

## iameco™

XV1-19" Computer TFT Monitors



# **User's Manual**

includes setup, service and troubleshooting information

Available in solid wood Ash, Beech, Sapele





# updateable upgradable re-usable recyclable

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## iameco<sup>™</sup> overview

Modern computer devices are made up of hundreds of different components, incorporating a host of toxic chemicals. The dominant toxic components contain brominated flame retardants, PCBs, and heavy metals like lead, cadmium and mercury, etc. These are extremely toxic even in the smallest quantities. These chemicals can accumulate in the environment and damage our health and the health of our children. MicroPro<sup>™</sup> are committed through the iomeco<sup>™</sup> range of environmentally friendly computers to phasing out these contaminants. We believe that computer manufacturers must take responsibility for the full environmental impact of their products to bring the e-waste crisis under control by designing clean electronics with longer life spans that are safe



and easy to recycle and will not expose workers and the environment to hazardous chemicals.

We believe our iameco<sup>™</sup> range of computers will be the third brand of the future. Standard PCs, Apple Mac and iameco<sup>™</sup> for the environmentally friendly computers. We have designed iameco<sup>™</sup> using techniques from environmental science, and its entire lifecycle has been examined to minimise ecological burdens. We have minimised the use of hazardous materials such as lead, mercury, chromium, brominated flame retardants and plastics. iameco<sup>™</sup> takes a holistic view of recycling and waste minimization. We apply this philosophy from the outset, beginning in the design stage by creating compact, ultra-efficient products that use high recycling-value materials wherever possible.

Fashion and greed for new computers with higher performance demanding more speed is fuelling a growing consumption of computers. The waste mountain of electronic goods is growing rapidly. In 1997 a standard computer had a lifespan of 7 years now it is as little as 2 years. iameco<sup>™</sup> computers believe in a cleaner greener approach to the whole eco design of computers resulting in a much longer lifespan averaging between 5 and 7 years. We achieve this through the usage of futuristic updateable, upgradeable, reusable, recyclable modular design components.

To date we have concentrated on the futuristic design approach to computers. We have pioneered and integrated the following approaches to waste and energy reduction, e.g.

Reduction of the multitude of plastics used for case parts. The current use of aluminium, wood and renewable wood casings as reusable materials Reduction of noise emissions (DB) Reduction of energy consumption Reduction in the size of PCs to use less material Minimisation of hazardous materials Use of recyclable packaging

In 1999 the company received support from Enterprise Ireland under the Environmentally Superior Products (ESP) Programme, which gave it access to external advise on the further greening of the iameco<sup>™</sup> design. Since then we have been supported by the "EU LIFE programme" and "CGPP" IRL (Cleaner Greener Production Program), which has enabled us to bring these products to the market.

The study concluded that the design had many technical and commercially feasible environmental attributes and compared favourably with the European Eco-label specification for PCs. The iameco<sup>™</sup> design is based on extending the operational life of the hardware via an upgradeable chassis with modular interface port design, using raw materials and assembly techniques to increase the recycling and reuse options at end of life and increasing energy efficiency. iameco<sup>™</sup> is unique in reflecting best practise and state-of-the-art technology with respect to energy efficient and environmentally aware design.

To sum it up:

"i am eco"

Are you?

Paul Maher

Supported by:





Anne Galligan



## **Getting started**

You have just purchased a high-quality environmentally friendly TFT LCD monitor! Thank you for buying your new iameco<sup>™</sup> XV1-19" TFT flat panel monitor. Your purchase has contributed to reducing the burden on the environment and to the further development of environmentally adapted electronic products. Please read this manual thoroughly before operating the monitor and keep your user's manual in an accessible place at all the times. Make sure the monitor has not been damaged in transit. Should the monitor be damaged, please contact your local iameco<sup>™</sup> dealer. Before you set up your monitor, remove any protective film from the outside of it.

#### **Package contents**

Monitor	iameco <sup>™</sup> XV1-19″
Cables	1 × AC/DC power adapter
	$1 \times AC$ adapter power cable
	1 × 15-pin D-sub signal cable
Accessories	1 × remote control
	$2 \times AAA$ battery
Application CD	Installation CD (not available in all locations)
Documentation	User guide
	Warranty card

If any items are missing or damaged, contact your iameco<sup>™</sup> dealer.



**Note:** Please keep the box and packing materials in a safe place for re-use. It can be used when transporting your LCD-TFT-TV monitor in the future or return the packaging to iameco for recycling and re-use.

**Warning:** Your AC cord comes equipped with a three-wire grounding plug. This plug will fit a standard AC outlet. If you are unable to insert the plug into an outlet because the outlet isn't grounded, contact a licensed electrician to replace the outlet with a properly grounded outlet.

#### Connecting your iameco<sup>™</sup> monitor

Follow these steps to set up your monitor.

**Step 1:** Connect the DC power cable for the monitor to the power port on the back of the monitor; Plug the AC power cable into the power adapter and the other end into a 3-pin socket.

**Step 2:** Connect the signal cable to the 15-pin, D-Type sub connector on the back of the monitor and to the VGA port in the computer.

(If you are using a Macintosh computer, connect the cable to a Macintosh adapter, and set the pins on your adapter (Adapter not included). PC-compatible computers do not need an adapter.)

**Step 3:** Press the Power button to turn on the monitor and turn on your computer. When your monitor displays an image, the installation is complete.

the osh PCour o is

Power cable Signal cable

**Note:** To set up the monitor, please ensure that the power of the monitor, computer system, and other attached devices are turned off before proceeding with the above steps. Also please read the safety information (discussed on page 11) before you plug your monitor into a wall socket.





