

**MOD 910**

USER  
MANUAL



Storing More Of Your  
Digital World™. Absolutely.



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## Changes

The material in this manual is for reference only and is subject to change without notice.

While reasonable efforts have been taken in the preparation of the material contained in this manual, Plasmon Data Limited assumes no liability resulting from any errors or omissions, or from the use of material contained herein.

## Cautions

**CAUTION** - Warnings related to directions which could put the operator and the drive at risk of damage.

**VORSICHT** - Warnungen, welche sich auf die Sicherheit des Benutzers sowie die des Laufwerks beziehen.

**ATTENTION** - Le non suivi des remarques, attentions et indications de ce mode d'emploi peut engendrer des risques à l'opérateur ainsi qu'au matériel lui-même.



NOTE - Information relating to important suggestions.



CAUTION - Warnings relating to directions which could put the operator and drive at risk of damage.



TIP - Hints to achieve the optimum performance from your drive.

Release December 2002

## FCC Compliance Statement



NOTE: 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 switching 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.



The compliance of this unit to the FCC rules is not subject to any special accessories, which are not readily available through normal dealer channels.



The drive is in conformity with the EMC directive and low-voltage directive.



**CAUTION:** Any modifications or changes made to this equipment not expressly approved by the PLASMON group of companies may void the authority to operate this equipment in its intended installation.

**WARNUNG:** Die Vollmacht, das Gerät in der vorgeschriebenen Weise zu betreiben wird dann ungültig, wenn an dem Laufwerk Veränderungen vorgenommen werden, die nicht von PLASMON genehmigt wurden.



**ATTENTION:** Toute modification ou changement fait sur cet équipement et non expressément approuvé par Plasmon peut engendrer des dysfonctionnements irréversibles et rendre son installation impossible.

## Thermal Precautions for the MOD910I

Forced air-cooling is required throughout the drive to prevent overheating of the drive and must be provided as part of the system integration.

The following are precautions that should be observed when installing the MOD910I:

- Do not cover the ventilation slot on top of the drive
- Airflow should be from the rear of the unit. Air should not be drawn into the front of the unit.
- Ensure that a minimum airflow of 3 CFM is provided.
- If possible, try to ensure that there is no device installed immediately above the MOD910I.

## Thermale Vorsichtsmassnahmen für das MOD910I

Zwangsluftkühlung ist erforderlich, da es das Überhitzen des Laufwerks verhindert. Die Kühlung muss in das System integriert werden.

Die folgenden Vorsichtsmassnahmen müssen bei dem Einbau des MOD910I beachtet werden:

- Die Ventilationsöffnung auf dem Laufwerk darf nicht abgedeckt werden.
- Das Gerät muss von hinten belüftet werden. Das Gerät darf keine Luft von vorne ansaugen.
- Ein minimaler Luftfluss von 3CFM (~28dm<sup>3</sup>/min) ist erforderlich.
- Wenn möglich, sollten keine Geräte direkt über dem MOD910I installiert werden.

## Précaution thermique d'emploi pour le lecteur MOD910:

Un refroidissement d'air forcé dans le lecteur est nécessaire au bon fonctionnement de l'appareil. Il doit prévenir toute surchauffe et doit faire partie intégrante du système lors de son intégration.

- Veuillez trouver ci-dessous toutes les recommandations à observer lors de l'installation du MOD910.
- Ne pas recouvrir, ni obturer les systèmes d'aération du lecteur
- La circulation d'air doit toujours être faite de l'arrière vers l'avant du lecteur. L'air forcé par l'arrière doit mettre le lecteur en pression pour prévenir toute introduction d'air par l'avant.
- Vérifier que le flux d'air est au minimum de 3 CFM
- Si possible, ne pas installer d'autre système immédiatement au dessus du MOD910.

# Laser Product

## Class 1 Laser Product

The optical drive mechanism contained in this unit is certified to comply with DHHS rule 21 CFR Chapter 1, Sub-chapter J in effect as of the date for manufacture.

This optical drive mechanism is classified as a Class 1 laser product to EN 60825, and there is no hazardous laser radiation with the safety protection.



Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.



Never open the enclosure or touch the parts internal to the product.



When the power switch is on, do NOT place your eyes close to the front panel opening to look into the unit.

## Laser Specification

Class 1 LASER mechanism

Laser Power: No hazardous radiation is emitted with the safety protection of the unit.

# Laser Produkt

## Klasse 1 Laser Produkt

Der optische Laufwerksmechanismus, welcher sich in diesem Gerät befindet, entspricht der DHHS Regel 21, Kapitel 1, Nebenkapitel J, wirkend ab Herstellungs Datum.

