TP100 Series SATA Hard Disk Eraser

User Manual

V1.1

Index

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Notice & Reminder

Important Notice

- Read the complete operation instruction carefully contributes to better operation.
- Make sure the source device is correct and workable.
- To guarantee data consistency, we highly recommend the capacity of source and targets should be the same.
- It is strongly suggested to use "Copy+Compare" to achieve a perfect duplication.

Safety Precautions

- The warranty will expire if damage is incurred resulting from non-compliance with these operating instructions.
- Store the equipment safely when not in used and keep out of the reach of children and infants.
- Please turn off the power before replace the socket.
- Never turn off the power while processing the firmware update.
- Use only approved power sources.
- The product is only suitable for operation in dry, dust free, clean environment. Do not allow liquids or foreign objects to enter. Failure to do so may severely damage your duplicator.

⌘ Preparation Tips before You Start

- Make sure to use stable power supply.
- Please use at clean & dry environment.
- Please keep the environment well ventilated.
- When the duplicator operates, it is normal for the machine to heat up.
- Please do not move the duplicator during operation to ensure better operation.
- Please do not remove HDDs during operation to avoid damage HDD.
- Please use power supply of its original manufacturer to ensure working safety.
- Static electricity may cause duplication error. Please pay attention to the duplicator environment and operators' equipment. It is recommended to purchase static electricity elimination equipment to avoid static electricity shock when stay in high static electricity.

⌘ Notice Symbols

Special items, procedures, or notes should be noticed by users before operation.

- **Note:**

Note	It refers to related operations on the duplicator, special details, tips to know, suggestions or more effective operation.

- **Caution:**

Caution	It refers to operations need to be followed or to be careful to avoid mistakes.

⌘Product Overview

TP100 Eraser supports both SATA/IDE interfaces data wiping, designed for data erasing consumers. TP series allow all business to seek an economic way to perform the safest hard drive cleaning and recycling work.

Using HDD eraser to overwrite data has been proven safe and effective method to prevent the risk of data retrieval by others. The HDD is cleaned and can safety be discarded or recycled. There are 8 types of professional erase modes that can provide various application levels, from general, corporate, banking and military usage.

⌘ Product Features

- Support SATA/IDE HDD and SSD directly.
- 8 professional erase modes: 1 Pass Erase (full area), 3-Pass Erase (DoD5220.22-M), 3-Pass Erase (CSEC ITSG-06), 3-Pass (HMG Enhanced IS 5), 7-Pass Erase (VSITR), Custom Erase, Secure Erase (NIST800-88), Enhanced Secure Erase (Extended NIST800-88)
- Check if there are HPA/DCO partitions in the HDD.
- Supports erase zones of HPA and DCO.
- Supports custom erase by user define.
- Professional log report management records all tasks and details for correct erasing, including serial number, tasks percentage, time and result.
- Auto power control system, protect HDD from damage during hot removal from the machine.
- Easy carriage, light weight and portable design

⌘TP100 Function Table

Function	Item & Description
1. Quick Erase	Erase the INDEX of HDD, and take very short period of time. (Data & system only)
2. 1-Pass Erase	Erase the whole HDD, including empty space by written-in 00. (Whole HDD area)
3. 3-Pass (DoD 5220.22-M)	Erase and overwrite whole HDDs for 3 times by written-in 00>>FF>>Random. (complying with US military Erase, DoD5220)
4. 3-Pass (CSEC ITSG-06)	Erase and overwrite whole HDDs for 3 times by written-in 00>>11>>Random. (complying with Canada Erase, CSEC ITSG-06)
5. 3-Pass (HMG Enhanced IS 5)	Erase and overwrite whole HDDs for 3 times by written-in 00>>11>>Random>>Random written comparison. (complying with UK Erase, HMG Enhanced IS 5)
6. 7-Pass Erase (VSITR)	Erase and overwrite whole HDDs for 7 times by written-in 00>>FF>>00>>FF>>00>>FF >>Random. (complying with German Erase, VSITR)
7. Custom Erase	7.1 Run # Pass (1~99 pass, 00~FF/Random) Run HDD erase based on self-defined time and patterns. (Setup 7.2/7.3 firstly, if not it will run default settings)
	7.2 Setup Pass# Setup erase time from 1 to 99 pass.
	7.3 Setup Pattern Setup erase methods from 00 to FF or random.
	7.4 Restore Default Set to clear parameter to default.
8. Secure Erase	Erase whole HDD, even HPA/DOC or other not loadable area, the international authorized high standard (complying with NIST800-88)
9. Enhanced Secure Erase	Advanced international authorized high standard Erase (complying with Extended NIST800-88)