#### For better display

- 1. Connect the power cable for the monitor to the power port on the back of the monitor; Plug the power cable for the monitor into a nearby power socket.
- Adjust computer resolution and screen injection rate (refresh rate) in the control panel of the computer as described below to enjoy the best quality of picture. You can have an uneven quality of picture in the screen if the best quality of picture is not provided in TFT-LCD. Resolution: 1024 × 768 and Vertical frequency (refresh rate): 60 Hz
- **3.** TFT LCD panel manufactured by using advanced semiconductor technology with precision of 99.999% above is used for this product. But the pixels of RED, GREEN, BLUE and WHITE colour seem to be bright sometimes or some black pixels can be seen. This is not bad quality pixels and can be used without difficulty. For example, the number of TFT LCD pixels that is contained in the 15" is 2,359,296.

When you clean the monitor and the panel outside, please apply the recommended small amount of cleaner by using a soft and dry cloth. The LCD area should not be forced or scrubbed harshly. If excessive force is applied, you can damage the screen and surround.

## iameco<sup>™</sup> 19″ monitor control buttons

#### **Front control buttons**

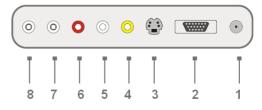
- **1. Power button:** Use this button to turn the monitor on and off.
- 2. Built-in Infrared Receiver (IR): Use your iameco<sup>™</sup> remote and the built-in IR receiver to work seamlessly with your monitor.
- **3. Power indicator:** This light glows green during normal operation and blinks orange once the monitor is in power save mode.
- 4. Input button: Use this button to specify the input of the video signal.
- **5.** Adjust button: These buttons allow you to highlight and adjust items in the menu (+/-). When the OSD is not active, these buttons will adjust the speaker's volume.
- 6. **Up-down button:** Use these buttons to navigation up and down.
- 7. Menu button: Use this button to open the OSD and activate a highlighted menu item and exit function.

#### **Rear connection ports**

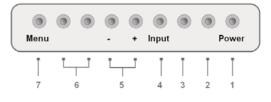
- **1. Power port (12ν DC):** Connect the power cord for your monitor to the power port on the back of the monitor.
- 2. Signal port (VGA 15 Pin D-Type): Connect the end of the signal cable to your computer's VGA port
- **3. S-Video port:** Use this port to connect to media hardware such as DVD players, televisions and projectors.
- 4. Composite video port
- 5. Audio-in left
- 6. Audio-in right
- 7. Audio-in from PC
- 8. Audio-out from monitor

**Note:** Never force a connector into a port. If the connector and port don't join with reasonable ease, they probably don't match. Make sure that the connector matches the port and that you have positioned the connector correctly in relation to the port.

See "Connecting your iameco<sup>™</sup> monitor" on page 4 of the manual for further information regarding cable connections or visit the iameco<sup>™</sup> website.









## **Remote control**

- 1. **Power:** Power ON/OFF button.
- **2. Mute:** Press once to activate the mute function. To restore sound, press the Mute button again.
- 3. Channel Keys 0-9: Use the numbers to select the channels directly.
- 4. **Image:** This mode changes the colour temp.
- 5. **Recall button:** Press this button to go back to the last chosen channel.
- 6. -/-- Key: For single or double number channel input.
- 7. Mode: Activates source OSD menu LC.
- 8. **Call:** Displays OSD channel number and system info.
- 9. Menu: Enter/exit the OSD menu.
- **10. OK:** Confirmation button to activate the item that you have highlighted
- **11. UP/down:** Press the Up or Down arrows to select channels or navigate through a menu.
- **12.** Left/right: For menu navigation and to increase or decrease the sound volume.

**Battery:** The remote requires 2 AAA batteries. While inserting batteries make sure to match the plus (+) ends with the plus markings on the battery case. Dispose of used batteries according to the manufacturer's instructions.

#### Tilt mechanism



The tilt mechanism makes it very easy to get the desired angle for your screen. Just adjust the dial at the base of your monitor to adjust your screen forward or backwards for best viewing position. This allows you to safely adjust your screen to a comfortable angle, reducing stress.

Adjustable Dial

## On Screen Display (OSD) control adjustment for 19" monitor

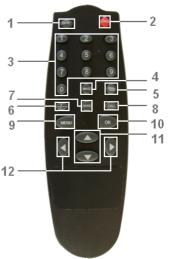
- 1. Push the MENU button to activate the OSD.
- 2. Highlight the desired submenu using the +/- buttons.
- Activate the submenu by pressing the MENU button.
- Activate the desired function using the MENU button.
- **5.** Adjust the selected function using the +/- buttons.
- **6.** To reverse one step push the EXIT button once.

#### **On Screen Display Functions**

#### Functions under the Picture submenu

Brightness:	Adjusts the brightness of the monitor's display.
Contrast:	Adjusts the contrast of the monitor's display.
H-Position:	Adjusts the horizontal position of the monitor's display.
V-Position:	Adjusts the vertical position of the monitor's display.
Phase:	Adjusts the phase of the monitor's display.
Clock:	Adjusts the frequency of the monitor's display.
Scaling:	Adjusts the scale of the monitor's display.









#### **Functions under the Advanced submenu**

Sharpness:	Adjusts the sharpness of the monitor's display.
Gamma:	Adjusts the gamma of the monitor's display.
Color Temp:	Adjusts the color temperature of the monitor's display.
User Red:	Adjusts the red color of the monitor's display.
User Green:	Adjusts the green color of the monitor's display.
User Blue:	Adjusts the blue color of the monitor's display.

#### Functions under the PIP (Picture in Picture) submenu

Size:	Adjusts the size of the PIP window.
Position:	Adjusts the position of the PIP window.
Source:	Specifies the source of the PIP window.
Brightness:	Adjusts the brightness of the PIP window.
Contrast:	Adjusts the contrast of the PIP window.
Color:	Adjusts the colors for the PIP window.
Tint:	Adjusts the tint of the PIP window.
Sharpness:	Adjusts the sharpness of the PIP window.

