heatshrink tubing - black, 6.0mm, 7m reel

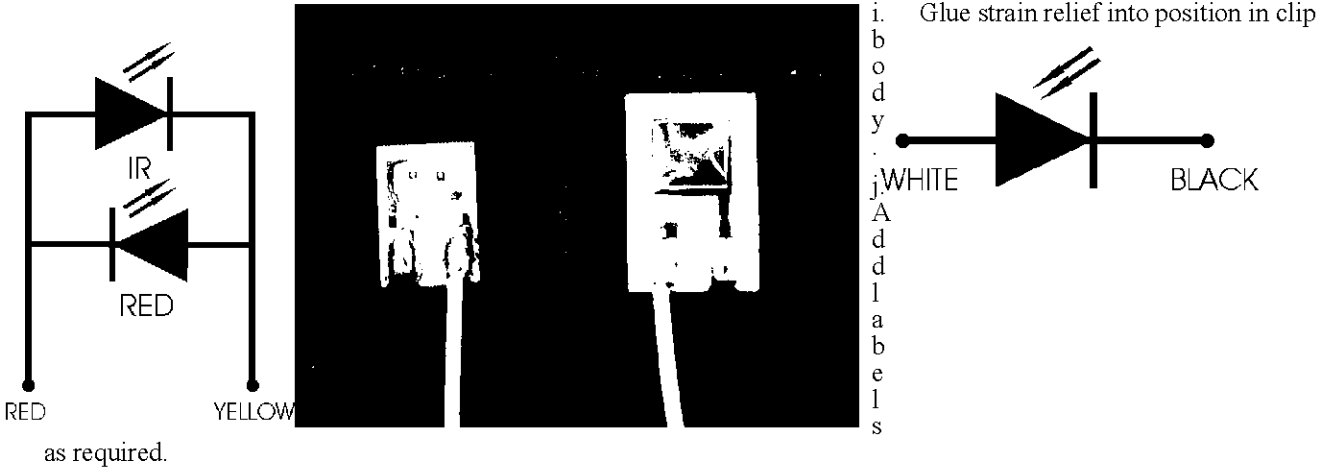
Assembly Clip

1. Prepare Clip end of cable as follows
 - a. Attach strain relief "0010150," to relevant replacement cable, and glue in position.
 - b. Strip back outer cable cover of exposed end 1mm from end of strain relief.
 - c. Remove outer shield and paper, and cut off Kevlar fibres and any unused wires.
 - d. Strip and tin relevant coloured wires (from red, yellow, blue, orange) to 13mm from end of cable cover. Strip and tin last 1mm of each wire.
 - e. Cut inner white cable to 78mm from end of outer cable cover, strip last 8mm of inner cable cover, strip and tin last 1mm of black and white wires, cut off inner shield and discard
 - f. Strip and tin ends of black and white wires.
2. Solder wires to components as per relevant diagram
3. Fit components into pads as follows
 - a. Position components in drying rack.
 - b. Place a small amount of flowable non-corrosive silicone sealant onto the face of the components.
 - c. Place pads onto components, ensuring that both emitter and detector are central in pad windows. Also note that the silicone on the outside of the pad must run to the contour of the pad to make a smooth window - there should be no doming or sinking of the window. Any excess can be removed with a small screwdriver, also any deficit can be topped up with small amounts of silicone from a screwdriver tip - however these steps should be taken within 2 minutes of the pad being placed on the component, before the silicone has had time to become tacky, so that it is still flowing enough to ensure that the window will return to a smooth flat surface
 - d. Leave pads to set for 24 hours.

Drawn By	MFG&DB
Date	26/04/01
Checked By	
Date	
Revised By	

SpO2 Assembly Instructions				
1/29/995/3/01		P860RA		Issue 1
03 May 2001		Simed/Baxter		ver 1
Page 2			of 3	

4. Assemble the clip as follows
- a. Glue white inner cable into channel in detector pad
 - b. Fill around component with silicone
 - c. Glue pad support onto back of detector pad.
 - d. Glue pad support onto back of emitter pad.
 - e. Glue white inner cable into channel in emitter pad.
 - f. Fill around component with silicone
 - g. Refit replacement springs “0010140,” around pads.
 - h. Push pads into position within clip, making sure that the pad support rim is securely underneath the pad retaining lugs - there are four retaining lugs for each pad. If any lugs are not holding the pad support securely, then add a drop of superglue to the relevant lug.



