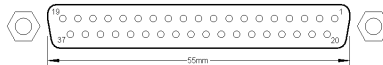
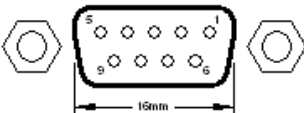
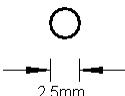
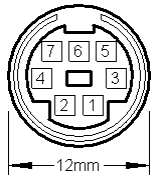
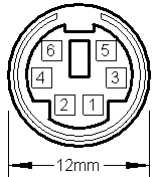
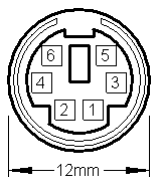
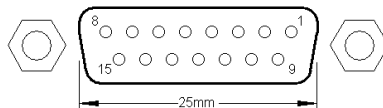


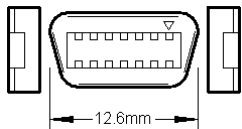
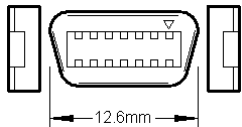
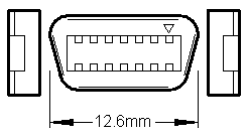
PULSECO CABLE ASSEMBLIES FOR CONNECTION TO BLOOD PRESSURE MONITORS

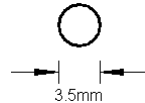
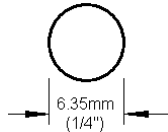
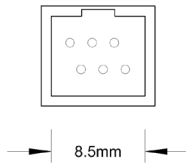

NOTE: The analogue invasive blood pressure signal from the patient monitor must be the industry standard 1Volt/100mmHg and 0V=0mmHg to be compatible with LiDCO Monitors. Patient monitors that scale differently or have an offset are not compatible with LiDCO Monitors. In this situation the HM 38-01 LiDCO Blood Pressure Module or the HM 38-02 LiDCO CNAP Module might provide a solution.

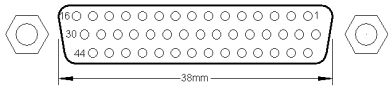
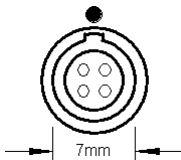
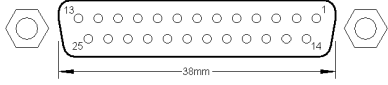
Incompatible monitors are shown in italics

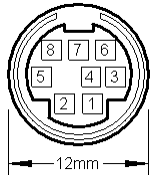
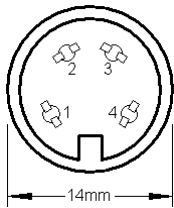
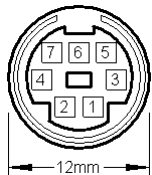
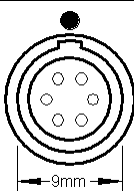
B.P. Monitor Manufacturer	Model No.	Connector Type on Cable Assembly	Drawing of the Socket on the Patient Monitor	LiDCO Item Number	LiDCO Description	Comments	Stock Item
Charter-Kontron	Kolormon / Supermon	37-way D Plug		Li10281	Cable Assembly, PulseCO to Kontron Kolormon / Supermon	This monitor produces a non-standard analog blood pressure waveform. The signal changes depending on the display configuration and scaling. This is not a good monitor for working with PulseCO. However bespoke cable assemblies can be made to order.	N
Charter-Kontron	Vitalogik VL4500, VL5500 & VL6500	9-way D Plug		Li10557	Cable Assembly, PulseCO to Kontron Vitalogik	1. Charter-Kontron Vitalogik VL4000, VL5000 and VL6000 are non-invasive and hence unsuitable for PulseCO. The VL4500, VL5500 and VL6500 are invasive and hence suitable for PulseCO. 2. Analogue blood pressure signal is always IBP1, this may not be ART.	N
Charter-Kontron / Mennen	Envoy	20-way Circular Plug	No drawing	Li10372	Cable Assembly, PulseCO to 20-way Kontron Envoy	Made to order but Li10381 is probably more suitable. BP module must be in left hand position in rack.	N
Charter-Kontron / Mennen	Envoy	2.5mm Special Mini Jack		Li10381	Cable Assembly, PulseCO to 2.5mm Kontron Envoy	BP module must be in left hand position in rack.	Y
<i>Criticare Systems</i>	<i>506 & 8100 Vital Signs Monitors</i>					<i>These monitors do not have a standard level analogue IBP output and consequently are not compatible with LiDCO monitors. The analogue output on the COM 2 port is designed for driving a chart recorder.</i>	