#### Functions under the Advanced PIP submenu

H-Position:	Adjusts the horizontal position of the PIP window.
V-Position:	Adjusts the vertical position of the PIP window.
Video format:	Specifies the video signal format.
Video type:	Specifies the video signal type.

#### **Functions under the Option submenu**

OSD position: Adjusts the OSD position to a pre-programmed position.
OSD h position: Adjusts the horizontal position of the OSD.
OSD v position: Adjusts the vertical position of the OSD.
OSD timeout: Adjusts the time of the OSD before it turns off. The OSD will automatically turn itself off if no adjustments are made within a certain time.
OSD background: Specifies the background of the OSD.
Mode information: Displays the actual resolution, frequency and mode.

#### Functions under the Utility submenu

Language:Specifies the OSD language.Volume:Adjusts the speaker's volume.Freeze Frame:Freezes the actual displayed picture.Factory Reset:All parameters are reset to the factory default values.Version Number:Displays the OSD's software version.

## **Plug and Play capability**

This monitor can be installed on any plug and play compatible system. Interaction of the monitor and computer systems will provide the best operating conditions and monitor settings. In most cases, monitor installation will proceed automatically, unless the user wishes to select alternate settings.

**Note:** See Power Saver described on the next page for further information regarding power-saving functions. For energy conservation, turn your monitor OFF when it is not needed, or when leaving it unattended for long periods. Always use your PC in S3 mode, which is set up in BIOS. All iameco<sup>™</sup> XPCs are factory set to S3 mode to conserve energy. Do not display a still picture for a long period, as this could cause a residual image (afterburn).





## **Power Saver**

This monitor has a built-in power management system called Power Saver. This system saves energy by switching your monitor into low-power mode when it has not been used for a certain amount of time. The monitor automatically returns to normal operation when you move the computer's mouse or press a key on the keyboard or screen. For energy conservation, turn your monitor OFF when it is not needed, or when leaving it unattended for long periods. The power saver system operates with a VESA DPMS-compliant video card installed in your computer. Use the software utility installed on your computer to set up this feature. There are two ways to reduce a product's energy consumption: by using components that require less power or by using power management software to modulate the energy consumption of these components. immeco<sup>™</sup> employs both techniques to maximize energy efficiency.

We believe efficiency should be the norm. Our computer monitors ship with power management enabled, meaning that a low-power sleep mode will automatically activate if there has been no user activity for 10 minutes. Another benefit of energy efficiency is lower power bills.

State	Normal Operation	Power Saving Mode EPA/ENERGY 2000	Power Switch Off	Unplug
Power Indicator	Green	Orange, Blinking	No Light	No Light
Power Consumption	~30W	1W	1W	OW

Features/Model	XV1-19-***
Resolution	SXGA
Number Of Pixels	1.280×1.024
Active Area (mm)	376.3×301.1
Pixel Pitch (mm)	0.294
Mode	PVA
Number of colours	16.2 M
Contrast Ratio	700:1
Brightness (cd/m²)	300 cd/m <sup>2</sup>
Response Time (at 25 C)	8 ms
Viewing Angle (U/D/L/R)	85/85/85
Back Light	4CCFL
Power Supply Voltage (V)	12
Power Consumption	50W Max
Operating	Temperature: 50°F ~104°F (10°C~40°C)
	Humidity: 10%~80%, non-condensing
Storage	Temperature: -4°F~113°F (-20°C~45°C)
	Humidity: 5%~95%, non-condensing.
Available options	Ash, Beech and Sapele wood
Outline Dimension (mm)	515×467×220
Weight (kg)	5,3
Warranty	Please view warranty section at page 25
Power Management	Meets DPMS, TCO'99 and ENERGY standards

## **General specifications**

## **Signal Connector Pin Assignment**

#### AC-DC Adapter

Input	AC 100-240V ~2.0 - 1.0A 50/60Hz
Output	DC 12V 4A ⊖-€€

**Note:** Use only the iameco<sup>™</sup> provided AC adapter approved for use with this monitor. Use of another AC adapter may damage your monitor and invalidate your warranty.





#### **15pin VGA Connector**

_		
	100 0 0 0 06	•

1 8 C1 C2 9 6 6 C5 17 2 24 C3 C4

Pin	Signal(D-Sub)	Pin	Signal (D-Sub)
1	Red Video	9	N.C.
2	Green Video	10	Sync. Ground
3	Blue Video	11	Ground
4	Ground	12	SDA (DDC Data)
5	Ground	13	H. Sync.
6	Red Ground	14	V. Sync.
7	Green Ground	15	SCL (DDC Clock)
8	Blue Ground		

Note: No.5 Pin must be grounded on the PC side.

### DVI-I Connector (Digital/Analog)

Pin	Signal(DVI-I)	Pin	Signal(DVI-I)
1	TMDS Data2-	16	Hot Plug Detect
2	TMDS Data2+	17	TMDS Data0-
3	TM DS Data2/4 Shield	18	TMDS Data0+
4	TMDS Data4-	19	TMDS Data0/5 Shield
5	TMDS Data4+	20	TMDS Data5-
6	DDC Clock	21	TMDS Data5+
7	DDC Data	22	TMDS Clock Shield
8	Analogue Vertical Sync.	23	TMDS Clock+
9	TMDS Data1-	24	TMDS Clock-
10	TMDS Data1+	C1	Analogue Red
11	TMDS Data1/3 Shield	C2	Analogue Green
12	TMDS Data3-	C3	Analogue Blue
13	TMDS Data3+	C4	Analogue H. Sync.
14	+5V Power	C5	Analogue Ground
15	Ground (return for +5V,		
	H. Sync. and V. Sync.)		