Drawn By	MFG&DB
Date	26/04/01
Checked By	
Date	
Revised By	

SpO2 Assembly Instructions				
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Assembly Connector

5. a/ Check that all the relevant parts are in the connector kit - the kit should contain:
1 x backnut (grey), 1 x collet (grey), 1 x 9 pin hole insert (grey), 1 x barrel (grey), 7 pins,
1 x cable clamp (0030500), 1 x strain relief (from multipack 0010618).
- b/ Add a 30mm length of heatshrink (0032331) to the cable.
- c/ Add the backnut to the cable.
- d/ Add the collet to the cable.
- e/ Push the strain relief (from multipack 0010618) on to the cable, using isopropyl alcohol as a lubricant.
- f/ Strip the outer cable cover back by 30mm, using the cable stripper (0060031).
- g/ Unwind, but do not remove, the outer shield. Remove the paper layer, and the Kevlar strands, using flush cutter (0060020), cutting them flush to the end of the cable cover. Also remove the unused wires, using the flush cutter, flush to the end of the cable cover.
- h/ Strip the inner cable cover back, using the cable stripper, as close to the end of the outer cable cover as possible. Unwind, but do not remove, the inner shield.
- i/ Straighten out the outer and inner shields, then twist together half of the strands of the inner shield with half of the strands of the outer shield. and tin this between 12-18mm from the outer cable cover. Twist together the remaining strands of outer and inner shield, and tin this between 12-18mm from the cable cover.
- j/ Cut both of these twisted shields at 15mm from the outer cable cover using the flush cutter. Trim off any loose strands of shield flush to the cable cover. Solder these two separate twists together, as close to the cable cover as possible without burning any of the wires or the cable cover, to form a small forked shield .
- k/ Cut the emitter and detector wires to 15mm from the outer cable cover. Strip and tin the last 2mm of each wire. Add the cable clamp (0030500) to the cable.
- l/ Solder pins to both detector wires, the yellow emitter wire, and both of the forks of the twisted shields.
- m/ Cut one of the legs of the 1K3 resistor (0032030) to 4mm from the resistor body. Cut the other leg to 15mm from the resistor body. Bend the longer leg of the resistor to form a hairpin, ensuring that the ends of both legs are now level.
- n/ Solder pins to both legs of the 1K3 resistor.
- o/ Solder the red wire to the longer leg of the 1K3 resistor, between the body of the resistor and the pin, 3mm above the point where the leg of the resistor enters the pin.
- p/ Referring to the wiring diagram, fit the pins into the insert as follows:
 - i/ Fit the short leg of the 1K3 resistor into pin hole 4, and the long leg of the resistor, with the red wire attached, into pin hole 3, ensuring that they click into place.
 - ii/ Fit the two forks of the twisted shields into pin holes 1 and 9 of the insert, ensuring that they click into place. Note that either fork of the twisted shields can go into either of the designated pin holes.
 - iii/ Fit the other pins into the relevant pin holes as per the wiring diagram, ensuring they click into place.
- q/ Isolate the resistor from the shields as follows:

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Date	26/04/01
Checked By	
Date	
Revised By	



SpO2 Assembly Instructions

1/29/995/3/01

P860RA

Issue 1

ver 1

03 May 2001

Simed/Baxter

Page 4

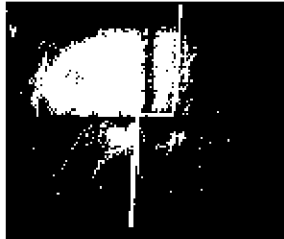
Of 3

i/

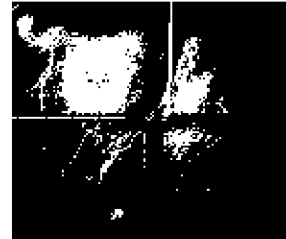
Push the 15mm length of black heatshrink (0032321) over the hairpinned resistor, pushing it as close to the insert as possible.