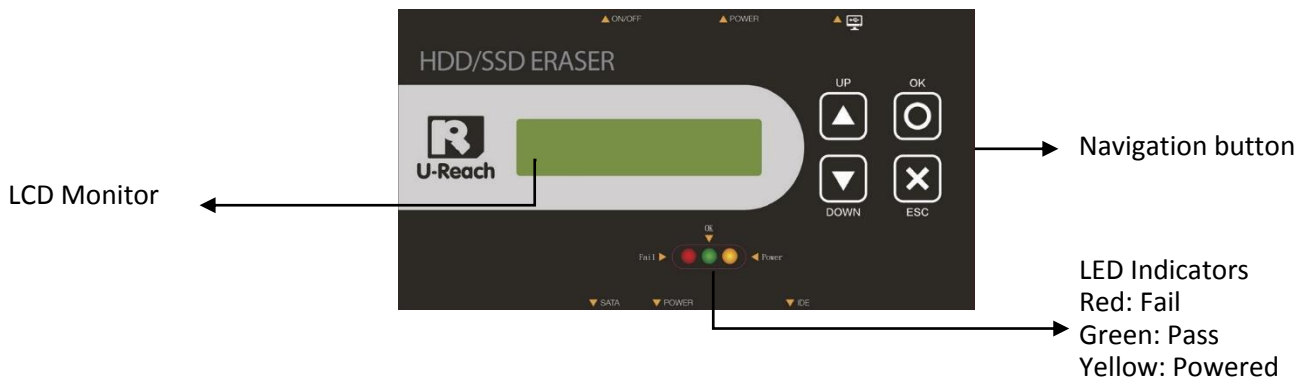| Function	Item & Description	
10.Utility	10.1 Show Disk Info Show the information of connected HDDs, such as brand name, total capacity, erase time, size of hidden area and etc.	
	10.2 System Info Show the information of the duplicator, such as controller model number, software version, and etc.	
	10.3 Update System Update the system firmware.	
	10.4 Start-up Menu Select which function is shown first when the system is turned on.	
11.Log Manager	11.1 Out Today Report Output today's log records.	
	11.2 Out Recent Report Output the log records in recent 1 day to 28 days.	
	11.3 Out Period Date Output the log records in a specific date range.	
	11.4 Advanced Function Enter password to operate.	11.4.1 Clear ALL Log Clean out the log records after entering protective password.
		11.4.2 Setup Password Set up the password for cleaning log records. The default password is "123456".
		11.4.3 Adjust Clock Reset the system time clock on LCD.
	11.5 Create Log HDD Format a HDD with FAT partition to record log.	

⌘ Hardware Overview

● **Package**

- ✓ TP100 Eraser
- ✓ Power adapter
- ✓ Power cord
- ✓ User manual
- ✓ SATA HDD cable set
- ✓ IDE HDD cable set

● **Front View**

LCD Monitor

Navigation button

LED Indicators
Red: Fail
Green: Pass
Yellow: Powered

● **Side View**

● **Application**

Connect SATA HDD/SSD   Connect IDE HDD

⌘ Data Sanitization

<table>
<tr><td>Caution</td><td>● It will erase the data in HDD, please make sure you have backup all important data before using this function.
● To cancel operation of any erasing mode, press <ESC> key and hold continuously for 3 seconds to exit any erasing tasks.</td></tr>
</table>

Step 1: Prepare HDDs
Prepare HDDs for disposal.

Step 2: Place HDDs
Connect the HDD.

Step 3: Enter function
Use ▲ ▼ to select the mode of erasing method, and then press "OK". Data Erase will proceed.

