

# 13

## *IXIA 250 Chassis*

This chapter provides details about Ixia 250 chassis—its specifications and features.

The IXIA 250 is a Field Service Unit (FSU) chassis with a built-in 10/100/1000 port and an additional two slots for Ixia Load Modules, which may be high-powered modules. The IXIA 250 is shown in the following figure.

**Note:** The Ixia 250 must only be operated in the horizontal position as shown in [Figure 13-1](#).

Figure 13-1. IXIA 250 Chassis



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## Operation

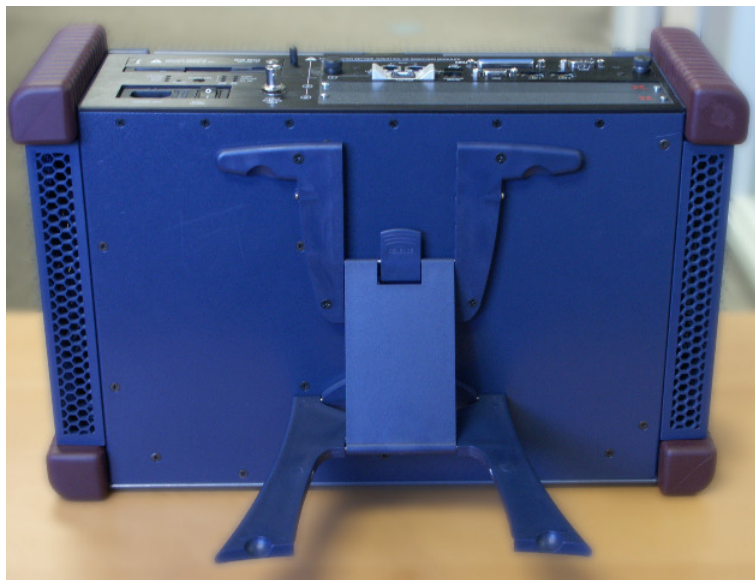
### Setup

The IXIA 250 incorporates an adjustable support, shown collapsed in [Figure 13-2](#) and extended in [Figure 13-3](#).

Figure 13-2. IXIA 250 Integrated Support (Collapsed)

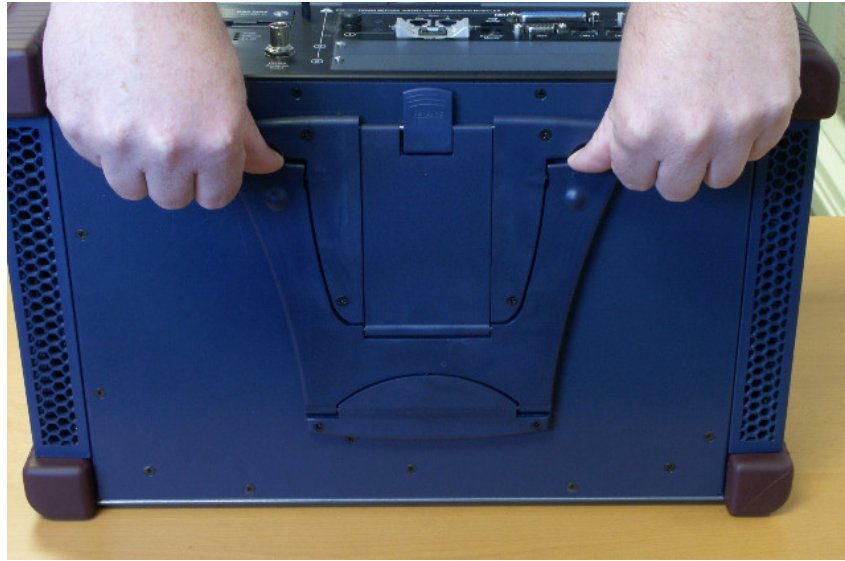


Figure 13-3. IXIA 250 Integrated Support (Extended)



The support is extended by placing your thumbs at the upper left and right corners of the cutouts and pushing down as shown in [Figure 13-4](#). Ensure that the stand is stable in one of its available locking positions.

Figure 13-4. IXIA 250 Integrated Support Operation



The keyboard is released by pressing on the button at the top of the chassis, as shown in [Figure 13-5](#).

Figure 13-5. IXIA 250 Keyboard Release



Unfold the keyboard and press down on the hinge until it lies flat.