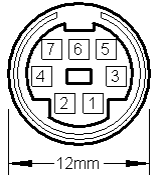
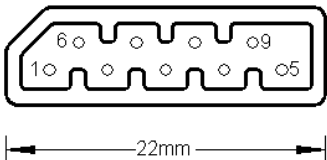
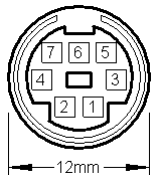
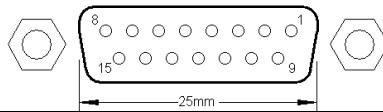
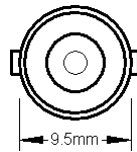
B.P. Monitor Manufacturer	Model No.	Connector Type on Cable Assembly	Drawing of the Socket on the Patient Monitor	LiDCO Item Number	LiDCO Description	Comments	Stock Item
Datascope	Passport 2, early models fitted with 7-way MiniDIN	7-way MiniDIN Plug, latching, no polarising lug		Li10260	Cable Assembly, PulseCO to Datascope Passport 2	Despite what Datascope have written in the user manual analogue blood pressure output signal was not available on the initial models. At some stage the 7-way MiniDIN was changed to a 6-way and at that time or sometime later analogue output was added.	N
Datascope	Passport 2, later models fitted with 6-way MiniDIN	6-way MiniDIN Plug, latching, no polarising lug		Li10411	Cable Assembly, PulseCO to Datascope Spectrum	Datascope Passport 2 monitors fitted with a 6-way MiniDIN, with a serial number starting "TS" and with software level AC.07 or above should be compatible. To determine software level: 1. Power the unit off 2. Press and hold the freeze key while turning the unit on 3. Keep the button pressed until the Diagnostic Menu appears 4. Scroll down and select the system information 5. Read the Main Module SW version.	Y
Datascope	Passport XG Expert					These monitors do not have analogue output.	N
Datascope	Spectrum	6-way MiniDIN Plug, latching, no polarising lug		Li10411	Cable Assembly, PulseCO to Datascope Spectrum	Despite what Datascope have written in the early manuals analogue blood pressure output signal is not available on any Spectrum before March'07. Spectrums with serial numbers ending in C7 or greater should be compatible.	Y
Diascope?	Diascope 2?	15-way D plug		Li10472	Cable Assembly, PulseCO to Diascope 2	Made to order	N

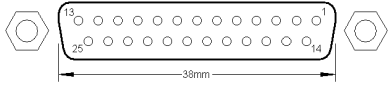
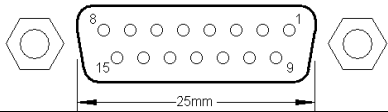
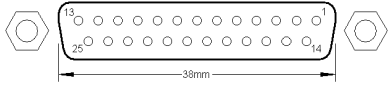
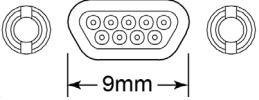
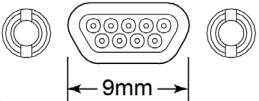
B.P. Monitor Manufacturer	Model No.	Connector Type on Cable Assembly	Drawing of the Socket on the Patient Monitor	LiDCO Item Number	LiDCO Description	Comments	Stock Item
Dräger (formerly Siemens)	Infinity Delta, Infinity Delta XL Infinity Kappa XLT	14-way MDR Plug, X10		Li10168	Cable Assembly, PulseCO to Siemens/Draeger Infinity Monitor	Analogue output must be configured to ART (not P1): click Pressure parameter box on display (only displays if a pressure transducer is connected), open Pressure control menu, select ART.	Y
Dräger	Infinity Acute Care System – Infinity M540 (Analog/Sync Mcable MS20662 required)	14-way MDR Plug, X10		Li10168	Cable Assembly, PulseCO to Siemens/Draeger Infinity Monitor	The Li10168 must connect to the M540 through an Analog/Sync Mcable MS20662. This MS20662 can either plug directly into the Temp/Aux port on the M540, or through a MainStream & Analog/Sync cable MS22259 into the CO ₂ port on the M540. Analogue output must be configured to ART (not P1): click Pressure parameter box on display (only displays if a pressure transducer is connected)(it is easier to do this on the large C500 or C700 display rather than on the small M540), open Pressure control menu, select ART.	Y
<i>Dräger</i>	<i>Infinity Kappa Infinity Gamma Infinity Gamma XL Infinity Gamma XXL Infinity Vista</i>					<i>These monitors do not have an analogue IBP output and consequently are not compatible with LiDCO monitors</i>	
Dräger	Zeus	14-way MDR Plug, X10		Li10168	Cable Assembly, PulseCO to Siemens/Draeger Infinity Monitor	Removing one of the side panels from this anaesthesia machine will reveal a Dräger Delta XL patient monitor, which has the X10 analogue output socket. Analogue output must be configured to ART (not P1): click Pressure parameter box on display (only displays if a pressure transducer is connected), open Pressure control menu, select ART.	Y