<table>
<tr><td>Note</td><td>After connect HDD press "OK" key to start erase.</td></tr>
</table>

⌘ Erase Options

There are several erase methods: （1）Quick Erase 　（2）One Pass Erase （3）3 Pass Erase(DoD) （4）3 Pass Erase(CSEC) （5）3-Pass Erase (HMG) （6）7-Pass Erase (VSITR) 　(7) Custom Erase (8) Secure Erase (9) Enhanced Secure Erase.

① Quick Erase
The function will ONLY erase the index of the HDD. It is the quickest way to erase HDD.
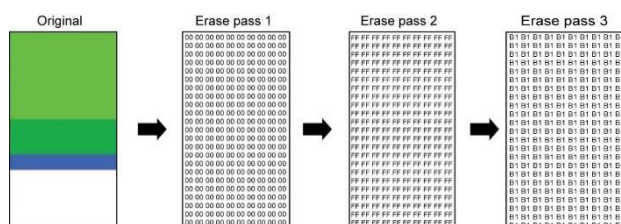
② 1 Pass Erase (Entire HDD Area)
Performs a 1-pass erase by overwriting zeros to entire capacity and complies with NIST 800-88 standards.
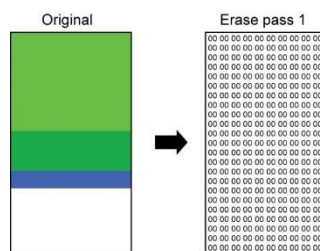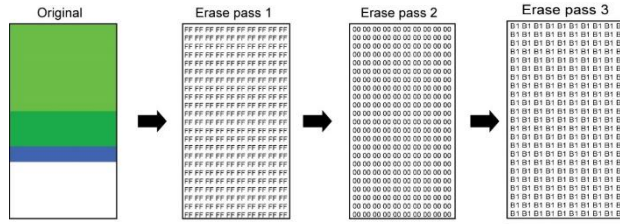

③ 3-Pass Erase (DoD)
Performs a 3-pass erase by overwriting 0x00, 0xFF, and Random to the entire capacity and complies with DoD 5220.22-M standards.
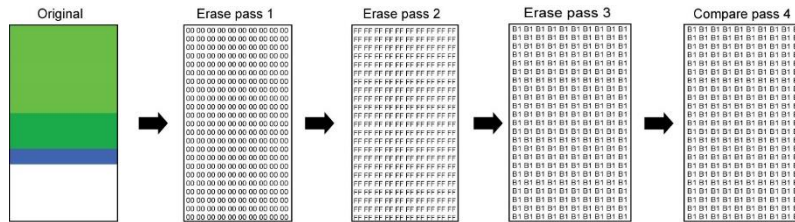
④ 3-Pass Erase (CSEC)

Performs a 3-pass erase by overwriting 0xFF, 0x00, and Random to the entire capacity and complies with CSEC standards.
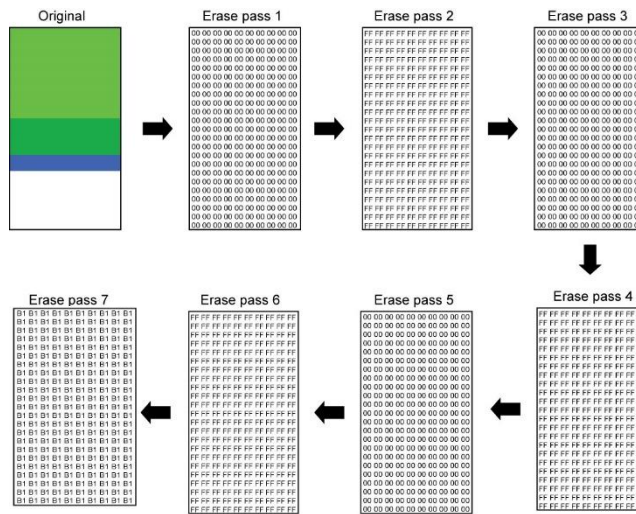

⑤ 3-Pass Erase (HMG)

