USER'S GUIDE

T6-5200*/ TMT6-5200*
T5-2600*/ TMT5-2600*
STAR SERIES

OPTICAL DISC DRIVE

Maxoptix®

DOCUMENT 2006092 Rev. A

Disc Drive Environment Specifications

	OPERATING	NON-OPERATING
AMBIENT TEMPERATURE	+5 °C to +50 °C	-40°C to 70°C
MAXIMUM TEMPERATURE GRADIENT	10°C/hr 18°F/hr	10°C/hr 18°F/hr
	8% to 80% Noncondensing	5% to 90% Noncondensing
RELATIVE HUMIDITY	30°C	30°C
MAXIMUM WET BULB	-300 m to 3000 m	-300 m to 12,000 m
ELEVATION	(-1,000 ft to 10,000 ft)	(-1,000 ft to 40,000 ft)
	5-25 Hz, 0.016 in P-P	5-31 Hz, 0.021 in P-P
VIBRATION (inputs to frame of drive, all axes)	25-500 Hz, 0.5 G Peak Acceleration	31-500 Hz, 1G Peak Acceleration
SHOCK (inputs to frame of drive)	3 msec Pulse Width (1/2 sine) 35 G	11 msec Pulse Width (1/2 sine) 50 G

Physical Specifications

HEIGHT	4.24 cm
WIDTH	14.61 cm
DEPTH	20.32 cm
DISK DIAMETER	130 mm
WEIGHT	1.5 kg
SHIPPING WEIGHT	2.0 kg

Reliability Specifications

MTBF	More than 200,000 hours
MTTR	15 min
PM	Not Required
DRIVE DESIGN LIFE	5 Years
ARCHIVAL LIFE	5 Years (unrecorded)
TO SPECIFIED ERROR RATES	10 Years (recorded)

Media Compatibility

The T6-5200*/TMT6-5200* & T5-2600*/TMT5-2600* STAR Series drives are compatible with the following major MO media formats. The following table lists these media with the drive's capability for each specific format.

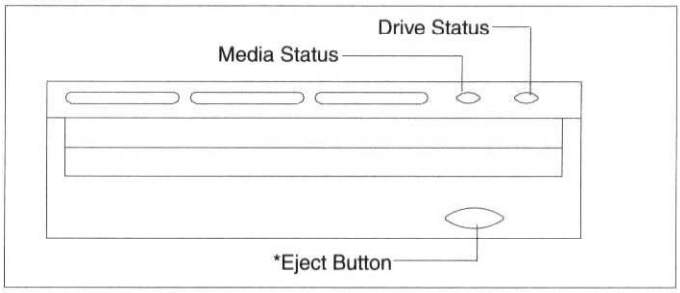
The T6-5200*/TMT6-5200* drives are 5.2GB capacity and the T5-2600*/TMT5-2600* are 2.6GB capacity. All are backwards read/write compatible.

Media Type	ISO/IEC #	Media Size	Sector size	Capabilities
MO	15286	5.2 GB	2048 B/S	Read & Write
	15286	4.8 GB	1024 B/S	Read & Write
	15286	4.1 GB	512 B/S	Read & Write
	966	2.6 GB	1024 B/S	Read & Write
	966	2.3 GB	512 B/S	Read & Write
	14760	1.3 GB	1024 B/S	Read & Write
	14760	1.2 GB	512 B/S	Read & Write
	ECMA 183	1.0 GB	1024 B/S	Read & Write
	ECMA 183	900 MB	512 B/S	Read & Write
	10089	650 MB	1024 B/S	Read & Write
	10089	600 MB	512 B/S	Read & Write
	966	2.6 GB	1024 B/S	Write Once
	966	2.3 GB	512 B/S	Write Once
	14760	1.3 GB	1024 B/S	Write Once
	14760	1.2 GB	512 B/S	Write Once
LIMDOW	966	2.6 MB	1024 B/S	Direct OverWrite
	966	2.3 GB	512 B/S	Direct OverWrite