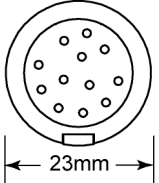
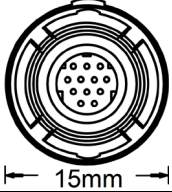
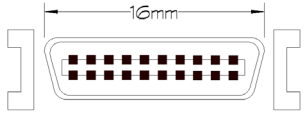
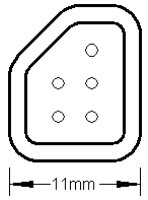
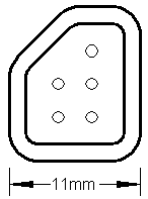
B.P. Monitor Manufacturer	Model No.	Connector Type on Cable Assembly	Drawing of the Socket on the Patient Monitor	LiDCO Item Number	LiDCO Description	Comments	Stock Item
Dräger	Cato Cicero Julian					These aging anaesthesia machines do not have an analogue IBP output and consequently are not compatible with LiDCO monitors	
Emtel	FX2000P					This Polish portable multi-parameter bedside monitor does not have an analogue IBP output and consequently is not compatible with LiDCO monitors	
Fukuda Denshi	DS7000 with HU71 module	3.5mm Stereo Jack Plug		Li10162	Cable Assembly, PulseCO to Philips #C01 BP Module		Y
Fukuda Denshi	DS7100 with IBP option DS7200 DS7300	¼" Jack Plug		Li10162	Cable Assembly, PulseCO to Philips #C01 BP Module	BP1 must be set to ART (default) not CVP. There are 2 transducer sockets on the front of the monitor and the left hand one must be used.	Y
Fukuda Denshi	DS8500	6-way special Plug		Li10735	Cable Assembly, PulseCO to Fukuda Denshi DS8500		Y
Fukuda Denshi	HS500 Module	10-way circular Plug		Li10282	Cable Assembly, PulseCO to Fukuda Denshi HS500 Module		Y

