



Security Engineered Machinery Co., Inc

**OPERATIONAL & MAINTENANCE
MANUAL**
SEM Model P2V MagEraSURE



As of January 1, 2008

Security Engineered Machinery Co., Inc.

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1.0 MagEraSURE

Thank you for purchasing the MagEraSURE Professional Value commercial degausser. MagEraSURE provides a safe means to erase sensitive data from magnetic recorded media. It erases media by passing it through a large *permanent* magnetic field. Once exposed to the magnetic field in the device, user data is erased, including manufacturer pre-recorded servo and calibration data. The degausser also destroys read/write heads. When operated in accordance to this manual guide lines, user data becomes unrecoverable by commercial means*.

With permanent magnet technology, the erasing field is always present and there is no re-calibration required.

Please take the time to read this manual before you begin to operate, and keep the manual for use as an operating reference.

Please observe all warnings. The manufacturer is not responsible for malfunctions or personal injury resulting from the misuse of this product or unauthorized service.



WARNING: This unit contains High Strength Permanent Magnets.

WARNING: There are no user serviceable parts. Unauthorized service or removal of MagEraSURE cover will void warranty and can result in potential injury.

WARNING: Do not override the interlock safety mechanism from the Guide Block Pin and the Cover Door Tap. Overrides can cause degausser to malfunction and can result in potential injury.

WARNING: MagEraSURE weighs approx 60 lbs. Take caution, use proper support and lift from the base. Improper handling can result in potential injury.

** Data is unrecoverable by commercial data recovery services.*

2.0 MagEraSURE Overview

The MagEraSURE Professional Value commercial degausser is an ideal solution for industries requiring fast and secure erasing of hard disk drives, removable disks and backup tapes that contain confidential or highly sensitive information. The MagEraSURE provides a quick and reliable means to erase recorded data on magnetic media. Once erased, data is non-recoverable by commercial means¹.

During the erase cycle MagEraSURE's motor moves the device tray with the media through the high-strength permanent magnetic field, and then returns the tray to the loading/unloading position. One erase cycle takes approximately 30 seconds.



WARNING: Hard Disks and Removable Disks that have been erased by MagEraSURE cannot be reused or recovered. Any Pre-formatted tape media (LTO, DLT, 3480, 3490, 3590 or similar type cartridges) will also be unusable after erased by MagEraSURE.

The MagEraSURE provides a quick and reliable means to erase recorded data on magnetic media. Once erased, data is non-recoverable by commercial means¹.

For Hard Disk Drive (HDD) media:

- 3.5-inch "Half-Height" (1 .0in) HDDs
- 3.5-inch "Full-Height" (1.6in) HDDs
- 2.5-inch HDDs
- 1.8-inch HDD & PC-Card HDDs
- 1.0-inch