Dieser optische Laufwerksmechanismus wird, entsprechend EN 60825, als Klasse 1 Laser Produkt klassifiziert und gibt, mit Sicherheits Schutz, keine schädliche Strahlungen ab.



Anwendung der Kontrollen oder Gebrauch dieses Gerätes anders wie hier vorgeschrieben, können zu schädlicher Strahlenaussetzung führen.



Das Gehäuse des Gerätes darf nicht geöffnet werden, auch dürfen die Innenteile unter keinen Umständen angefasst werden.



Wenn das Gerät eingeschaltet ist, darf man nicht versuchen durch das Öffnen der forderen Klappe in das Laufwerkinnere hinein zu sehen.

## Laser Beschreibung

Klasse 1 Laser Mechanismus

Laser Antrieb: Mit Sicherheitsschutz gibt Gerät keine schädliche Strahlungen ab.

# Produit laser

## Produit laser de classe 1

Le mécanisme de lecture optique composant cette unité est certifié conforme à la norme DHHS règle 21 chapitre 1, sous-chapitre J, en vigueur à la date de fabrication.

Ce mécanisme de lecture optique fait partie des produits laser de classe 1 conformément à la norme EN 60825, et ne produit aucun rayonnement nocif grâce à son dispositif de sécurité.



Toutes vérifications, réglages ou procédures autres que ceux mentionnés dans ce guide d'utilisation peuvent vous exposer à un rayonnement nocif.



Ne jamais ouvrir le boîtier du lecteur et évitez tout contact avec les composants internes du produit.



Lorsque l'appareil est sous tension, n'essayez jamais de regarder à l'intérieur de l'unité par l'ouverture du panneau frontal.

## Spécification du laser

Mécanisme laser de classe 1

Puissance laser : aucun rayonnement nocif n'est émis grâce au dispositif de sécurité intégré à l'unité.

# Unpacking / Packing

## (1) General precautions



Note the following precautions in order to maintain the performance and reliability of the drive.

- ! Open the package with particular care.
- ! Do not expose the unit to excessively dusty environment.
- ! The unit contains components that can be destroyed by static electricity.

Follow the guidelines below for internal unit:

- ! Use an anti-static mat and ground yourself when handling the internal unit.
- ! Always be sure to handle the internal unit only by the frame and do not touch any electrical components.

## (2) Unpacking (Internal Unit)



When moving the unit to an environment where there is a significant difference in temperature, let the unit remain in its packaging for at least two hours.

Find a flat, soft surface for unpacking, keeping the box upright.

Do not apply excessive force to the unit when removing the shock-absorbing material, or to the surfaces and interface connector when removing the anti-static bag.

## (3) Unpacking (External Unit)



When moving the unit to an environment where there is a significant difference in temperature, let the unit remain in its packaging for at least two hours.

Find a flat, soft surface for unpacking, keeping the box upright.

## (4) Packing

Pack the unit after you have removed the disk.

Put the device in the anti-static or plastic bag.

It is desirable to use the original shock-absorbing material and packing box used when the unit was delivered to you. If not, use a box with a shock-absorbing structure that will prevent direct impacts to the device. In the case of the internal unit, protect the surfaces and interface connector against possible damage and use an anti-static bag.

## (5) Transportation



! Transport the unit in a well-packaged condition, with the upside facing up.

! Transport the unit as little as possible after unpacking, always using the shock absorbing material to avoid impact and vibration. When carrying the unit after unpacking, keep it in the horizontal plane.

## (6) Storage



- Use the moisture-proof packing material for storage.

- The storage environment should meet the non-operating environmental requirement as specified in Appendix E.

! Do not expose the unit to radical changes in temperature, which could cause condensation.

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## Owners Record



The model and serial number of the drive you have just purchased are located on the underside of the unit<sup>(1)</sup>. Please record them below, and refer to them should you need to call your supplier for service or technical support.

<sup>(1)</sup> *(External) or the top of the drive (Internal).*

*(1) (Extern) oder der obere Teil des Laufwerks (Intern).*

MOD910 Serial No. ....

Keep this manual for reference purposes should any switch setting need to be altered.

## Warning

Use of controls or adjustments other than those specified herein may result in hazardous laser radiation exposure. This product may only have the cover removed for service or repair by a qualified and approved service site.

## Vorsicht

Anwendung der Kontrollen oder Einstellungen dieses Gerätes anders wie hier vorgeschrieben, können zu schädlicher Strahlenaussetzung führen. Das Gehäuse darf nur von einer qualifizierten Reparaturwerkstatt entfernt werden.

