

# Remote multi-display graphics for 24/7/365 environments.

Matrox Extio Series  
Remote Graphics Units

## Multi-display remote graphics units

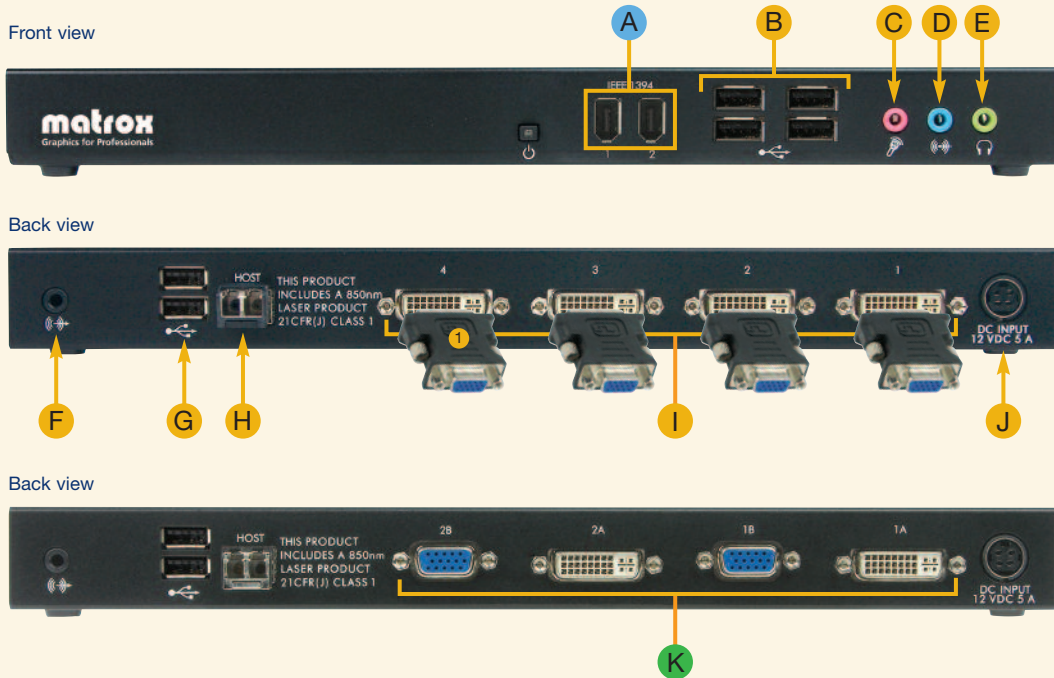


With Matrox Extio™ multi-display remote graphics units (RGUs), the user interface of the computer – the keyboard, mouse, audio peripherals and graphics hardware – can be separated from the rest of the computer by up to 820 feet (250 meters) of fiber-optic cable. Ideal for environments where data security, heat, noise and space are prevalent issues, this innovative technology provides a new physical layout for enterprise, industrial and government computing. With support for up to 4 digital or analog monitors, two dual-link displays, passive (fanless) cooling and support for PCI, PCI-X, and PCI Express slots on the host system, the Matrox Extio series is a clear choice for industries requiring a reliable and stable graphics and I/O extension technology.



## Multi-display remote graphics units

Feature	Benefit
User interface devices separated from the computer by up to 820 feet (250m)	<ul style="list-style-type: none"> <li>- Improved IT systems maintenance and life cycle support</li> <li>- Climate and noise control for user/operator stations</li> <li>- Climate and environment control for systems</li> <li>- Increased security by physical separation of workstations from users</li> </ul>
Support for up to 4 digital/analog monitors or two dual-link displays	<ul style="list-style-type: none"> <li>- Additional screen real estate can help increase productivity by as much as 20-50%</li> <li>- Seeing more critical information at once can improve the ability to react and reduce errors</li> </ul>
Passive cooling solution	<ul style="list-style-type: none"> <li>- No moving parts leads to a reduction in noise, heat and a longer MTBF (Mean Time Between Failure), maximizing uptime of mission-critical applications</li> </ul>
Long product life cycle	<ul style="list-style-type: none"> <li>- Decrease of the TCO (total cost of ownership) and reduction of any downtime of critical applications</li> </ul>
Thin size of remote graphics unit	<ul style="list-style-type: none"> <li>- Better workspace management and ergonomics</li> </ul>
Easy-to-use Matrox PowerDesk display driver interface	<ul style="list-style-type: none"> <li>- Allows for optimal management of message pop-ups and windows positioning</li> </ul>



- A) 2 FireWire ports
- B) 4 USB 2.0 ports
- C) Microphone, mini-jack connector with bias current (3.5 mm / 1/8")
- D) Audio-in, mini-stereo-jack connector (3.5 mm / 1/8")
- E) Audio-out, mini-stereo-jack connector (3.5 mm / 1/8")
- F) Audio-out, mini-Toslink connector (3.5 mm / 1/8")
- G) 2 USB 2.0 ports
- H) Fiber-optic, dual-LC connector
- I) 4 DVI-I connectors (3.5 mm / 1/8")
- J) Power input, lock-in, DIN-4 (12 VDC, 5 A)
- K) 2 HD-15 & 2 DVI-I connectors