Performs a 3-pass erase by overwriting 0x00,0xFF, Random and compare to the entire capacity and complies with UK HMG erase standards.
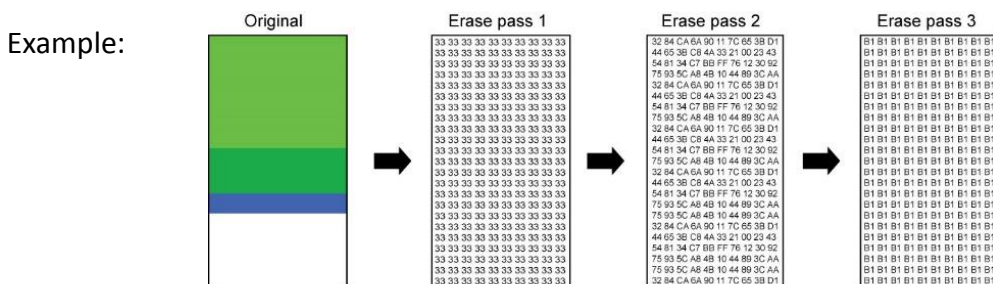

⑥ 7-Pass Erase (VSITR)

Performs a 7-pass erase by overwriting 0x00, 0xFF, 0x00, 0xFF, 0x00, 0xFF, and Random to the entire capacity and complies with Germany VSITR standards.
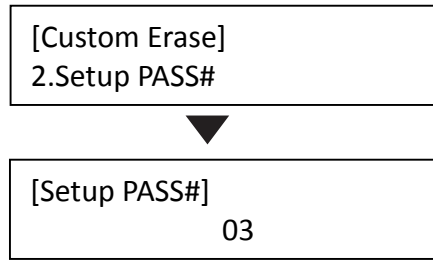

⑦ Custom Erase

Perform a custom erase by self setting run loop and erase pattern.
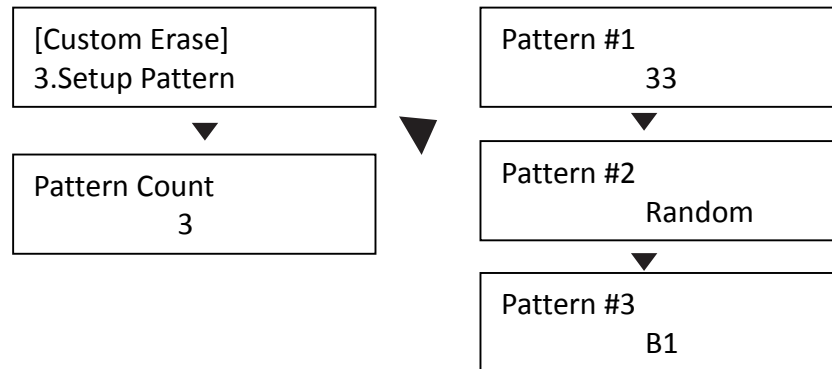For example, if you want to overwrite HDD 3 time by 0x33, Random and 0XB1

Example:

(1) Setup Looping Number
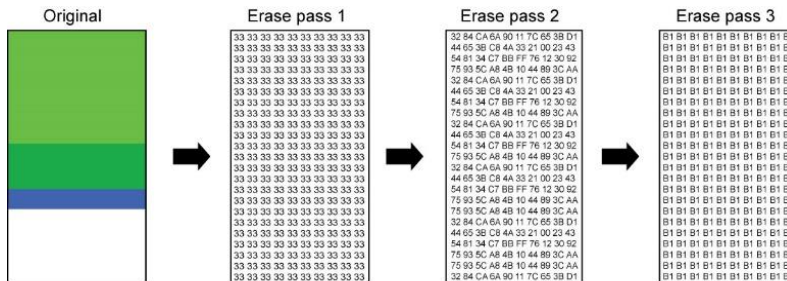
Setup how many loop you want to run

```
┌─────────────────────────┐
│ [Custom Erase]          │
│ 2.Setup PASS#           │
└─────────────────────────┘
            ▼
┌─────────────────────────┐
│ [Setup PASS#]           │
│                  03     │
└─────────────────────────┘
```

