

HD-3WXL Series

Continuous Degaussing System

Operation Manual



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Manufactured in the U.S.A.

PN 4075-244K

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GENERAL INFORMATION

The Garner Products, Inc. Model **HD-3WXL** is a continuous duty capacitive discharge degausser. The HD-3WXL is designed to erase hard drives and tape cartridges that fit within the opening of the Media Entrance Door. The convenient media loading design accommodates many different types and sizes of media, without the need for adapters. Each erase cycle is measured and verified by internal diagnostics thus eliminating the possibility of a non-erasure. For security purposes, if an insufficient field is detected, the HD-3WXL will not release the media. For assistance from Garner Products, Inc. call (916) 784-0200.

MAGNETIC FIELDS

EXTERNAL MAGNETIC FIELDS

The **HD-3WXL** produces a single focused magnetic pulse lasting less than 1/20 of a second. The focused intensity of the degaussing coil allows the HD-3WXL to erase today's highest coercivity media while also limiting the magnetic field exposure to 1 second for every 20 pieces of media degaussed.

<u>Distance from side of degausser</u>	<u>Magnetic field</u>	<u>Duration of Field</u>
0" (0cm)	61 gauss	< 0.05 Second
6" (15cm)	6 gauss	< 0.05 Second
12" (30cm)	2 gauss	< 0.05 Second

Note: The testing room measured 0.4 gauss before degausser was plugged in.

Average Operational Distance (AOD) from user to the HD-3WXL is 12-18 inches (30-45 cm). According to the American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (2005) - Static Magnetic Fields, whole body exposure limits recommended for an 8 hour shift are 600 gauss. Because of the short duration of each pulse from an HD-3WXL (1/20th of a second) and the extremely small magnetic field outside of the HD-3WXL (<6 gauss, AOD), the total 8 hour whole body exposure is 0.004% of the recommended limit.

*Pulse duration was rounded to ½ second per discharge for calculations to cover any buildup of magnetic fields generated before or after discharge.

PACE MAKER USERS



WARNING

Due to stray magnetic fields, consult your physician before operating.

SPECIFICATIONS

Power Supply (HD-3WXL):	Selectable: 95~105, 105~115, 115~125, 215~225, 225~235 or 235~240, 50/60Hz.
Power Consumption (HD-3WXL):	100V: Under Standby 0.3A While charging 9.0A At the time of ERASE 0.6A 110V: Under Standby 0.25A While charging 8.5A At the time of ERASE 0.55A 120V: Under Standby 0.2A While charging 8.0A At the time of ERASE 0.5A 220V: Under Standby 0.17A While charging 4.5A At the time of ERASE 0.35A 230V: Under Standby 0.16A While charging 4.25A At the time of ERASE 0.325A 240V: Under Standby 0.15A While charging 4.0A At the time of ERASE 0.3A
Degausser System:	Capacitive Discharge
Operating Time Duty Cycle:	Continuous
Erasing time:	< 10 milliseconds
Cycle time:	9 seconds per cycle
Magnetic Field:	10,000 Oe Peak; 9,200 Oe measured in center
Max. Media Size:	6.75 in. (171mm)(W) x 4.5 in. (114mm)(H) x 1.8 in. (45.7mm)(D)
Erasing Area Size:	6.75 in. (171mm)(W) x 4.5 in. (114mm)(H) x 1.8 in. (45.7mm)(D)
Media:	2.5 type HDD, 3.5 type HDD, DLT, LTO, 3490 and more
Temperature:	41°F - 104°F (5°C - 40°C)
Humidity:	10%H - 40%H (without condensation)
Weight:	66 lbs. (30 Kg)
Shipping:	95 lbs. (43 Kg)
Size:	12.25 in. (31.1cm)(L) x 13.125 in. (33.3cm)(W) x 18.75 in. (47.6cm)(H), without slide 12.25 in. (31.1cm)(L) x 22.625 in. (57.5cm)(W) x 18.75 in. (47.6cm)(H), with slide
Warranty:	1 Year Factory Warranty Standard, Optional 3 Year Factory Warranty available.

INSPECTION

Inspect the degausser for shipping damage as soon as it is unpacked. If the degausser or any accessories are damaged or fail to operate correctly, notify carrier and Garner Products, Inc. immediately. For assistance from Garner Products, Inc. call (916) 784-0200 or fax (916) 784-1425. For warranty information, please refer to the Warranty section inside this manual.

OPERATION

The **HD-3WXL** operation is automatically completed in one cycle or when the media has been released down the exit chute. **Note:** As a safeguard, the media will stay in the degaussing chamber until a successful erase sequence has been completed.

CONTROLS AND INDICATORS

POWER Button

The POWER button is a toggle switch that will change states from on to off when pressed. When the POWER button is depressed, the power is on.

LCD Display

The LCD display gives status, automatic count, total count, software version, field strength, user instructions and fault messages.

DEGAUSSING INSTRUCTIONS

The HD-3WXL media degausser operates automatically when media is inserted into the media door.

Automatic Degaussing

Sensors built into the Media Entrance Door sense that a hard drive has been inserted. The act of depositing media through the Media Entrance Door automatically initiates the degaussing process.

Powering Up

Press the POWER button ON. The HD-3WXL will go in to its power up sequence. The LCD display will show start up messages including firmware version and total count ending with "INSERT MEDIA SESSION = 0". Automatic Degaussing has now started.

