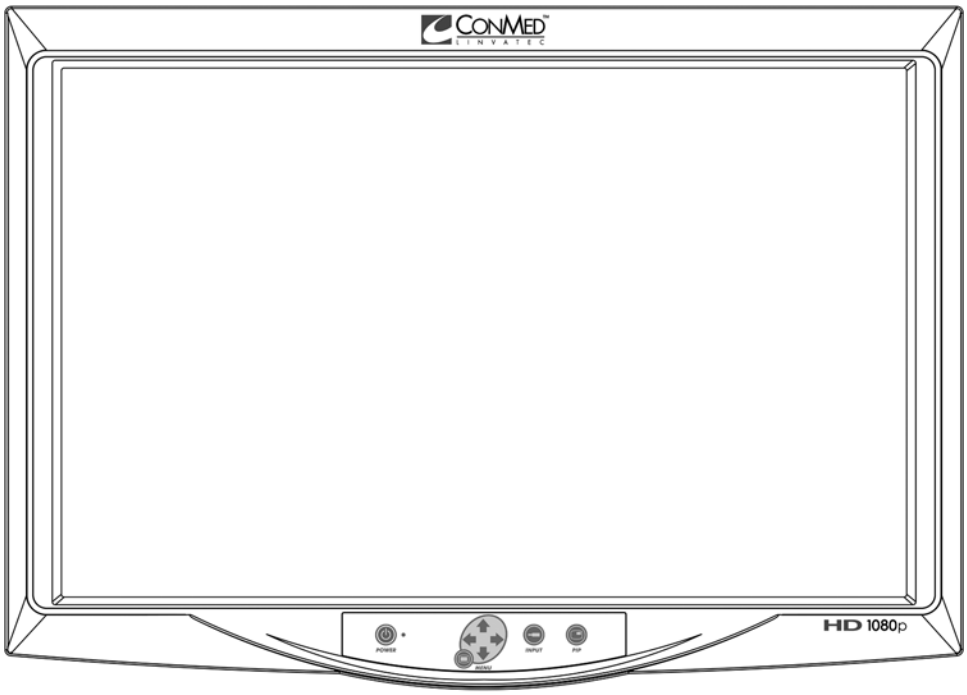
The ConMed Linvatec
26” LCD Medical Monitor
Instruction Manual
(VP4726 and VP4726F)



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Record the Model and Serial Numbers of the VP4726 LCD Monitor(s) and date received. Retain for future reference.

Monitor Model No.	_____	**Serial No**	_____	**Date**	_____
Monitor Model No.	_____	**Serial No**	_____	**Date**	_____
Monitor Model No.	_____	**Serial No**	_____	**Date**	_____

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1.0 INTRODUCTION

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2.0 MAINTENANCE

1.0 INTRODUCTION

It is recommended that personnel study this manual before attempting to connect, operate, adjust and/or clean the ConMed Linvatec VP4726 and VP4726F Medical LCD 26” Monitors. The safe and effective use of this equipment requires the understanding of and compliance with all warnings, precautionary notices, and instructions marked on the product, and included in this manual.

The VP4726F Monitor is identical to the VP4726 Monitor except it is equipped with Optical input connectors. See **“1.20 OPTICAL (available on VP4726F Monitor Only)”** on page 34 for connector information.

1.1 Intended Use

The VP4726 and VP4726F Medical LCD 26” Monitors are used to display live and recorded images captured with a medical grade camera system or previously recorded using various recording devices.

1.2 Warnings and Precautions

The words **WARNING**, **PRECAUTION**, and **NOTE** carry special meanings and they should be read carefully.

WARNING: The safety and/or health of the patient, user, or a third party is at risk. Comply with this warning to avoid injury to the patient, user, or third party.

PRECAUTION: This contains information concerning the intended use of the device or accessory. Damage to the equipment is possible if these instructions are not followed.

NOTE: A note is added to provide additional, focused, information.

1.2.1 Warnings

1. This equipment is designed for use by medical professionals completely familiar with the required techniques and instructions for use of the equipment. **Prior to using the device, read and follow all warning and precautionary notices and instructions marked on the product and included in this manual**.
2. Do not attempt to open or service the monitor, as this may void your warranty. There are no user-serviceable parts inside. Removing the cover may introduce an electric shock hazard by exposing you to dangerous high voltages or other risks. If the system malfunctions, return it for service immediately.

3. Dangerous voltages are present inside the monitor. The unit should be used only in rooms that comply with recommendations concerning electrical safety when used for medical purposes (as stated in IEC 60601 Series and UL 60601-1).

4. Never insert anything metallic into the cabinet openings of the monitor. Doing so may cause electric shock.

5. System installation shall be in accordance with the requirements of IEC 60601-1-1, The Standard for Safety Requirements of Medical Electrical Systems.

6. This equipment is not suitable for use in the presence of flammable anesthetic mixture with air, oxygen, or nitrous oxide.

7. Some disinfectants and cleaning agents vaporize to form explosive mixtures and, if such agents are used, the vapor must be allowed to disperse before the monitor is put to use.

8. Before connecting the AC power cord to the DC adapter outlet make sure the voltage designation of the DC adapter corresponds to the local electrical supply.

9. Disconnect monitor prior to applying cardiac defibrillation to patient.

10. This monitor should not share an electrical outlet or grounding with life supporting or life sustaining equipment.

11. This monitor may not be used in connection with life support equipment.

12. Equipment grounding is vital for safe operation. Plug power cord into a properly earthed mains supply outlet whose voltage and frequency characteristics are compatible with those listed on the monitor or in this manual. Do not use plug adapters or extension cords; such devices defeat the safety ground and could cause injury.

13. Grounding reliability is achieved only when the monitor is connected to a “hospital only” or “hospital grade” receptacle. Inspect routinely and do not use if damage is discovered.

14. If one or more mains powered units are connected simultaneously to one socket by the means of a distribution box, the sum of the individual leakage currents may exceed the tolerated limits.

15. Be sure to hold the plug, not the cord, when disconnecting the monitor from an electric socket. Doing so may cause electric shock.

16. Do not touch signal input, signal output or other connectors, and the patient simultaneously.

17. If your monitor does not operate normally, in particular, if there are any unusual sounds or smells coming from it, unplug it immediately and return for service.

18. For the protection of service personnel, and for safety during transportation, all devices and accessories that are returned for repair must be prepared for shipment as described in **“1.6 Returning the Monitor”** on page 6 of this manual. The manufacturer has the right to refuse to carry out repairs if the product is contaminated.

1.2.2 Precautions

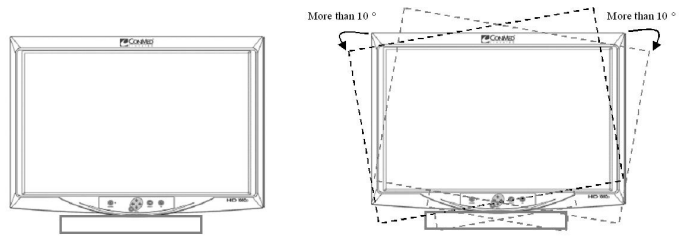
Rx ONLY

1. United States Federal law restricts sale of this device to or on the order of a physician.
2. The monitor should only be used in compliance with its intended use.
3. Do not use the monitor with incompatible equipment not authorized by ConMed Linvatec. Doing so may void certifications and/or warranties.
4. The warranty becomes void and the manufacturer is not liable for direct or resulting damage if:
   - The monitor or the accessories are improperly used, prepared or maintained;
   - The instructions in the manual are not adhered to;
   - Non-authorized persons open and / or perform repairs, adjustments or alterations to the monitor;

NOTE: Receipt of technical documentation from the manufacturer does not authorize individuals to perform repairs, adjustments, or alterations to the monitor or accessories.

Only authorized service personnel may perform repairs, adjustments or alterations on the monitor and accessories. Any violation will void the manufacturer's warranty. Authorized service technicians are trained and certified only by the manufacturer.

5. Prior to each use the monitor and all associated equipment must be inspected for proper operation.
6. Do not expose the monitor to moisture, operate in wet areas, or place liquids on or above unit.
7. Electrical cords and attaching cables used with the monitor must be appropriate for the rated voltage and current, and in compliance with all international, national, and local electrical codes and regulations pertaining to the use of medical devices.
8. Ensure that the available mains voltage matches the mains voltage data on the rear of the monitor which is located near the appliance inlet module.
9. Do not excessively bend or kink the instrument power cord.
10. Handle all equipment carefully. If the monitor is dropped or otherwise damaged, return it immediately for service.
11. Openings in the monitor cabinet are provided for ventilation. To prevent overheating, these openings should not be blocked or covered.
12. Thoroughly clean the monitor as needed (reference "2.3 Cleaning Instructions" on page 35).
13. To avoid injury by tipping over, set the monitor to the following tilted position before moving.



14. Using Plug for US: 120V rating -5-15P type only
    Caution: Make sure the power cord is the correct type that is required in your area.
    This LCD monitor has a universal power supply that allows operation in either 100-120V AC or 200-240V AC voltage areas (no user adjustment is required).

Use the proper power cord with correct attachment plug type. If the power source is 120 V AC, use a power cord which is a Hospital Grade Power Cord with NEMA 5-15 style plug, labeled for 125 volts AC with UL and C-UL approvals. If the power source is a 240 V AC supply, use the tandem (T blade) type attachment plug with ground conductor power cord that meets the respective European country's safety regulations.