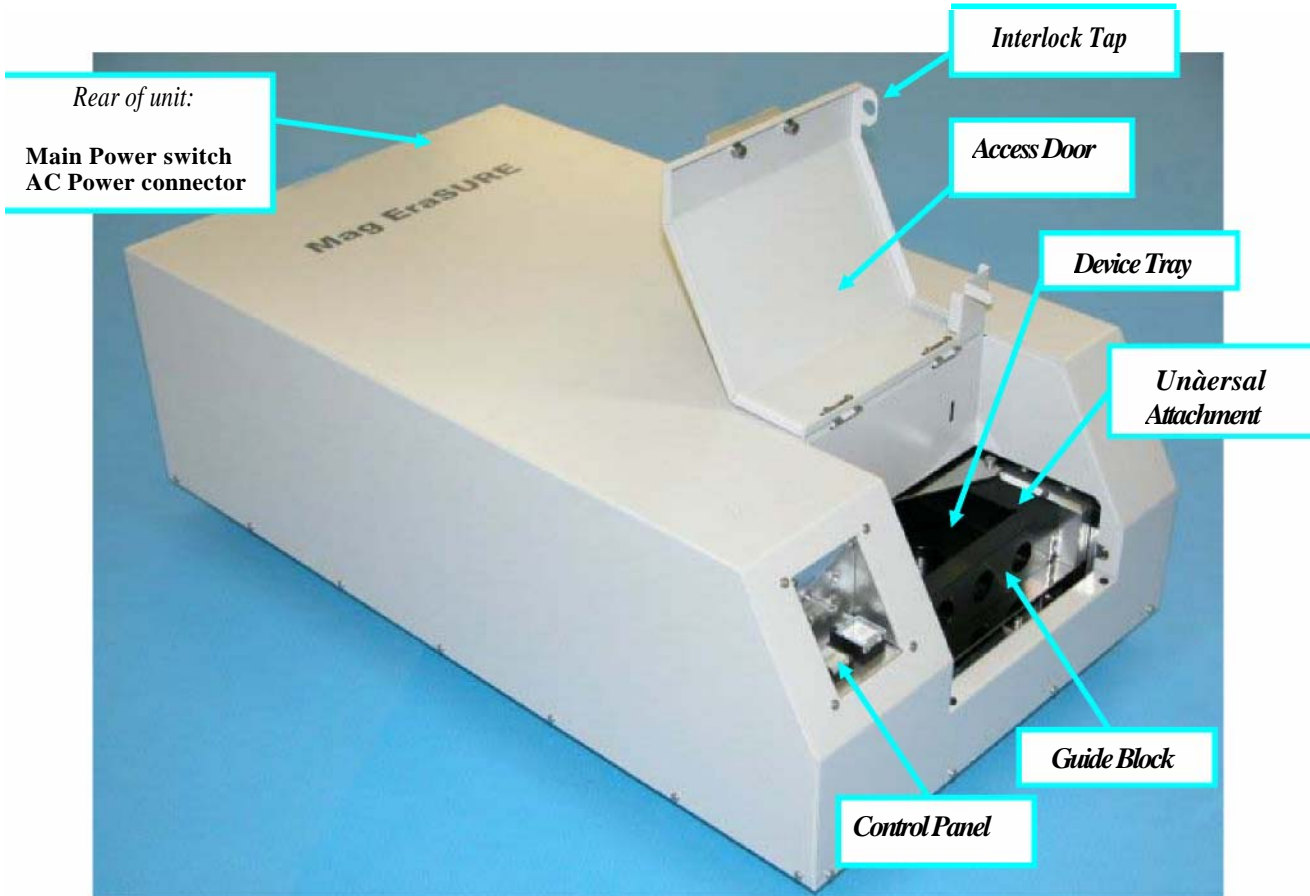
For Removable media:

- Rev® drive
- Zip® drive
- Jazz® drive
- Floppy

For Tape media:

- 3480/3490/3 590 Tape Cartridges
- DLT Tapes
- LTO Tapes
- 1/4" QIC Tape
- DAT Tape
- D8
- TRAVAN NS Tape
- AIT
- S-AIT

Product Overview



MagEraSURE Value

3.0 MagEraSURE Operation

3-1 Setting Up



CAUTION: MagEraSURE weighs approximately 60 lbs. To avoid injury and damage when transporting, lift from the base and use proper lift and support.

Place MagEraSURE on a level surface of a stable, flat table top that can sustain the weight and which will not be subjected to vibration or impact. *Avoid* using or storing the unit in the following places:

- (1) Direct sunlight or other high-temperature locations
- (2) Extremely cold or humid location or locations where it could come into direct contact with water or other liquids.
- (3) Locations where there is a significant amount of dust, dirt or soot.
- (4) Locations where metal filings or metal particles are present. Metal particles can stick to the unit and are difficult to remove, this will eventually cause the unit to fail.

NOTE: *Moving the unit from a cold environment into a warmer area can result in the formation of condensation inside the chassis. If this happens, allow the unit to sit and adjust to the new temperature for at least 4 hours.*

3-2 Precautions

When using MagEraSURE, always observe the Safety Precautions and Warnings:

- > Do not use MagEraSURE for any purpose other than erasing magnetic data from Hard Disks, Removable Disks or Tapes.
- > Observe the warnings on the second page of the manual.
- > Do not spill any liquid on the MagEraSURE unit. It can cause electric shock and malfunction.
- > Do not stack objects on top of the MagEraSURE cover or the access door.
- > When not in use, keep the *Universal Attachment* and *Guide Block* inside MagEraSURE. Do not drop the Universal Attachment and Guide Block, or subject it to heavy impact. Parts can break and the Guide Block interlock pin can bend. If damaged or deformed, MagEraSURE will not activate.
- > Observe the appropriate precautions when handling the power cord. Only use the power cable that is supplied with the unit and ensure that the Power Switch is in the OFF position prior connecting the power cord. If MagEraSURE is not working properly, turn off the power switch and unplug the power cord.
- > Do not operate the MagEraSURE if it is damaged or defective. Contact SEM Customer Service @ 1 800-225-9293.