Automatic Degaussing Steps

- Step 1:** Press POWER button ON.
- Step 2:** Wait for the LCD to display “Insert Media”.
- Step 3:** Insert media through the Media Entrance Door.
- Step 4:** Remove degaussed media from Media Slide.
- Step 5:** Repeat Steps 2,3 & 4.

The following information appears on the LCD Display from power-up through one automatic degaussing cycle:

Action	LCD Display	Description
Step 1: Press POWER button ON Step 2: {Initial startup sequence.}	GARNER PRODUCTS, INC.	Displays Manufacturer.
	HD-3WXL DATA ELIMINATOR	Displays Degausser Model.
	FIRMWARE VER ##	Displays current firmware version.
	TOTAL # -- ##	Displays total erasing cycles. Number on left indicates number of times the counter reached 50,000.
	Insert Media Session = 0	Ready for media to be placed in the Media Entrance Door. Counter for erase cycles from power up.
Step 3: Insert media	Door Open	Indicates Media Entrance Door is open – this is normal when inserting media to be erased.
	Erase Cycle Initiated	Door has closed and the erase cycle has started.
	Charging >>>>>>>>>>>>>>>>>>	Displays capacitor charging status.
	----- ==	Visual indicator of erasing field strength.
	Data Eliminated	Indicates power and erasing field strength was verified good and data has been eliminated.
	Media Released	Media gate has lowered and erased media will slide out.

Automatic Degaussing Technical Detail

- 1) The LCD displays "Insert Media Session = #".
- 2) The media to be degaussed is inserted into the degaussing chamber through the Media Entrance Door. While the media is sliding into the degaussing chamber and the door is open, the LCD will display "Door Open".
- 3) The media slides into the degaussing chamber and stops when it contacts the media gate.
- 4) Sensors in the Media Entrance Door detect that media has been inserted and automatically initiate the degaussing process while displaying "**Erase Cycle Initiated**" and then displaying "**CHARGING >>>>**" on the LCD Screen.
- 5) The LCD will display the Field Strength Graph "-----==|===". The "I" in the graph represents the strength of the erasing field. The "====" portion of the graph represents the normal range for field strength level. The "I" within the "-----====" indicates where the erasing field strength measured. The position of the "I" can vary from cycle to cycle as it is based on the actual field strength.
- 6) If the field is in the normal range, the LCD will display "**DATA ELIMINATED**".
- 7) If the field is not in the normal range, the LCD will display "**ERASE FAILURE**". As an added measure of security, the media will remain inside the degaussing chamber until a successful degauss is performed or until the media is removed by following the instructions in this manual under "Ejecting Media after an Error".
- 8) The LCD will display "**MEDIA RELEASED**". The media gate will lower, allowing the erased media to exit the degaussing chamber via the Exit Slide located on the right side of the HD-3WXL.
- 9) The HD-3WXL's internal counter will advance one count and display the total number of media degaussed for the current session.

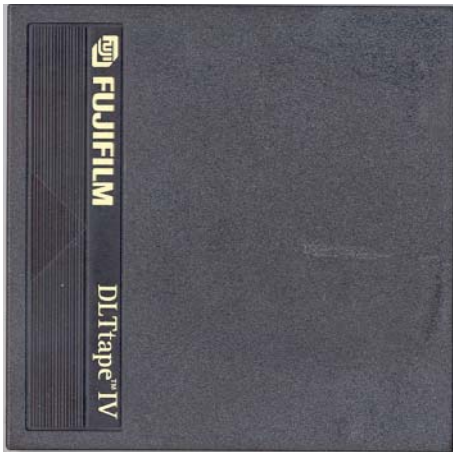
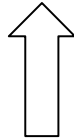
DEGAUSSING INSTRUCTIONS FOR DLT MEDIA

The HD-3WXL allows DLT media to be erased in their plastic protective cases. Simply follow the degaussing instructions above for complete erasure.

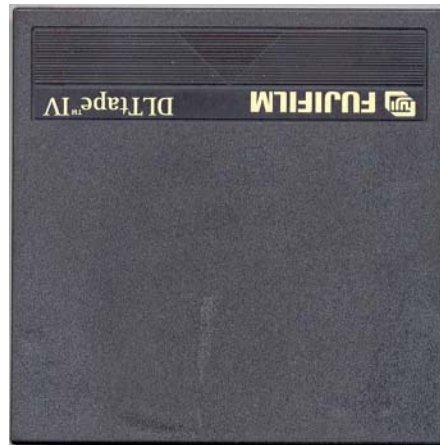
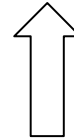
Note: For DLT media that is to be re-used.

Although the data is completely degaussed in one operation, a second pass rotated at 90 degrees is required to smooth out any magnetic fluctuation. Note: If the second pass is not completed, the tape drive may eject the tape and indicate that the tape needs cleaning. Performing a second pass of the DLT through the HD-3WXL at 90 degrees will correct this condition.

First Pass



Second Pass



ERROR CODES

Charge Error

The LCD displays “CHARGE ERROR”. This error indicates that the HD-3WXL failed to charge to the determined power level necessary to successfully erase the media in the degaussing chamber. **Note:** The media will stay in the degaussing chamber until a successful erase sequence has been completed.

Action: Turn off the HD-3WXL for one minute and restart. (Turning off the power to the HD-3WXL will clear the error.) If the error repeats, have the power mains checked and also check the HD-3WXL to make sure the power setting is set to match the power mains. If error persists, call customer support.