The hospital-grade plug for medical products intended for use in Denmark has DEMKO approval and is rated 13 amps at 250Vac. Plug is recommended for use in medical applications and specifications are being added to the standard SB 107-2-D1.
Plug mates with maker's Danish hospital-grade socket. Hospital sockets have slightly different shaped openings allowing only the hospital plug, not the standard Danish plug, to be inserted, to protect the ac circuit in specific medical settings.

15. External equipment that will be connected to signal input and signal output ports or other connectors shall comply with relevant IEC standard (i.e., IEC 60950 for IT equipment and IEC 60601 series for medical electrical equipment). In addition, all such combinations / systems - shall comply with the standard IEC 60601-1-1 (Safety requirements for medical electrical systems).

    Any person who connects external equipment to signal input and signal output ports or other connectors has formed a system and is therefore responsible for the system to comply with the requirements of IEC 60601-1-1. If in doubt, contact a qualified technician or your local representative.

(a) Reorient or relocate the receiving device.

(b) Increase the separation between the equipment.

(c) Connect the equipment into an outlet on a circuit different from that to which the other devices are connected.

(d) Consult the manufacturer or field service technician for assistance.

1.3 Environmental Directives

WEEE Directive [2002/96/EC] on Waste Electrical and Electronic Equipment

The Directive on Waste Electrical and Electronic Equipment obliges manufacturers, importers, and/or distributors of electronic equipment to provide for recycling of the electronic equipment at the end of its useful life.

Do not dispose of WEEE in unsorted municipal waste.

The WEEE symbol on the product or its packaging indicates that this product must not be disposed of with other waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of Waste Electrical and Electronic Equipment. The separate collection and recycling of your waste equipment at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your medical equipment at the end of its useful life for recycling, please contact ConMed Linvatec.

1.4 Symbol Definitions

	Power Standby / ON
	Follow instructions for use.
	Precaution or warning notice
	Electrical hazard. Dangerous voltages are present within the cabinet. Never attempt to repair the equipment. Only trained service personnel may remove the cover, or obtain access to the system components.
	Alternating Current.
	Direct Current
	Protective Earth (ground).
	Warning - For continued protection against risk of fire, replace only with same type and rating fuse.
	Waste Electronics and Electrical Equipment (WEEE) Symbol. Regarding European Union end-of-life of product.
	RF Symbol. Non-ionizing Electromagnetic Radiation
Rx ONLY	Caution: Federal Law restricts this device to sale by or on the order of a physician.

	Flammable Anesthetics - Risk of explosion if used in the presence of flammable anesthetics
	Fragile
	This side up
3	Maximum Stacking
	Keep Dry
	Temperature limits for storage and transport
	Humidity limits for storage and transport
	Pressure limits for storage and transport
GPIO	General Purpose Input / Output
PACS	Picture Archive Communications System
PIP	Picture in Picture
PBP	Picture By Picture (side by side images)
IPX1	Indicates that the device is protected against the effects of vertically falling water"

1.5 Unpacking and Inspecting the Monitor

Upon receipt, carefully unpack the monitor and accessories. Ensure contents are complete and are free from damage. If any damage is noted contact your ConMed Linvatec Customer Service. Save **ALL** packaging materials; they may be needed to verify any claims of damage by the shipper.

VP4726 / VP4726F LCD 26” Monitor:

- 1 - DVI Cable, 6 ft. (IM9021)
- 1 - BNC Cable (8175-06)
- 1 - S-Video (Y/C) Cable (8149-06)
- 1 - AC Adapter (023933)
- 2 - DC Cable Terminal male / female (Optional)
- 1 - Screws FH M3x5 (Optional)
- 1 - Instruction Manual

The power cord is sold separately and is packaged in a separate box.

- C7104 Power Cord — 115VAC
- C7105 Power Cord — 230VAC

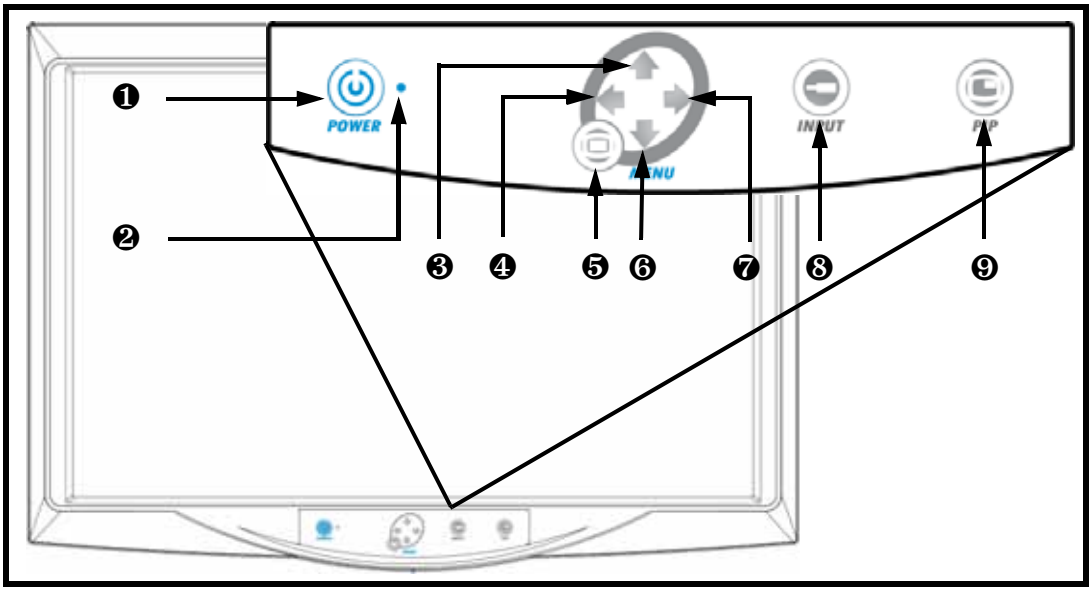
1.6 Returning the Monitor

If it becomes necessary to return the monitor, always use the original packaging. The manufacturer does not take responsibility for damage that has occurred during transportation if the damage was caused by inadequate transport packaging.

Contact the Manufacturer for Return Authorization PRIOR to shipping your monitor for service.

Please make sure that all required information has been supplied.

- Owner’s Name
- Owner’s Address
- Owner’s Daytime Telephone Number
- Device type and model.
- Serial Number
- Detailed explanation of the damage.



1.7 System Indicators

1.7.1 Front Panel On-Screen Display (OSD) Button Functionality

❶ **"POWER" Button** - Press to set the monitor to Normal Mode or Stand-by Mode.

❷ **Power Status Indicator** - Indicator is illuminated green when monitor is in stand-by mode, and is off when the monitor is activated.

❸ **Up Arrow** - With the OSD deactivated, press this area to increase the brightness of the monitor. With the OSD activated, press this area to move the cursor upward in a menu.

❹ **Left Arrow** - With the OSD deactivated, press this area to decrease the contrast of the monitor. With the OSD activated, press this area to enter a sub-menu and decrease the adjustment of the selected function.

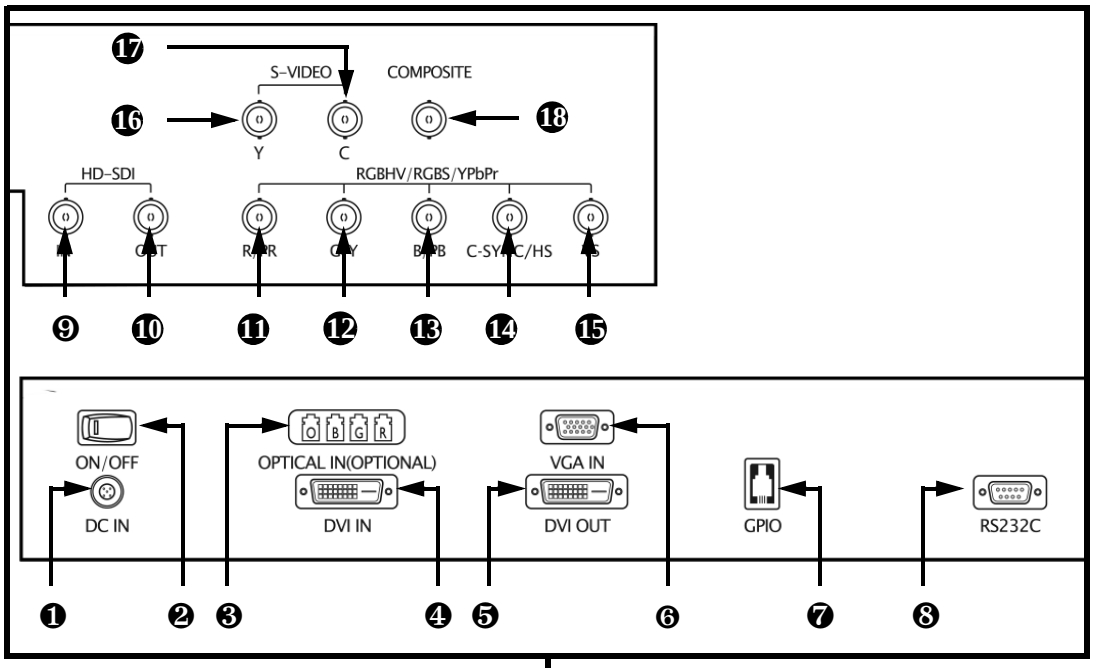
❺ **MENU Button** - With the OSD deactivated, pressing this button activates the OSD menu. With OSD activated, pressing this button exits the main menu or sub-menu.

