

NOKIA 730C



PerfectFlat®

Full 17" (16.0" Diagonal Viewable)

Color Monitor

User Guide

Guide de l'utilisateur

Bedienungsanleitung

(Intl. Spanish)

(Italian)

(Brazilian Portuguese)

(Swedish)

(Russian)

(Polish)

(Arabic)

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For Your Records

The serial number of this product is on the back of the monitor. Write the serial number of this unit in the space below and keep this booklet as a permanent record of your purchase to aid in identification in the event of theft or loss.

Product Name:	Nokia 730C
Model Number:	VCDTS21511-2
Document Number:	730C_UG_80
Serial Number:	_____
Purchase Date:	_____

Product Disposal at end of Product Life

Please help preserve our environment. Please dispose of this product properly at the end of its useful life. Your local waste disposal company may provide information about proper disposal.

Power Cord Safety Guidelines

The power cord for this unit has been packed separately and has been selected according to the country of destination and must be used to prevent electric shock.

Use the following guidelines if it is necessary to replace the original cord set.

Caution : Use a power cable that is properly grounded. Always use the AC cords listed below for each area :

- USAUL
- CanadaCSA
- GermanyVDE
- SwitzerlandSEV
- BritainBASEC/BS
- JapanElectric Appliance Control Act

In other areas, use AC cord which meets local safety standards.

The female receptacle of the cord set must meet CEE-22 requirements and will look like Figure 1 below:

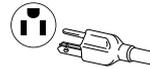
Figure 1



For the United States and Canada

In the United States and Canada the male plug is a NEMA5-15 style (Figure 2) UL Listed and CSA Labelled. For units which are mounted on a desk or table, type SVT or SJT cord sets may be used. For units which sit on the floor, only SJT type cord sets may be used. The cord set must be selected according to the current rating for your unit. Please consult Table A below for the selection criteria for power cords used in the United States and Canada.

Figure 2



Cord Type	Size of Conductors In Cord	Maximum Current Rating of Unit
SJT	18AWG	10Amps
	16AWG	12Amps
	14AWG	12Amps
SVT	18AWG	10Amps
	17AWG	12Amps

AC PLUG CORD PRECAUTIONS FOR THE UNITED KINGDOM

FOR YOUR SAFETY PLEASE READ THE FOLLOWING TEXT CAREFULLY.

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET THEN THE PLUG SHOULD BE CUT OFF AND DISPOSED OF SAFELY.

THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO AN APPROPRIATE SOCKET.

If a new plug is to be fitted, please observe the wiring code as shown below.

If in any doubt, please consult a qualified electrician.

WARNING: THIS APPLIANCE MUST BE EARTHED.

IMPORTANT: The wires in this mains lead are coloured in accordance with the following code:

Green-and-Yellow:	Earth
Blue:	Neutral
Brown:	Li e

If the coloured wires of the mains lead of this appliance do not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured GREEN-AND-YELLOW must be connected to the terminal in the plug which is marked by the letter E or by the Earth symbol \perp or coloured GREEN or GREEN-AND-YELLOW.

The wire which is coloured BLUE must be connected to the terminal in the plug which is marked with the letter N or coloured BLACK. The wire which is coloured BROWN must be connected to the terminal in the plug which is marked with the letter L or coloured RED.

For Other European Countries

In Europe you must use a cord set which is appropriate for the receptacles in your country. The cord set is HAR-Certified, and a special mark that will appear on the outer sheath, or on the insulation of one of the inner conductors.

If you have any questions concerning which proper power cord to use, please consult with the dealer from whom you purchased your monitor.

FCC Information

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, 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 antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Warning:

To assure continued FCC compliance, the user must use the grounded power supply cord and the provided shielded video interface cable with bonded ferrite cores. Also, any unauthorized changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this device.

Power Supply Cord USA

For units with 100 - 120V input voltage in the USA, use the following :

UL Listed and CSA Certified Type SVT or SJT No. 18/3 AWG rated 125Vac 7A min.