Door Open Error

The LCD displays “DOOR OPEN”. This error indicates that the Media Entrance Door is not completely closed. The HD-3WXL checks to see if the Media Entrance Door is closed just before the media is to be erased. Once the door is closed, the HD-3WXL will automatically continue the erase function.

Action: Check Media Entrance Door for obstructions.

Gauss Error

The LCD displays “GAUSS ERROR”. This error indicates the erasing field may not have been adequate to effectively erase the media in the degaussing chamber. Media will not be ejected.

Action: Turn off the HD-3WXL for approximately one minute. Turning off the power to the HD-3WXL will clear the error. Turn the HD3-WXL back on. To initiate the degauss cycle with media already in the degaussing chamber, push the Media Entrance Door open and let it close. The media in the degaussing chamber will be erased and only released with a successful degauss. has finished. If error persists, call customer support.

Overheat Error

The LCD displays “OVERHEAT”. This error indicates the internal temperature has risen to a level that may be harmful to the HD-3WXL.

Action: When the HD-3WXL indicates an overheat error, it will inhibit any further operation until the HD-3WXL returns to an acceptable temperature. Leave the HD-3WXL powered on as the chassis fan will help reduce the heat inside the HD-3WXL. When the temperature is low enough, the HD-3WXL will return to normal operation. If this error persists, call customer support.

EJECTING MEDIA AFTER AN ERROR

To retrieve media that has remained in the degaussing chamber due to an error:

Step 1: Turn the HD-3WXL OFF.

Step 2: Turn the HD-3WXL ON. (by pressing the POWER button).

Optional Media-Destruction Report Software Installation Guide

To install software, perform the following steps:

1. Insert the installation CD or USB drive into the computer. A Windows® Explorer window should open automatically. If it doesn't, go to Windows Explorer and click on the CD or USB drive. Find the install batch file, as shown below.



If your computer is running Windows XP, double click the “Install - XP” icon to install the logging spreadsheet template.

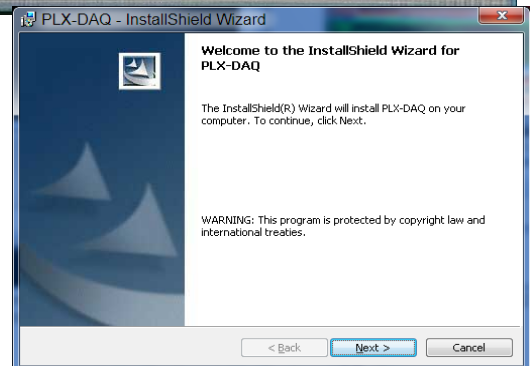
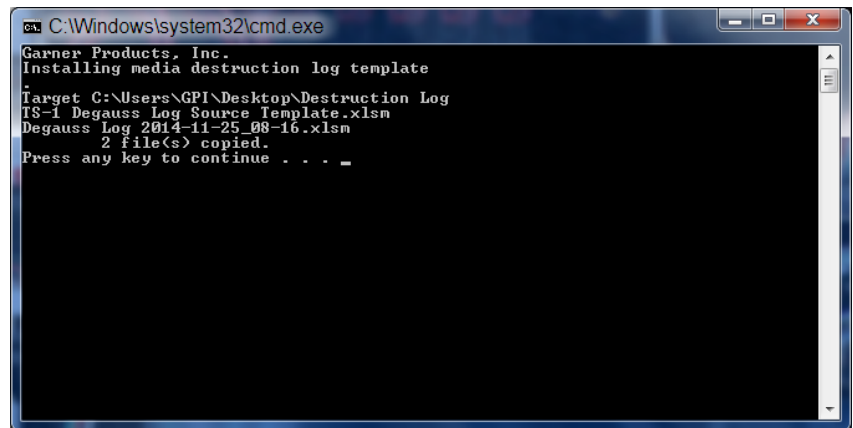


Install - 7

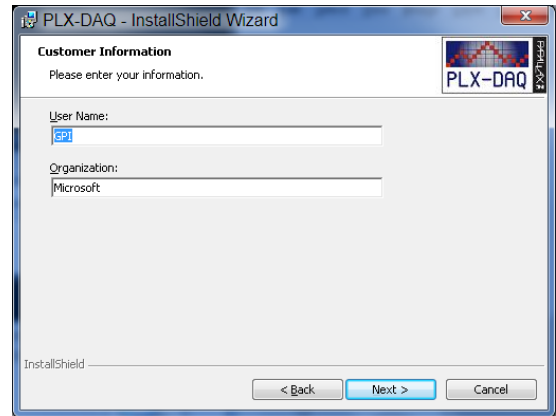
If your computer is running Windows 7, Windows 8, or Windows Vista®, double click on the “Install - 7” icon to install the logging spreadsheet template.

After you double click on the icon, a window will open, showing you the actions being taken during this phase of the installation. The number of files copied may be different.