## Troubleshooting

Occasionally you may have problems while working with your monitor. This page provides solutions to problems that prevent you from working with your monitor. You can find more troubleshooting information in our support website at *www.iameco.com/support*. If you experience a problem with your monitor, there is usually a simple and quick solution. If you encounter a problem, try to make a note of what you did before the problem occurred. This will help you narrow down the possible causes of the problem and then find the answers you need. Before calling for service, check the information in this section to see if you can remedy any problems yourself. If you do need further assistance, please contact your *iameco*<sup>™</sup> dealer or visit our homepage at *www.iameco.com* 

A monitor recreates visual signals received from the PC. Therefore, if there is trouble with the PC or the video card, this can cause the monitor to become blank, have poor colouring, noise, video mode not supported, etc. In this case, first check the source of the problem, and then contact your dealer.

#### **Common checklist**

- 1. Check if the power cord and the cable are properly connected to the computer.
- 2. Check if the computer beeps more than 3 times when booting (If it does, request an after-service from your computer supplier for the main board of the computer).
- 3. If you installed a new video card or if you assembled the PC, check if you have installed the adapter (video) driver and the monitor driver.
- 4. Check if the scanning ratio of the video screen is set at 75Hz or 85Hz (Do not exceed 60Hz when using the maximum resolution).
- 5. If you have problems in installing the adapter (video) driver, boot the computer in Safe Mode, remove the Display Adapter at the Control Panel, System, Device Administrator and then reboot the computer to reinstall the adapter (video) driver.

#### Diagnosing the monitor's working condition

If there is no image on the screen or a *"Video mode not supported"* message comes up, disconnect the cable from the computer while the monitor is still powered on.

If there is a message coming up on the screen or if the screen goes white, this means the monitor is in working condition. In this case, check the computer for trouble.

The TFT colour LCD panel used in this monitor is made with the application of high precision technology. However, there may be minute points on the screen where pixels never light up or are permanently lit. Also, if the screen is viewed from an acute angle, there may be uneven colours or brightness. Please note that these are not malfunctions but common phenomena of LCDs and will not affect the performance of the monitor.

#### Self-Test feature check

Your monitor provides a self-test feature that allows you to check whether your monitor is functioning properly. If the monitor is functioning properly, you will get the following message.

- 1. Turn off both your computer and the monitor.
- 2. Unplug the video cable from the back of the computer.
- 3. Turn on the monitor.

## The screen does not display any images



- 1. Check for the power cord connection and supply if they are connected properly or not.
- 2. If the initial screen (*the login screen*) appears, boot the computer in the applicable mode and then change the frequency of the video card. (Refer to the Preset Display Modes).
- 3. If you see *"Video mode not supported"* on the screen it means the signal from the video card exceeds the maximum resolution and frequency that the monitor can properly handle. Adjust the maximum resolution and frequency that the monitor can properly handle. Set frequency of VGA card to 60 Hz.
- 4. If the power indicator on the monitor blinks at 1-second intervals it means the monitor is in Power Saver mode. Press any key on the keyboard or move the mouse to activate the monitor and restore the image on the screen.







#### The Image on the screen is shaking

- 1. Check the monitor configuration to see if it is in interlace mode. (Interlace mode: Vertical frequency 43Hz, 87Hz (i), etc.) It occurs if the signal from the video card exceeds the maximum resolution and frequency of the monitor. The best is 60Hz.
- 2. If there are any magnetic products such as a power adapter, speaker or high voltage wire that can create a strong magnetic field move those items away from the monitor.

#### The screen shows strange colours

- 1. Check if the windows colours or the video card has been set properly or not. For windows operating system set the colours properly from the *Control Panel > Display Settings*. Set the video card by referring to the video card manual.
- 2. If the screen displays only one colour, as if you were looking at the screen through cellophane paper than check the signal cable connection as they may have become loose. Make sure the video card is fully inserted in its slot and configured properly.
- 3. If the screen colours become strange after running a programme or due to a crash between applications, reboot the computer.

#### The screen suddenly has become unbalanced

- 1. If you have changed the video card or the drivers adjust the screen image position and size using the OSD.
- 2. If you have adjusted the resolution or frequency of the monitor, adjust the resolution and frequency at the video card.

#### The screen is out of focus or OSD cannot be adjusted

1. If you have adjusted the resolution or frequency of the monitor, adjust the resolution and frequency of the video card. (Refer to the Preset Display Modes)

#### LED is blinking but no images on the screen

- 1. Check if the frequency is adjusted properly or not (60 Hz). To adjust the frequency properly refer to the video card manual and Preset Display Modes.
- 2. If the power indicator on the monitor blinks at 1-second intervals it means the monitor is in Power Saver mode. Press any key on the keyboard or move the mouse to activate the monitor and restore the image on the screen.

#### There is a message on the screen

- 1. If it reads *"No Connection Check the signal cable"* on the screen, check the signal cable connection. (15 pin D-Type Connector)
- 2. If it reads "Unrecognised monitor, plug and play (VESA DDC) monitor found" on the screen then check for your newly installed devices. See the video card manual to see if the plug and play (VESA DDC) function can be supported. Find the updated monitor driver from our site and install the monitor driver according to the driver installation instructions.

**Note:** If a problem repeatedly occurs, contact an authorized iameco<sup>™</sup> service centre.





## **Tips and Safety precautions**

For your safety and the safety of your equipment, please read and observe the following rules in this page for handling and cleaning your monitor, as well as the guidelines for working more comfortably.

By any means do not modify, disassemble, or repair the monitor yourself. Doing so may cause a fire, electrical shock, or injury and you will invalidate your warranty.