One end terminated in a molded on parallel blade, grounding attachment cap or hooded attachment cap (15A, 125V configuration), other end terminated in a mold-on appliance coupler.

Notice for Germany

The X-rays generated in this unit are shielded sufficiently. High voltage: Max. 30.0 kV. For ergonomic reasons, we recommend that you do not display blue characters on a dark background. Doing so may produce insufficient contrast that could lead to eye strain.

Notice for Japan

This equipment falls under the class B information Technology Equipment based on the standard established by the self-imposed Control Council for Radio interference through information-processing Equipment (VCCI). This equipment is designed to be used in a household environment, However, if it is used near radio and television receiver units, radio disturbances can occur. Use this equipment appropriately according to the instruction manual.

CE Conformity



The device complies with the requirements of the EEC directive 89/336/EEC as amended by 92/31/EEC and 93/68/EEC Art.5 with regard to "Electromagnetic compatibility", and 73/23/EEC as amended by 93/68/EEC Art. 13 with regard to "safety".

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Getting Started

Congratulations on your purchase of a **Nokia 730C** color monitor.
Important! Save the original box and all packing material for future shipping needs.

NOTE: This product was designed for operation in the magnetic fields of the hemisphere where it was purchased. Also, the word “Windows” in this user guide refers to the following Microsoft operating systems: Windows ‘95, Windows NT, Windows ‘98, Windows 2000 and Windows ME (Millennium).

Package Contents

Your **Nokia 730C** package includes:

- **Nokia 730C** monitor
- Power cord
- Video cable (detachable)
- User’s guide
- INF and ICM installation files on CD-ROM or diskette

IMPORTANT: The supplied **INF file** assures compatibility with Windows operating systems, and the **ICM file** (Image Color Matching) ensures accurate on-screen colors. We recommend that you install both files.

- **For CD-ROM:** Insert the CD-ROM into your system, wait for it to auto-start, select “Monitor Drivers,” and follow the on-screen instructions.
- **For diskette:** Insert the diskette into your system, runs **etup.exe**, and follow the on-screen instructions.

Precautions

- For best viewing conditions sit at least 18" from the monitor.
- **AVOID TOUCHING THE SCREEN WITH YOUR FINGERS.** Oils from the skin are difficult to remove.
- **NEVER REMOVE THE REAR COVER.** The monitor contains high-voltage parts. You may suffer serious injury if you touch these parts.
- Avoid exposing the monitor to direct sunlight or another heat source. The monitor should be facing away from direct sunlight to reduce glare.
- Always handle your monitor with care when moving it.
- Choose a well ventilated area to position your monitor. Do not place anything on the monitor that prevents adequate dissipation of heat.
- Ensure the area around the monitor is clean and free of moisture.
- Keep the monitor away from magnets, motors, transformers, speakers, and televisions.
- Do not place heavy objects on the monitor, video cable, or power cord.
- If smoke, abnormal noise, or strange odor is present, immediately switch the monitor off and call your dealer. It is dangerous to continue using the monitor.

Quick Installation

1 Connect video cable

Make sure both the monitor and the computer are powered OFF. Connect the video cable to the computer.

Macintosh users: Connect a Macintosh adapter to the video cable, then to the computer. For information about Mac adapters contact your dealer. You will need to provide your monitor's serial number.

2 Connect power cord

Connect the power cord to a properly grounded AC outlet, then to the monitor.

3 Power-ON monitor and computer

Power-ON the monitor, then power-ON the computer. This sequence (monitor before computer) is very important.

NOTE: At this point Windows® 98 users may receive a message asking them to install the 730C's INF file.

4 Install INF and ICM files

- For CD-ROM: Insert the CD-ROM into your system, wait for it to auto-start, select "Monitor Drivers," and follow the on-screen instructions.
- For diskette: Insert the diskette into your system, runs **etup.exe**, and follow the on-screen instructions.

5 Windows users: Setting the Timing Mode

(resolution and refresh rate) *Example: 1024x768@ 75Hz.*

For instructions on changing the resolution and refresh rate, see the user guide for your computer's graphics card.