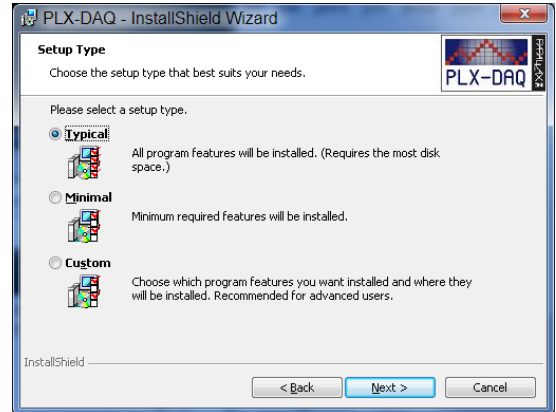
2. Press any key to continue.
3. Next you will install the data acquisition components. Click “Yes” to grant permission for the installation to continue.
4. When the InstallShield wizard appears, click “Next” to continue.



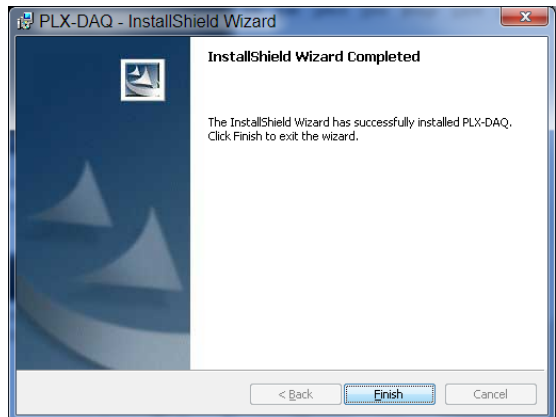
5. Fill in the user name in Customer Information window and click “Next” to continue. Note: You can also click “Next” to skip this step.



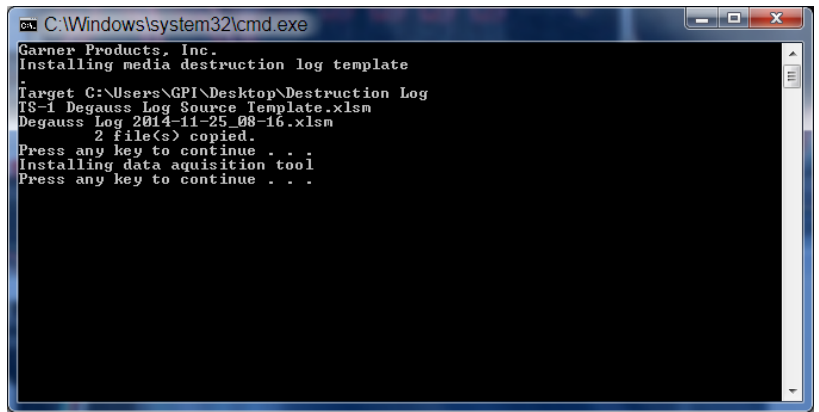
6. In the Setup Type window, select “Typical” and click “Next.”



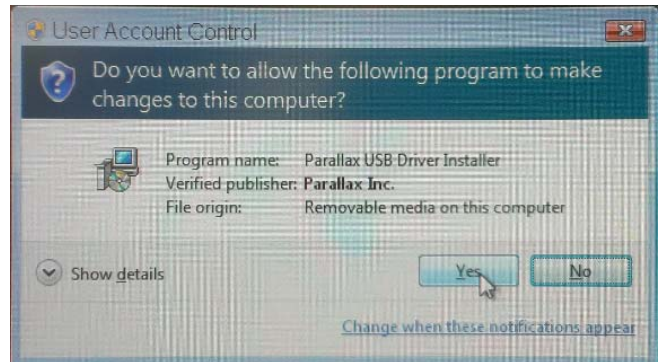
7. Click “Finish” to complete the installation.



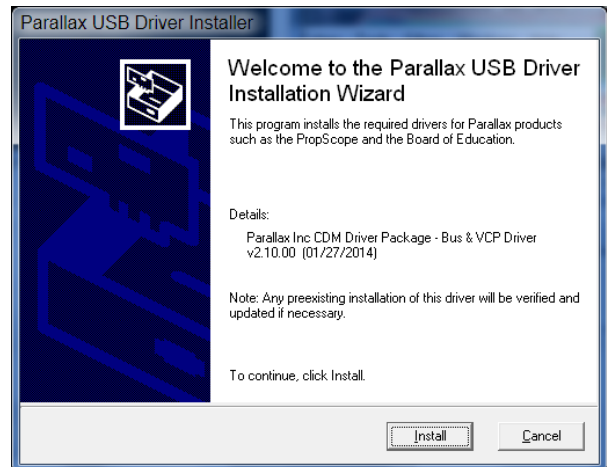
8. Once the installation is complete, the Windows system screen will appear. Press any key to continue.



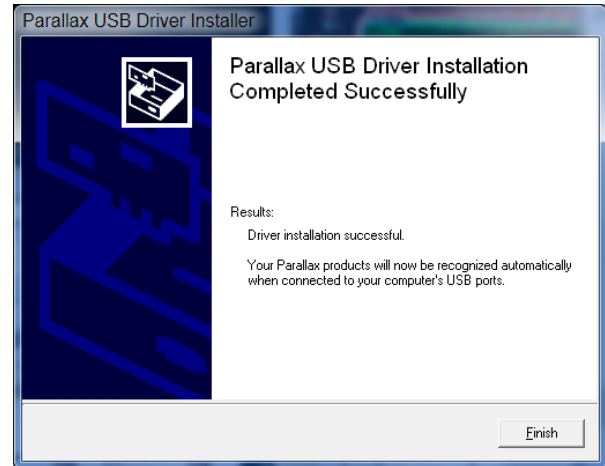
9. Next is the USB driver installer. Insert the USB flash drive into the port. When the screen appears, click "Yes" to continue.