Test using component tester and test box:

Position 1: Red & IR emitters



Position 3: Photo-diode



ii/ Shrink the heatshrink onto the resistor using a heatgun.

iii/ While the heatshrink is still warm enough to be manipulated, pinch the heatshrink together above the resistor, using the snipe nose pliers (0060021), to seal the top part of the heatshrink.

r/ Clamp the cable clamp onto the cable, using the cable crimp tool (0010501), 2mm from the end of the outer cable cover. Slide the strain relief up so that it is flush to the cable clamp.

s/ Slide the collet up so that it is flush to the insert, then slide this into the barrel. Fasten the backnut to the barrel, and screw on until it is finger tight.

Connector rear view

1. Main + inner shield

2. Yellow

3. R1 + Red

4. R1

5. No pin

6. Black

7. White

8. No pin

9. Main + inner shield

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Date	26/04/01
Checked By	
Date	
Revised By	

P860 RA (SIMED) CONNECTOR

STEP-1 CUT 25' OF CABLE

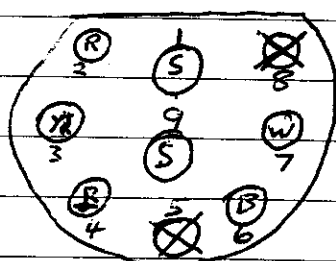
STEP-2 PUT COLAR, JAWS & STRAIN RELIEF ON CABLE

STEP-3 TRIM BOTH OUTER & INNER CABLE BACK 1 1/2
REMOVE ORANGE & BLUE WIRES

STEP-4 DEVIDE EACH SHIELD IN 2 AND TWIST OPOSIT
SHIELDS TOGETHER.

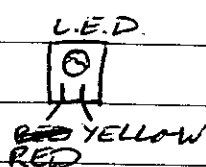
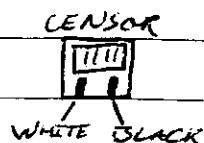
STEP-5 TRIM ALL WIRES BACK TO 1 CM THEN STRIP &
TIN ENDS. ~~REF~~

STEP-6 SOLDER WIRES INTO PINS AS FOLLOWS -

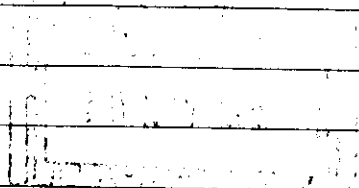


1 = SHIELD
YELLOW 2 = ~~REF~~ 3 RES
RED 3 = ~~YELLOW~~ + 1K 3 RES (LONG LEG)
4 = 1K 33 RES (SHORT LEG)
5 = N/C
6 = BLACK
7 = WHITE
8 = N/C
9 = SHIELD.

LED & SENSOR



TEST IN SOCKET 'K'



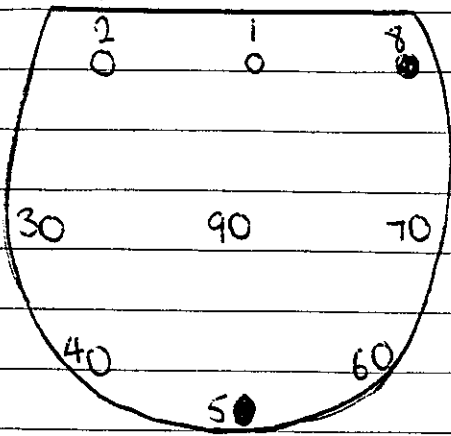
P8602A

Smed

(12 foot)

12/9/00

INSERTION SIDE



1/ Innershield

6/ Black

2/ RED

7/ White

3/ Yellow + 1k33r

8/ N/C

4/ 1k33r

9/ outershield

5/ N/C

CONNECTOR END

CLIP END

LED

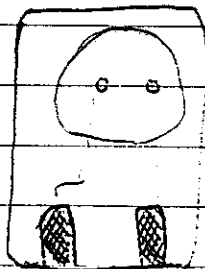
SENSOR

1/ Yellow

2/ RED

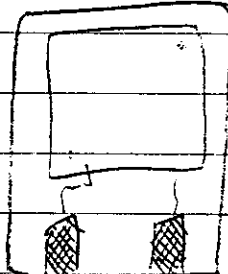
3/ White

4/ Black



1

2



3

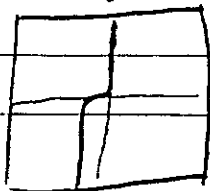
4

Connector End.