3-3 Operation Overview

MagEraSURE Operation involves 6 basic steps:

- (1) Opening the *access door*
- (2) Ensure the *Universal Attachment* is in place and in the orientation labeled
- (3) Load *media* to be erased
- (4) Install *Guide Block*
- (5) Close *access door*
- (6) Press the *START* button on the *control panel* to begin the erasure cycle

NOTE: For HDD media, MagEraSURE Professional Value requires 2 erasure cycles. Turn or flip the media over and re-insert for second erasure cycle.

For best results, Fujitsu recommends that only a single media is used per erasure cycle.

3-4 Operation Steps

- (1) Make sure the *Power Switch* on the rear of the MagEraSURE is turned OFF prior to connecting the power cord.
- (2) Turn on the Power switch. The control panel *POWER* light is on and the *ALARM* indicator is off (see picture).



- (3) Open the Access door (Do not bend the access door tap. It is the interlock safety pin when door is closed).
- (4) Insure the Universal Attachment is place in the device tray then insert the media to be erased.



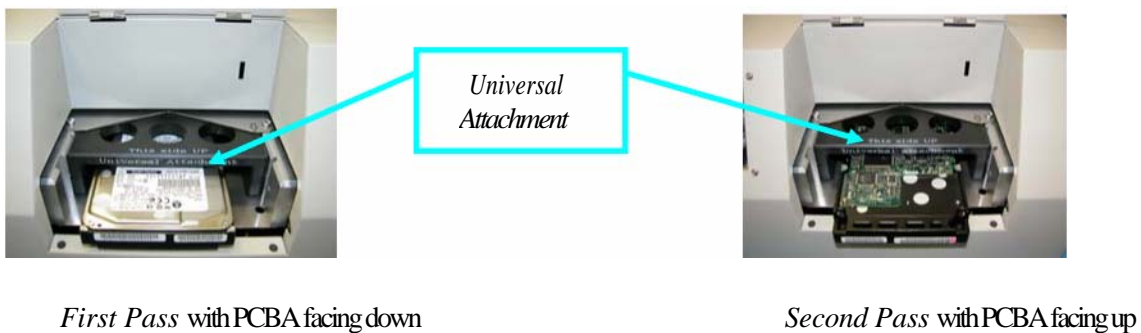
CAUTION: Failing to use the Universal Attachment will allow erasing media to move and can result in internal jamming of MagEraSURE. And will void your warreanty.

- (5) MagEraSURE requires *two cycles* for secure erasure of Hard Disks media – First pass with *PCBA-down* and Second pass with *PCBA-up* (see photos below).

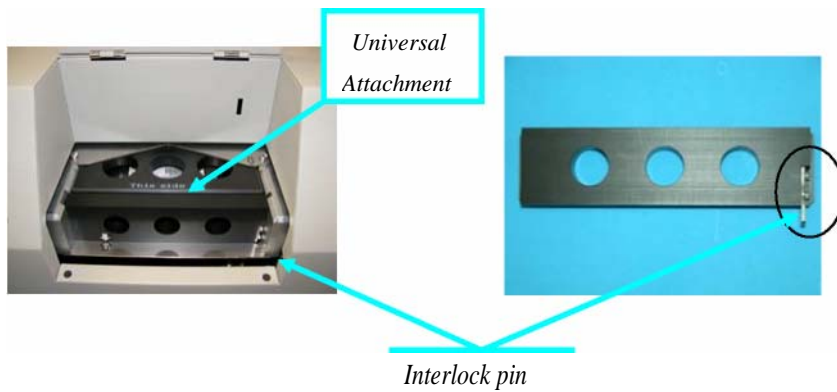
Failure to follow can result in data not being completely erased from the media.