6 Use the OnView® controls to adjust the screen image.

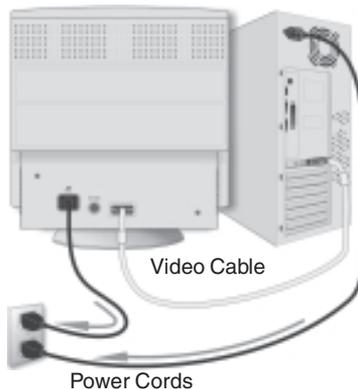
See the *Operations* section in this guide.

Installation is complete!

Enjoy your new 730C Monitor!

To be best prepared for any future customer service needs:

- Write the serial number (see back of the monitor) in "For your Records" on page 1 of this guide.



Operation

Adjust your **Nokia 730C** monitor using the buttons on the Front Control Panel to access the Main Menu and the Control Screens as explained on the following pages.

Front Control Panel

To adjust the monitor, follow the numbered steps in sequence as shown below.

<p>1</p> <p>Press Button A shown below to display Main Menu</p>	<p>2</p> <p>Press - to scroll down, + to scroll up Main Menu to highlight name of Control Screen to be displayed.</p>	<p>3</p> <p>Press Button B shown below to select the control you want to adjust.</p>
<p>5</p> <p>Press Button A to exit Control Screen or Main Menu and save adjustments.</p>	<p>4</p> <p>Press - to decrease, + to increase value of Active Control.</p>	<p>Power light: Green = on Orange = power saving mode</p>

Power On/Off Button *

*The monitor automatically degausses each time you turn it on, removing the build-up of magnetic fields that can affect color purity and convergence. To prevent possible damage, wait 20 minutes between turning the monitor off and on again. See page 11 for information on how to manually degauss the monitor.

OnView® Main Menu, part 1

<p>Main Menu [1] +</p> <p>☉ ⚙ CONTRAST / BRIGHTNESS</p> <p>↔ □ H. SIZE / POSITION</p> <p>↑ ↓ □ V. SIZE / POSITION</p> <p>▭ □ PINCUSHION/PIN.BAL</p> <p>▭ □ TRAPEZOID / PARALLEL</p> <p>⌂ ZOOM</p> <p>⌂ TILT -</p> <p>EXIT: A SELECT: B</p>	<p>Sample Control Screen</p> <p>CONTRAST 40</p> <p>EXIT: A BRIGHTNESS: B</p>
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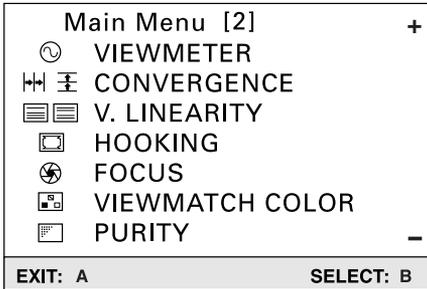
This is the Contrast control screen

Button **B** toggles to the Brightness control screen

OnView[®]Main Menu, part 1, continued

-  **CONTRAST** adjusts foreground white level of the screen image.
[-] to decrease contrast or [+] to increase contrast.
-  **BRIGHTNESS** adjusts background black level of the screen image.
[-] to decrease brightness or [+] to increase brightness.
-  **H. SIZE** (Horizontal Size) adjusts the width of the screen image.
[-] decreases width, [+] increases width.
-  **H. POSITION** (Horizontal Size) moves the screen image left or right.
[-] moves screen left, [+] moves screen right.
-  **V. SIZE** (Vertical Size) adjusts the height of the screen.
[-] decreases screen height, [+] increases screen height.
-  **V. POSITION** (Vertical Size) moves the screen up and down.
[-] moves screen down, [+] moves screen up.
-  **PINCUSHION** straightens vertical sides of the screen.
[-] curves vertical edges inward, [+] curves vertical edges outward.
-  **PIN BALANCE** curves the vertical edges of the screen to the right or left. [-] curves vertical edges to the left, [+] curves vertical edges to the right.
-  **TRAPEZOID** makes vertical edges of the screen image parallel.
[-] narrows top and widens bottom, [+] widens top and narrows bottom.
-  **PARALLEL** (Parallelogram) slants vertical edges of the screen to the left or right. [-] slants vertical edges to left, [+] slants vertical edges to right.
-  **ZOOM** expands and contracts the entire screen image. [-] contracts the screen image. [+] expands the screen image.
-  **TILT** rotates entire screen image. [-] rotates screen image counter-clockwise, [+] rotates screen image clockwise.