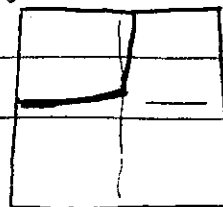
Strip cable to about 1 1/2 inch. Take orange and blue off. Strip inner cable, then split both shields in half and fasten so/s. heatshrink resistor ~~the resistor~~ leaving enough space on leg to solder yellow to. Strip & tin rest of wires. Solder pins & insert as diagram above.

CLIP END.

Strain relief + ~~the~~ clear heatshrink. Put strain relief 8cm down cable. Strip cable and take outershield off. Cut yellow & red to 1cm. Tin ends & fasten to LED. Strip inner cable to 1cm. take inner shield off. In black & white and solder Sensor.



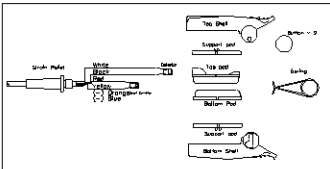
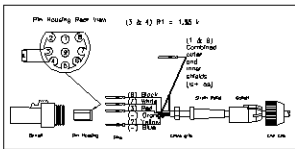
4/

TEST
Position



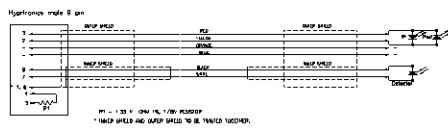


ed v 43 C
hudební,
soud na



44 Y 43 C
 highlight,
 para. no.

Technical drawings of a bolt and nut. The top drawing is a side view of a bolt with a hexagonal head and a threaded shank. The bottom drawing is a top-down view of a hexagonal nut with a central threaded hole.

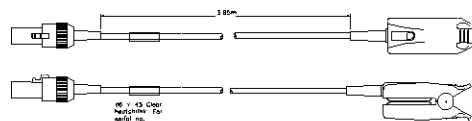
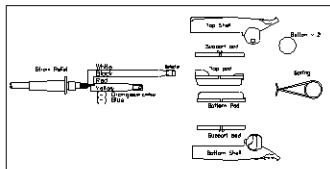
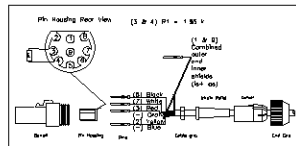


Hypertronics Mole 9 Pin

Finger Probe



Enlarged front view

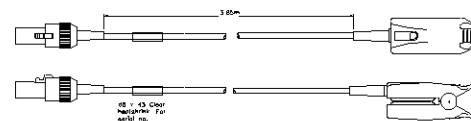
45 ± 0.3 Chip
Height (mm) For
serial no.

Hypertronics Mole 9 Pin

Finger Probe

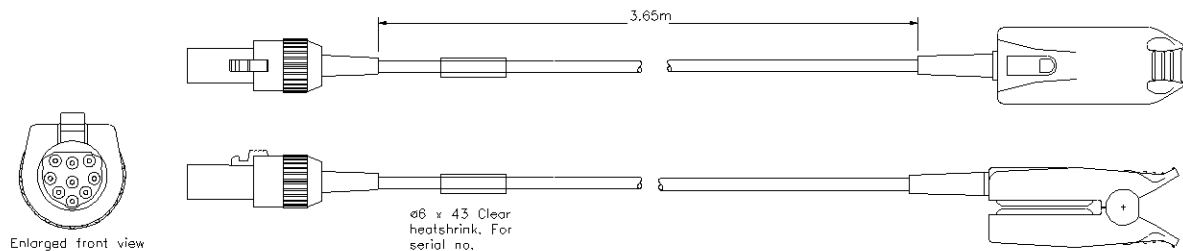


Enlarged front view

45 ± 0.3 Chip
Height (mm) For
serial no.Pin 1 - 1.85 ± 0.05 mm PLATING
* PINS 1-9 AND 10-11 MUST BE IN THE SAME POSITION