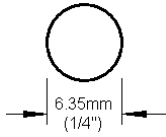
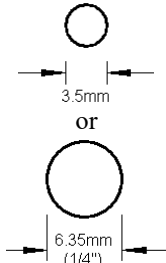
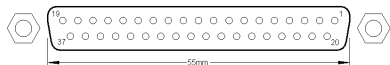
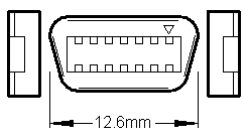
B.P. Monitor Manufacturer	Model No.	Connector Type on Cable Assembly	Drawing of the Socket on the Patient Monitor	LiDCO Item Number	LiDCO Description	Comments	Stock Item
<p>NOTE: Datex / GE patient monitors can be configured in several different ways. From the model number alone one can not foretell with certainty which type of connector will be present for the analogue IBP signal. The only certain method is to look for the Defib/Sync connector and match it to a drawing below.</p>							
GE Datex	AS/3 & 5 Anesthesia Monitors CS/3 & 5 Critical Care Monitors, Cardiocap/5	44-way HD D Plug		Li10158	Cable Assembly, PulseCO to GE Datex S/3 & S/5 Digital & Analog I/O Connector	Requires user to configure monitor to produce blood pressure waveform on analog output channel 0, using Monitor Setup / Password (16,4,34) / Install / Setup / Analog Output Menu. Invasive pressure real-time values, low resolution (-20mmHg... +320mmHg is scaled between -0.2 and +3.2V) to be selected. Pressure P1 must be zeroed before connecting the cable.	Y
GE Datex	AS/3 & 5 Anesthesia Monitors CS/3 & 5 Critical Care Monitors, Cardiocap/5	4-way LEMO Plug		Li10287	Cable Assembly, PulseCO to GE Datex S/5 with B-UPI4 fitted	Some B-UPI4NET boards are fitted with a 4-way LEMO socket and others are fitted with a 7-way MiniDIN socket marked X7 for the Synchronisation Connector. Model numbers do not identify which type of socket is fitted, the only way is to look. If it is a 7-way MiniDIN an Li10334 is required. Pressure P1 must be zeroed before connecting the cable.	Y
GE Datex	PROCARE B20	None				The B20 does not have an analogue BP output, neither does it accept any module which could give an analogue BP output.	
GE Datex	PROCARE B40	None				The B40 does not have an analogue BP output, neither does it accept any module which could give an analogue BP output.	
GE Datex	Cardiocap II	25-way D Plug		Li10252	Cable Assembly, PulseCO to GE Datex Cardiocap II	This monitor produces a non-standard analogue blood pressure waveform. Consequently we do not support this monitor.	N

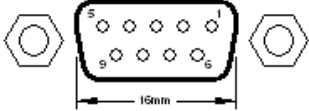
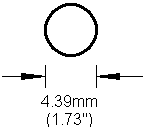
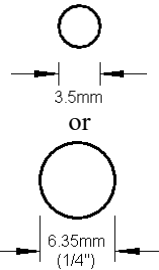
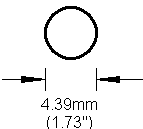
B.P. Monitor Manufacturer	Model No.	Connector Type on Cable Assembly	Drawing of the Socket on the Patient Monitor	LiDCO Item Number	LiDCO Description	Comments	Stock Item
GE Datex	F-CU5(P)	8-way MiniDIN Plug		Li10440	Cable Assembly, PulseCO to Datex F-CU5(P)		Y
GE Datex	M-PT Module	4-way DIN Plug		Li10166	Cable Assembly, PulseCO to GE Datex M-PT Module		Y
GE Datex	S/5 fitted with a B-UPI4NET board which has a 7-way MiniDIN socket.	7-way MiniDIN Plug		Li10334	Cable Assembly, PulseCO to Marquette TRAM 451	Some B-UPI4NET boards are fitted with a 4-way LEMO socket and others are fitted with a 7-way MiniDIN socket marked X7 for the Synchronisation Connector. Model numbers do not identify which type of socket is fitted, the only way is to look. If it is a 4-way LEMO, an Li10287 is required. Pressure P1 must be zeroed before connecting the cable. This Li10334 is also suitable for the Marquette TRAM 451 and CARESCAPE B650 & B850 without a PDM, see below.	Y
GE Marquette	6000 Series 7000 Series with TRAM 250 or TRAM 450 units	6-way LEMO Plug		Li10107	Cable Assembly, PulseCO to Marquette Blood Pressure Monitor		Y