OnView® Main Menu, part 2



- 

VIEWMETER® displays the frequency signal input (horizontal scan and refresh rate) coming from the graphics card in your computer.
- 

H. CONVERGENCE (Horizontal Convergence) adjusts horizontal color alignment. Use only if you see red or blue around the horizontal segments of black letters on a white background. Press [-] or [+] to adjust.
- 

V. CONVERGENCE (Vertical Convergence) adjusts vertical color alignment. Use only if you see red or blue around the vertical segments of black letters on a white background. Press [-] or [+] to adjust.
- 

V. LINEARITY CENTER (Vertical Linearity Center) adjusts the vertical distortion at the center of the screen image. Press [-] or [+] to adjust.
- V. LINEARITY SYMMETRY** (Vertical Linearity Symmetry) adjusts the vertical distortion by balancing the vertical distortion between the top and the bottom of the screen image. Press [-] or [+] to adjust.

NOTE: Both **V. LINEARITY CENTER** and **V. LINEARITY SYMMETRY** are advanced controls to be used for setup and calibration only. To return these controls to factory settings, use **DATA RECALL** (see page 11).
- 

HOOKING straightens the four corners of the screen image. Press [-] or [+] to adjust.
- 

FOCUS adjusts the sharpness of the screen image. Press [-] or [+] to adjust.

OnView® Main Menu, part 2, continued



VIEWMATCH® COLOR provides four color adjustment options: three preset color temperatures and User Color, which allows you to individually adjust red, green, and blue (RGB).

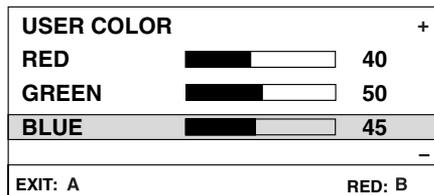
To activate one of the three preset color temperatures, highlight your selection by pressing [-] or [+] and then press button B. The factory setting for the monitor is 9300°K, the color temperature most frequently used in offices with fluorescent lights.



To adjust USER COLOR:

- 1 With **USER COLOR** highlighted on the **VIEWMATCH COLOR** screen shown above, press button B to activate **USER COLOR**. The screen below appears.
- 2 To select red, green, or blue, press button B to highlight your selection.
- 3 To adjust a color, press [-] or [+]. The number next to the status bar changes accordingly.
- 4 To save your adjustment and exit a color, press Button A.

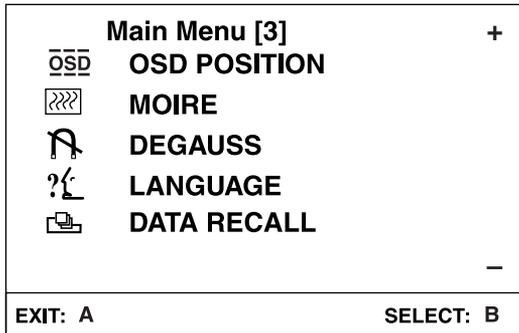
Highlighted color is active control, ready to adjust with [-] or [▲]



PURITY adjusts the color evenness of the overall image. Press [-] or [+] to adjust.

NOTE: If you see unevenness in a color (such as one area of a color appearing darker than another area), first use **DEGAUSS** (see page 11), then if color unevenness is still present, use **PURITY**.

OnView® Main Menu, part 3



 **OSD POSITION** allows you to reposition the OnView display (including all menus and control screens). Press [-] or [+] to move the OSD. To exit this screen, press button A.