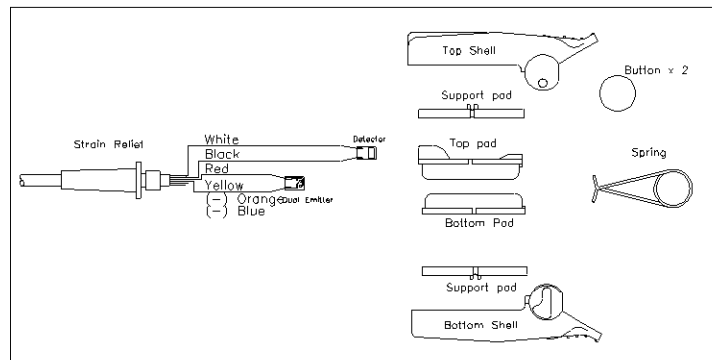
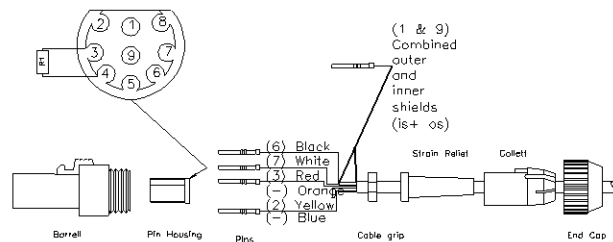
Hypertronics Male 9 Pin

Finger Probe



Pin Housing Rear View

(3 & 4) R1 = 1.35 k



Title P860RA
Simer
Baxter



Dim in mm

Tol ± 0.2

Drawn J.Nirwan

Scale Not To Scale

Date 30/01/02

Dwg No.

SPF-860

VIAMED

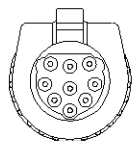
Ltd.

15 Station Rd
Cross Hills, Keighley
West Yorkshire
BD20 7DT

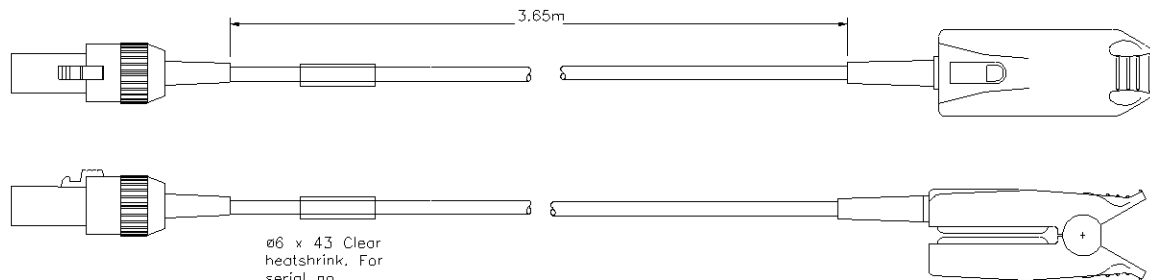
					Material :
REV	Date	N°	Drawn	Approv	Part No. 0018600

Hypertronics Male 9 Pin

Finger Probe

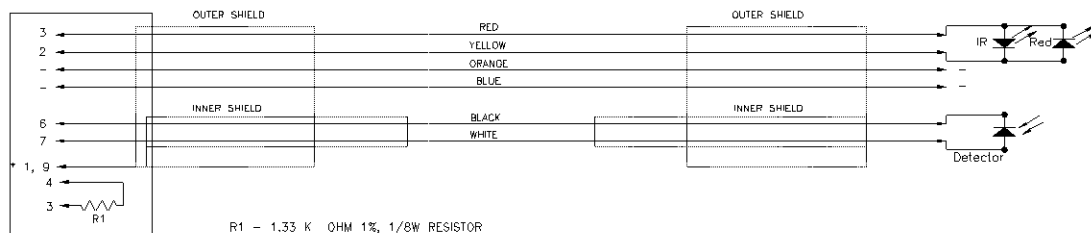


Enlarged front view



Ø6 x 43 Clear
heatshrink. For
serial no.

Hypertronics male 9 pin



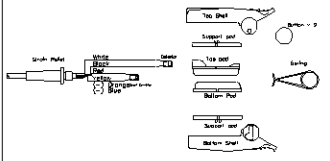
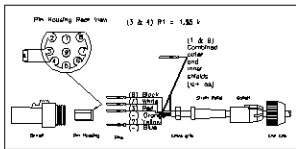
R1 - 1.33 K OHM 1%, 1/8W RESISTOR

* INNER SHIELD AND OUTER SHIELD TO BE TWISTED TOGETHER.