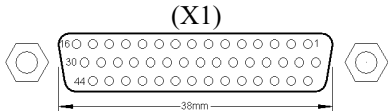
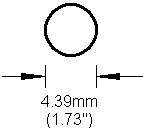
B.P. Monitor Manufacturer	Model No.	Connector Type on Cable Assembly	Drawing of the Socket on the Patient Monitor	LiDCO Item Number	LiDCO Description	Comments	Stock Item
GE Marquette	CARESCAPE B450, B650 and B850 without a PDM (Patient Data Module) attached.	7-way MiniDINPlug		Li10334	Cable Assembly, PulseCO to Marquette TRAM 451	If a PDM is attached to a CARESCAPE B450, B650 or B850 monitor the Defib/Sync connector on the frame is disabled. In this situation an Li10504 Cable Assembly, PulseCO to GE Marquette PDM Port is required. This Li10334 is also suitable for the Marquette TRAM 451 and Datex S/5 fitted with a B-UPI4NET board.	Y
GE Marquette	Monitors with PDM Port, e.g. Solar 8000, CARESCAPE B450, CARESCAPE B650, CARESCAPE B850	9-way PDM Port (special) Plug		Li10504	Cable Assembly, PulseCO to GE Marquette PDM Port	Note: When the PDM module is plugged into the CARESCAPE 450, 650 or 850 the Defib/Sync socket on the frame of the monitor becomes inactive.	Y
GE Marquette	TRAM 451 Dash 3000 Dash 4000 Dash 5000	7-way Mini-DIN Plug, non-latching, polarising lug		Li10334	Cable Assembly, PulseCO to Marquette TRAM 451	This cable also suits the Datex S/5 fitted with a B-UPI4NET board, and CARESCAPE B450, B650 & B850 without a PDM.	Y
GE Marquette	Tram Rac 4A for Solar 8000	15-way D Plug		Li10395	Cable Assembly, PulseCO to GE Tram Rac 4A		Y
General Purpose	N.A.	BNC Plug		Li10106	Cable Assembly, PulseCO to BNC Blood Pressure Monitor		Y
Igel	ICARD M169A					<i>These monitors do not come with analogue IBP output as standard.</i>	N
Invivo	Precess					<i>These monitors do not have an analogue IBP output signal.</i>	N

B.P. Monitor Manufacturer	Model No.	Connector Type on Cable Assembly	Drawing of the Socket on the Patient Monitor	LiDCO Item Number	LiDCO Description	Comments	Stock Item
Ivy	405C	25-way D Plug		Li10316	Cable Assembly, PulseCO to Ivy 405C		N
Ivy Biomed	700	15-way D Plug		Li10401	Cable Assembly, PulseCO to Ivy Biomed Model 700		N
Larsen & Toubro	Galaxy					<i>These monitors do not have an analogue IBP output.</i>	N
Lohmeier	M211	Binder 7-way circular Plug	No drawing	Li10337	Cable Assembly, PulseCO to Lohmeier M211		N
Mennen / Kontron	Horizon XL-Split	25-way D plug		Li10456	Cable Assembly, PulseCO to Kontron / Mennen Horizon XL-Split		N
Mindray	<i>Bene-View monitors prior to Nov'09 and all PM-6000, PM-7000, PM-8000, PM-9000. See exceptions below.</i>		No drawing			<i>Although an IBP analogue output is available and it is 1V: 100mmHg there is an offset so 0mmHg = 1V. These monitors are unsuitable. Only BeneView T5 & T8 monitors manufactured after Nov'09 are compatible, see below.</i>	N
Mindray	In Europe the monitors are called BeneView T5 & T8 and in North America the same monitors are called DPM 6 and DPM 7. These models manufactured after Nov'09 and fitted with a Mirco-D connector are supported.	9-way Micro-D plug		Li10631	Cable Assembly, PulseCO to Mindray	The 9-way Micro-D socket on the rear of the T5 and T8 is disabled when the T1 (the MPM that has the integral screen) is docked in the chassis. In this situation use Li10807.	Y
Mindray	BeneView T6 & T9. These models manufactured after Nov'09 and fitted with a Mirco-D connector are supported.	9-way Micro-D plug		Li10631	Cable Assembly, PulseCO to Mindray	The 9-way Micro-D socket on the rear of the T6 and T9 is disabled when the T1 (the MPM that has the integral screen) is docked in the chassis. In this situation use Li10807.	Y