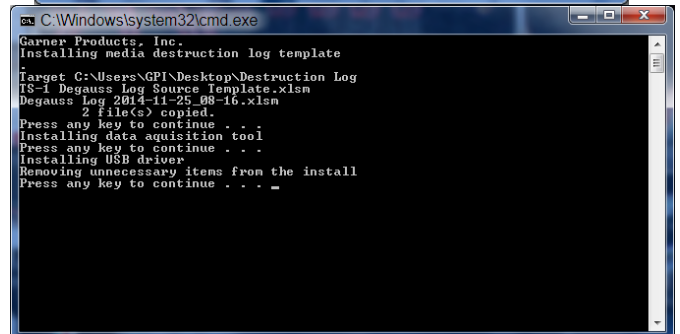
10. Click "Install" when the installation wizard window appears.



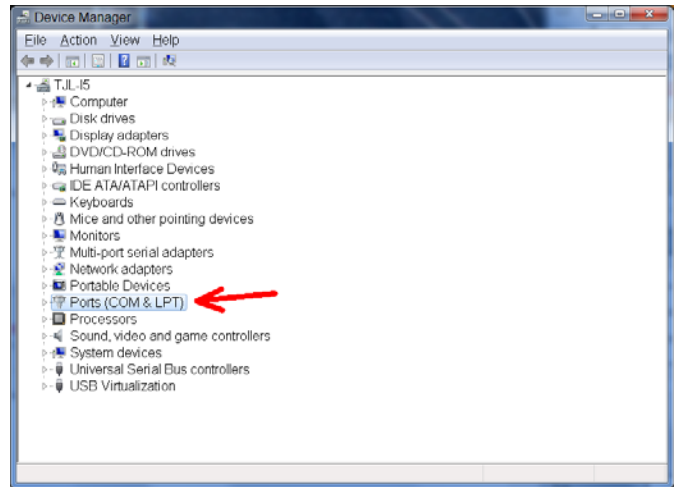
11. When the installation completes, click “Finish.”



12. When the wizard closes and the Windows screen appears, connect the HD-3WXL to an open USB port on the computer using the USB cable provided. Once connected, press any key to continue the installation process.



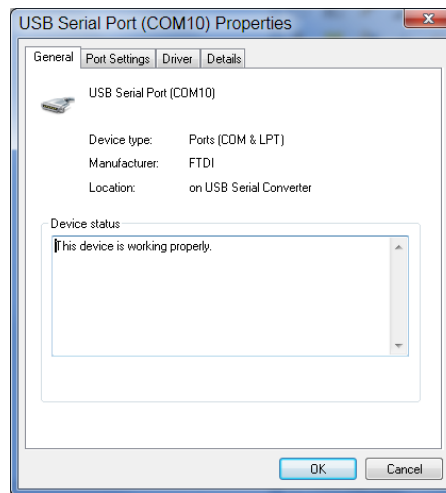
13. The Device Manager window will appear. Locate Ports (COM & LPT) and double click on it.



14. A list of serial ports will display. Double click on the ports to display their properties.

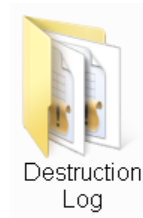


15. Find the port that is Manufactured by “FTDI” and Location is located “on USB Serial Converter”. Take note of the COM number (COM10) in the example on the Right.



16. Close the “USB Serial Port (COMnn) Properties window and then close the “Device Manager” window.

A folder will appear called “Destruction Log” on the computer’s desktop. This folder will contain the destruction log template(s) and any destruction session logs generated.



17. Plug in the Motorola Model LS2208 barcode scanner to an open USB port on your computer.

18. Print this page and scan these three barcodes in sequence.

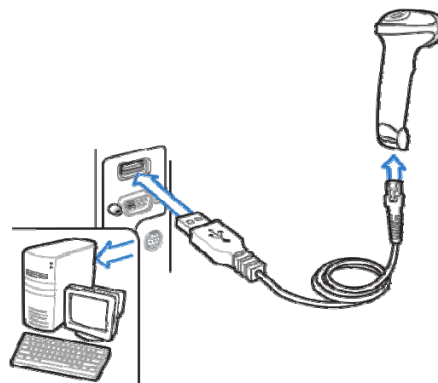
1



2



3

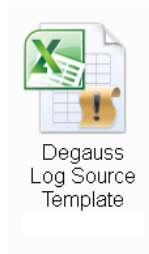


This completes the installation.

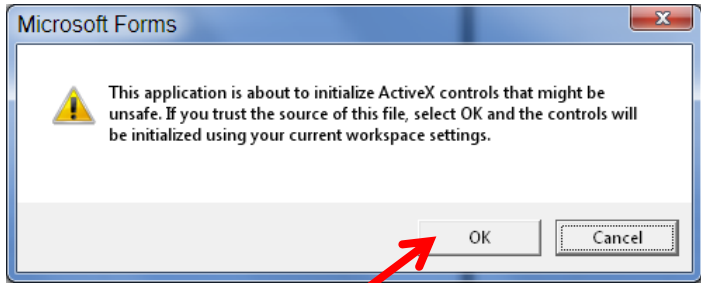
Optional Media-Destruction Report Operator Instruction

1. Using the supplied USB cable, connect the HD-3WXL USB port (front panel, below the power switch) to an open USB port on the computer.
2. Connect the supplied hand scanner to another open USB port on the computer.