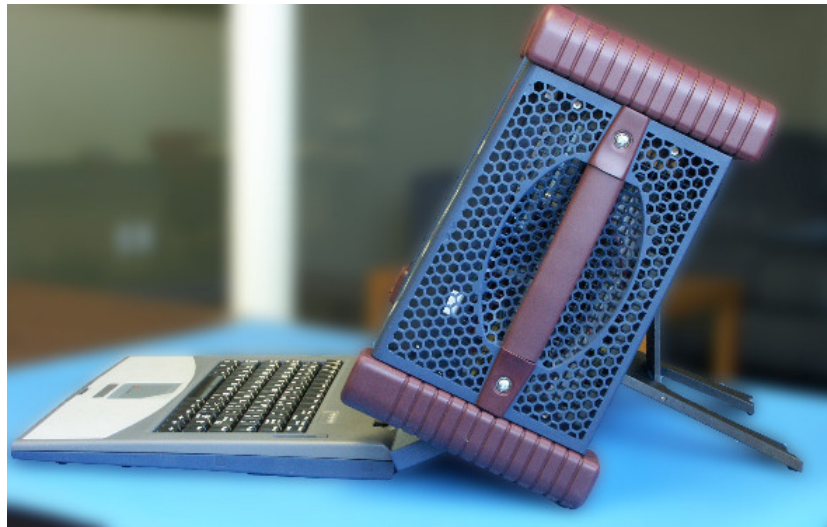


**Caution:** The Ixia 250 can only be operated in the horizontal position shown in [Figure 13-6](#) on page 13-4.



**Warning:** In order to prevent accidental injury to personnel, do not leave unused SFP (or SFP+) ports on load modules uncovered. When transceivers are not installed, end caps must be used. For details, see [Use End Caps on Open Ports](#) on page xxxvii.

Figure 13-6. IXIA 250 Keyboard



**Caution:** Do not block the back or sides of the chassis, and leave approximately two inches of space around the unit for proper ventilation.

Power is applied to the unit by plugging it in and toggling the '1/0' switch as shown in the following figure.

Figure 13-7. IXIA 250 Power



This applies power to the chassis, but does not turn on the computer within. The separate *Standby* switch must be pressed, as shown in [Figure 13-8](#). This may also be used to put the computer into standby mode at a later time. Should the IXIA 250 experience a power failure, it does not automatically start the operating system.

Figure 13-8. IXIA 250 Standby Switch



## Computer Operation

The computer on the IXIA 250 is operated as any other computer system running Windows 2000 Server. The keyboard is used for all typed input. The touchpad at the bottom of the keyboard, as shown in the following figure, is used to position the cursor and click the left and right mouse buttons.

Figure 13-9. IXIA 250 Keyboard and Touchpad



Move around the touchpad, following the cursor on the screen. Use the buttons under the touchpad as you would use the left and right mouse buttons on a

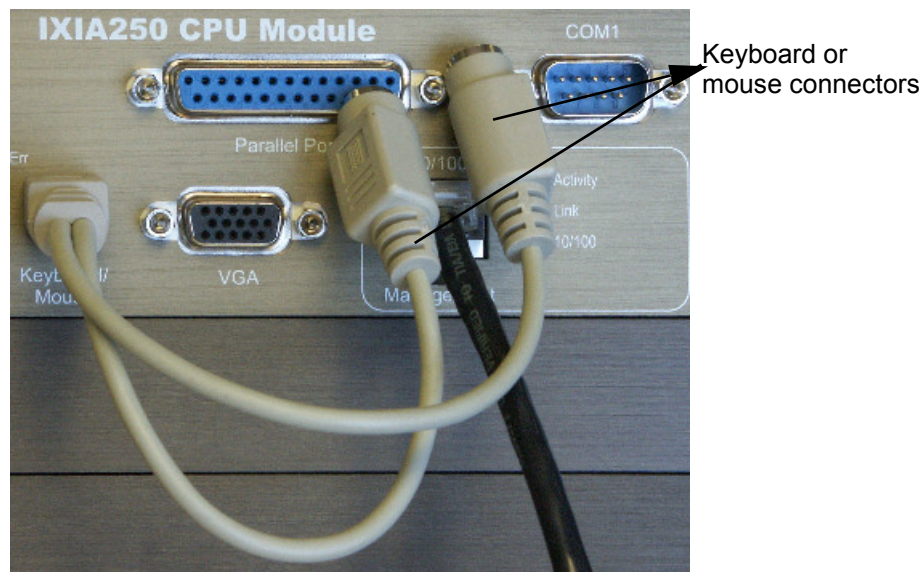
mouse. Double tapping on the touchpad is equivalent to a double-mouse click. Pressing in the shaded area at the top-right of the touchpad is equivalent to a right mouse button click.

The intensity of the LCD screen is controlled by the slide switch at the upper right corner of the keyboard.

In addition to the use of the touchpad, an external mouse may be connected to the *Keyboard/Mouse* port at the back of the chassis. Furthermore, the LCD screen is touch sensitive and may be used as an alternative to the touchpad or mouse. Touching the screen is equivalent to pressing and holding the left mouse button at that point and taking your finger off the screen is equivalent to releasing the mouse button.