B.P. Monitor Manufacturer	Model No.	Connector Type on Cable Assembly	Drawing of the Socket on the Patient Monitor	LiDCO Item Number	LiDCO Description	Comments	Stock Item
Mindray	Beneview T1, either stand alone or docked in a T5 or T8 as an MPM	12-way Circular		Li10807	Cable Assembly, PulseCO to Mindray MPM	IBP1 must be arterial pressure.	Y
Mindray	Benvision N1 / MPM	12-way Special Plug		Li11199	Cable Assembly, PulseCO to Mindray Benevision MPM / N1 Module		Y
Mindray	iPM range on monitors. Also iMEC range of monitors that have invasive pressure monitoring fitted.	20-way MDR plug		Li10842	Cable Assembly, PulseCO to Mindray iPM		N
Nihon Kohden	LifeScope VS BSM-3000 Series: ECG/BP OUT is only available on the following models if the QI-372P optional interface is installed at the factory: BSM-3532, BSM-3552, BSM-3562, BSM-3733, BSM-3753 and BSM-3763	5-way Special Plug		Li10363	Cable Assembly, PulseCO to Nihon Kohden 5-way ECG/BP OUT	Must have QI-372P interface installed. To output a blood pressure waveform from the ECG/BP OUT socket, you must connect the IBP cable to the MULTI 1 or Multi-parameter 1 socket. If the IBP Cable is connected to any other socket, the expected blood pressure waveform is not output from the ECG/BP OUT socket.	Y
Nihon Kohden	Lifescop BSM-5100A, BSM-5100K, BSM-5105K, BSM 5106A, etc. BSM-6000 series	5-way Special Plug		Li10363	Cable Assembly, PulseCO to Nihon Kohden 5-way ECG/BP OUT	To output a blood pressure waveform from the ECG/BP OUT socket, you must connect the IBP cable to the MULTI 1 or Multi-parameter 1 socket. If the IBP Cable is connected to any other socket, the expected blood pressure waveform is not output from the ECG/BP OUT socket.	Y

B.P. Monitor Manufacturer	Model No.	Connector Type on Cable Assembly	Drawing of the Socket on the Patient Monitor	LiDCO Item Number	LiDCO Description	Comments	Stock Item
Nihon Kohden	Lifescop 9, Lifescop 14	¼" Stereo Jack Plug		Li10162	Cable Assembly, PulseCO to Philips #C01 BP Module		Y
Penlon	Various					<i>These are re-badged Mindray monitors (see above), as such they are not generally compatible.</i>	
Philips	MP2, MP2X, MP5 MP20 MP30					<i>These monitors do not have analogue output: they have no module rack.</i>	N
Philips (formerly Agilent, formerly Hewlett Packard)	IntelliVue MP40 and above, i.e. those with a rack to accept the M1006B with Option #C01 Pressure Module	3.5mm Stereo Jack Plug or ¼" Stereo Jack Plug		Li10162	Cable Assembly, PulseCO to Philips #C01 BP Module	The Philips monitor must be fitted with a M1006B Option #C01 Pressure Module with Analog Pressure Output. This module should work with all chassis systems, i.e. MP40 and above. This cable assembly is also suitable for Spacelabs 90601A & 90603A monitors.	Y
Philips (formerly Agilent, formerly Hewlett Packard)	M116X series with Option J11 AKA: Agilent Viridia HP Merlin	37-way D Plug		Li10251	Cable Assembly, PulseCO to Agilent M116X Monitoring System with Option J11	Requires user to configure monitor to produce blood pressure waveform on Analog Channel 3 (factory default).	Y
Siemens	Sirecust 1280/1281	SDLC-6	No drawing	Li10362	Cable Assembly, PulseCO to Siemens Sirecust 1280/1281 Monitor	Obsolete monitor. Some Sirecust monitors are reported to have SDLC-8 connectors and will not work with this cable assembly.	Y
Siemens (see Draeger)	SC7000, SC8000, SC9000, SC9000XL Patient Monitors	14-way MDR Plug, X10		Li10168	Cable Assembly, PulseCO to Siemens/Draeger Infinity Monitor	Analogue output must be configured to ART (not P1).	Y