## Important

Toutes procédures de vérification, d'alignement ou de tests, autres que celles spécifiées dans ce manuel, peuvent entraîner une exposition dangereuse au rayon laser. Dans tous les cas, ce produit ne doit avoir le capot de protection laser ouvert, que dans les centres de réparation agréés par le constructeur.

## Air Filters

The MOD910E (external drive) is shipped without Air Filters. The drive has been designed with ducted air cooling, air should not get into the body of the drive. Air Filters are provided for particularly dusty or dirty environments. (Please be advised that the drive will run up to a maximum ambient temperature of 30°C with air filters).

## General Description

The MOD910 is a high performance, high capacity optical disk drive that offers recording on rewritable and CCW WORM media that is ISO compliant. The MOD910 reads and writes to 9.1GB, 8.6GB 5.2GB, 4.8GB, 4.1GB, 2.6GB and 2.3GB, rewritable, WORM and DOW disks and offers read compatibility to earlier ISO standard 1.3GB, 1.2GB, 650MB and 600MB media so protecting any existing investment in storage.

The MOD910 also forms the basis for the range of Plasmon Magneto Optical jukeboxes, providing further performance increases. The MOD910 has been designed to give fast, solid and reliable disk exchanges .

Please take the time to study this manual to become familiar with operating the unit, as well as prescribed service.

The main features of the MOD910 drive are:

- ✓ 9.1GB (4.55GB per side) of storage on rewritable, and CCW WORM disks.
- ✓ Half height unit.
- ✓ Reads 594MB and 650MB disks as well as 1.2GB, 1.3GB, 2.3GB, 2.6GB, 4.1GB, 4.8GB and 5.2GB media as used in earlier MO drives in addition to read & write compatibility to 2.3GB and 2.6GB disks.
- ✓ Data cache of 8MB for write and read operations.
- ✓ Effective seek time of 25ms
- ✓ Synchronous data rates up to 10 MBytes/sec.
- ✓ Universal AC supply operates from 100 to 240 volts (MOD910E).



# SCSI Connections

The external drive is equipped with two Micro D 50 way connectors on the rear panel. These are for the SCSI in and SCSI out (if there are additional devices connected).

A SCSI interface cable needs to be terminated at each end of the line, one terminator being on the last device in the chain and the other terminator is usually on the host computer or adapter card, a Micro D SCSI Terminator is supplied (external drive only).



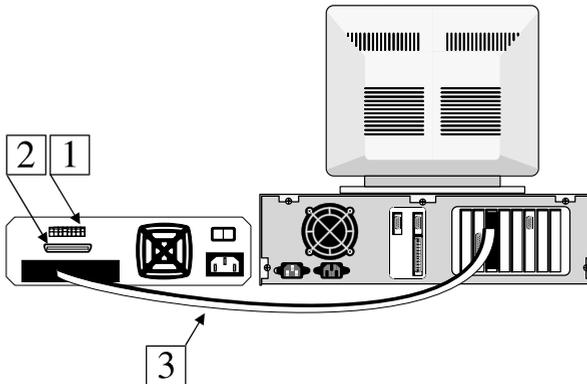
Refer to the documentation supplied with your SCSI card or computer system should you need to check the computer termination. In normal circumstances this will usually be enabled.

The two ways of connecting SCSI devices are shown below :

Fig 1. External Drive Connection

Fig 2. Internal Drive Connection

## Fig 1 External Drive Connection

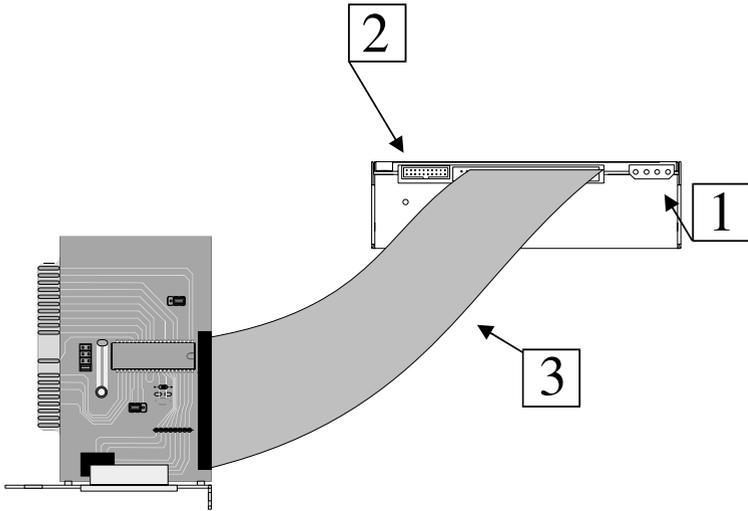


1. Switch block SCSI ID setting
2. SCSI connector for additional devices or terminator if last in chain.
3. SCSI cable



If there are also internal devices on the same SCSI card, then the SCSI adapter card must have its on-board termination disabled.