#### Location and installation

- Set down the monitor carefully on a flat and stable work surface. The monitor can cause injury by falling as a result of placing on top of unstable objects or in unsafe places.
- Do not place the monitor face down. This may cause the screen to get scratched.
- Do not use the monitor where the ventilation is poor, or there is a lot of dust, where humidity is high, or where the monitor may come into contact with oil or steam and do not place the monitor where the power cord is subject to damage.
- The vents and other openings in the cabinet are designed for ventilation. Do no cover these vents and openings since insufficient ventilation can cause overheating and/or shorten the life of the monitor. Do not place the monitor on a bed, sofa, rug, or other similar surface, or in an enclosed space since they can block the ventilation openings.
- Ensure that the monitor does not come into contact with water or other fluids and protect your computer from dampness or wet weather, such as rain, snow. Ensure that no objects such as paper clips or pins enter the monitor as this could lead to fire or electric shock.
- Do not allow the monitor to come into contact with strong shocks or vibrations. Causing the monitor to fall or topple over may damage it.
- Do not place any heavy objects on the monitor. This may cause an electric shock or a fire.
- Do not use in places where the monitor will be subject to direct sunlight, near heating equipment or anywhere else where there is likelihood of high temperature, as this may lead to generation of excessive heat and outbreak of fire.
- If there are any woofer speakers near the monitor, unplug and relocate the woofer. Remove all electronic devices or anything with strong magnetic fields such as radios, fans, clocks and telephones that are within 3 feet (one meter) of the monitor.

#### Power

- When not used for extended periods of time, set your PC to DPMS (Display Power Management Signalling). If using a screen saver, set it to the active screen mode (as this could cause a residual image).
- When connecting to the power socket ensure that it is firmly connected. Do not use a damaged or loose plug or socket.
- Use only a properly grounded plug and receptacle. An improper ground may cause electric shock or equipment damage.
- Keep the minimum required distance between the power cord and any heat sources.
- Do not connect too many extension cords to an outlet. Insert the power plug directly into the AC outlet.
- Do not excessively bend the plug and wire nor place heavy objects upon them. Doing so may cause an electric shock.
- Disconnect the plug from the outlet during storms or lightning or if it is not used for a long period of time.
- Do not pull the plug out by the wire nor touch the plug with wet hands.
- Place the AC adapter in a ventilated area, such as desk top or on the floor. The AC adapter may become hot during normal operation of your computer. Use care when handling the adapter during or immediately after operation.
- Electrical equipment may be hazardous if misused. An adult must always supervise operation of this product. Do not allow children access to the interior of any electrical product and do not permit them to handle any cables.
- Do not attempt to repair the power cord if it is broken or malfunctioning. Refer the servicing to your iameco<sup>™</sup> service representative.

**Note:** There are Dangerous High Voltages inside, even when the power is OFF. The only way to turn off power completely is to disconnect the power cord. Make sure at least one end of the power cord is within easy reach so that you can unplug the monitor when you need to. Use only the power cord supplied with the monitor.





#### How to take care of your iameco<sup>™</sup> monitor

- Shut down your monitor and disconnect from mains.
- When cleaning the monitor case or the surface of the TFT-LCD, wipe with a slightly moistened, soft fabric cloth. Be careful not to scratch casing or glass.
- Do not spray detergents directly on the monitor. Spray the recommended detergent onto a smooth cloth and clean.
- Do not place liquids, chemicals or any metal objects on the monitor. This may cause damage, electric shock or a fire. If a foreign substance gets into the monitor, disconnect from AC power and then contact iameco<sup>™</sup> service centre.
- Do not paint your monitor's wooden frame. Use damp cloth to clean the wooden frame of the monitor.
- Before you lift or reposition your monitor, disconnect all cables and cords connected to it. To lift or move your monitor, firmly grasp both the display and stand sections.

#### **Other safety instructions**

- Do not display a still picture for a long period, as this could cause a residual image. If the brightness is adjusted to the minimum setting, it may be difficult to see the screen.
- Let your eyes rest for 5 minutes for each hour of looking at the monitor. This will reduce eye fatigue.
- Do not use or store inflammable substances near the monitor.
- Do not move the monitor by pulling the wire or the signal cable.
- Do not add accessories that have not been designed for this monitor.
- Keep the monitor away from any magnetic substances and do not touch screen as this may damage the monitor and may cause discolouring or distortion of the image.
- The quality of the computer signal may influence the quality of the display. We recommend using a computer able to emit high quality video signals.
- Never rub or tap the monitor with hard objects.

If the size of your monitor is small, or if the same image is present for long periods of time, you may see after images due to damage to the fluorescent substance on the inside of the TFT-LCD.

## **Repair of your iameco™ monitor**

This monitor has no user-serviceable parts. Do not attempt to open your monitor. This may cause an electric shock or a fire. Only authorised iameco<sup>™</sup> service personnel should remove the casing, by doing so you invalidate your warranty! If the warranty seal is broken this will invalidate your warranty.

If an unauthorised person opens your monitor, you risk damaging your equipment, and such damage is not covered by the limited warranty on your monitor. All spare parts are available from iameco<sup>™</sup> and can only be installed by official service centres. Visit *www.iameco.com* for updated information.

If your monitor is not operating normally or if there are any unusual sounds or smells coming from it, unplug it immediately and contact your iameco<sup>™</sup> service centre.

#### Before contacting us

In many cases, your monitor may not need repair. Before you contact us, please consult the troubleshooting section to see if you can easily remedy the problem yourself. Refer to page no 9. You can find the addresses of iameco<sup>TM</sup> service centres in page no 20.

#### MicroPro Computers

98 Nutgrove Avenue, Rathfarnham, Dublin 14, Ireland.

Tel: +353 (0) 1 4930514 Fax: +353 (0) 1 4943885





## **Disposal information**

The PC housing is manufactured of recycled aluminium, thereby exceeding the reuse and recycling facility. This also maximises energy saving, as minimal additional energy is required for re-manufacture with recycled aluminium. No plastic is used in the computer housing. Reusable materials and recyclable packaging are also used, resulting in zero waste. It's a modular design, which means you can take out and replace an individual part when it fails, as opposed to the whole machine maximising the options for upgrading and reuse of the PCs. At the end of life of your iameco<sup>™</sup> product we recommend that you treat the disposal of your equipment in an environmentally sound manner. Potential methods include reuse of parts or whole products and recycling of products, components and/or materials.