● Extio F1420 and Extio F1220 only

● Extio F120 and Extio F1240

① 4 DVI-to-HD15 connector adapters included for Extio F1400 and F1420

### Environmental information

Condition	Matrox Specifications
Environmental temperature	Operating temperature from 32°F to 131°F (0°C to 55°C) Maximum operating temperatures: 131°F (55°C) in an enclosure with airflow 113°F (45°C) in a zero-airflow environment
Temperature, non-operational storage & transportation	-40° F to 167° F (-40° C to 75° C)
Humidity, operational (indoor)	20% to 80%, non-condensing
Humidity, non-operational storage & transportation (in packaged configuration)	5% to 95%
Maximum atmospheric pressure, operational	13,000 ft (3,962 m)
Maximum atmospheric pressure, non-operational & transportation	40,000 ft (12,192 m)
Vibration, operational and non-operational storage & transportation	NEBS level 3 Seismic Zone 4*
EMC certifications: Class A (commercial, industrial, or business)	ACMA, CE, FCC, VCCI
Laser emissions	Product includes 850 nm laser compliant to 21CFR, Subpart J, Class 1

\* Zone 4 = 7.0 to 8.3 on the Richter scale

### Software included

- Matrox display drivers for Microsoft Windows 2000, Windows Server 2003, Windows XP, and Windows XP X64 (64-bit)\*
- Matrox PowerDesk (driver interface and utilities)
- Audio drivers for Microsoft Windows 2000, Windows Server 2003, Windows XP, and Windows XP X64 (64-bit)

\* For other possible operating systems, contact Matrox.

### Hardware included†

- Matrox Extio remote graphics unit
- 4 DVI-to-HD15 connector adapters\*
- Universal, external, 12-volt-DC, 5-amp, power adapter
- Power cables for various regions (North America / Japan, UK, Continental Europe, Australia)

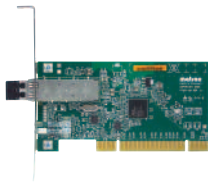
† Fiber-optic cable and low-profile fiber-optic interface card (PCI or PCIe) sold separately (with ATX and low-profile brackets).

\* Extio F1400 and F1420.

	Extio F1400	Extio F1420	Extio F1220	Extio F1240	
Part number	XTO-F1400F	XTO-F1420F	XTO-F1220F	XTO-F1240F	
Number of displays supported (analog & digital)	4	4	2	2	
Connectors	4 DVI-I connectors <sup>1</sup>	✓	✓		
	2 HD-15 & 2 DVI-I connectors			✓	
	6 USB 2.0 ports	✓	✓	✓	✓
	Analog or stereo audio connectors	✓	✓	✓	✓
	Dual-LC fiber-optic connector	✓	✓	✓	✓
	Power input	✓	✓	✓	✓
	2 FireWire ports		✓	✓	
	Maximum analog and digital resolutions (per display)	1920 x 1200 <sup>2</sup>	1920 x 1200 <sup>2</sup>	1920 x 1200	2560 x 1600 (digital only) <sup>3</sup> 1920 x 1200
Dimensions	11.8" x 1.2" x 5.6" (30.0 cm x 2.9 cm x 14.2 cm)	11.8" x 1.2" x 5.6" (30.0 cm x 2.9 cm x 14.2 cm)	11.8" x 1.2" x 5.6" (30.0 cm x 2.9 cm x 14.2 cm)	11.8" x 1.2" x 5.6" (30.0 cm x 2.9 cm x 14.2 cm)	
Warranty	2 years	2 years	2 years	2 years	

<sup>1</sup> 4 DVI-to-HD15 connector adapters included <sup>2</sup> Earlier versions support a maximum resolution of 1600x1200. Please contact your Matrox sales representative for details if required.

<sup>3</sup> Resolutions between 1920 x 1200 and 2560 x 1600 are not supported.



### Fiber-optic interface cards

The interface card installed in the computer converts outgoing bus data to an optical signal and converts incoming bus data back to an electrical signal. The card transmits and receives this optical data to and from the remote graphics unit via fiber-optic cable. Extio has integrated graphics, audio, and USB hardware that process the bus data as if it were part of an add-in card directly installed in a computer expansion slot.

Interface Card	Part Number	Bus Type	Dimensions
PCI interface card	XTOA-FP66LPAF	32-bit PCI (works in PCI and PCI-X slots)	4.7" x 2.5" (11.9 cm x 6.3 cm)
PCIe interface card	XTOA-FESLPAF	PCI Express x1 (works in PCIe x1, x4 and x16)	4.7" x 2.7" (11.9 cm x 6.8 cm)

Note: Matrox interface cards sold separately. Contact Matrox for compatibility information.

### Fiber-optic cable

Extio is compatible with widely available standard duplex multi-mode fiber-optic cables. "Duplex" means that the cable contains two independent fiber-optic strands – one to bring data to the remote graphics unit and one to bring data back from the unit. Compared to single-mode fiber, multi-mode fiber has a larger center core, can carry more data over shorter distances, and the equipment to support this type of fiber is less expensive.

Fiber-optic cable requirements:

- Duplex
- Multi-mode
- Dual-LC connectors
- 50/125 µm cable for 250 meters (820 feet) maximum
- 62.5/125 µm cable for 150 meters (492 feet) maximum



(sold separately)

### Learn More or Purchase

Matrox Graphics offers a wide range of specialized graphics solutions for professional markets such as finance, digital media, medical imaging, and enterprise computing. For more information about the entire Matrox Graphics product line, visit [www.matrox.com/graphics](http://www.matrox.com/graphics).

To locate the local office nearest to you, visit [www.matrox.com/graphics/contact](http://www.matrox.com/graphics/contact). For product support, contact your Matrox representative or visit [www.matrox.com/graphics/support](http://www.matrox.com/graphics/support).

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