B.P. Monitor Manufacturer	Model No.	Connector Type on Cable Assembly	Drawing of the Socket on the Patient Monitor	LiDCO Item Number	LiDCO Description	Comments	Stock Item
Smiths Medical (formerly BCI Inc) and SurgiVet	Advisor 9200	9-way D Plug		Li10505	Cable Assembly, PulseCO to Smiths/BCI Advisor 9200	This monitor does not produce a 1V=100mmHg standard analogue blood pressure waveform. The analogue output signals replicate the display traces. Consequently we do not support this monitor.	N
Spacelabs	90470 Pressure & ECG Module 90402 Pressure Module 90305 Main Frame	Switchcraft TT253 .173" 3-pole Plug		Li10156	Cable Assembly, PulseCO to Spacelabs' BP Monitors	Obsolete command modules and monitors. The 90470 module has 2 High Level Output sockets (HLO1 & HLO2) situated in the top right hand corner of the front panel. The factory default settings for these outlets is HLO1 = ECG and HLO2 = P1 and these can be changed through jumper settings on the front of the CPU board.	Y
Spacelabs	90601A & 90603A Monitors	3.5mm Stereo Jack Plug or ¼" Stereo Jack Plug		Li10162	Cable Assembly, PulseCO to Philips #C01 BP Module	Obsolete monitors. This cable assembly is also suitable for Philips monitors.	Y
Spacelabs	Command Modules 90496 & 91496 These command modules interface with the SL2400 (91369), SL2600 (91370), SL2700 and SL2800 monitors and the previous range SL1030/SL1050, UV1500, UV1600, UV1700	Switchcraft TT253 .173" 3-pole Plug		Li10156	Cable Assembly, PulseCO to Spacelabs' BP Monitors	The Ultraview Command Modules that support invasive blood pressure are: 90496-B, -C, -J, -K, -L, -N, and -O (all but -A) 91496-A, -B, and -C (all but -I) These modules have 2 High Level Output sockets (HLO1 & HLO2) situated in the top right hand corner of the front panel. The factory default settings for these outlets is HLO1 = ECG and HLO2 = P1 and these can be changed through the Module Configuration Manager should there be a requirement to do so.	Y

B.P. Monitor Manufacturer	Model No.	Connector Type on Cable Assembly	Drawing of the Socket on the Patient Monitor	LiDCO Item Number	LiDCO Description	Comments	Stock Item
Spacelabs	Ultracare SLP	44-way HD D Plug		Li10158	Cable Assembly, PulseCO to GE Datex S/3 & S/5 Digital & Analog I/O Connector	Requires monitor to have Invasive BP option and requires user to configure monitor to produce blood pressure waveform on analog output channel 0, using Monitor Setup /Password (16434) / Install / Setup / Analog Output Menu. Invasive pressure real-time values, low resolution (-20mmHg...+320mmHg is scaled between -0.2 and +3.2V) to be selected.	Y
Spacelabs	Xprezzon	Switchcraft TT253 .173" 3-pole Plug		Li10156	Cable Assembly, PulseCO to Spacelabs' BP Monitors	Li10156 must be plugged into the HLO1/2 port on the Spacelabs monitor, and the monitor must be configured thus: <ol style="list-style-type: none"> 1. Select ECG on main screen 2. Select 'setup' along the bottom bar menu 3. Select 'config' along the bottom bar menu 4. Select the hidden key. Press along the bottom bar until you hear a click, then press this same spot THREE times. 5. This will bring up a new bottom menu bar, select 'user settings' 6. Select ECG 7. Press 'next page' until you reach HLO parameters. Once you see it, press the down cursor to select. 8. This needs to be set on P1/P2, not on any of the other settings. The arterial pressure transducer must be connected to P1.	Y
Welch Allyn	Propaq Encore		No drawing			There is no analogue blood pressure output available so this patient monitor is not suitable.	

Y-Splitter Cables

We have a number of Y-splitter cables available so that a LiDCO Monitor can still be used where the analogue output socket on the patient monitor is already being used for another purpose. These are not normally stock items but can be made to order.

LiDCO Item Number	LiDCO Description	To be used with:
Li10478	Cable Assembly, "Y" Splitter, Marquette BP Monitor, 6-way LEMO	Li10107
Li10493	Cable Assembly, "Y" Splitter, Marquette BP Monitor, 7-way MiniDIN	Li10334
Li10632	Cable Assembly, "Y" Splitter for Li10395	Li10395

LiDCO Ltd

16 Orsman Road • London • N1 5QJ • UK

Tel: +44 (0)20 7749 1500

Fax: +44 (0)02 7749 1501