3. Locate the “HD-3WXL Degauss Log Source Template” Excel® file. Open the file by double clicking the icon. Once loaded, look for the “Enable Content” in excel and click it.

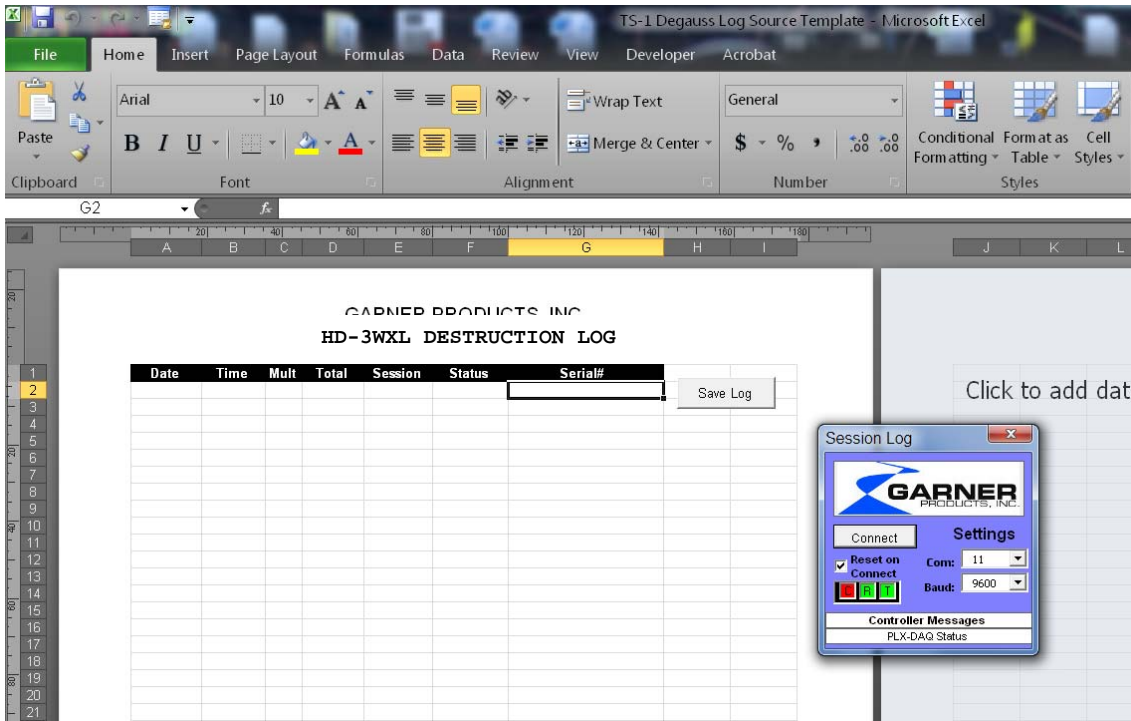


4. Upon opening the log source template, a message warning of ActiveX controls will appear. Press the “OK” button to continue.



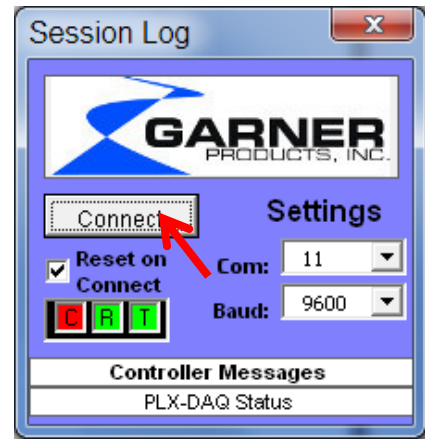
5. Another warning about running macros may appear. Allow the macro to run.

6. When the log opens, there will be a communications window labeled “Session Log.” Drag the communications window off the side of the log as illustrated in the image below.



7. Turn on the HD-3WXL and wait for the “Ready” message to appear in the HD-3WXL display. The settings in the communications window should be 9600 Baud, and the applicable port number. (Use the port number found on page 16. After the first use, the Com Port shall stay set).

8. Press the “Connect” button and watch the display on the HD-3WXL. If the correct port is selected, the HD-3WXL will reset. If not, click the drop-down arrow on the port setting. Select another port and press the “Connect” button. Repeat until connecting causes the HD-3WXL to reset. The button will read “Disconnect” until pressed again. This setting should remain set for future sessions.