❻ **Down Arrow** - With the OSD deactivated, press this area to decrease the brightness of the monitor. With the OSD activated, press this area to move the cursor downward.

❼ **Right Arrow** - With the OSD deactivated, press this area to increase the contrast of the monitor. With the OSD activated, press this area to enter a sub-menu and increase the adjustment of the selected function.

❽ **INPUT Button** - Used to change the monitor's signal source; select DVI OPTICAL / DVI DIGITAL / DSUB ANALOG / SDI YPbPR / RGBS / SVIDEO / CVIDEO. With OSD deactivated, press this button to switch signal inputs.

❾ **PIP Button** - Pressing this button enables the Picture-In-Picture function. Select PIP, PBP1, PBP2.



1.7.2 Rear Panel

❶ **AC / DC IN Jack**

❷ **ON / OFF Switch**

❸ **OPTICAL IN (OPTIONAL) Connector (Available only on the VP4726F Model)**

❹ **DVI IN Connector**

❺ **DVI OUT Connector**

❻ **VGA IN Connector**

❼ **GPIO Connector**

❽ **RS232C Connector**

❾ **HD SDI IN Connector**

❿ **HD SDI OUT Connector**

⓫ **RED / Pr Connector**

⓬ **GREEN / Y Connector**

⓭ **BLUE / Pb Connector**

⓮ **C-SYNC / H-SYNC Connector**

⓯ **VS (V-SYNC) Connector**

⓰ **S-VIDEO / Y Connector**

⓱ **S-VIDEO / C Connector**

⓲ **Composite (C) VIDEO Connector**

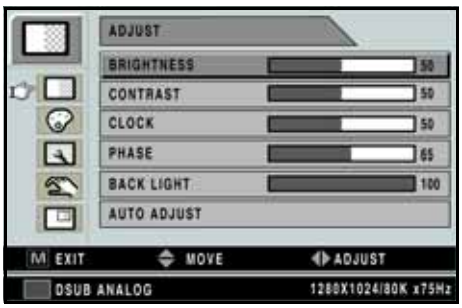
1.8 Monitor Operation

1. Connect the DC input jack to the DC IN connector on the back of the monitor.
2. Plug the female end of the AC Power Cord into the AC Inlet of the DC Adapter.
3. Plug the AC Power Cord into a Hospital Grade outlet.
4. Connect the appropriate video source to the monitor.
5. Apply power to all connected peripheral devices.
6. Turn the monitor on by pressing the power switch on the back of the monitor.
7. Set your preferred settings using the On-Screen Menus listed on the following pages.

1.9 On-Screen Display Menus

1.9.1 DSUB ANALOG/RGBS Input Source

Adjust Menu



❶ **BRIGHTNESS** - Increase or decrease the brightness (Range: 0~100).

❷ **CONTRAST** - Increase or decrease the contrast (Range: 0~100).

❸ **CLOCK** - Increase or decrease the sampling frequency (Range: 0~100).

❹ **PHASE** - Increase or decrease the phase level (Range: 0~100).

❺ **BACK LIGHT** - Increase or decrease the back light dimming level (Range: 0~100).

❻ **AUTO ADJUST** - Fit to the most appropriate screen on the D-SUB Analog signal.

Color Temp Menu

❶ **MODE** - Change the color temperature mode: C1, C2, USER. When USER is selected, a sub-menu displays allowing the user to adjust the RED, GREEN or BLUE balance.

❷ **RED** - Red balance- Only works with USER mode (Range: 0~100).

❸ **GREEN** - Green balance- Only works with USER mode (Range: 0~100).

❹ **BLUE** - Blue balance- Only works with USER mode (Range: 0~100).

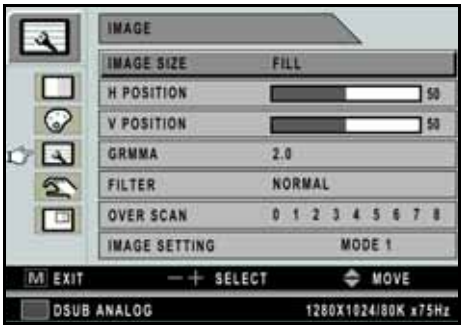


Image Menu

❶ **IMAGE SIZE** - Change the image size (Scaling mode) (Full; Fill aspect, 1:1; Normal; Video; Zoom; Video only).

❷ **H POSITION** - Adjust the horizontal (left or right) position of the displayed source image (Range: 0~100).

❸ **V POSITION** - Adjust the vertical (up or down) position of the displayed source image (Range: 0~100).

❹ **GAMMA** - Adjust GAMMA value (VIDEO, BYPASS, 1.8, 2.0, 2.2, 2.4, 2.6, PACS).

❺ **FILTER** - Set the sharpness of the image (Softest, Soft, Normal, Sharp, Sharpest).

❻ **OVER SCAN** - Adjust the displayed size (0~8)

❼ **IMAGE SETTING** - Allow selection of one of five user defined image presets.

Setup Menu

❶ **LANGUAGE** - Change the OSD language (8 languages - Korean, English, French, Spanish, German, Chinese, Japanese, Italian).

❷ **OSD COLOR** - Adjust the OSD background from white opaque to half translucent.

❸ **OSD POSITION** - Change the OSD position.

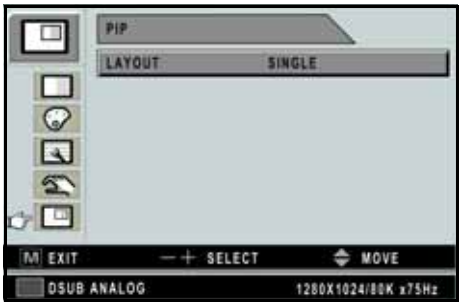
❹ **DURATION** - Adjust time until the OSD Menu will disappear after adjusting the duration (5, 10, 20, 30, 60, 90, 120, 180, 240 seconds).

❺ **RESET SETTINGS** - Changes all the OSD values to factory out-going status.

❻ **AUTO SOURCE SELECT** - Disable or enable auto source select. (ON: Searches through all possible input sources until an active video source is found. OFF: Video input is manually selected.)

❼ **USER NAME ENTRY** - Change the name of a Preset to the Users Name, etc.

PIP Menu



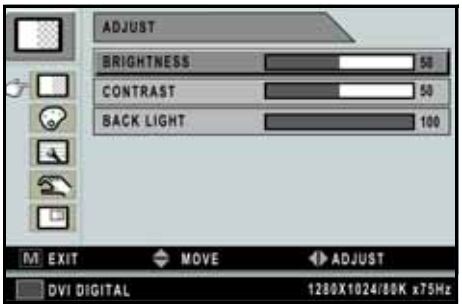
❶ **LAYOUT** - Changes the OSD layout (Single, PIP, PBP1, PBP2).

The following are Sub-menus under LAYOUT;

❷ **SOURCE** - Changes the secondary source.

❸ **SWAP** - Swaps the position and size of the Primary and Secondary image.

1.9.2 DVI OPTICAL / DVI DIGITAL Input Source



Adjust Menu

❶ **BRIGHTNESS** - Increase or decrease the brightness (Range: 0~100).

❷ **CONTRAST** - Increase or decrease the contrast (Range: 0~100).

❸ **BACK LIGHT** - Adjust the back light dimming level (Range: 0~100).

Color Temp Menu

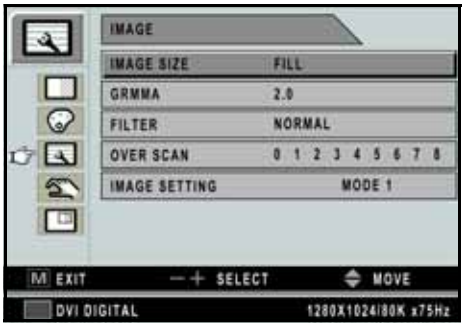
❶ **MODE** - Change the color temperature mode: C1, C2, USER. When USER is selected, a sub-menu displays allowing the user to adjust the RED, GREEN or BLUE balance.

❷ **RED** - Red balance- Only works with USER mode (Range: 0~100).

❸ **GREEN** - Green balance- Only works with USER mode (Range: 0~100).

❹ **BLUE** - Blue balance- Only works with USER mode (Range: 0~100).

Image Menu



❶ **IMAGE SIZE** - Change the image size (Scaling mode) (Full; Fill aspect, 1:1; Normal; Anamorphic).

❷ **GAMMA** - Adjust GAMMA value (VIDEO, BYPASS, 1.8, 2.0, 2.2, 2.4, 2.6, PACS).

❸ **FILTER** - Set the sharpness of the image (Softest, Soft, Normal, Sharp, Sharpest).

❹ **OVER SCAN** - Adjust the displayed size (0~8).

❺ **IMAGE SETTING** - Change the image setting (MODE, 1, 2, 3, 4, 5).