 **MOIRE** reduces interference that causes unwanted color textures or patterns. Press [-] or [+] until interference patterns disappear.

 **DEGAUSS** removes the build-up of magnetic fields that can cause irregular colors to appear around the edges of screen images. There are two ways to degauss the **Nokia 730C**: automatically by turning the monitor on, or manually by selecting the Degauss control from OnView Main Menu, part 3.

Important: *Do not degauss repeatedly. Doing so can be harmful to the monitor. Wait at least 20 minutes before using this control again.*

 **LANGUAGE** allows you to choose from among five languages for the OnView menus and control screens; English, French, German, Italian, and Spanish. To select a language press button B. To exit this screen, press button A.

 **DATA RECALL** returns all controls back to factory settings (only if the monitor is set to one of the factory preset modes shown on the Specifications page).

NOTE: Use this control resets color to the 9300° K.

Other Information

Specifications

CRT	Type	17" (16.0" viewable diagonal area), 0.25mm aperture grille pitch, 90° deflection, PerfectFlat®	
	Phosphor Glass surface	RGB, medium short persistence ARAG®, (Anti-reflective and anti-glare) coating Standard light transmission rate = 38%	
Input Signal	Video Sync	RGB analog (0.7/1.0 Vp-p, 75 ohms), f _v : 30-97 kHz, f _h : 50-180 Hz, H/V Separate (TTL), Sync-On-Green, Composite sync	
Compatibility	PC Macintosh ¹	Up to 1600 x 1200 NI Power Macintosh®	
Maximum Refresh Rates²	1600 x 1200 NI @ 77 Hz	832 x 624 NI @ 143 Hz	
	1280 x 1024 NI @ 90 Hz	800 x 600 NI @ 148 Hz	
	1152 x 870 NI @ 104 Hz	640 x 480 NI @ 180 Hz	
	1024 x 768 NI @ 118 Hz	640 x 400 NI @ 180 Hz	
Power	Voltage	AC 100-240 VAC (auto switch) 50/60 Hz	
Display Area	Factory setting	300mm (H) x 225mm (V) typ	
	Full scan	324mm (H) x 243mm (V)	
Operating Conditions	Temperature	32°F to 104°F (0°C to 40°C)	
	Humidity	5% to 95% (no condensation)	
	Altitude	To 10,000 feet	
Storage Conditions	Temperature	-40°F to +140°F (-40°C to +60°C)	
	Humidity	5% to 95% (no condensation)	
	Altitude	To 40,000 feet	
Dimensions	Physical (monitor)	417mm (W) x 427mm (H) x 439mm (D) 16.4" (W) x 16.8" (H) x 17.3" (D)	
Weight	Net	20 kgs (44 lbs) Monitor only	
Regulations		UL, FCC-B, CB, ISO9241-3, CE, DHHS, TUV/GS, TUV/Ergo, NEMKO, SEMKO, DEMKO, FIMKO, B-MARK, PCT, MPR-II, SASO, TCO99	
Power and modes	On	<130W (green LED)	
	DPMS™ Suspend	<15W (orange LED)	
	DPMS™ Off	<3W (blinking orange LED)	

Pre-set Timing Modes (Pre-adjusted to VESA® 1024 x 768 @ 85Hz)

VGA 640 x 400 @ 70 Hz	VESA 800 x 600 @ 85 Hz	VESA 1600 x 1200 @ 75 Hz
VESA 640 x 480 @ 75 Hz	VESA 1024 x 768 @ 75 Hz	Macintosh 832 x 624 @ 75 Hz
VESA 640 x 480 @ 85 Hz	VESA 1024 x 768 @ 85 Hz	Macintosh 1024 x 768 @ 75 Hz
VESA 800 x 600 @ 75 Hz	VESA 1280 x 1024 @ 75 Hz	Macintosh 1152 x 870 @ 75 Hz

¹ Macintosh models prior to G3 require a Macintosh adapter. To order a Macintosh adapter, contact your dealer. You will need to provide the product serial number.

² **Warning:** Do not set the graphic card in your computer to exceed these maximum refresh rates; doing so could result in permanent damage to the monitor.