Location of Parts

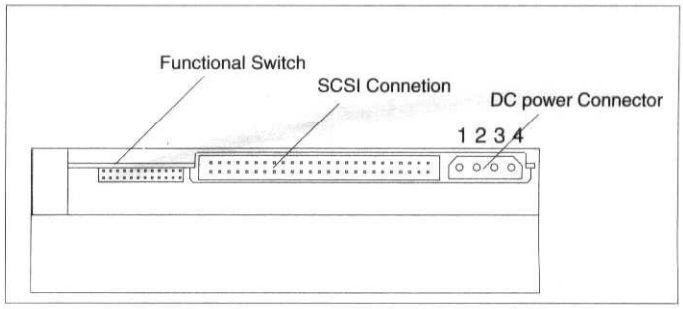
This section provides a general description of the STAR Series of Magneto-Optical disc drives.

Front Panel

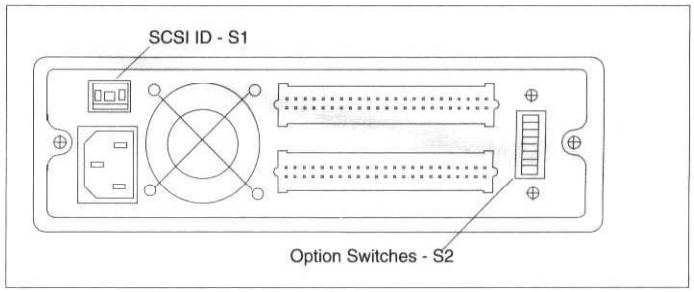


*For manual release,remove the soft eject button cover. Use a flat bladed screwdriver and turn the inside shaft counter-clockwise until media is fully ejected . Make sure power is OFF.

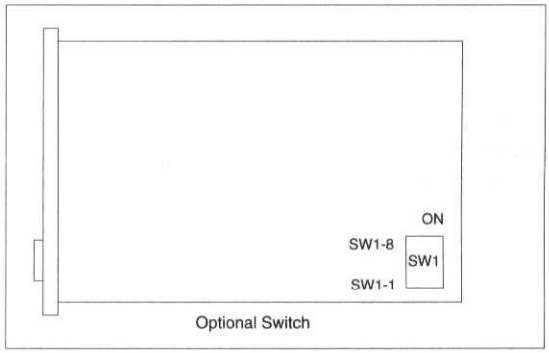
Rear Panel (Internal)



Rear Panel (External)

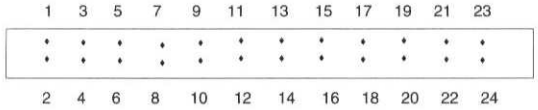


Top View (Internal)



Switch Setting and Assignments

Functional Switch Connector Pin Assignments



Jumper Assignments

PIN NUMBER	DESCRIPTION	DEFAULT	Function
1 & 2	SCSI ID Bit Zero	Removed	Disable
3 & 4	SCSI ID Bit One	Installed	Enable
5 & 6	SCSI ID Bit Two	Installed	Enable
7 & 8	Write with Verify	Removed	Disable
9 & 10	Active Termination	Installed	Enable
11 & 12	Drive Supplied Term Power	Installed	Enable
13 & 14	SCSI Bus Supplied Term Power	Installed	Enable
15	AC Eject	Jukebox Operation	Reserved
16	LED Pipe	Jukebox Operation	"
17	PwrDnReq	Jukebox Operation	"
18	PwrDnAck	Jukebox Operation	"
19	AC Error	Jukebox Operation	"
20	Cart_in_Drive	Jukebox Operation	"
21	AC Reset	Jukebox Operation	"
22	Cart_Loaded	Jukebox Operation	"
23	GND	Jukebox Operation	"
24	Stand Alone/AC	Jukebox Operation	"

SCSI ID	Jumper Pins 1 & 2	Jumper Pins 3 & 4	Jumper Pins 5 & 6
0	OUT	OUT	OUT
1	IN	OUT	OUT
2	OUT	IN	OUT
3	IN	IN	OUT
4	OUT	OUT	IN
5	IN	OUT	IN
6	OUT	IN	IN
7	IN	IN	IN