An external keyboard may be attached to the *Keyboard/Mouse* port at the back of the chassis. When both an external mouse and keyboard are required, they may be attached with the use of the supplied 'Y' adapter, as shown in [Figure 13-10](#). Attach the keyboard and mouse to either connector.

Figure 13-10. IXIA 250 Keyboard/Mouse 'Y' Adapter



The rear panel of the IXIA 250 contains additional connectors for external devices. This is shown in [Figure 13-12](#) and further explained in [Table 13-1](#).

Table 13-1. IXIA 250 Computer Connections

Connector	Usage
Keyboard/Mouse	Used to connect an external mouse and/or keyboard.
VGA	An external monitor may be attached to this connector. The monitor must have at least a 1024 x 768 resolution.
Parallel Port	May be used for an external printer.

Table 13-1. IXIA 250 Computer Connections

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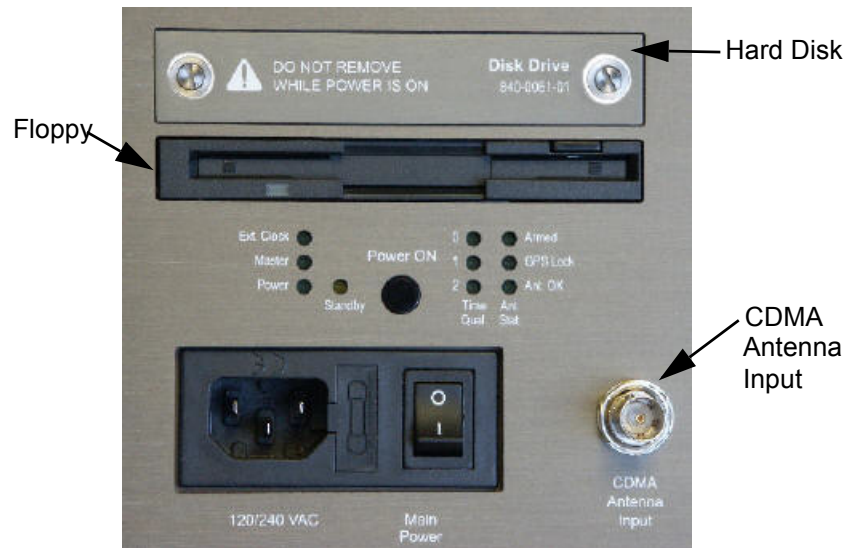
COM1	May be used to communicate with an external serial device.
10/100 Management	Two 10/100 Ethernet ports may be used for remote management of the chassis. Three LEDs are provided: <i>Activity</i> , <i>Link</i> , and <i>10/100</i> . <i>Link</i> and <i>10/100</i> glow a steady green when link has been established and the port is operating in 100 Mbps mode, respectively. The <i>Activity</i> light blinks green as data is sent or received.

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A floppy drive and access to the hard disk is provided on the left rear of the chassis, as shown in the following figure.

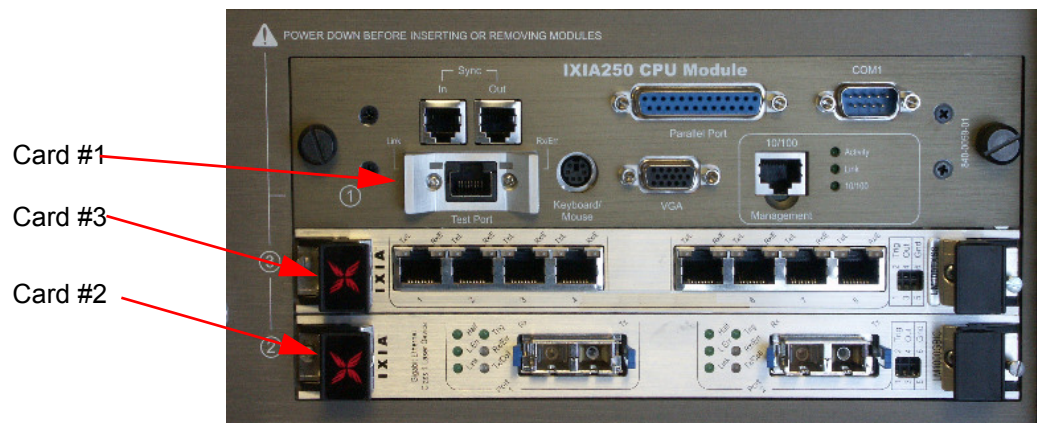
Figure 13-11. IXIA 250 Floppy and Hard Drive Access



## Test Operation

Device testing may be accomplished using the built-in port or by plugging in additional Ixia load modules. The following figure shows two additional boards in an IXIA 250 chassis.