By any means, this equipment should not be disposed in an ordinary dustbin with household waste! Be responsible for your environment!

#### Information on disposal for private households

#### In the European Union (EU)

Ideally, the first option would be to bring back your iameco<sup>™</sup> product to iameco<sup>™</sup> service centre for remanufacture.

In some countries, your local retailer may also take back your old product free of charge if you purchase a similar new one. Please contact your local authority for further details. If your used electrical or electronic equipment has batteries or accumulators, please dispose of these separately beforehand according to local requirements. By disposing of this product correctly you will help ensure that the waste undergoes the necessary treatment, recovery and recycling and thus prevent potential negative effects on the environment and human health which could otherwise arise due to inappropriate waste handling.

#### In other countries outside the EU

If you wish to discard this product, please contact your local authorities and ask for the correct method of disposal. In some countries used electrical or electronic equipment can be returned free of charge to the dealer, even if you don't purchase a new product.

#### Information on disposal for business users

#### In the European Union (EU)

If the product is used for business purposes and you want to discard it please contact your iameco<sup>™</sup> dealer who will inform you about the take-back of the product. You might be charged for the costs arising from the take-back and recycling. Small products (and small amounts) might be taken back by your local authority for take-back of your used products.

#### In other countries outside the (EU)

If you wish to discard of this product, please contact your local authorities and ask for the correct method of disposal.

#### WEEE collection points in Dublin, Ireland

There are 7 recycling centres located in Dublin, which will take back your Waste Electrical and Electronic Equipment (WEEE) for free.

Shamrock Terrace Recycling Centre (North Strand) - Dublin City Council Pigeon House Recycling Centre, Ringsend - Dublin City Council Balleally Recycling Centre - Fingal County Council Coolmine Recycling Centre - Fingal County Council Balbriggan Recycling Centre - Fingal County Council Ballyogan Recycling Centre - Dun Laoghaire Rathdown County Council Ballymount Recycling Centre - South Dublin County Council





## **Return Policy**

#### Our guarantee

iameco<sup>™</sup> is pleased to offer you a 7-day money back guarantee if you are not fully satisfied with our products (subject to certain conditions contained in this return policy). You have 7 days from date of shipment of your purchase to return your purchase. iameco<sup>™</sup> must be notified by e-mail of your intention to return your purchase within 10 days of shipment.

#### How to return your purchase

All returns queries are dealt with by e-mail. Contact *returns@iameco.com* for further instructions. You will be e-mailed a Return Merchandise Authorisation (RMA) number with some details to fill out before receiving the RMA number. You can find the RMA form on page 19 in this manual.

#### Exchanges

Exchange of items is handled in the same way as returns. However there is a charge on freight cost to ship it out again. You will be informed how to process this charge. Replacement items are not entitled to free delivery even if the free shipping option was included in the original order.

#### **Returns - Exchanges Terms and Conditions**

iameco will repair/exchange/replace the full original product. Price including original shipping costs if the return is as a result of an iameco error.

If the product fails within the manufacturer's Dead on Arrival (DOA) period, a replacement product will be offered.

#### iameco<sup>™</sup> is NOT responsible for any loss or damage of your return.

Any non-insured, items showing wear and tear or damage will not be accepted for return. Returned items must be in a re-saleable condition. Please ensure that items are insured for the full amount including shipping costs. iameco<sup>m</sup> will not be liable for any shipping charges on the returned items.

All original paperwork and documentation must be included. Custom requests, special orders are not accepted for return. We reserve the right not to accept any item that has not been hallmarked as a result of a special request. Items will not be accepted for return after 10 days from shipping date.

#### Packing your return

Pack your return carefully in the original boxing. Include all original paperwork and documents. Send the package by priority registered mail or a shipment of your choice to

#### MicroPro Computers

98 Nutgrove Avenue, Rathfarnham, Dublin 14, Ireland.

Tel: +353 (0) 1 4930514 Fax: +353 (0) 1 4943885

Mark your Returns Material Authorisation (RMA) number clearly on the outside. Mark clearly on the outside that this is an item originally exported from Ireland and now being returned. Request a return receipt to confirm that we have received your item.





## Warranty information

The following terms apply only to new "in the original carton" products marketed and distributed by iameco<sup>™</sup>, which are purchased and used by the original consumer purchaser. This information is subject to the terms and conditions of the written warranty statement included with each product, and are available for examination from the dealer prior to purchase.

Depending on the model, your terms and conditions may be different from those shown below, and this information is subject to change without prior notice. Unless specifically stated otherwise, used and reconditioned products that are resold have no warranty from iameco<sup>¬</sup> and are considered sold "AS-IS", however, the selling dealer may offer additional service options.

#### Information in this document is subject to change without prior notice.

Reproduction in any manner whatsoever without the written permission of iameco<sup>™</sup> is strictly forbidden. iameco<sup>™</sup> shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance, or use of this material.

#### Warranty for iameco<sup>™</sup> TFT-LCD Monitor

Product	LCD Panel	Labour	Parts
TFT LCD Monitor	1 Year	2 Years	2 Years

#### What the warranty covers

**iameco<sup>™</sup>** warrants your display(s) against defects in material and workmanship during the warranty period from **iameco<sup>™</sup>** factory delivery date shown the in shipping documents. If a product proves to be defective in material or workmanship during the warranty period, **iameco<sup>™</sup>** will, at its sole option repair or replace the product with similar product provided the purchaser adheres to certain return authorization procedures and guidelines. **iameco<sup>™</sup>** may, use rebuilt, reconditioned, or new parts or components when repairing any product or replace a product with a rebuilt, reconditioned or new product. Upon request from **iameco<sup>™</sup>**, the consumer must provide information to reasonably prove the date of purchase. **iameco<sup>™</sup>** reserves the right to charge customer in case of warranty conditions that are not fulfilled.