Setup Menu

❶ **LANGUAGE** - Change the OSD language (8 languages - Korean, English, French, Spanish, German, Chinese, Japanese, Italian).

❷ **OSD COLOR** - Adjust the OSD background from white opaque to half translucent.

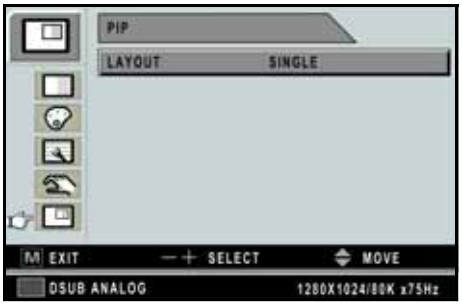
❸ **OSD POSITION** - Change the OSD position (9 Positions).

❹ **DURATION** - Adjust time until the OSD Menu will disappear after adjusting the duration (5, 10, 20, 30, 60, 90, 120, 180, 240 seconds).

❺ **RESET SETTINGS** - Changes all the OSD values to factory out-going status.

❻ **AUTO SOURCE SELECT** - Disable or enable auto source select. (ON: Searches through all possible input sources until an active video source is found. OFF: Video input is manually selected.)

❼ **USER NAME ENTRY** - Change the name of a Preset to the Users Name, etc.



PIP Menu

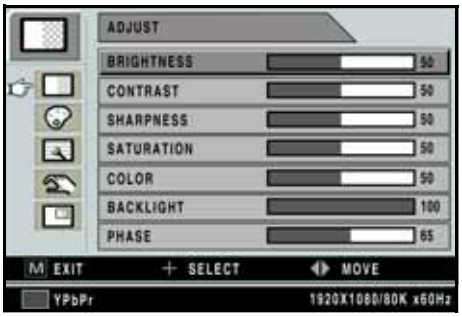
❶ **LAYOUT** - Changes the OSD layout (Single, PIP, PBP1, PBP2).

The following are Sub-menus under LAYOUT;

❷ **SOURCE** - Changes the secondary source.

❸ **SWAP** - Swaps the position and size of the Primary and Secondary image.

1.9.3 YPbPr Input Source



Adjust Menu

❶ **BRIGHTNESS** - Increase or decrease the brightness (Range: 0~100).

❷ **CONTRAST** - Increase or decrease the contrast (Range: 0~100).

❸ **SHARPNESS** - Adjust the sharpness of the video image (Range: 0~100).

❹ **SATURATION** - Changes the tone of the color (Range: 0~100).

❺ **COLOR** - Changes the richness of the color (Range: 0~100).

❻ **BACK LIGHT** - Increase or decrease the back light dimming level (Range: 0~100).

❼ **PHASE** - Increase or decrease the phase level (Range: 0~100).

Color Temp Menu

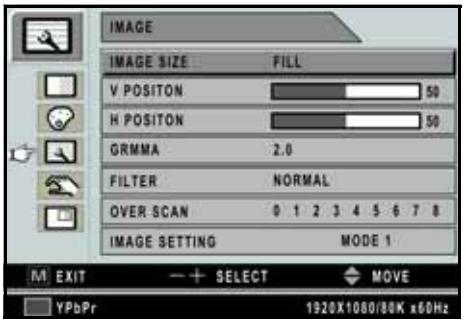
❶ **MODE** - Change the color temperature mode: C1, C2, USER. When USER is selected, a sub-menu displays allowing the user to adjust the RED, GREEN or BLUE balance.

❷ **RED** - Red balance- Only works with USER mode (Range: 0~100).

❸ **GREEN** - Green balance- Only works with USER mode (Range: 0~100).

❹ **BLUE** - Blue balance- Only works with USER mode (Range: 0~100).

Image Menu



❶ **IMAGE SIZE** - Change the image size (Scaling mode) (Full; Fill aspect, 1:1; Normal; Video; Zoom; Video only).

❷ **V POSITION** - Adjust the vertical (up or down) position of the displayed source image (Range: 0~100).

❸ **H POSITION** - Adjust the horizontal (left or right) position of the displayed source image (Range: 0~100).

❹ **GAMMA** - Adjust GAMMA value (VIDEO, BYPASS, 1.8, 2.0, 2.2, 2.4, 2.6, PACS).

❺ **FILTER** - Set the sharpness of the image (Softest, Soft, Normal, Sharp, Sharpest).

❻ **OVER SCAN** - Adjust the displayed size (0~8)

❼ **IMAGE SETTING** - Change the image setting (Mode 1, 2, 3, 4, 5).

Setup Menu

❶ **LANGUAGE** - Change the OSD language (8 languages - Korean, English, French, Spanish, German, Chinese, Japanese, Italian).

❷ **OSD COLOR** - Adjust the OSD background from white opaque to half translucent.

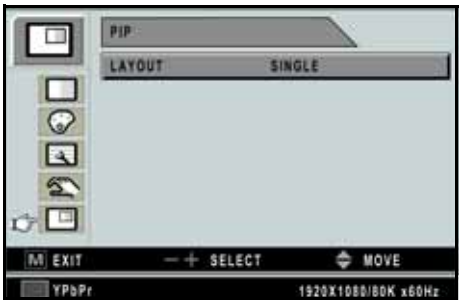
❸ **OSD POSITION** - Change the OSD position (9 Positions).

❹ **DURATION** - Adjust time until the OSD Menu will disappear after adjusting the duration (5, 10, 20, 30, 60, 90, 120, 180, 240 seconds).

❺ **RESET SETTINGS** - Changes all the OSD values to factory out-going status.

❻ **AUTO SOURCE SELECT** - Disable or enable auto source select. (ON: Searches through all possible input sources until an active video source is found. OFF: Video input is manually selected.)

❼ **USER NAME ENTRY** - Change the name of a Preset to the Users Name, etc.



PIP Menu

❶ **LAYOUT** - Changes the OSD layout (Single, PIP, PBP1, PBP2).

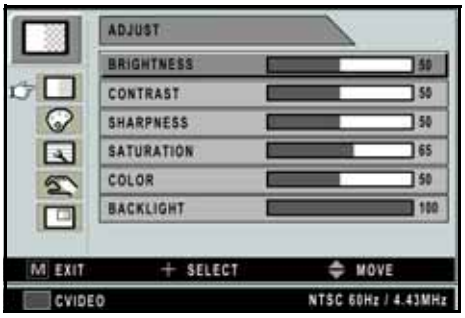
The following are Sub-menus under LAYOUT;

❷ **SOURCE** - Changes the secondary source.

❸ **SWAP** - Swaps the position and size of the Primary and Secondary image.

1.9.4 SVIDEO / CVIDEO Input Source

Adjust Menu



❶ **BRIGHTNESS** - Increase or decrease the brightness (Range: 0~100).

❷ **CONTRAST** - Increase or decrease the contrast (Range: 0~100).

❸ **SHARPNESS** - Adjust the sharpness of the video image (Range: 0~100).

❹ **SATURATION** - Changes the tone of the color (Range: 0~100).

❺ **COLOR** - Changes the richness of the color (Range: 0~100).

❻ **BACK LIGHT** - Increase or decrease the back light dimming level (Range: 0~100).

Color Temp Menu

❶ **MODE** - Change the color temperature mode: C1, C2, USER. When USER is selected, a sub-menu displays allowing the user to adjust the RED, GREEN or BLUE balance.

❷ **RED** - Red balance- Only works with USER mode (Range: 0~100).

❸ **GREEN** - Green balance- Only works with USER mode (Range: 0~100).

❹ **BLUE** - Blue balance- Only works with USER mode (Range: 0~100).

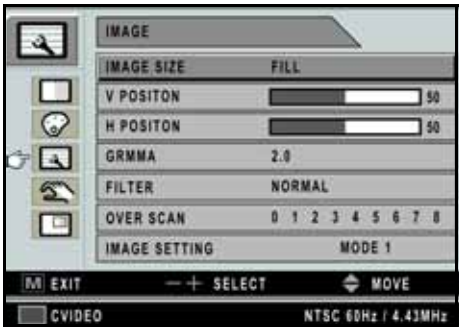


Image Menu

❶ **IMAGE SIZE** - Change the image size (Scaling mode) (Full; Fill aspect, 1:1; Normal; Video; Zoom; Video only).

❷ **V POSITION** - Adjust the vertical (up or down) position of the displayed source image (Range: 0~100).

❸ **H POSITION** - Adjust the horizontal (left or right) position of the displayed source image (Range: 0~100).

❹ **GAMMA** - Adjust GAMMA value (VIDEO, BYPASS, 1.8, 2.0, 2.2, 2.4, 2.6, PACS).

❺ **FILTER** - Set the sharpness of the image (Softest, Soft, Normal, Sharp, Sharpest).

❻ **OVER SCAN** - Adjust the displayed size (0~8)

❼ **IMAGE SETTING** - Change the image setting (Mode 1, 2, 3, 4, 5).

Setup Menu

❶ **LANGUAGE** - Change the OSD language (8 languages - Korean, English, French, Spanish, German, Chinese, Japanese, Italian).

❷ **OSD COLOR** - Adjust the OSD background from white opaque to half translucent.

❸ **OSD POSITION** - Change the OSD position (9 Positions).