Troubleshooting

No power

- Make sure power button (or switch) is ON.
- Make sure A/C power cord is securely connected to the back of the monitor and to a power outlet.
- Plug another electrical device (like a radio) into the power outlet to verify that the outlet is supplying proper voltage.

Power on but no screen image

- Make sure the video cable supplied with the monitor is tightly secured to the video output port on the back of the computer. If the other end of the video cable is not attached permanently to the monitor, tightly secure it to the monitor.
- Adjust brightness and contrast.
- Check this user's guide to see if an adapter is required for proper signal continuity between graphics card and monitor.

Faint horizontal lines

- Caused by steel wires called Damper Wires. This is normal for all monitors that employ aperture grille technology, the source of superior, rich color.

Flickering

- Not enough power supplied. Connect the monitor to a different outlet. If using a surge protector, reduce the number of devices plugged in.
- Check the ViewMeter® from the main menu to verify the refresh rate (vertical frequency) is 75 Hz or higher. See Specifications.
- Make sure the graphics card in your computer can use non-interlaced mode at the desired frequencies. To enable your graphics card to support higher refresh rates, try selecting fewer colors or running lower resolutions.
- Remove any devices from the area around the monitor that emits magnetic fields such as radios, surge protectors, unshielded speakers, fluorescent lights, AC power converters, desk fans, etc.

Wrong or abnormal colors

- If any colors (red, green, or blue) are missing, check the video cable to make sure it is securely connected. Loose or broken pins in the cable connector could cause an improper connection.
- Connect the monitor to another computer.
- Select Degauss from the Main Menu.
- If you have an older graphics card, contact your dealer for a non-DDC adapter.

Entire screen images roll vertically

- Make sure video input signals are within the monitor's specified frequency range.
- Try the monitor with another power source, graphics card, or computer system.
- Connect the video cable securely.

Control buttons do not work

- Press only one button at a time.

Cleaning the Monitor

- MAKE SURE THE MONITOR IS TURNED OFF.
- NEVER SPRAY OR POUR ANY LIQUID DIRECTLY ONTO THE SCREEN OR CASE.

To clean the screen

- 1 Wipe the screen with a clean, soft, lint-free cloth. This removes dust and other particles.
- 2 If still not clean, apply a small amount of non-ammonia, non-alcohol based glass cleaner onto a clean, soft, lint-free cloth, and wipe the screen.

To clean the case

- 1 Use a soft, dry cloth.
- 2 If still not clean, apply a small amount of a non-ammonia, non-alcohol based, mild non-abrasive detergent onto a clean, soft, lint-free cloth, then wipe the surface.

DISCLAIMER

Do not use ammonia or alcohol-based cleaners on the monitor's screen or case. Some chemical cleaners have been reported to damage the screen and/or case of the monitor. Your warranty will not cover damage resulting from use of any ammonia or alcohol-based cleaners.

Customer Support

For the most expedient answer to your question, do the following:

- 1 Check *Troubleshooting* first.
- 2 For assistance contact your reseller.
- 3 For further assistance see the contact information listed below.

If contact information for your country or region is not listed below, ask your reseller to refer you to a service center.

NOTE: You will need to provide the serial number (on the back of the product).

Country/Region	T = Telephone; F = Fax
United States	T: (800) 688-6688 F: (909) 468-1202
Canada	T: (800) 688-6688 F: (909) 468-1202
United Kingdom	T: 0800 833 648 F: 0044 (0)1293 643910
Europe, Middle East, Baltic countries, and North Africa	T: 0044 (0)1293 643900 F: 0044 (0)1293 643910
Australia	(contact reseller)
New Zealand	T: 64- 3 - 366-1135 F: 64-3-366-7006
Singapore/Southeast Asia	T: 65-273-4018 F: 65-273-1566
Other Asia/Pacific countries and Indian Peninsula	T: 886-2-2248-4072 F: 886-2-2240-8238
South Africa	T: 27-11-314-0002 F: 27-11-314-0002