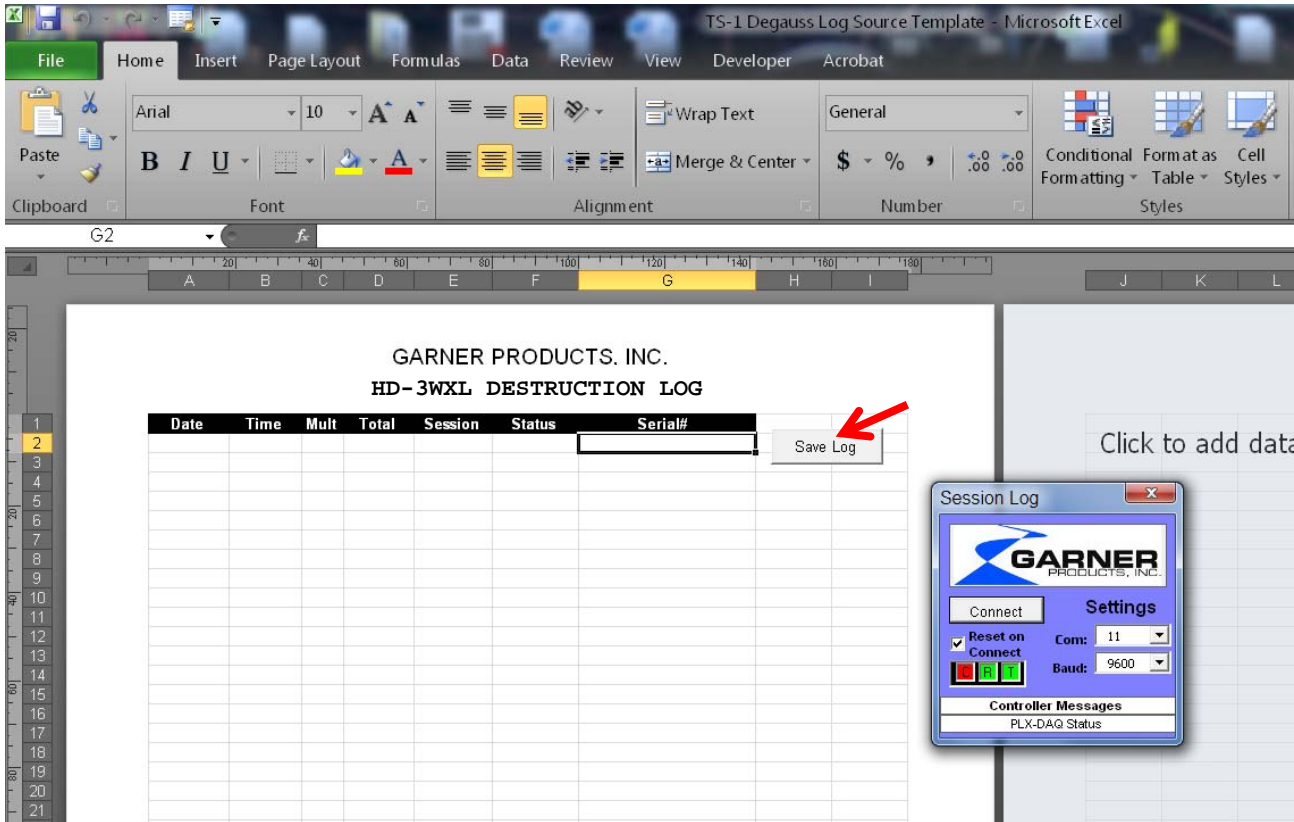
9. Once the HD-3WXL and the computer are connected, click on the cell directly below the “Serial” header. (See bottom illustration on previous page)

10. Scan the serial number bars on the hard drive to be erased. There may be several sets of scan bars on a hard drive, so be careful to scan the “S/N” barcode. The serial number will appear in the cell highlighted earlier. The cell will automatically advance to the next line.



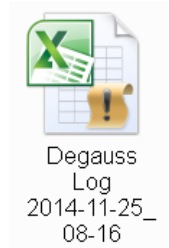
11. Insert the hard drive you just scanned into the HD-3WXL. After the degauss cycle is complete and the media has exited the HD-3WXL, information about the erasure will appear in the first row of the Media Destruction Report. The next row will automatically be selected for the next drive.

- Continue erasing until the hard drive degaussing session is complete. Press the “Save Log” button next to the Serial number column (See image below).

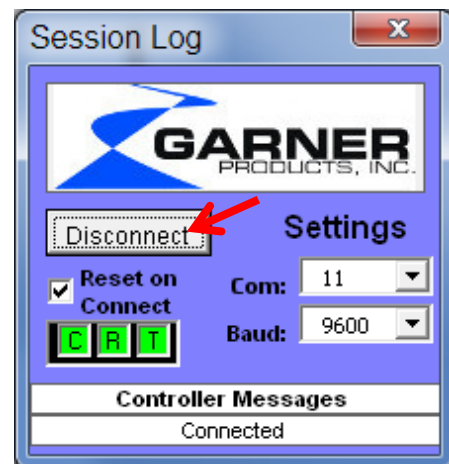


This will save the session to a new Excel file, as illustrated.

The Degauss Log will be open in Excel. The file will save in the same folder as the source template. Saving again is unnecessary unless you want to save the log to a different location. The file name will be “Degauss Log” and a date time stamp in ISO 8601 format (YYYY-MM-DD_HH-MM). This will create chronological file names for the logs, avoiding duplicate file names and loss of log data.



- At the end of the session, press the “Disconnect” button in the Session Log communications window.



- Close Excel without saving.
- Power down the Degausser.