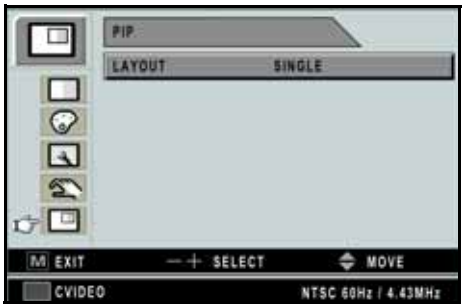
❹ **DURATION** - Adjust time until the OSD Menu will disappear after adjusting the duration (5, 10, 20, 30, 60, 90, 120, 180, 240 seconds).

❺ **RESET SETTINGS** - Changes all the OSD values to factory out-going status.

❻ **AUTO SOURCE SELECT** - Disable or enable auto source select. (ON: Searches through all possible input sources until an active video source is found. OFF: Video input is manually selected.)

❼ **USER NAME ENTRY** - Change the name of a Preset to the Users Name, etc.

PIP Menu



❶ **LAYOUT** - Changes the OSD layout (Single, PIP, PBP1, PBP2).

The following are Sub-menus under LAYOUT;

❷ **SOURCE** - Changes the secondary source.

❸ **SWAP** - Swaps the position and size of the Primary and Secondary image.

1.9.5 SDI Input Source

Adjust Menu

❶ **BRIGHTNESS** - Increase or decrease the brightness (Range: 0~100).

❷ **CONTRAST** - Increase or decrease the contrast (Range: 0~100).

❸ **SHARPNESS** - Adjust the sharpness of the video image (Range: 0~100).

❹ **SATURATION** - Changes the tone of the color (Range: 0~100).

❺ **COLOR** - Changes the richness of the color (Range: 0~100).

❻ **BACK LIGHT** - Increase or decrease the back light dimming level (Range: 0~100).

Color Temp Menu

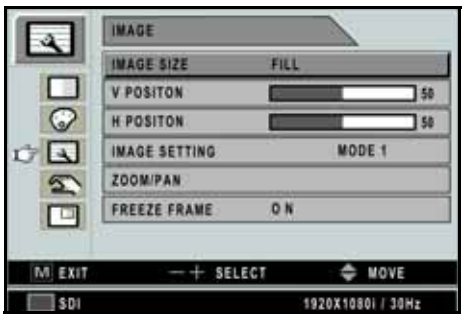
❶ **MODE** - Change the color temperature mode: C1, C2, USER. When USER is selected, a sub-menu displays allowing the user to adjust the RED, GREEN or BLUE balance.

❷ **RED** - Red balance- Only works with USER mode (Range: 0~100).

❸ **GREEN** - Green balance- Only works with USER mode (Range: 0~100).

❹ **BLUE** - Blue balance- Only works with USER mode (Range: 0~100).

Image Menu



❶ **IMAGE SIZE** - Change the image size (Scaling mode) (Full; Fill aspect, 1:1; Normal; Video; Zoom; Video only).

❷ **V POSITION** - Adjust the vertical (up or down) position of the displayed source image (Range: 0~100).

❸ **H POSITION** - Adjust the horizontal (left or right) position of the displayed source image (Range: 0~100).

❹ **IMAGE SETTING** - Change the image setting (Mode 1, 2, 3, 4, 5).

❺ **ZOOM / PAN** - Enlarge the image.

❻ **FREEZE FRAME** - Freezes the image.

Setup Menu

❶ **LANGUAGE** - Change the OSD language (8 languages - Korean, English, French, Spanish, German, Chinese, Japanese, Italian).

❷ **OSD COLOR** - Adjust the OSD background from white opaque to half translucent.

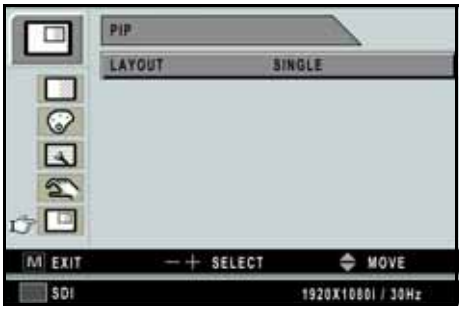
❸ **OSD POSITION** - Change the OSD position (9 Positions).

❹ **DURATION** - Adjust time until the OSD Menu will disappear after adjusting the duration (5, 10, 20, 30, 60, 90, 120, 180, 240 seconds).

❺ **RESET SETTINGS** - Changes all the OSD values to factory out-going status.

❻ **AUTO SOURCE SELECT** - Disable or enable auto source select. (ON: Searches through all possible input sources until an active video source is found. OFF: Video input is manually selected.)

❼ **USER NAME ENTRY** - Change the name of a Preset to the Users Name, etc.



PIP Menu

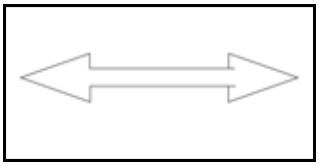
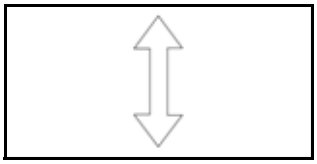
❶ **LAYOUT** - Changes the OSD layout (Single, PIP, PBP1, PBP2).

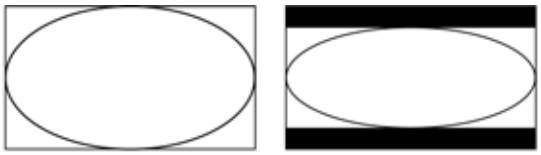
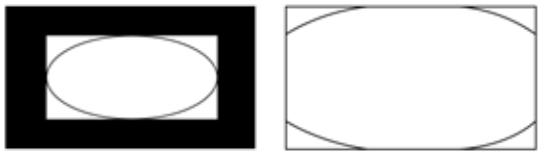
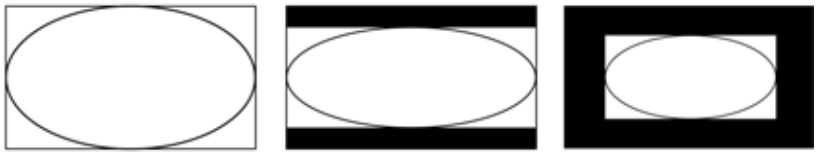
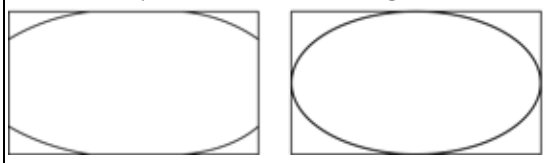
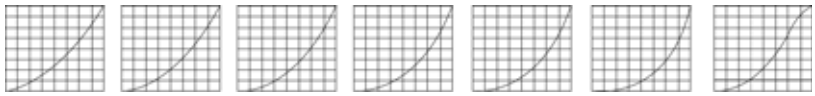
The following are Sub-menus under LAYOUT;

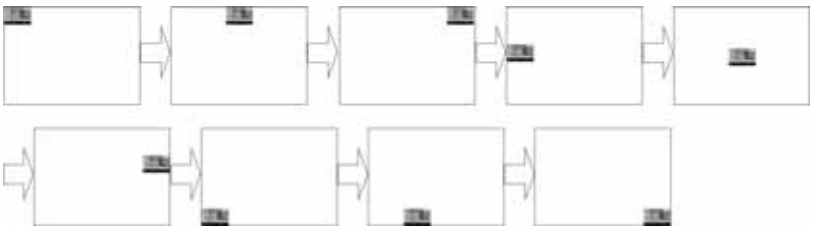
❷ **SOURCE** - Changes the secondary source.

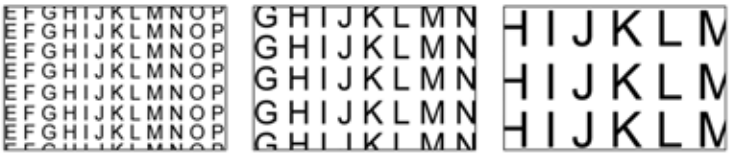
❸ **SWAP** - Swaps the position and size of the Primary and Secondary image.