DC power Connector Pin Assignments

Pin Number	Description
1	DC+5V
2	+5V Return
3	+12V Return
4	DC+12V

Pin Assignment of SCSI Connector

Pin No.	Signal Name	Pin No.	Signal Name
1	GND	2	DB 0-N
3	GND	4	DB 1-N
5	GND	6	DB 2-N
7	GND	8	DB 3-N
9	GND	10	DB 4-N
11	GND	12	DB 5-N
13	GND	14	DB 6-N
15	GND	16	DB 7-N
17	GND	18	DB P-N
19	GND	20	GND
21	GND	22	GND
23	OPEN	24	OPEN
25	OPEN	26	TERM PWR
27	OPEN	28	OPEN
29	GND	30	GND
31	GND	32	ATN-N
33	GND	34	GND
35	GND	36	BSY-N
37	GND	38	ACK-N
39	GND	40	RST-N
41	GND	42	MSG-N
43	GND	44	SEL-N
45	GND	46	C/D-N
47	GND	48	REQ-N
49	GND	50	I/O-N

Switch S2 Summary

Here is a summary of the functions controlled by switch S2:

#	Description	Default
*	Moving a switch to the right is On	--->>
1	Verify after write	Off
2	Active termination	On
3	Internal termination power	On
4	External term power	On
5	Not Used	N/A
6	Not Used	N/A
7	Not Used	N/A
8	Not Used	N/A

Enable Verify after Write

When the switch is set ON, the drive verifies written data in response to a WRITE command (Ah, 2Ah, and AAh).

User Options

Modify the user option switches only when the TMT6-5200* or TMT5-2600* drive power switch is in the OFF position. Changes to the SCSI user option switches only occur at power up.

SCSI Bus Termination

The SCSI device at each end of the SCSI bus must be terminated. Normally, the SCSI host controller is at one end of the SCSI bus, and the last device on the daisy-chain of drives is at the other end of the bus. All devices between the two ends of the SCSI bus must have bus terminators removed or disabled. The devices at the ends of the SCSI bus must have terminators installed or enabled. Modify the SCSI termination status only when the TMT6-5200*/ TMT-52600* power switch is in the OFF position. Changes to the termination status only occur at power on. When S2 switch 2 is ON, the TMT6*/TMT5* drive enables active termination of the SCSI bus.

Configuration Switch Settings (SW1)

This table identifies the configuration switch settings for all STAR platform drives.

Switch Number	Description	Default Setting
SW1-1	MVax Mode	Off
SW1-2	Disable Auto Spin Up	Off
SW1-3	Disable SCSI Bus Parity	Off
SW1-4	Enable Mac. Mode	Off
SW1-5	Disable Removable Media	Off
SW1-6	Disable Optical Device	Off
SW1-7	Disable Write Cache	Off
SW1-8	Disable Read Cache	Off

SW1-7 setting	SW1-8 setting	Write Cache	Read Cache
ON	ON	OFF	OFF
ON	OFF	OFF	ON
OFF	ON	*	*
OFF	OFF	ON	ON

*** Enable seccondary APC Mode**

Safety Regulations

Safety Notices

Before you attempt to configure and install the drive, review the procedures and safety notes in this manual.

Sicherheitshinweise

Bevor Sie mit der Konfigurierung und der Installation Ihres Laser-Plattenlaufwerkes beginnen, bitte die Verfahren und Sicherheitshinweise in diesem Handbuch beachten.

Safety Precautions for Laser Equipment

WARNING! Do not look inside the drive or use a mirror to look inside the drive. The laser can cause eye damage.

Controls, adjustments, or procedures other than those specified herein may result in hazardous radiation exposure.

Because this product contains a semiconductor laser diode, observe the following precautions to avoid exposure to laser radiation. Visible laser radiation is present inside the drive assembly.