Title		P860RA				VIAMED Ltd. 15 Station Rd Cross Hills, Keighley West Yorkshire BD20 7DT	
		Simed					
		Baxter					
Scale		Not To Scale		Dim in			
				Tol		± 0.2	
				Drawn		J.Nirwan	
Date	17/02/03	Dwg No.	SPF-860.1				



ed v 43
highlight
savel no



88 v. 43
highlight
panel no

Technical drawings of the probe and its connection to the control unit. The top drawing shows the probe with a dimension line indicating a length of 1.95m. The bottom drawing shows the probe connected to the control unit, with a dimension line indicating a length of 1.95m.



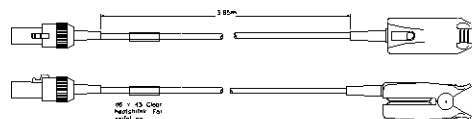
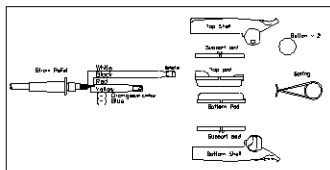
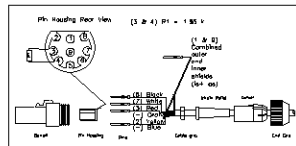
* UNDER ARMED AND: (AFTER SAILED TO BE TUNED TOGETHER)

Hypertronics Mole 9 Pin

Finger Probe



Enlarged front view

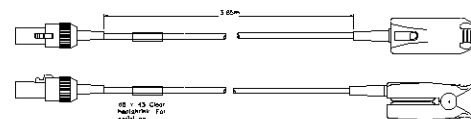
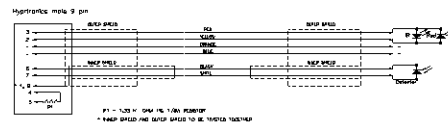
45 ± 0.3 Chip
Height (mm) For
serial no.

Hypertronics Mole 9 Pin

Finger Probe

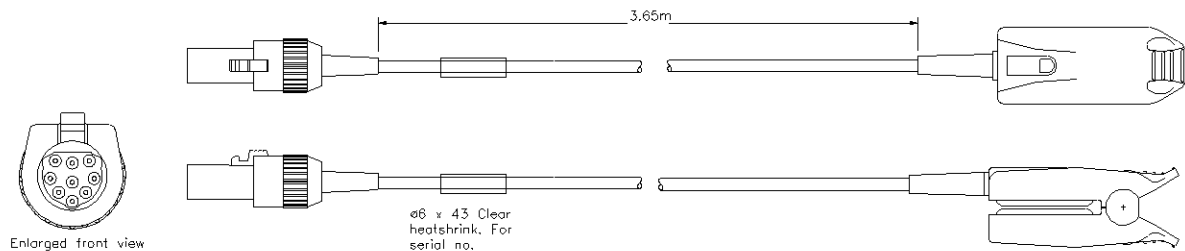


Enlarged front view

45 ± 0.3 Chip
Height (mm) For
serial no.Pin 1 - 1.85 ± 0.05 mm PLATING
* PINS 1-9 AND 10-11 MUST BE IN THE SAME POSITION

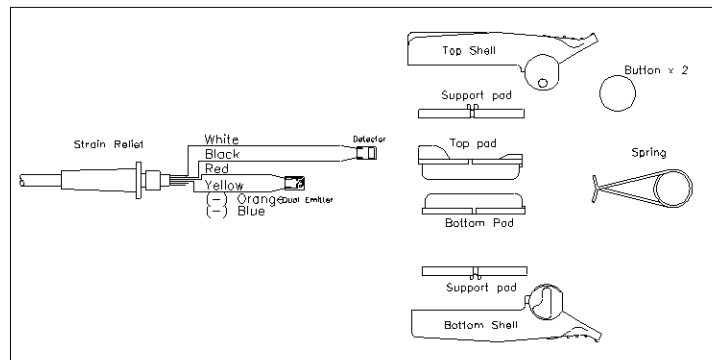
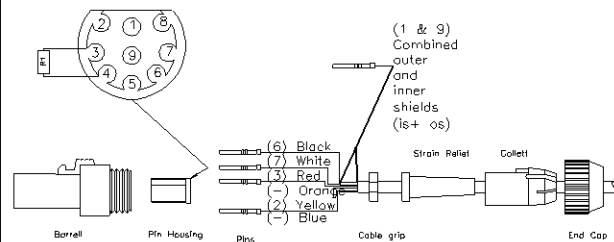
Hypertronics Male 9 Pin

Finger Probe



Pin Housing Rear View

(3 & 4) R1 = 1.35 k



Title P860RA
Simer
Baxter



Dim in mm

Tol ± 0.2

Drawn J.Nirwan

Scale Not To Scale

Date 30/01/02

Dwg No.