Figure 13-12. IXIA 250 with Additional Load Modules



The IXIA 250 accepts any two single-wide or one double-wide load modules. See the remaining chapters of this manual for a discussion of available load modules. When using Ixia software to access the load modules, the cards are numbered as shown in Figure 13-12. That is, the built-in port is card number 1, the lower card in the chassis is card number 2, and the card above that is card number 3.

When the IXIA 250 is ordered with the Gigabit-only option, then one of two optional connectors may be attached to the *Test Port*. The connectors are either copper (RJ-45) or fibre optic SFP module. The module to which the connector is

attached is hot-swappable. Merely press the release tabs on either side of the connector and pull out the connector.

Sync-in/Sync-out connectors are provided to daisy chain the IXIA 250 with other chassis.

When the CDMA option is installed, an appropriate antenna should be attached to the rear panel, as shown in [Figure 13-11](#). Refer to [Ixia 100 Chassis](#) for a full discussion of the use of the CDMA feature. LEDs are provided to indicate the status of the CDMA time lock; the aforementioned chapter has a discussion of their interpretation.

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## Specifications

### Ixia 250 Chassis

Ixia 250 computer and chassis specifications are contained in [Table 13-2](#).

Table 13-2. IXIA 250 Specifications


CPU	Intel Celeron 850Mhz
	 <p><b>Caution-Battery replacement</b></p> <p>There is danger of explosion if battery is incorrectly replaced. Do not attempt to replace the battery.</p> <p>Return to Ixia Customer Service for replacement with the same or equivalent type of battery. Ixia disposes of used batteries according to the battery manufacturer's instructions.</p>
Memory	512 MB
Disk	Removable IDE disk: 20 GB
Operating System	Windows 2000 Server
Keyboard	Integrated keyboard
Mouse	Integrated touchpad
Integrated Display	12.1 inch TFT active matrix LCD panel <ul style="list-style-type: none"> <li>• 1024 x 768 resolution</li> <li>• Touchscreen</li> <li>• Adjustable brightness</li> </ul>
Physical	
Load Module Slots	2-accepts single or double-wide module
Size	17.5" x 11.25" x 7" (44.5cm x 28.5cm x 17.8cm)
Weight (empty)	20 lb. (9 kg)
Avg. Shipping Wt.	22 lb. (10 kg)
Shipping Vibration	FED-STD-101C, Method 5019.1/5020.1
Environmental	
Temperature	
Operating	41°F to 104°F, (5°C to 40°C) <p><b>Note:</b> Some high-density/high performance load modules may require a lower operating temperature; if this is the case, the operating temperature is specified in the load module datasheet.</p>
Storage	41°F to 122°F, (5°C to 50°C)
Humidity	
Operating	0% to 85%, non-condensing

Table 13-2. IXIA 250 Specifications

Storage	0% to 85%, non-condensing
Clearance	Rear: 4 in (10 cm); fan openings should be clear of all cables or other obstructions. Sides: 2 in (5 cm) unless rack mounted.
Power	100-240V 60/50Hz 3.0-1.5A
Fuse	3.15A 250V Fast Acting
Front Panel Switches	LCD brightness slide switch (on built-in keyboard)
Back Panel Switches	Power On/Off rocker switch Momentary Power-On switch
Back Panel Indicators	Power, Master, External Clock, CDMA status
Back Panel Connectors	
Power	Male receptacle (IEC 320-C19)
Keyboard/Mouse	1 PS/2 6-pin DIN connector with Y-connector cable, for external mouse and/or keyboard
Monitor	HD-DB15 Super VGA for external monitor
Printer	Female DB25 parallel port for external printer
Ethernet	RJ-45 10/100Mbps dual port
Com 1	Male DB9 serial port
Test port	RJ-45 or SFP
Sync In/Out	two 4-pin RJ11 (provided by Ixia)
CDMA Antenna	BNC connector (only on 250-CDMA)
XM2 Noise Spec(Fan db)	Condition:Ixia XM2 Front Back Right Left Plugged in not started 56 54 57 58 Only CPU Running On Low Speed 58 56 58 60 On Medium Speed- On Full Speed 70 67 70 73

## Test System

The test system specifications are contained in [Table 13-3](#) on page 13-13.

Table 13-3. IXIA 250 Test System Specifications

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Built-in Load Module	One port of LM1000TXS4 load module with 10/100/1000 capability. Refer to <a href="#">Chapter 21, IXIA 10/100/1000 Load Modules</a> for a description of the port characteristics. Load module must be ordered with a copper or SFP connector. This port is available as card 1, port 1 in Ixia software.
Load Module Slots	Any of Ixia's single-wide or double-wide modules may be used. Load modules are hot-swappable. These cards are available as cards 2 and 3 in Ixia software.
CDMA	Optional CDMA clock synchronization module.

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