(2) Setup Pattern

Setup overwrite pattern.

```
┌─────────────────────────┐        ┌─────────────────────────┐
│ [Custom Erase]          │        │ Pattern #1              │
│ 3.Setup Pattern         │        │                33       │
└─────────────────────────┘        └─────────────────────────┘
            ▼              ▼                    ▼
┌─────────────────────────┐        ┌─────────────────────────┐
│ Pattern Count           │        │ Pattern #2              │
│           3             │        │               Random    │
└─────────────────────────┘        └─────────────────────────┘
                                               ▼
                                    ┌─────────────────────────┐
                                    │ Pattern #3              │
                                    │                B1       │
                                    └─────────────────────────┘
```

(3) Run Custom Erase

⑧ Secure Erase

Performs by sending ATA commands to the device(s) requiring complete purging of data by its internal methods, which conforms to NIST 800-88 standards. If you interrupt the secure erase process, your device(s) will be unusable.

⑨ Enhanced Secure Erase

Enhanced Secure Erase complies with advanced standard of secure erase (Extended NIST 800-88)

⌘How to Use Log Report

Log Report is a very important management tool to assist users in monitoring, recording and managing the whole duplication process and the result. It shows all the information details for each port, which is a powerful tool for sorting out the slowest writing HDD and keeping the operation running efficiently.

Explanation of Log Report

Advanced Function

1. Function "Clear ALL Logs"

After entering the password, the log report saved in duplicator can be wiped out.

Note	Please close PC-Monitoring program LV07H or disconnect PC from duplicator while clearing log report.

2. Function "Setup Password"

Users can reset password to protect log records. To execute function ❶❷, you must use ▲▼ keys to input password. The default password is "123456".

Caution	It can save up to 30,000 logs at one time. One HDD record is equal to one recorded log. (E.g. duplication from 1 to 21 HDDs will be recorded to 21 logs.

⌘How to Output Log Report

I. Output Log by hard disk

After finishing all the task of duplicator, enter function "11. Log Manager", and then choose among 3 options, to export log report of day, to recent log report or to select a period of time.

Note	The HDD has to be FAT16/FAT32 format. Use Function 11.5 Create Log HDD, it will automatically create a 2GB FAT partition in the HDD.

1. Export Log Report of Today

Export log report of today via USB port to a USB drive.

```
[Log #1-#6]
1.Out Today Report
```

2. Export Recent Log Report

To output the log report in recent 1 to 28 days via USB port to a USB drive.

```
[Log #1-#6]
2.Out Recent Report
```

3. Export Report from a Period of Time

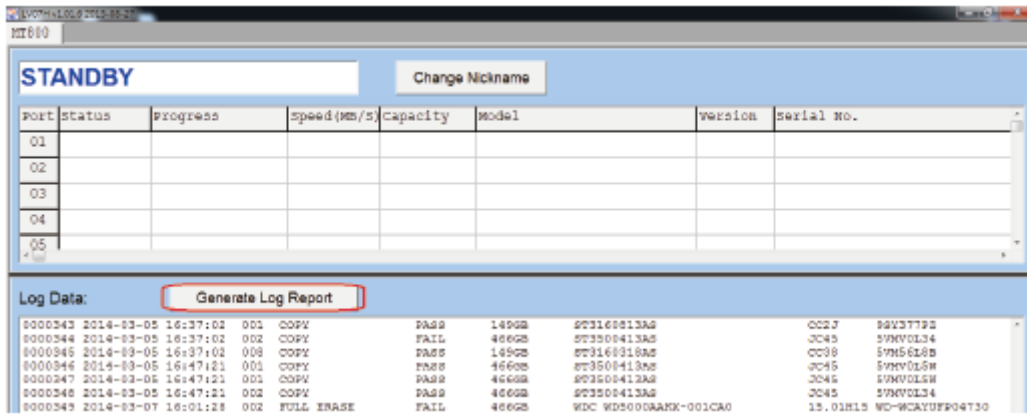To output the log report of a period time via USB port to a USB drive.

```
[ Log #1-#6 ]
3.Out Period Data
```

II. Output log by PC-LINK

1. Connect the eraser to PC and run PC link software

2. Click <Generate Log Report>.

3. Select Date Range

After entering <Open Report>, select the date range for log report
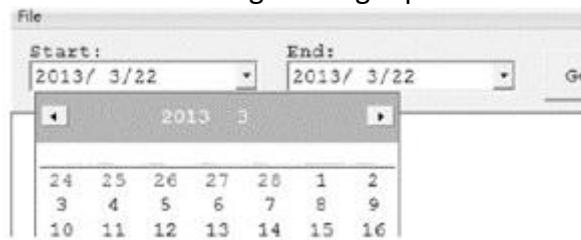
4. Generate Report

After selecting the date range, clicking the tab <Generate Report> for log report. The duplicator is able to record up to 30,000 records of operation information of HDD. One single HDD operation is saved as one record.