SPF-860

VIAMED

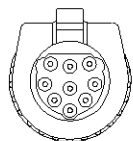
Ltd.

15 Station Rd
Cross Hills, Keighley
West Yorkshire
BD20 7DT

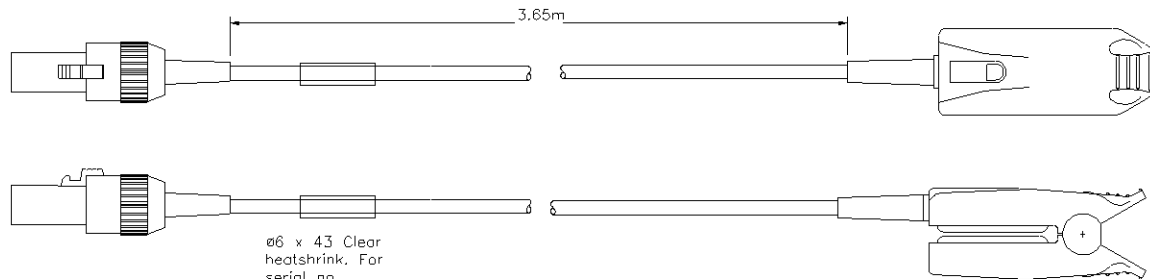
					Material :
REV	Date	N°	Drawn	Approv	Part No. 0018600

