MiniPro RAID V2 Enclosure
## User Guide

For more information, visit our website at www.oyendigital.com

(1) Specifications

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Application	• 2 x 2.5" SATA HDDs or SSDs (up to 15mm height)
Interface/Ports	• eSATA 6G (Up to 6.0 Gbps) • USB 3.0 (Up to 5.0 Gbps) • FireWire 800 (Up to 800 Mbps)
RAID Modes	• RAID 0 Striping • RAID 1 Mirroring • JBOD Clear (independent drives) • BIG (non-RAID single volume)
System Requirements	• Windows Vista/7/8 or higher • Mac OS 10.4 or higher
Operating Environment	• Temperature: 5°C ~ 40°C • Humidity: 10%RH ~ 80%RH
Storage Environment	• Temperature: -20°C ~ 70°C • Humidity: 5%RH ~ 90%RH
Power	Input: AC 100-240V, 50-60Hz; or bus power Output: DC +12V/2A
Enclosure Size	6.5 x 5.1 x 1.1 inches

(2) Detailed View

Power LED

Drive LEDs
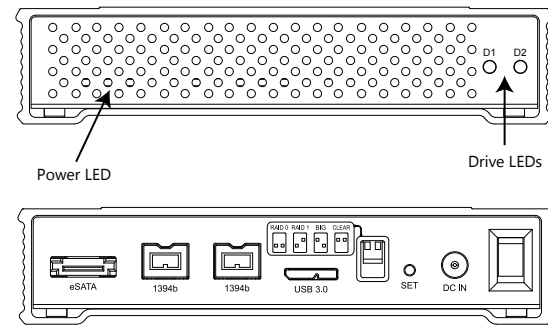
LED indicators

State	Power LED	Drive 1 (D1)	Drive 2 (D2)
Powered & ready	Solid White	Solid Blue	Solid Blue
Read/Write activity	Solid White	Fast rapid blinking	Fast rapid blinking
Drive Error *	Solid White	Red	Red
HDD Sleep mode	Solid White	Off	Off
RAID 1 Rebuilding	Solid White	Slow steady blink	Slow steady blink

* Note: D1 & D2 LEDs will be OFF when the MiniPro is not connected to a computer.

(3) Installing Drives

a) Remove the screws located at the bottom of the case and slide out the circuit board bracket from the enclosure.
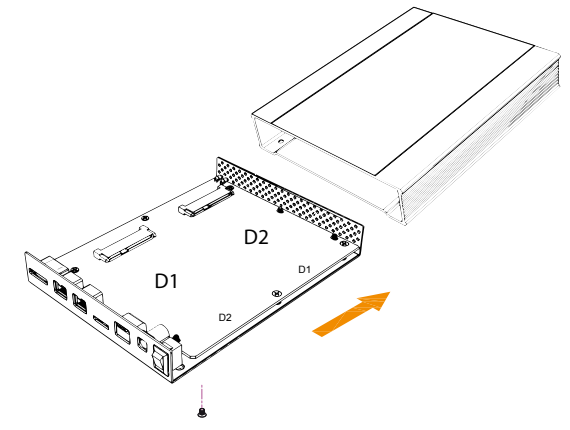
(4) Installing Drives (cont.)

b) Install the drives in the D1 & D2 slots on the circuit board.

c) With your hand holding the drives into the bracket, flip it over to view the screw holes.

d) Using the 8 mounting screws, attach the drives to the bracket using the included screwdriver.

Bottom View
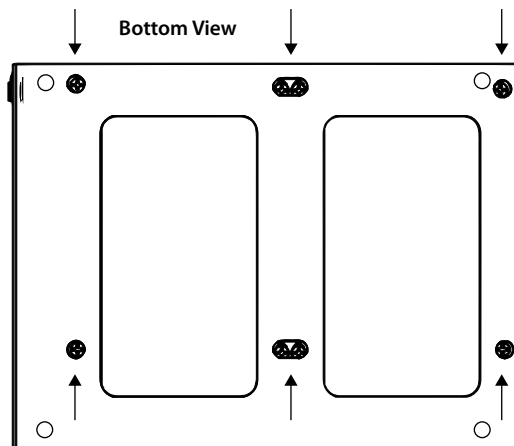
e) Slide the bracket back into the enclosure and fasten using the 4 exterior screws removed in step a.

(5) Power

The MiniPro RAID can be powered using the included AC adapter or FireWire bus power.

The MiniPro RAID can **use USB 3.0 or eSATA for data while using FireWire for power**. To do so, connect the MiniPro to a computer using the USB or eSATA cable. Then connect the FireWire cable and turn the power switch on.

(6) System Setup

The default mode is JBOD. To set a new mode, perform these steps:

Set RAID Procedure:
1. Set the switches on the MiniPro to the desired mode.
2. Connect the MiniPro RAID to the host computer.
3. Using the tip of the screwdriver, press the SET button while turning on the power.
4. Hold the SET button for 7-10 seconds.
5. Release the SET button. The RAID mode is now configured.

If changing RAID modes, you first must perform a "Clear" procedure.

Clear RAID Procedure:
1. Set the switches on the MiniPro to Clear.
2. Using the tip of the screwdriver, press the SET button while turning on the power.
3. Hold the SET button for 7-10 seconds.
4. Release the SET button. Any previous RAID mode is removed and the drives are now set for JBOD mode.

(7) RAID Modes

RAID 0 (Striping) is a non-redundant data mapping technique. It combines data evenly across both drives simultaneously; dramatically increasing performance.

• RAID 0 will be viewed as one single storage unit. If one disk in the RAID System fails, all data in installed disks will be lost.

• The total capacity = smallest drive x the total number of drives. For example, if the smallest drive is 500GB and the other is 2TB, the total capacity will be 1TB (500 x 2).

RAID 1 (Mirroring) consists of two drives storing duplicate copies of the same data. In this mode, the data is simultaneously written to two disks. The speed of operation is slow in comparison to RAID 0.

JBOD (Clear) is simply is a collection of drives that are recognized as separate drives by the OS. JBOD provides no performance increase or redundancy. This is the **default** setting.

Big (Span) combines both hard drives into a single logical unit. Unlike Striping, it writes data to the first drive until it reaches full capacity. When the first disk reaches full capacity, data is written to the second disk. Spanning does not increase performance or safety.

(8) Sleep

The MiniPro RAID V2 does not have an auto-sleep timer. However, it will follow the sleep settings of the computer. When your computer enters sleep mode, the MiniPro will sleep also.

(9) RAID 1 Rebuild

If one of the drives fail, the D1 or D2 LED will turn RED while connected to a computer. A new HDD can be installed and will automatically rebuild with data (if configured for RAID 1 mode).

Note: The replacement drive must be a new, unformatted drive.

1. Power down the MiniPro RAID.
2. Remove the failed drive using the included screwdriver.
3. Install the new drive and power up the MiniPro
4. The D1/D2 LED will blink twice per second, which indicates a rebuild in progress. This can take several hours.

(10) Troubleshooting

Does a "Clear" procedure delete data from existing RAID 1 or JBOD drive(s)?
No, if a Clear procedure is performed on RAID 1 or JBOD drives, the existing data on the drives will not be deleted.

Can I remove a drive from the RAID and install it in another enclosure for access to the files?
Yes, only if using RAID 1(Mirroring) or JBOD.

For full FAQ, visit the following link:
http://oyendigital.com/FAQs-MiniPro-RAID-V2.html

(11) Warranty Information

This product includes a two (2) year repair/replacement warranty provided by Oyen Digital. This warranty is non-transferable and is limited to the original purchaser. Warranty service may be requested at: oyendigital.com/support.html