## Fig 2 Internal Drive Connection



1. DC Power Connector
2. Jumper block for SCSI ID settings
3. 50 way SCSI cable - note pin 1 orientation



If internal devices are also to be connected to the SCSI card, then the SCSI adapter on-board termination must be disabled. Refer to the documentation that accompanies the SCSI adapter.

## SCSI Identifier

Each device on a SCSI bus requires a unique address to be set which maybe in the range of 0 to 6 as address 7 is usually reserved for the host computer address. The MOD910 is shipped with a default address of 1 which will usually suffice in most cases.

Please refer to diagram on Appendix C

## General Precautions for MOD910E

- X** Never plug or un-plug any connectors or cables from the device on the SCSI bus whilst power is applied to either host computer or any devices attached.
- X** Do not use the unit under the following operating environments:
  - Places with high humidity
  - Exposed to direct sunlight
  - Locations subject to excessive shock or vibration
- X** Do not cover ventilation slots as these are provided for cooling.
- X** Do not place the drive near a printer.
- X** Never attempt to disassemble the unit.
- X** Never touch the surface of a recordable disk.
- X** Do not allow any foreign object or liquid to enter the unit.
- ✓ Always remove the disk before moving the unit. This will ensure that the optical head is securely positioned for shipping.
- ✓ Keep the packaging material should the unit have to be transported.

## Additional Notes for Internal Models

- ✗ Never connect / disconnect unit to / from SCSI bus with power on any units including host computer.
- ✓ When handling the unit, an anti-static wrist strap should be used to avoid possible damage from static electricity.
- ✓ Ensure that the power connector is correctly wired.
- ✓ Check that the power is within the unit's specification.
- ✓ Ensure that adequate ventilation is provided.

# GETTING STARTED

## Operation & Installation Instructions

### External Drive

#### **Do not apply power yet!**



Set the SCSI ID of the unit via the DIP switch on the rear of the unit. (see Appendix B and C)

Connect the SCSI interface cable between the computer and the drive unit.

If the drive is the last unit on the SCSI interface, install the supplied terminator in the unused SCSI connector.

Apply power to the unit.

Insert a disk cartridge into the drive, gently pushing it into the drive until it is power loaded. The motor will start and after a few seconds the drive will be ready for use.

When the eject button is pressed the cartridge will electronically eject from the drive after a short delay.

## Externes Laufwerk

### **Noch nicht einschalten!**



Man stellt die SCSI ID des Geräts am hinterem DIP Schalter ein. (siehe Anhang B und C).

Verbinden Sie den Rechner und das Laufwerk mit dem SCSI Kabel.

Falls das Laufwerk das letzte Gerät in der SCSI Kette ist, installiert man den mitgelieferten Begrenzer (Terminator) in den leeren SCSI Sockel.

Schalten Sie das Gerät ein.

Man schiebt eine Disk in das Laufwerk bis das Gerät sie von selber annimmt. Der Motor fängt dann zu laufen an und nach wenigen Sekunden ist das Laufwerk anwendungsfähig.

Wenn man den Eject-Knopf drückt, wirft das Gerät die Disk nach ein paar Sekunden wieder aus.

## Lecteur Externe

### **Ne connectez pas encore votre matériel.**



Configurez l'adressage SCSI au moyen du "dip switch" en panneau arrière de l'équipement (voir appendice B et C).

Connectez le câble SCSI entre l'ordinateur et l'unité.

Si l'unité est la dernière de la chaîne SCSI, veillez à installer le terminateur sur le connecteur SCSI libre.

Alimentez l'unité et mettez la en marche.

Insérez avec précaution une cartouche dans le lecteur jusqu'à la voir automatiquement "avalée" par l'unité. Le moteur du disque va alors commencer à tourner et après quelques secondes le lecteur est prêt à l'utilisation.

Lorsque le bouton "éject" est pressé, la cartouche sera éjectée après quelques secondes.

## Notes:



*If you need to use the emergency eject pinhole, make sure that the unit is powered off and that the disk has stopped its rotation (20-30 seconds after power off).*



*If the SCSI ID is changed with the unit powered ON, then power must be removed and reapplied for the new ID to take effect.*



*Before moving the drive, always ensure that the optical disk cartridge is removed.*



*The drive has various functions that may be altered from their defaults if required. These are outlined in the MOD910I section. Opening the enclosure and changing these settings must only be carried out by a qualified service engineer.*

## Internal Drive

! The internal drive can be used in both the vertical and horizontal plane.