#### How long the warranty is effective

 $iameco^{T}$  display products are warranted for 1 year for LCD Panel, 2 years for parts and labour, starting from the delivery date as per shown on the corresponding shipping documents. Please ensure you register your iameco<sup>T</sup> product to avail of your guarantee.

#### Who the warranty protects

This warranty is valid only for the first purchaser and is not assignable or transferable to any subsequent purchaser/end user.

#### What the warranty does not cover for

- **1.** Any product, which the serial number has been defaced, modified or removed.
- **2.** Damage, deterioration or malfunction resulting from:
  - a. Accident, misuse, neglect, fire, water, lightning, or other acts of nature, Power Indicator Green/Orange, blinking, No light, unauthorized product modification, or failure to follow instructions supplied with the product will not be covered under warranty.
  - b. Repair or attempted repair by anyone not authorized by iameco<sup>™</sup>.
  - c. Any damage of the product due to shipment.
  - d. Removal or installation of the product.
  - e. Causes external to the product, such as electric power fluctuations or failure.
  - f. Use of supplier or parts not meeting iameco<sup>™</sup> specifications.
  - g. Normal wear and tear.
  - h. Any other cause that does not relate to a product defect.





- 3. Cosmetic damage by purchaser, such as markings, discolouration, scratches, dents, anti-theft devices markings, gouges or any other defacement.
- Physically damaged products by purchaser, such as broken PCB, Housing, damaged LCD Module. 4.
- No Defect Found (product returned to iameco<sup>™</sup> as defective but failure is not duplicated by iameco<sup>™</sup>s 5. test method).
- The product is not in accordance with the fault in the application. 6.
- Damage resulting from use of non- iameco<sup>™</sup> approved accessories. 7.
- Timber is a lifelike natural material which can cause some little changes in the precision of the 8 produced product such as small openings line beside the connecting point and some other small changes which are out of iameco<sup>™</sup> control and don't make any effect for the product functionality.
- 9. Products serviced by non-authorized persons or companies.

#### Limitation of liability

If your iameco<sup>™</sup> product fails to work as warranted above, your sole and exclusive remedy shall be repaired or replaced. iameo<sup>™</sup> maximum liability under this limited warranty is expressly limited to the lesser of the price you have paid for the product or the cost of repairing or replacement of any hardware components that malfunction in conditions of normal use.

iameco<sup>™</sup> is not liable for any damages caused by the product or the failure of the product to perform, including any lost profits or savings or special incidental, or consequential damages. iameco<sup>™</sup> is not liable for any claim made by a third party or made by you for a third party.

This limitation of liability applies whether damages are sought, or a claim made, under this limited warranty or as a tort claim (including negligence and strict product liability), a contract claim, or any other claim. This limitation of liability cannot be waived or amended by any person. This limitation of liability will be effective even if you have advised iameco<sup>™</sup> or an authorized representative of iameco<sup>™</sup> of the possibility of any such damages.

This limitation applies whether damages are sought, or a claim made, under this limited warranty or as a tort claim (including negligence and strict product liability), a contract claim, or any other claim. This limitation of liability cannot be waived or amended by any other person. This limitation of liability will be effective even if you have advised iameco<sup>™</sup> or an authorized representative of iameco<sup>™</sup> of the possibility of any such damages. This limitation of liability however will not apply to claims for personal injury.

#### How to get warranty service

For information on obtaining warranty service, contact your iameco<sup>™</sup> dealer (the place where you 1. bought your product) as your first choice. If for any reason you can not contact your dealer, please contact iameco<sup>™</sup> customer service by emailing to *support@iameco.com* 

To obtain warranty service, you will be required to fill out RMA Request Form (return 2. merchandise/material authorization) available on page 19 of the user's manual, or on the following address (www.iameco.com/support/rma.htm) to provide:

- i. Your information
   ii. Reference of your purchase and copy of your invoice confirming your warranty
   iii. Product information
- iv. A description of the problem

If the contact is made with iameco<sup>™</sup> Customer Service, iameco<sup>™</sup> will contact the customer upon receipt of the RMA Request Form and issue a RMA number within normally 48-72 hours and give the customer further instructions.

#### iameco<sup>™</sup> technical support services

During the period of product warranty, we support your basic configuration, setup and troubleshooting questions, and when required, we provide you with all instructions on how to return your product for repair. For support enquiries, please e-mail us at support@iameco.com

**Note:** RMA programme is subject to changes at any time without prior notice.

**Conditions:** The above policies are for warranty service and the customer will be responsible for any costs associated with non-warranty conditions such as control test, shipping and administration costs, etc.





## **Regulatory Notices**

#### **ENERGY STAR<sup>®</sup> Compliance**

iameco<sup>™</sup> products are designed to minimize energy consumption and meet requirements set by ENERGY STAR<sup>®</sup>. Our monitors are EPA ENERGY STAR<sup>®</sup> compliant and ENERGY 2000 compliant when used with a computer equipped with DPMS functionality. iameco<sup>™</sup> has determined that this product meets with the Environmental Protection Agency (EPA) ENERGY STAR<sup>®</sup> guidelines as configured. You can help reduce electricity usage and its side effects by turning off your product when it is not in use for extended periods of time, particularly at night and on weekends.

#### TCO'99 Qualifications (Sweden)

Certain iameco<sup>™</sup> products have achieved TCO'99 qualification. Qualified products meet the requirements for the TCO'99 scheme, which provides for international and environmental labelling of personal computers. The labelling scheme was developed as a joint effort by the TCO (the Swedish Confederation of Professional Employees), Svenska Naturskyddsforeningen (the Society for Nature Conservation).