The photos show the orientation of the media in the *two pass* erasure procedure.

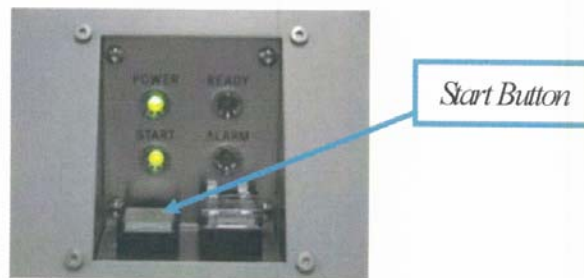
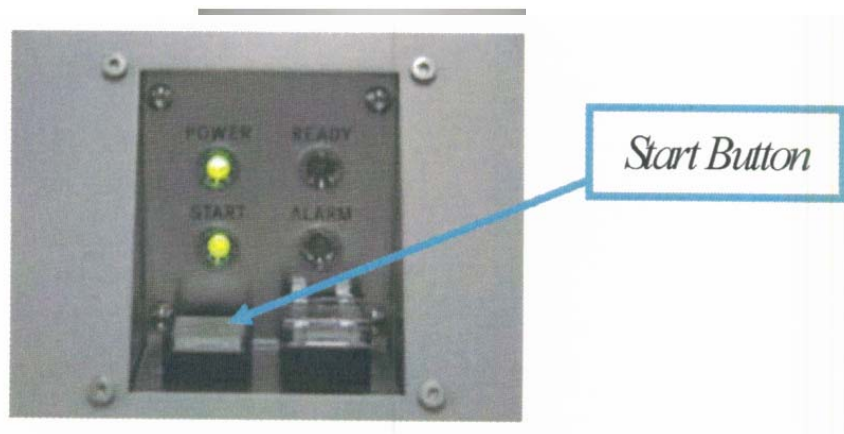


(6) After the media has been inserted in the *device tray*, place the *Guide Block* firmly to set the *interlock pin* securely in the corresponding hole in the device tray.



NOTE: The *interlock pin* is required to be inserted otherwise the *Ready* indicator will not come on when the access door is closed and MaEraSURE will not be activated!

- (7) Close the access door and the *READY* light should illuminate.



- (9) Wait until *Start* indicator goes off and *Ready* indicator is on – the erasure process is now complete.
- (10) Open the *Access door* and remove the erased media. If erased media is a Hard Disk, a second pass is needed by turning the hard disk over and reinserting it into the device tray.
- (11) Repeat steps 4 – 10 for each device to be erased.
- (12) Turn off the *Main Power Switch* on the rear panel when not in use.

3-5 Handling Erased Media

It is recommended that a label be attached to the erased media to indicate that the media has been erased by Mag EraSURE. This helps to identify erased media.

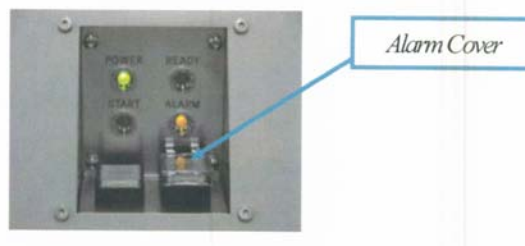


After being erased by MagEraSURE, hard disks, removable disks and pre-formatted tape media (LTO, DLT and 3480/3490/3590 cartridges) cannot be reused or recovered. Please label and dispose of the erased media in accordance with local environmental standards.

3-6 Trouble Shooting

3-6.1 Alarm Indicator

If the *ALARM* light goes on during the erasure process, follow the steps below to reset:



- (1) Lift up the protective cover on the *Alarm Reset Button* and press the *Reset Button* until the *Alarm* light goes off.
- (2) Wait until the *Alarm* light goes off,
- (3) Press the *Start Button* to restore the system operation.