! The external drive must only be used in the horizontal plane.

- Attaching screws are supplied with the unit. The screws are M3 x 8 mm, and the fixing plate should be within the range of 1.5 to 2.5 mm, which includes the washer.
- Included with internal drives is a 50-way flat IDC cable with 2 connectors for connection to the SCSI adapter.



**Note for correct orientation of the flat cable when installing! Pin 1 is usually identified by a red stripe on the edge of the cable, and connectors have a small arrow by pin 1.**

! Connect the internal power connector in your computer to the drive making sure that the orientation is correct.

## Prechecks before Service Call



1. Disk cannot be inserted.
  - ? Is power on?
  - ? Is the disk orientated correctly?
  - ? Is the disk the correct type?
  
2. Access Failure
  - ? Is the cartridge inserted?
  - ? Is the SCSI ID set correctly?
  - ? Are the SCSI bus terminated correctly?
  - ? Is the cartridge set to write protect?
  - ? Are other devices on the SCSI bus operating normally?
  - ? Is the software device driver installed correctly?

## Placing a service call



Contact your supplier or service company. They will probably require the following information;

Where purchased

Date of Purchase

Serial Number

Description of failure

System information which may include;

- ? Computer type and SCSI adapter type
- ? Software configuration (in DOS this will be the CONFIG.SYS and AUTOEXEC.BAT file)
- ? Type of device driver being used



Software and Driver Updates

Do you have the latest revisions?

Contact your supplier for firmware or driver updates.

## Service on the unit

There is no prescribed service for the unit. However, to ensure optimum performance, the unit should operate in as clean an environment as possible where contaminants do not enter the unit. Should the unit require cleaning, do NOT attempt to open the drive, but contact your supplier.

## Microsoft Operating Systems and Optical support



Microsoft have confirmed that their NT operating system versions 3.51 and 4.0 do not currently FULLY support any WORM or Rewritable Optical media (512, 1024, 2048 or 4096 bytes per sector) or drives under Fat or NTFS File Systems.

NT, using FAT or NTFS, only supports Optical if the drive and media act as a Magnetic Hard Drive. (Type 0 Device)

Windows NT will support both WORM and Rewritable Optical media when used with another File System (such as Plasmon Drive Manager for NT)

FAT and NTFS with full Optical support are being looked into for a future release of NT from Microsoft.

Microsoft have committed that Windows 95 will read and write Rewritable Optical media only when it has been formatted with third party software. WORM media is not supported and requires third party software.

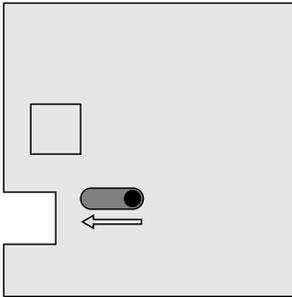
UDF 1.02 file formats can be read by Windows 2000 without any additional driver software, which gives guarantees of future read compatibility.

Customers using NT with Plasmon Multitasking Manager have **no need** for any action.

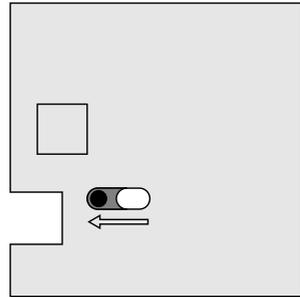
For details of Optical support in future products from Microsoft, please contact them direct.

## Disk Cartridge Notes

1. Never open the shutter to look at the disk. The shutter is provided for protection against dust, dirt and other contaminants.
2. Avoid subjecting the cartridge to sudden shock or impact.
3. When the write protect window is open, the disk is in a read only mode of operating.