1.10 OSD System Overview

MENUS	FUNCTION DESCRIPTION
BRIGHTNESS	Press the BRIGHTNESS button to display the ADJUST menu or the UP/ DOWN arrows Setting the brightness too high will cause the image to bloom or flare, too low will decrease the visible light
CONTRAST	Press the CONTRAST button to display the ADJUST menu or the + / - arrows Setting the Contrast too high or too low will causes loss of some grayscales.
BACKLIGHT	Press the BACKLIGHT button to display the ADJUST menu. Setting the backlight too low will cause a dark image and too high will decrease the backlight lifetime.
AUTO ADJUST	Press the BACKLIGHT button to display the ADJUST menu or SOURCE hot key.
SHARPNESS	Adjusts the sharpness of the video image
SATURATION	Changes the tone of the color
COLOR	Change the tone richness of the color
COLOR TEMP C1	Default 6500K color setting
COLOR TEMP C2	Default 9300K color setting
COLOR TEMP USER	Default 7200K color setting. When USER is selected, Red, Green and Blue values are changeable by the user.
H POSITION	Adjusts the Horizontal (left / right) position of the image. It will return to the default state when executing AUTO ADJUST OR RESET SETTINGS 
V POSITION	Adjusts the Vertical (up / down) position of the image. It will return to the default state when executing AUTO ADJUST OR RESET SETTINGS 

<table>
<tr>
<td>IMAGE SIZE</td>
<td>DSUB/ DVI OPTICAL / DVI DIGITAL input source
FULL FILL ASPECT
 
1:1 NORMAL
 
CAUTION: FILL ASPECT, NORMAL Size are dependent on input size ratio
YPbPr / RGBS / SDI / CVIDEO / SVIDEO input source
FULL FILL ASPECT 1:1
 
1:1 NORMAL
  </td>
</tr>
<tr>
<td>GAMMA</td>
<td>Adjusts the gamma curve of the video image
1.8 2.0 2.2 2.4 2.6 PACS VIDEO
  </td>
</tr>
<tr>
<td>FILTER</td>
<td>Adjusts the sharpness of the video image
 
</td>
</tr>
</table>

OVER SCAN	Enable 10% over scan of the original input image 0: 1: 2:  3: 4: 5:  6: 7: 8: 
IMAGE SETTING	Allows the selection of one of five user defined image presets
FREEZE FRAME	Freezes the main image. Does not support secondary image freeze at PIP mode
LANGUAGE	Changes the OSD language (8 languages). ENGLISH / GERMAN / FRENCH / SPANISH / ITALIAN / JAPANESE / CHINESE / KOREAN
OSD COLOR	Adjusts the color of the OSD 
OSD POSITION	Adjusts the position of the OSD 

OSD TIMEOUT	Adjusts the time until the OSD Menu will disappear after adjusting the menu.
ZOOM / PAN	Controls the zoom in / out of the image. 0: 1: 2:  3: 4: 5:  6: 7: 8:  Controls the PAN in / out of the image  NOTICE: Maximum ZOOM size is ten times as large as original size
RESET	Reset the unit to factory outgoing status
AUTO SOURCE SELECT	When AUTO SOURCE SELECT is on, the monitor automatically searches input source, except PIP sub source
USER NAME ENTRY	Put User's name, etc. into Preset
WINDOW LAYOUT	Change sub window layout (SINGLE, PIP, PBP1, PBP2)

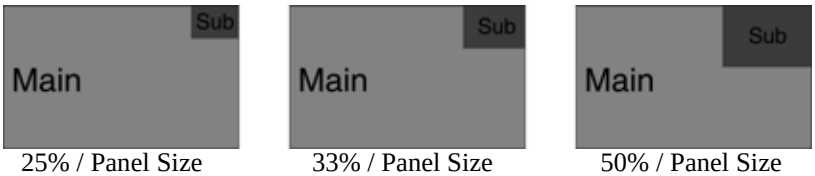
PIP SOURCE

Select PIP source input. You can change other sub windows through OSD PIP menu. The table below is a PIP matching table with main and sub window.

	Sub Window							
Input Source	DVI Optical	DVI Digital	DSUB Analog	SDI	YPbPr	RGBS	CVIDEO	SVIDEO
DVI Optical	X	0	0	0	0	0	0	0
DVI Digital	0	X	X	0	X	X	0	0
DSUB Analog	0	X	X	0_1	X	X	0	0
SDI	0	0	0_1	X	0_1	0_1	X	X
YPbPr	0	X	X	0_1	X	X	0	0
RGBS	0	X	X	0_1	X	X	0	0
CVIDEO	0	0	0	X	0	0	X	X
SVIDEO	0	0	0	X	0	0	X	X
0_1: Support up to UXGA, 60Hz (162MHz)								

PIP SIZE

Change PIP mode sub window size

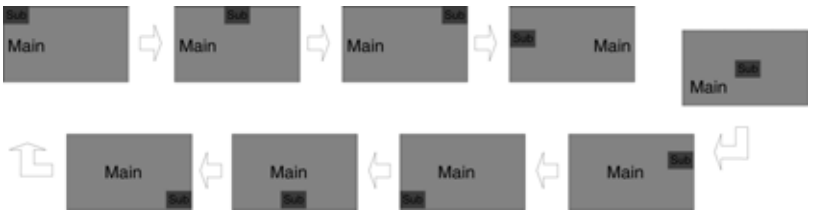


25% / Panel Size 33% / Panel Size 50% / Panel Size

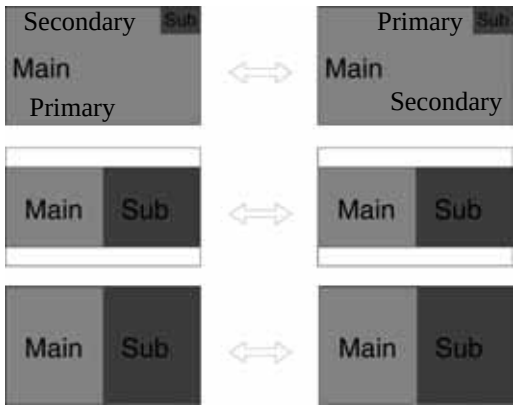
CAUTION: Do not change input Source aspect ratio. The PIP image size is changeable depending on input timing.

PIP POSITION

Change PIP mode sub window position



SWAP	Change the main window and sub window position on PIP, PBP1, PBP2



1.11 Standard Signal Table

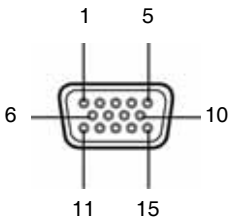
Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)	Clock Frequency (MHz)
640 x 350 @ 70 Hz	31.469	70.087	25.175
720 x 400 @ 70 Hz	31.469	70.082	28.324
640 x 480 @ 60 Hz	31.469	59.940	25.175
640 x 480 @ 75 Hz	37.500	75.000	31.500
800 x 600 @ 60 Hz	37.879	60.317	40.000
800 x 600 @ 75 Hz	46.875	75.000	49.500
1024 x 768 @ 60 Hz	48.363	60.004	65.000
1024 x 768 @ 75 Hz	60.023	75.029	78.750
1152 x 864 @ 60 Hz	54.348	60.053	80.000
1152 x 864 @ 75 Hz	67.500	75.000	108.000
1280 x 1024 @ 75 Hz	79.976	75.025	135.000
1360 x 768 @ 75 Hz	47.649	59.936	84.625
1600 x 1200 @ 60 Hz	74.077	59.981	130.375
1920 x 1080 @ 60 Hz	67.500	60.000	148.500
1920 x 1200 @ 60 Hz	74.099	59.999	154.125

1.12 SDI Video Format

Output Signal	Description
SMPTE-274M	1080i (60 / 59.94 / 50) 1080p (30 / 29.97 / 25 / 24 / 24sF / 23.98 / 23.98sF)
SMPTE-296M	720p (60 / 59.94 / 50)
SMPTE-260M	1035i (60 / 59.94)
SMPTE-125M	480i (59.94)
ITU-R BT.656	576i (50)

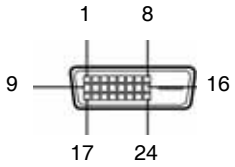
1.13 VGA (15 Pin D-Sub)

Pin No.	Assignment	Pin No.	Assignment
1	Red	8	Ground-Blue
2	Green	9	No Connection
3	Blue	10	Ground-Sync
4	Ground	11	Ground
5	DDC 5V Standby Cable Connection Check	12	DDC Data
6	Ground-Red	13	H.Sync
7	Ground-Green	14	V.Sync
8	Ground-Blue	15	DDC Clock



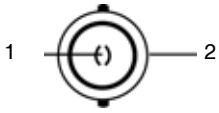
1.14 DVI In, Out (24 DVI-D)

Pin No.	Assignment	Pin No.	Assignment
1	T.M.D.S. Data 2-	13	No Connection
2	T.M.D.S. Data 2+	14	+5V Power
3	T.M.D.S. Data 2 Shield	15	Cable Connection Check
4	No Connection	16	Hot Plug Detect
5	No Connection	17	T.M.D.S. Data 0-
6	DDC Clock	18	T.M.D.S. Data 0+
7	DDC Data	19	T.M.D.S. Data 0 Shield
8	No Connection	20	No Connection
9	T.M.D.S. Data 1-	21	No Connection
10	T.M.D.S. Data 1+	22	T.M.D.S. Clock Shield
11	T.M.D.S. Data 1 Shield	23	T.M.D.S. Clock+
12	No Connection	24	T.M.D.S. Clock-



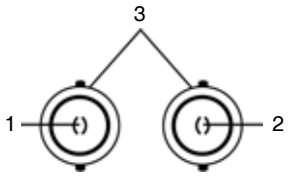
1.15 C-Video (BNC)

Pin No.	Assignment
1	Composite
2	Ground



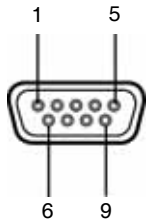
1.16 S-Video (BNC)

Pin No.	Assignment
1	S_VIDEO / Y (Luma)
2	S_VIDEO / C (Chroma)
3	Ground



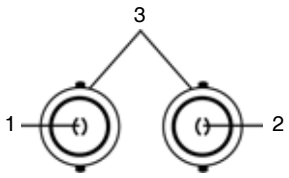
1.17 RS232C (D-SUB 9 Pin)