PARTS LIST MODEL HD-3WXL

Part Number	Description
1500-026	Capacitor, 33,000uf 200VDC
225-0033	Filter assembly, HD-3WXL series
225-0034	Fan guard, internal HD-3WXL series
250-0015	Handle, recessed pull
2825-029	Feet, rubber
318-0136	Fuse block, AC 15A 250V
3500-056	Motor, fan HD-3WXL series
3500-063	Gear motor, 12V 25RPM
356-0001	SS relay, 240VAC 40A
398-0073	Cord, power
3700-006	Display, 2x16 serial LCD
4075-244F	Manual, operation HD-3WXL
4075-399-10	Lbl, degaussed 10 sheet/140ct
4300-006	Fuse, 15A, 250V
4300-022	Fuse, 7.5A, 250V
4700-043	Surge resistor
4800-009	SCR module
4800-012	Zener diode, 160v 50w
4800-017	Blocking diode
5100-035	Switch, PB Illum Red on/mom
5100-037	Switch, PB Illum Yellow on/off
5100-036	Switch, PB Illum Green on/mom
5600-022	Transformer, toroidal
SA1400-219J	Media transport assy, HD-3WXL
SA1400-221G	Assy, front panel chassis
SA1400-220C	Media entrance, hd-3wxl
SA1700-204G	PC assy, controller hd-3wxl
SA1700-208E	PC assy, control panel
SA1800-101C	Coil, assy 160w
SA2200-007F	Power control module
SA2200-008	Module, base plate
SA2500-075G	Media gate assy.
SA2500-081B	Exit slide assy.

DECLARATION OF CONFORMITY

WARRANTY

GARNER PRODUCTS, INC. LIMITED WARRANTY AND WARRANTY RETURN POLICY

Garner Products, Inc. ("Garner") warrants this Garner-branded product ("Product") against defects in materials and workmanship for a period of ONE (1) YEAR from the date of purchase by the original end-user ("end-user") as evidenced by end-user's packing slip or invoice ("Warranty Period"). No Product may be returned except upon prior written permission by Garner and shipment to factory with transportation charges prepaid.

If a defect arises and a valid claim is received within the Warranty Period, at its option, Garner will either: (1) repair the Product, (2) exchange the Product, or (3) request that end-user replace defective parts with new or refurbished user-installable parts that Garner provides in fulfillment of its warranty obligations. A replacement Product or part, including a user-installable part that has been installed in accordance with instructions provided by Garner, assumes the remaining warranty of the original Product or ninety (90) days from the date of replacement or repair, whichever provides longer coverage.

Garner's liability under this warranty is limited to Garner's cost of replacing any part or Product found by Garner to be defective and shall not exceed the original purchase price of the defective Product. End-user's sole and exclusive remedy against Garner shall be for the replacement of the defective part or Product as provided herein.

This warranty does not apply to: (a) cosmetic damage, including but not limited to scratches, dents and broken plastic; (b) freight damage; (c) consumable parts; (d) damage caused by accident, abuse, inadequate wiring, power surge, rust, corrosion, neglect, misuse, water, fire, earthquake or other external causes; (e) damage caused by operating the Product outside the permitted or intended uses described by Garner; (f) damage caused by service performed by anyone who is not a representative of Garner or a Garner authorized service provider; (g) a Product or part that has been modified to alter functionality or capability without the written permission of Garner; or (h) if any Garner serial number has been removed or defaced.

No Garner dealer or reseller is authorized to make any modification, extension, or addition to this warranty.

DISCLAIMER

THIS WARRANTY SET FORTH ABOVE IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE OR USE. GARNER'S MAXIMUM LIABILITY SHALL BE LIMITED TO THE PURCHASE PRICE OF THE PRODUCT.

LIMITATION OF LIABILITIES

IN NO EVENT SHALL GARNER BE LIABLE TO ANY PARTY FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY NATURE THAT ARISE FROM ANY BREACH OF WARRANTY OR CONDITION, OR UNDER ANY OTHER LEGAL THEORY, INCLUDING BUT NOT LIMITED TO LOSS OF USE, LOSS OF REVENUE, LOSS OF ACTUAL OR ANTICIPATED PROFITS, LOSS OF BUSINESS, OR LOSS OF GOODWILL.

GARNER'S MAXIMUM LIABILITY SHALL NOT EXCEED THE PURCHASE PRICE OF THE PRODUCT WHICH GIVES RISE TO THE CLAIM. END-USER'S SOLE AND EXCLUSIVE REMEDY FOR ANY CAUSE OF ACTION, WHETHER ARISING FROM BREACH OF CONTRACT OR TORT, IS A CLAIM FOR DAMAGES WHICH IN NO EVENT WILL EXCEED THE PRICE OF THE SPECIFIC PRODUCT AS TO WHICH THE CLAIM IS MADE.

WARRANTY RETURN POLICY

If a problem occurs with this Product, contact Garner directly by **Email at Info@Garner-Products.com** or by **phone at (916) 784-0200** to obtain technical support and/or to get a Return Authorization Number (RA#).

All returns must be specifically authorized by Garner prior to shipment and returned to Garner **FREIGHT PREPAID** with the RA# marked prominently near the shipping label.

Garner recommends using the original shipping container to securely package the Product. It is end-user's responsibility to ensure the Product is packaged properly to prevent damage during transit to Garner. Garner will provide product packaging to end-user at end-user's request and expense.

Enclose proper documentation, including RA#, the return address, a name and phone number of the contact person, the serial number of the merchandise being returned and a description of the reason for the return. Omission of any of this information may delay service. Garner recommends end-user insure the shipment; otherwise end-user accepts the risk if Product is lost or damaged in shipment.

Garner will pay to ship the repaired or replacement Product to end-user's shipping dock if end-user's delivery address is in the United States (excluding Puerto Rico and U.S. possessions and territories); otherwise Garner will ship the Product to end-user freight collect. Garner will select method for return shipment. Alternate shipment methods may be made at end-user's expense.