Read write enable

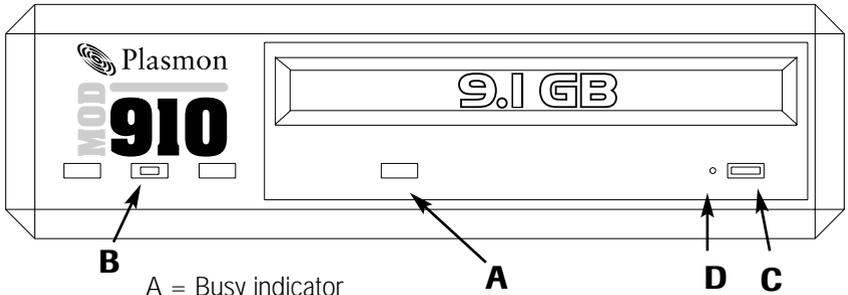


Write protect

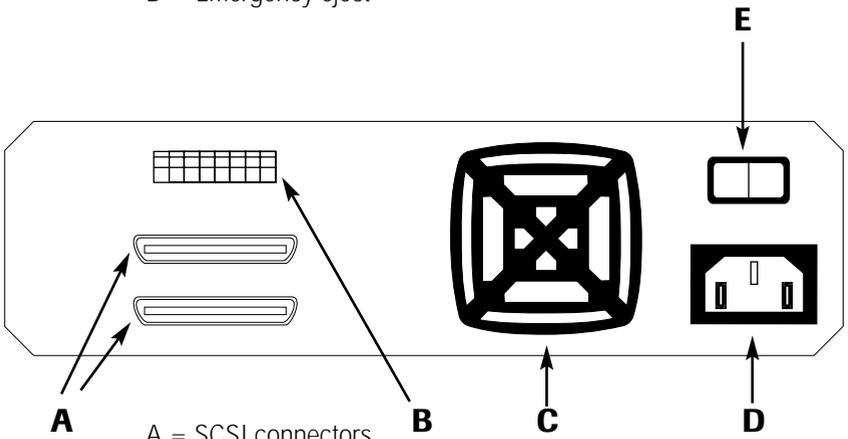
# Appendix A

## Component Location

MOD910E



- A = Busy indicator
- B = Power light
- C = Cartridge eject
- D = Emergency eject

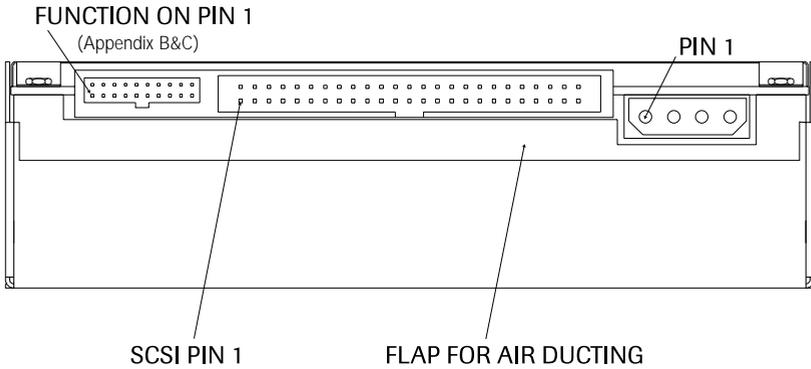
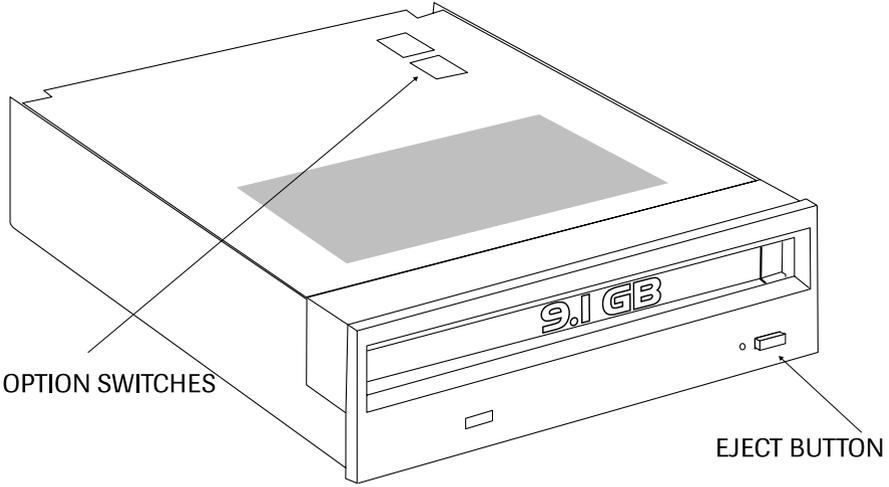


- A = SCSI connectors
- B = SCSI ID selector
- C = Fan (optional filter)
- D = Power connector
- E = AC on / off switch

# Appendix A (continued)

## Component Location

MOD910I



## Appendix B

### Function Connector Pin Description

(see appendix A for connector location)