Pin No.	Assignment
1	No Connection
2	TXD
3	RXD
4	No Connection
5	Ground
6	No Connection
7	No Connection
8	No Connection
9	No Connection



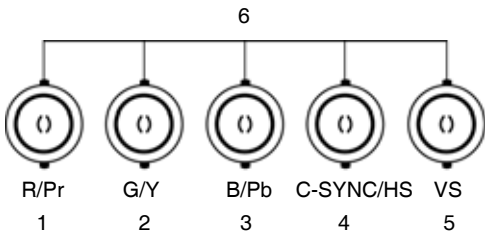
1.18 SDI (BNC)

Pin No.	Assignment
1	SDI IN
2	SDI OUT
3	Ground



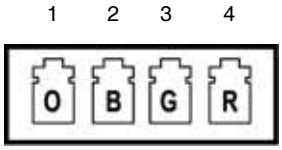
1.19 RGBHV / RGBS / YPbPr (BNC)

Pin No.	Assignment	
	RGBS	Y Pb Pr
1	Red	Pr
2	Green	Y
3	Blue	Pb
4	H-Sync / C-Sync	No Connection
5	V-Sync	No Connection
6	Ground	



1.20 OPTICAL (available on VP4726F Monitor Only)

Pin No.	Assignment
1	OPTICAL Clock
2	OPTICAL Blue
3	OPTICAL Green
4	OPTICAL Red



2.0 MAINTENANCE

Regular and proper maintenance of your VP4726 and VP4726F Monitors is the best way to protect your investment and avoid non-warranty repairs.

Recommended care and handling of your VP4726 and VP4726F Monitors includes proper day-to-day operation and periodic inspection & cleaning.

Your authorized ConMed Linvatec service department is the most knowledgeable about the ConMed Linvatec VP4726 and VP4726F Monitors and will provide competent and efficient service. Any services and/or repairs done by any unauthorized repair facility may result in reduced performance of the instruments or instrument failure.

2.1 Life Expectancy

The standard warranty for this product is twelve months. Life expectancy for the product is expected to meet and exceed this period under normal use and standard of care.

2.2 Periodic Maintenance

This product requires no periodic maintenance. Occasional inspection of hardware interfaces is recommended for high use connectors. Periodically inspect for excessive wear or damage to ensure effective data transfers. Arrange for service if a connector is visibly worn or damaged.

2.3 Cleaning Instructions

Follow universal precautions for protective apparel when handling and cleaning contaminated instruments.

1. Turn the monitor power off. Disconnect all power cords and adaptors from the electrical power source and from the rear of the monitor.
2. Wipe monitor with a clean, soft cloth dampened with a mild, pH- balanced detergent.
3. Wipe again with distilled or sterilized water.
4. Wipe dry with a clean, soft cloth.

2.4 Recommended Annual Monitor Maintenance Requirements

NOTE: Technical data is subject to modification, revision and improvement without notice.

Table 1: Recommended Annual Monitor Maintenance Requirements

Test Type	Test Value
Ground Impedance	ZG < 100 mOhm from the ground pin on the power inlet module to the Console's exposed metal parts. *
Test Chassis Leakage Currents	IL < 100 uA in NORMAL Condition. IL < 500 uA in Single Fault Conditions [300 uA US deviation] *
Test Earth Leakage Currents	IL < 500 uA NORMAL Condition [300 uA US deviation] IL < 1 mA Single Fault Condition *
Test Dielectric Withstand	Test Line and Neutral to Ground @ V = 1500 V~, no breakdown *
* See IEC 60601-1 for test methods.	

Table 2: Safety, Classifications

Classification of Equipment	Parameter Value
According to protection against electric shock.	Class I [Grounded]. this includes the AC/DC Adapter (Bridgepower Corporation: MW122RA2400F02)
According to degree of protection against electric shock.	Type B
According to degree of protection against harmful ingress of water.	IPX1
According to the degree of safety in the presence of Flammable Anesthetics mixture with air, with oxygen, or with nitrous oxide.	Equipment is NOT suitable for use in the presence of flammable anesthetics mixture with oxygen or with nitrous oxide.
According to the mode of operation.	Continuous
UL Safety Compliance:	This LCD monitor is U.L. Classified with respect to electric shock, fire and mechanical hazards only in accordance with 60601-1/CAN/CSA C22.2 NO. 601.1.
EEC Safety Compliance:	This display meets the requirements of EN-60601-1 so as to conform to the Medical Device Directive 93/42/ EEC (general safety information).

NOTE: This monitor complies to the above standards only when used with the supplied medical grade power supply, 24 Volt: Bridgepower Corporation: MW122RA2400F02.
The monitor should be powered from a center tapped circuit when used in the US at voltages over 120 volts. Monitor is intended for continuous operation.
This display is energized from an external electrical power source for class 1 equipment. It is the responsibility of the installer to test the display's earth ground to verify that it complies with the hospital, local and national impedance requirements.

2.5 Technical Specifications

VP4726 and VP4726F Monitors		
LCD Panel	Type	TFT-LCD
	Screen Size	26 inch
	Maximum Resolution	1920 x 1200 @ 60 Hz
	Pixel Pitch	0.2865 mm (H) x 0.2865 mm (V)
	Display Colors	16.7M
	Contrast Ratio	1000:1
	Viewing Angle	89° /89° /89° /89°
	Response Time	12 msec (Rising + Falling)
	Luminance	400cd/m^2
Synchronization	Horizontal Frequency	30KHz~75KHz
	Vertical Frequency	50Hz~75Hz
Power Consumption	Maximum	Max 120W
	Stand-by Mode	Max 20W
Control Key	Front Side	▲, ►, ▼, ◄, INPUT, PIP, MENU, POWER
Input Signal	Video	1XDVI, 1XOptical DVI (VP4726F Monitor Only), 1XD-SUB, 1XBNC (CVBS), 2XBNC (SVHS Y/C), 1XBNC (SDI), 5XBNC (Component Y/G, Pb/B, Pr/R, H/CS, VS Input)
Input Signal	Video	1XDVI, 1XBNC (SDI)
Input Power	DC 24V, 6.25A Max	
Weight	18.7 lbs. (8.5 kg)	
Dimensions	24.6” (W) x 17.6” (H) x 4.1” (D) 625 mm (W) x 445.7 mm (H) x 103.4 mm (D)	
IEC Equipment Classification	Class 1, Continuous Operation	

ENVIRONMENTAL	
Operating	Ambient Temperature: + 32° F to 104° F (+0° C to 40° C)
	Relative Humidity: 30% to 75%, non-condensing
	Atmospheric Pressure: 700 hPa to 1060 hPa
Transport and Storage	Ambient Temperature: - 4° F to 140° F (-20° C to + 60° C)
	Relative Humidity: 10% to 85%, non-condensing
	Atmospheric Pressure: 500 hPa to 1060 hPa

NOTES:

1. **If the product is connected to a 240V system in the United States, then it must be connected to a center tap system.**

2. **The VP4726 and VP4726F Monitors contain electronic components and may require special handling for end-of-life disposal. Refer, for example, to Directive 2002/96/EC (WEEE Guidelines) for disposal in the European Union or other local guidelines regarding disposal of electronic components.**

Power Cord Requirements:

100/120 Volt (Cat. No. C7104)

Use only a listed (UL, CSA) detachable power cord manufactured to the following specifications.

- Plug End
  - NEMA 5-15P hospital grade, 15 amps, 125V
- Receptacle End
  - IEC 320/CEE-22, 6 amps, 250V/15 amps, 125V
- Cord
  - UL style SJT, 14 AWG, 3 conductor

220/240 Volt (Cat. No. C7105)

- Plug End
  - Molded straight PVC plug with double grounding system
  - DIN 49441, CEE 7/U11, 10/16A, 250V
  - CEBEC, DEMKO, KEMA, NEMKO, OVE, SEMKO, VDE, UTE, FEMKO
- Receptacle End
  - Molded straight PVC plug
  - DIN 49457, CEE 22/V, 10A, 250V
  - VDE, D, N, S, SEV, OVE, KEMA
- Cord
  - PVC, 7.2mm diameter
  - 10A, 250V
  - Conductors: 3 x 1 mm^2
  - Conductor Colors - brown, blue, green/yellow stripe

2.6 Detailed EMC Information

The equipment has been tested and found to comply with the EMC limits for Medical Devices per EN 55011 Class B and EN 60601-1-2. These limits are designed to provide reasonable protection against harmful interference in a typical medical installation. Operation is subject to the following two conditions: 1) this VP4726 Monitor may not cause harmful interference, and (2) this VP4726 Monitor must accept any interference received, including interference that may cause undesired operation.

The Equipment generates and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to other devices in the vicinity. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference with other devices, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving device.
- Increase the separation between the equipment.
- Connect the equipment to an outlet on a circuit different from that to which the other device(s) is connected.
- Consult the manufacturer or a field service technician for assistance.

FCC WARNING :

This equipment generates or uses radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose authority to operate this equipment if an unauthorized change or modification is made.