* Never remove any circuit board from the drive. The drive has NO user-serviceable parts.

* Do not use the drive without installing it in a chassis or enclosure. The drive is designed to operate only within a chassis or enclosure.

* The drive does not require user maintenance. If the drive does not operate properly, do not try to fix it yourself. Call your dealer, distributor, technical support representative, or Maxoptix Applications Engineering for service information.

Sicherheitsvorschriften für Lasergeräte

Warnung! Nicht in das Laufwerk schauen oder einen Spiegel zum Hineinschauen benutzen. Der Laser kann zu Augenschäden führen.

Steuerungen, Einstellungen oder Verfahren, die nicht hier spezifiziert sind, können zu harmvoller Strahlenaussetzung führen.

Da dieses Gerät eine Klasse IIIB Halbleiter- Laserdiode enthält, müssen die folgenen Vorsichtsmaßnahmen befolgt werden, um eine Laserstrahlengefahr zu vermeiden. Innerhalb des Laufwerkes befinden sich unsichtbare Laserstrahlen.

* Nie die Schaltkarten vom Laufwerk entfernen. Das Laufwerk hat keine vom Anwender zu reparierbaren Teile.

* Das Laufwerk nicht verwenden, es sei denn es ist im Gehäuse oder in einer Abdeckung installiert.

* Das Laufwerk benötigt keine Wartung. Sollte das Laufwerk nicht sachgemäß funktionieren, so versuchen Sie nicht es zu reparieren. Bitte den Hersteller oder Maxoptix Kundendienst anrufen, um Informationen zu erhalten.

General Safety Guidelines

Pay special attention to and follow all the hazard warnings on the drive and in the manual. Failure to do so can cause injury to yourself or damage to the drive.

Do not perform any operation or action in any way other than as directed in this manual. When in doubt, contact Maxoptix for advice about the safety of a procedure.

Remember that the hazard warnings in this manual or on the drive cannot cover every possible case, as it is impossible to predict and evaluate all circumstances before hand. Be alert and use your common sense!

Allgemeine Sicherheitsvorschriften

Befolgen Sie besonders die Warnungshinweise auf dem Laufwerk und in dieser Gebrauchsanweisung. Ein Nichtbeachten kann zu Verletzungen oder Geräteschäden führen.

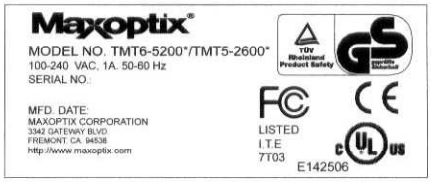
Bitte keine Arbeiten durchführen, die nicht in diesem Handbuch beschrieben sind. Falls im Zweifel, wenden Sie sich bitte an den Maxoptix Kundendienst, um Sicherheitsratschläge bezöglich des Verfahrens zu erhalten.

Bitte beachten Sie, daß die Warnungen in dieser Gebrauchsanweisung oder auf dem Laufwerk nicht unbedingt sämtliche möglichen Risiken erwähnen, da diese oft nicht voraussehbar sind. Seien Sie vorsichtig und gehen Sie mit Vernunft vor!

Regulatory Approvals:

C-UL,UL,TUV,CE

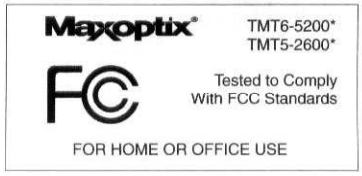
This Class 1 laser product conforms to the applicable requirements of 21 CRF 1040, IEC 825-1:1993, and EN 60825-1:1994. The wavelength of the laser is 650 nanometers and the Maximum power output of the laser is 30 milliwatts.



This label is located on bottom of external enclosure

EMI Standards:

FCC part 15 Class B, EN55022



Compliance Information Statement

This device, trade name Maxoptix, model number TMT6-5200* / TMT5-2600*, has been tested and complies with the limits for a Class B digital device pursuant to Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The responsible party for these device compliances is:
Maxoptix Corporation

NOTE: 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/television technician for help.