Switch	Pins	Function	Description
3	A1 - B1	SCSI ID 2	See Appendix C to set SCSI ID
2	A2 - B2	SCSI ID 1	See Appendix C to set SCSI ID
1	A3 - B3	SCSI ID 0	See Appendix C to set SCSI ID
	A4 - B4 Parity	Disable SCSI	When the pair of pins is open, the drive performs SCSI parity checking (default). Shorting the pins with a jumper forces the drive NOT to perform the SCSI parity checking.
	A5 - B5	Disable Write Cache	When the pair of pins is open, the drive performs write back caching (default). Shorting the pins with a jumper forces the drive NOT to perform the write back caching.
	A6 - B6	Disable Auto Spin-up	When the pair of pins is open, the drive performs an automatic spin-up upon media loading (default). Shorting the pins with a jumper forces the drive NOT to perform the automatic spin-up.
4	A7 - B7	Force Verify for Write	Shorting the pair of pins forces the drive to perform a Write and Verify operation whenever the host issues a WRITE command (default). Opening the pins by removing the jumper will force the drive not to Verify after Write (unless specified under software
	A8 - B8	Disable Manual Eject	Shorting the pins disables the eject button operation. (Default Open).
5	A9 - B9	Enable Fast SCSI	Shorting the pins enables Fast SCSI mode. Default Closed
6	A10 - B10	Device Type	When the pins are open the drive responds as an Optical Memory Device (type 7) (Default). Shorting the pins forces the drive to respond as a Direct Access Device (type 0)
	A11 - B11	Enable Termination	Shorting the pins invokes the internal SCSI active terminator. With the pins open (default) Termination is disabled.
	A12 - B12	Terminator Power	These pins supply +5V DC through an isolation diode for SCSI terminator power to the SCSI bus TERMPWR line. Shorting the pins enables SCSI TERMPWR signal (default). Leaving them open disables.

# Appendix C

## SCSI Device Address

### Jukebox Connector SCSI ID

SCSI Drive Address	JP1 or SW3	JP2 or SW2	JP3 or SW1
0	OFF	OFF	OFF
1	OFF	OFF	ON
2	OFF	ON	OFF
3	OFF	ON	ON
4	ON	OFF	OFF
5	ON	OFF	ON
6	ON	ON	OFF
7	ON	ON	ON

Drives are set up to ID1 as default

### Default Jumpers on external and internal units

Jumper/Switch	internal	external
JP1/SW3	N/C	OFF
JP2/SW2	N/C	OFF
JP3/SW1	Fitted	ON
JP4	N/C	N/C
JP5	N/C	N/C
JP6	N/C	N/C
JP7/SW4	Fitted	ON
JP8	N/C	N/C
JP9/SW5	Fitted	ON
JP10/SW6	N/C	OFF
JP11	N/C	N/C
JP12	Fitted	Fitted

## Appendix D Drive Option Switches

The MOD910 provides eight switches, which permit the user to define certain drive operations or interface features.

Optional Switch	Switch Number	Description
S501	1	Reserved
	2	Reserved
	3	Disable Command Eject
	4	Reserved
	5	Enable Library I/F Mode
	6	Reserved
	7	Disable Write Cache
	8	Disable Auto Spin-up
S502	1	Reserved
	2	Reserved
	3	Reserved
	4	Reserved
	5	Disable SCAM Selection
	6	Reserved
	7	Enable Fast SCSI
	8	Enable Write Cache for Write and Verify Command

### Option Switch Function

**NOTE:**The MOD910I is shipped with the forced verify on write operation enabled.

**NOTE:**The drive is shipped with write caching enabled by default. In data critical applications it may be necessary to disable write caching. This may be achieved using Adaptec "SCSI EXPLORER" program under the windows environment. Programmers may also access this function through the Mode Page Settings.

## Appendix E

### Main Specifications

	MOD910e	MOD910i
<b>Access times</b>		
Average seek (1/3 full stroke)	25 ms	25 ms
Motor start	2.5 seconds	2.5 seconds
Motor stop	2.2 seconds	2.2 seconds
Rotational speed	3000/3300/3600 RPM	3000/3300/3600 RPM
<b>Data transfer rates</b>		
User sustained write/read	3.07 to 6.14 MB/second	3.07 to 6.14 MB/second
Burst asynchronous	3 MB/second	3 MB/second
Burst synchronous	10 MB/second (Fast SCSI enabled)	10 MB/second (Fast SCSI enabled)
<b>Buffer size</b>		
MTBF (Power On Hours)	8 MB 100,000	8 MB 100,000
<b>Environmental</b>		
Operating temperature	+5 to +40°C	+5 to +45°C
Non-operating temperature	-30 to 60°C	-30 to 60°C
Operating humidity	10 to 90%	10 to 90%
Non-operating humidity	5 to 90% non condensing	5 to 90% non condensing
Operating vibration (5-350Hz)	0.00015 G <sup>2</sup> Hz or 0.014 m <sup>2</sup> /s <sup>3</sup>	0.00015 G <sup>2</sup> Hz or 0.014 m <sup>2</sup> /s <sup>3</sup>
Operating shock (no damage)	30G or 294 m/s <sup>2</sup> , 3ms half sine	30G or 294 m/s <sup>2</sup> , 3ms half sine
Non-operating shock	89G or 873 m/s <sup>2</sup> , 3ms half sine	89G or 873 m/s <sup>2</sup> , 3ms half sine
<b>Electrical</b>		
Operating voltage	100 to 240V AC; 50/60Hz	+5V ± 5%; 12V + 5%
Power requirements	0.5A	+5V @ 2.0A (Max); 0.8A (Typ) 12V @ 3.0A (Max); 0.9A (Typ)
<b>Structure</b>		
Dimensions (WxHxD in mm)	228 x 66 x 276	146 x 41.3 x 203
Weight	3.9 Kg	1.5 Kg
Drive orientation	horizontal	horizontal/vertical
Warranty	one year parts and labour return to base	one year parts and labour return to base