NOTES:

1. **The EMC tables and other guidelines that are included in the Instruction Manual provide information to the customer or user that is essential in determining the suitability of the Equipment or System for the Electro-magnetic Environment of use, and in managing the Electromagnetic Environment of use to permit the Equipment or System to perform its intended use without disturbing other Equipment and Systems or non-medical electrical equipment.**
2. **Medical Electrical Equipment needs special precautions regarding EMC and needs to be installed and put into service according to the EMC information provided in the Accompanying Documents.**

WARNINGS:

1. **Portable and mobile RF communications equipment can affect Medical Electrical Equipment.**
2. **Use of accessories, transducers, and cables other than those specified, with the exception of transducers and cables sold by the manufacturer of the equipment as replacement parts for internal components, may result in increased emissions and decreased immunity of the equipment or system.**
3. **The console should not be used adjacent to or stacked with other equipment, and that if adjacent or stacked use is necessary, the equipment or system should be observed to verify normal operation in the configuration in which it is intended to be used.**
4. **Under extreme conditions of primary power voltage sag [Primary voltage less than 60% of mains] the device may require operator intervention to recover lost image. Device may have to be restarted by pressing On/Standby Switch.**

Table 3: Guidance and Manufacturer's Declaration - Electromagnetic Immunity

The ConMed Linvatec VP4726 and VP4726F Monitors are intended for use in the electromagnetic environment specified below. The customer or the user of the VP4726 and VP4726F Monitors should assure it is used in such an environment.		
Emissions Test	**Compliance**	**Electromagnetic environment - guidance**
RF Emissions CISPR 11	Group 1	The VP4726 and VP4726F Monitors use RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF Emissions CISPR 11	Class B	The VP4726 and VP4726F Monitors are suitable for use in all establishments, including domestic establishments and those directly connected to the public low-voltage power supply network that supplies buildings used for domestic purposes.
Harmonic Emissions IEC 61000-3-2	Class D	
Voltage fluctuations / flicker emissions IEC 61000-3-3	Complies	

Table 4: Guidance and Manufacturer's Declaration - Electromagnetic Immunity

The ConMed Linvatec VP4726 and VP4726F Monitors are intended for use in the electromagnetic environment specified below. The customer or the user of this VP4726 and VP4726F Monitors should assure that it is used in such an environment.			
Immunity Test	**IEC 60601 Test Level**	**Compliance Level**	**Electromagnetic environment guidance**
Electrostatic discharge (ESD) IEC 61000-4-2	± 6 kV contact ± 8 kV air	± 6 kV contact ± 8 kV air	Floors should be wood, concrete or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrical fast transients / bursts IEC 61000-4-4	± 2 kV for power supply lines ± 1 kV for input/ output lines	± 2 kV for power supply lines ± 1 kV for input/ output lines	Mains power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	± 1 kV line to line ± 2 kV lines to earth	± 1 kV line to line ± 2 kV lines to earth	Mains power quality should be that of a typical commercial or hospital environment.
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	3 A/m	3 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
Voltage dips, short interruptions and voltage variations on power supply input lines IEC 61000-4-11	<5% *Ut* (>95% dip in *Ut*) for 0.5 cycle 40% *Ut* (60% dip in *Ut*) for 5 cycles 70% *Ut* (30% dip in *Ut*) for 25 cycles <5% *Ut* (>95% dip in *Ut*) for 5 seconds	<5% *Ut* (>95% dip in *Ut*) for 0.5 cycle 40% *Ut* (60% dip in *Ut*) for 5 cycles 70% *Ut* (30% dip in *Ut*) for 25 cycles <5% *Ut* (>95% dip in *Ut*) for 5 seconds	Mains power quality should be that of a typical commercial or hospital environment. If the user of the VP4726 and VP4726F Monitors requires continued operation during power mains interruptions, it is recommended that theVP4726 and VP4726F Monitors be powered from an uninterruptable power supply or battery.
Note: *Ut* is the a.c. mains voltage prior to application of the test level.			

Table 4: Guidance and Manufacturer's Declaration - Electromagnetic Immunity

The ConMed Linvatec VP4726 and VP4726F Monitors are intended for use in the electromagnetic environment specified below. The customer or the user of this VP4726 and VP4726F Monitors should assure that it is used in such an environment.			
Immunity Test	**IEC 60601 Test Level**	**Compliance Level**	**Electromagnetic environment guidance**
			Portable and mobile RF communications equipment should be no closer to any part of the VP4726 and VP4726F Monitors, including cables, than the recommended separation distance calculated from the equation applicable to the frequency of the transmitter.
			Recommended Separation Distance
Conducted RF IEC 61000-4-6	3 Vrms 150 kHz to 80 MHz	3 Vrms 150 kHz to 80 MHz	d = [3.5 / V1] $\sqrt{P}$

Table 4: Guidance and Manufacturer's Declaration - Electromagnetic Immunity

The ConMed Linvatec VP4726 and VP4726F Monitors are intended for use in the electromagnetic environment specified below. The customer or the user of this VP4726 and VP4726F Monitors should assure that it is used in such an environment.

Immunity Test	IEC 60601 Test Level	Compliance Level	Electromagnetic environment guidance
Radiated RF IEC 61000-4-3	3 V/m 80 MHz to 2.5 GHz	3 V/m 80 MHz to 2.5 GHz	$d = [3.5 / E1] \sqrt{P}$ 80 MHz to 800 MHz $d = [7 / E1] \sqrt{P}$ 800 MHz to 2.5 GHz Where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in meters (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey [a], should be less than the compliance level in each frequency range [b]. Interference may occur in the vicinity of equipment marked with the following symbol. 

Note 1: At 80 MHz and 800 MHz, the higher frequency range applies.
Note 2: These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and/or people.

a Field strengths from fixed transmitters, such as base stations for radio (cellular / cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the VP4726 and VP4726F Monitors are used exceeds the applicable RF compliance level above, the VP4726 and VP4726F Monitors should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as re-orienting or relocating the VP4726 and VP4726F Monitors.

b Over the frequency range 150 kHz to 80 MHz, field strengths should be less than 3 V/m.

Table 5: Recommended Separation Distances Between Portable and Mobile RF Communications Equipment and the VP4726 and VP4726F Monitors

The ConMed Linvatec VP4726 and VP4726F Monitors are intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the VP4726 and VP4726F Monitors can help prevent electromagnetic interference by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the VP4726 and VP4726F Monitors as recommended below, according to the maximum output power of the communications equipment.

	Separation Distance According to Frequency of Transmitter		
	m		
Read Maximum Output Power of Transmitter	150 kHz to 80 MHz	80 MHz to 800 MHz	800 MHz to 2.5 GHz
W	$d = [3.5/V1]\sqrt{P}$ V1 = 3V/m	$d = [3.5/E1]\sqrt{P}$ E1 = 3V/m	$d = [7/E1]\sqrt{P}$ E1 = 3V/m
0.01	0.12	0.12	0.23
0.1	0.37	0.37	0.74
1	1.17	1.14	2.33
10	3.70	3.70	7.37
100	11.70	11.70	23.3

For transmitters rated at a maximum output power not listed above, the recommended separation distances *d* in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where *P* is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

Note 1: E1) At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.
Note 2: E2) These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people.

2.7 Obtaining Parts and Accessories

When obtaining parts or accessories, please supply the following information:

1. Instrument Model / Serial number
2. Component description
3. Quantity desired
4. ConMed Linvatec Part / Catalog number
5. Component reference designator (if applicable)

Accessory Description	Part Number
DVI-D Cables	
DVI-D Video Cable, DVI to DVI, 3 ft.	IM9020
DVI-D Video Cable, DVI to DVI, 6 ft.	IM9021
DVI-D Video Cable, DVI to DVI, 10 ft.	IM9003
DVI-D Video Cable, DVI to DVI, 25 ft.	IM9022
Power Cables	
Power Cord, 115 V, 1 ft.	C7104-1
Power Cord, 115 V, 2 ft.	C7104-2
Power Cord, 115 V, 3 ft.	C7104-3
Power Cord, 115 V, 4 ft.	C7104-4
Power Cord, 115 V, 6 ft.	C7104
Power Cord, 230 V, 10 ft.	C7105

2.8 Customer Service

2.8.1 Assistance

If you need technical assistance regarding the use or application of this product, or you encounter a problem that requires servicing or repair, contact ConMed Linvatec Customer Service at 800-925-4255 or your ConMed Linvatec Sales Representative. Outside the U.S. contact your local ConMed Linvatec Representative.

Report any events involving injuries or malfunctions to the ConMed Linvatec Regulatory Product Support.

2.8.2 Repairs

Products returned for any reason must have an authorized Return Goods (R.G.) number prominently displayed on the box and included on all paperwork. Refer to this number if making inquiries about repair status. Please call ConMed Linvatec Customer Service and provide the following information to obtain an R.G. number prior to returning any product for repair:

- Product Number
- Serial/Lot Number - if applicable
- Original Invoice Number
- Date of Purchase
- Detailed description of the problem

All returns should be sent to:

ConMed Linvatec
Attn.: Customer Service Dept.
7416 Hollister Avenue
Santa Barbara, CA 93117 USA

Customer Service

(within U.S.)	**Phone:**	**800-925-4255**
	FAX:	**727-399-5256**
(outside U.S.)	**Phone:**	**727-392-6464**
	FAX:	**727-397-4540**

ConMed Linvatec Regulatory Product Support

(within U.S.)	**Phone:**	**800-237-0169**
(outside U.S.)	**Phone:**	**727-392-6464**

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EC REP

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CE Rx ONLY

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