Hypertronics Male 9 Pin

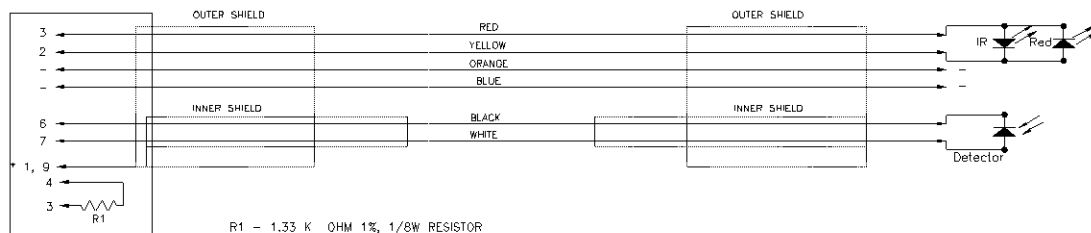
Finger Probe



Enlarged front view



Hypertronics male 9 pin



R1 - 1.33 K OHM 1%, 1/8W RESISTOR

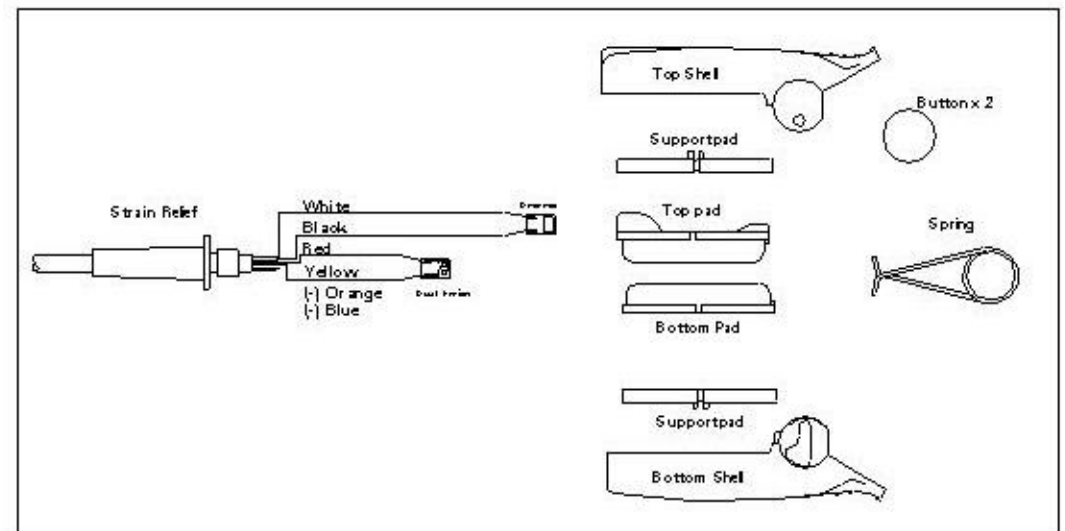
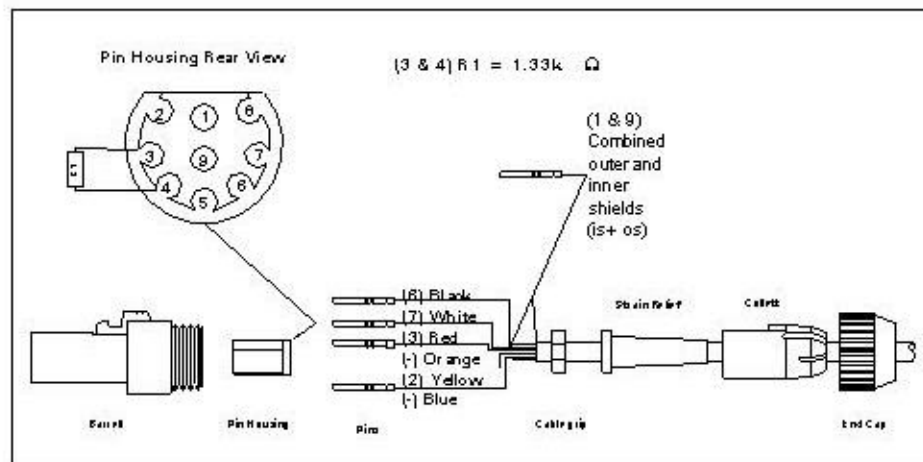
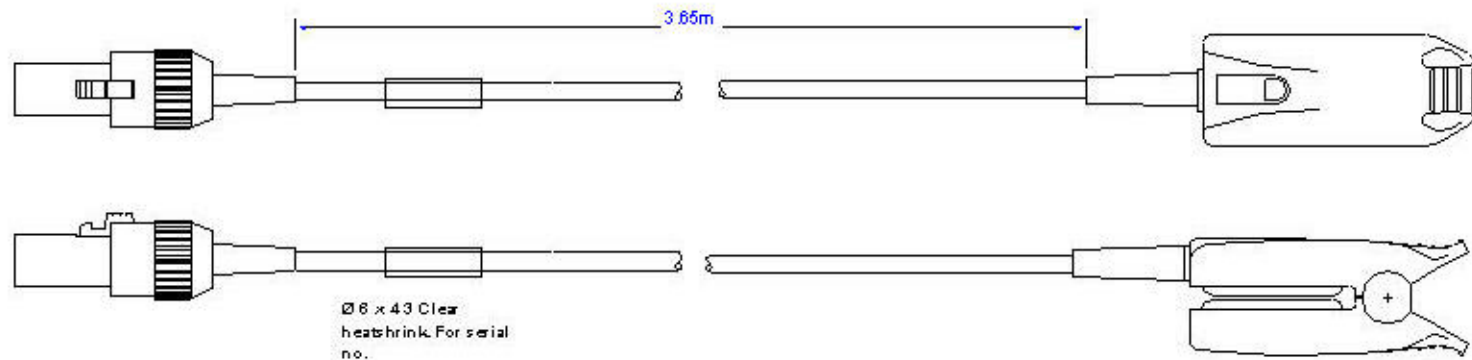
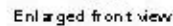
* INNER SHIELD AND OUTER SHIELD TO BE TWISTED TOGETHER.

Title		P860RA		Dim in		mm	
		Simed		Tol		± 0.2	
		Baxter		Drawn		J.Nirwan	
Scale		Not To Scale		Date		17/02/03	
REV		Date		Dwg No.		SPF-860.1	

VIAMED Ltd.
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Cross Hills, Keighley
West Yorkshire
BD20 7DT

Part No. 0018600

Finger Probe



Title: P860RA Simed Baxter			
		Dim in	mm
		Tol	± 0.2
Scale	Not To Scale	Drawn	J.Nirwan
Date	30/01/02	Dwg No.	SPF-860



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