# Appendix F

## SCSI Interface connector signal names

### MOD910E SCSI CONNECTOR

SIGNAL NAME	PIN NUMBER	SIGNAL SOURCE
DB0	26	SCSI HOST /CONTROLLER
DB1	27	SCSI HOST /CONTROLLER
DB2	28	SCSI HOST /CONTROLLER
DB3	29	SCSI HOST / CONTROLLER
DB4	30	SCSI HOST /CONTROLLER
DB5	31	SCSI HOST /CONTROLLER
DB6	32	SCSI HOST /CONTROLLER
DB7	33	SCSI HOST /CONTROLLER
DBP	34	SCSI HOST /CONTROLLER
GROUND	35	
GROUND	36	
GROUND	37	
TERMPWR	38	SCSI HOST /CONTROLLER
GROUND	39	
GROUND	40	
ATTN	41	SCSI HOST
GROUND	42	
BSY	43	SCSI HOST /CONTROLLER
ACK	44	SCSI HOST
RST	45	SCSI HOST
MSG	46	CONTROLLER
SEL	47	SCSI HOST /CONTROLLER
C / D	48	CONTROLLER
REQ	49	CONTROLLER
I / O	50	CONTROLLER

## SCSI Interface connector signal names

### MOD910I 50 WAY IDC CONNECTOR

SIGNAL NAME	PIN NUMBER	SIGNAL SOURCE
DB0	2	SCSI HOST /CONTROLLER
DB1	4	SCSI HOST /CONTROLLER
DB2	6	SCSI HOST /CONTROLLER
DB3	8	SCSI HOST /CONTROLLER
DB4	10	SCSI HOST /CONTROLLER
DB5	12	SCSI HOST /CONTROLLER
DB6	14	SCSI HOST /CONTROLLER
DB7	16	SCSI HOST /CONTROLLER
DBP	18	SCSI HOST /CONTROLLER
GROUND	20	
GROUND	22	
GROUND	24	
TERMWR	26	SCSI HOST /CONTROLLER
GROUND	28	
GROUND	30	
ATTN	32	SCSI HOST
GROUND	34	
BSY	36	SCSI HOST /CONTROLLER
ACK	38	SCSI HOST
RST	40	SCSI HOST
MSG	42	CONTROLLER
SEL	44	SCSI HOST /CONTROLLER
C / D	46	CONTROLLER
REQ	48	CONTROLLER
I / O	50	CONTROLLER

## **Appendix G**

### **Accessories**

#### **Media**

P9100W 9.1GB WORM MO media (4096 bytes/sector)  
P9100E 9.1GB Rewritable MO media (4096 bytes/sector)  
P8600W 8.6GB WORM MO media (2048 bytes/sector)  
P8600E 8.6GB Rewritable MO media (2048 bytes/sector)

#### **Filter Pack kit**

Part No. RS-184-5113  
Contains: 5 x Replacement Filters (external drive only)

## Contacting Plasmon

Should there be a need for further support other than what this manual provides, please contact one of these two technical support locations:

<b>To obtain technical support in the United States</b>	
Plasmon Technical Support	1-877-585-6793
	1-719-593-4192 (fax)
e-mail	support@plasmon.com
World Wide Web	<a href="http://www.plasmon.com">www.plasmon.com</a>
<b>To obtain technical support in Europe</b>	
Plasmon Technical Support	+44 (0) 1763 262 963
	+44 (0) 1763 264 444
e-mail	support@plasmon.co.uk
World Wide Web	<a href="http://www.plasmon.com">www.plasmon.com</a>
International Calls	1-719-593-4437
	1-719-593-4192 (fax)

## **European Headquarters**

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Tel +44 (0)1763 262963  
Fax +44 (0)1763 264444  
Email: [sales@plasmon.co.uk](mailto:sales@plasmon.co.uk)

## **United States**

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# MOD 910



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