NOTE: *If the Alarm indicator does not turn off after pressing the Alarm Reset button or there is an abnormal motor sound, MagEraSURE may be jammed. Turn off the power and contact SEM for service.*

3-6.2 Continue After Power Interruption

During operation, if the *Main Power Switch* is inadvertently turned off or if the power cord is accidentally unplugged, follow these steps to restore operation:

- (1) Make sure the Main Power Switch is OFF. Reconnect the Power cord.
- (2) Verify that the Control Panel *Power* light is illuminated.
- (3) Verify that the Control Panel *Alarm* light is off.
- (4) Press the *Start Button* on the Control Panel until the *Start* indicator on the Control Panel is illuminated. The *Ready* lamp should come on when the device tray returns to the load/unload position, indicating that the unit is ready to resume normal operation. Repeat the erase process to make sure that the device is completely erased.

3-7 Maintenance

- (1) Do not remove cover or disassemble MagEraSURE. All services must be performed by SEM authorized service representative with the proper tools. Failure to follow the warning will void the warranty and can result in serious injury.

There are no user-serviceable parts in MagEraSURE and there is a high risk of personal injury if the internal components are handled improperly.

- (2) A clean soft, dry cloth may be used to wipe down the outside of MagEraSURE.
- (3) MagEraSURE contains permanent magnets of high strength. Follow your local environmental standards in disposing or recycling of the unit.

3-8 Universal Attachment

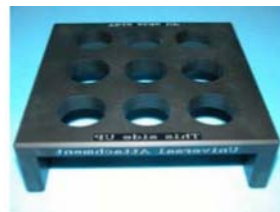
The adapter shown is called the Universal Attachment. During the degaussing process, the media that being erased may move around. The Universal Attachment is used to retain the media to the device tray. It applies to all media except when degaussing 3.5" HDD Full Height (1.6").



CAUTION: *Using the Universal Attachment is required as directed in section 3. Failure to follow can result in MagEraSURE jamming due to media loose in the device tray.*

Do not degauss other media that is not described in this manual - Doing so may damage the unit and will void the Manufacturer's Warranty.

P2 Universal Attachment
(ZB100-0520-X0022)



4.0 Using Universal Attachment with Various Media

The Universal Attachment is used with all media except 3.5" HDD Full-Height (1.6").

	Use Universal Attachment
3.5" HDD Full Height(1.6")	No
All Other Media	Yes

4-1 Device Tray with Universal Attachment



4-2 Degaussing Small Size Hard Disks (1.8", 2.5" and 3.5" with 1" height)



First pass, PCBA faces down.



Second pass, PCBA faces up.

4-3 Degaussing Full Size Hard Disks (3.5" with 1.6" height)



First pass, PCBA faces down
(Universal Attachment is not used).



Second pass, PCBA faces up
(Universal Attachment is not used).

4-4 Degaussing Small Media (Removable Disks and Tapes)

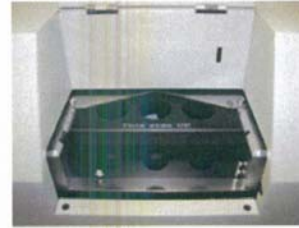
This section shows photo examples of degaussing small disks and removable media with MagEraSURE.



DAT, DLT, or LTO Tape



3480/3590 Tape



QIC Tape



Floppy Stacking

5.0 Specifications

Demagnetization method:	Erasure by permanent magnet
Cycle Time:	approx. 30 seconds per cycle
Internal Field Strength:	5,000 - 13,000 Gauss (max)
Top Cover External Field:	80 Gauss (max)
Underside External Field:	220 Gauss (max)
Degauss media coercitivity:	
Hard Disk Drives	(up to 5000 Oe)
Tapes	(up to 2600 Oe)
Operating temperature range:	-10 to 40° C
Operating humidity range:	10 to 85% RH
Weight:	approx. 60 lbs
Dimensions:	340 mm (W) X 605 mm (D) X 215 mm (H)

6.0 Supplied Accessories and Part Number

(1) Guide Block	ZB100-0510-V0005
(2) Universal Attachment	ZB100-0520-X0022
(3) AC Power Cord	CG01000-520601
(4) "ERASED" Label (3000 pcs.)	ZB100-0520-X0002

7.0 Consumables

(1) "ERASED" Label (3000 pcs)	ZB100-0520-X0002
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8.0 Limited Warranty

Please refer to Warranty Information Guide included with this product.