Approval requirements cover a wide range of issues: environment, ergonomics, usability, emission of electric and magnetic fields, energy consumption and electric and fire safety. Current information regarding TCO'99 approved and labelled products may be obtained from the address: *www.tcodevelopment.com* 

#### **Eco-Flower**

The European Union's eco-labelling programme was launched throughout the European Community in 1993 to encourage the manufacture of less environmentally damaging products. The European Union's Eco-label, a flower with the EU's star symbol, is awarded to products that have passed a life cycle analysis. Further information on the eco-label can be found at *http://europa.eu/int/ecolabel* 

#### **Restriction of Hazardous Substances (RoHS)**

iameco products are safe from hazardous substances (Cd, Pb, Hg, Cr+6, PBDE and PBB) and can be disposed of in an environmentally safe manner. Moreover, we at iameco are continuing our efforts to develop products that do not require internationally banned toxic chemicals. The parts and components have been carefully selected to meet RoHS requirements and to minimise electricity consumption, electromagnetic emissions and noise.

#### Waste Electrical & Electronic Equipment (WEEE)

iameco has been registered by the WEEE Registration Society Limited in accordance with provisions of article 12(5) of the Waste Management (Waste Electrical & Electronic Equipment) Regulations 2005 (S.I. No. 340 of 2005) with the registration number is 00823. Used electrical and electronic equipment must be treated separately and in accordance with legislation that requires proper treatment, recovery and recycling of used electrical and electronic equipment to designated collection facilities free of charge.

















## **ISO** certifications

ISO 9001:2000

iameco has been assessed and is in compliance with the provisions of the Quality System to IS.EN.ISO 9001:2000 in respect of the scope of operations such as build and sale of environmentally friendly computers. Service and repair of computers, peripherals and network solutions and is hereby included in the European Quality Assessment (EQA) directory of certified organisations. This certificate of Quality System Registration Number 3176 was issued on 2<sup>nd</sup> November 2006 and is valid until 1<sup>st</sup> November 2009.



#### ISO 14001:2004

The European Quality Assessment (EQA) granted iameco whose Environmental Management System is in conformance with ISO 14001:2004 the right to be listed in the Environmental Register of Assessed Companies for the following scopes: build and sale of environmentally friendly computers, service and repair of computers, peripherals and network solutions. This certificate of Assessment Number 7173 was issued on 27<sup>th</sup> November 2006 and is valid until 26<sup>th</sup> November 2009.





047

Supported by









## Useful terms

#### **Dot pitch**

The image on a monitor is composed of red, green and blue dots. The closer the dots the higher the resolution is. The distance between two dots of the same colour is called the Dot Pitch. The unit is mm.

#### Vertical frequency

The screen must be redrawn several times per second in order to create and display an image for the user. The frequency of this repetition per second is called Vertical Frequency or Refresh Rate. The unit is Hz.

Example: If the same light repeats itself 60 times per second, this is regarded as 60 Hz. In this case, flickering of the screen can be detected. To avoid this problem, there is a Flicker-free Mode using a vertical frequency over 70 Hz.

#### Horizontal frequency

The time to scan one line connecting the right edge to the left edge of the screen horizontally is called Horizontal Cycle. The inverse number of the Horizontal Cycle is called Horizontal Frequency. The unit is kHz.

#### Interlace and Non-Interlace methods

Showing the horizontal lines of the screen from the top to the bottom in order is called the Non-Interlace method while showing odd lines and then even lines in turn is called the Interlace method. The Non-Interlace method is used for the majority of monitors to ensure a clear image. The Interlace method is the same as that used in TVs.

#### Plug & Play

It provides the best quality screen for the user by allowing the computer and the monitor to exchange information automatically. This monitor follows the international standard VESA DDC for the Plug & Play function.

#### Resolution

The number of horizontal and vertical dots used to compose the screen image is called resolution. This number shows the accuracy of the display. High resolution is good for performing multiple tasks as more image information can be shown on the screen.

Example: If the resolution is  $1024 \times 768$ , this means the screen is composed of 1024 horizontal dots (horizontal resolution) and 768 vertical lines (vertical resolution).





## iameco<sup>™</sup> Product registration form

Title	
Contact first name	
Contact last name	
Address/Company	
City	Country
Daytime phone	Fax
E-mail address	
Reference number*	
Purchase date	
Dealer	

\* Can be found at the back of the monitor

#### Registering your iameco<sup>™</sup> product

Upon receipt of your Product Registration you will be enrolled in the iameco<sup>™</sup> programme at no additional cost, which will enable you to receive technical support and iameco<sup>™</sup> newsletters periodically. Failure to complete and submit this product registration form will not diminish your rights under iameco<sup>™</sup> Standard Limited Warranty.

You can either e-mail it to info@iameco.com or fax it to +353 (0) 1 4943885.

## **Returns Material Authorisation (RMA) request form**

Title	
Contact first name	
Contact last name	
Address/Company	
City	Country
Daytime phone	Fax
E-mail address	
Unit description	
Reference number	
Model ID	
Serial number(s)*	
Purchase date	
Dealer	
Description of fault	

\* i.e. "Invoice Number", "Order Number", etc





## iameco<sup>™</sup> registered dealers in Ireland

MicroPro Computers	Cultivate Sustainable Living Centre
98 Nutgrove Avenue, Rathfarnham, Dublin 14, Ireland.	15-19 Essex St, West Temple Bar, Dublin 8, Ireland.
Tel: +353 (0) 1 4930514 Fax: +353 (0) 1 4943885 Homepage: www.micropro.ie E-mail: info@micropro.ie Contact: Paul Maher	Tel: +353 (0) 1 6745773
Woods Communications	
Unit L7, Ballymount Industrial Estate, Dublin 12, Ireland.	
Tel: +353 (0) 1 4501898 Fax: +353 (0) 1 4501946 Homepage: www.woodcomm.ie E-mail: sales@woodcomm.ie Contact: Derek Finlay	

## iameco<sup>™</sup> service centres in Ireland