Note	If there is no record saved at the selected period of time, or record had been wiped out, the program would show "No match records!"

5. Save Log as Text File

On the top-left tab of Log Data screen, select <File> and <Save to Text File>.
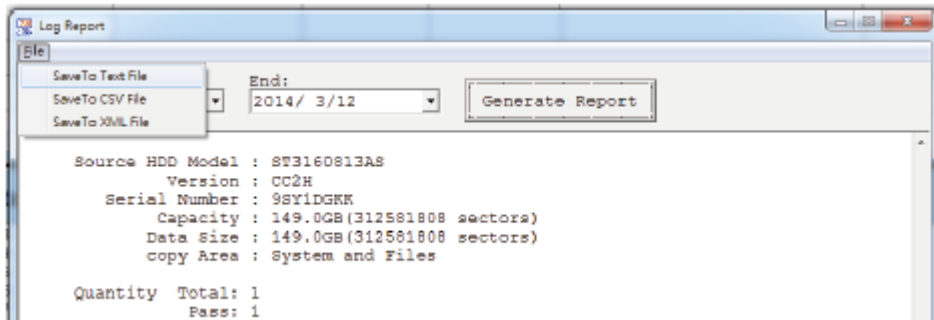
6. Save Log to the Specific Location

Specify a location and a name to save the log.
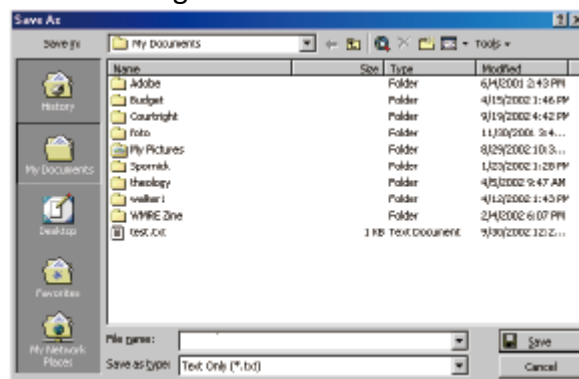
7. Complete to Output Log Reports

After successful creating and saving the log, the report has been output to the location.

⌘ How to Update Bios

I. Update by HDD

Step 1: Create an Update HDD

Place one HDD to the duplicator. Select function "Create Update HDD".

```
[Update System]
2.Create Update HDD
```

Step 2: Format BIOS HDD

Click "OK" to format the BIOS hard disk. One FAT, 2GB partition will be formatted in HDD. That would reduce searching time, and speed up firmware update.

```
Do FORMAT HDD#1
    Confirm ?
```

Caution	The data saved in this HDD will be erased.

Step 3: Download Firmware

Connect the BIOS HDD to PC. Download the latest firmware from PC and save it to HDD. Unzip BIOS, and save it to the root directory
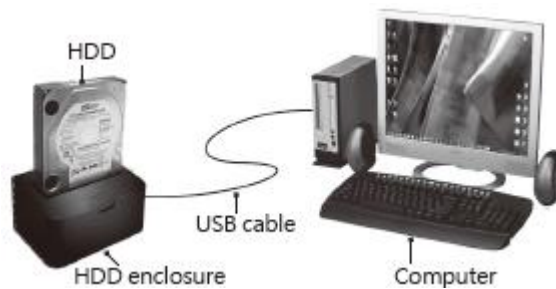
Step 4: Enter "Update BIOS"

Place the BIOS HDD into source port (first port). Enter function "Update BIOS". Update will take about a one minute to complete.

```
[Update System]
1.Update BIOS
```

Caution	Please do not disrupt during BIOS update, otherwise it would cause irretrievable error on duplicator. We are not held responsible for any damages.

⌘Utility

1. Show Disk Information

Function [10.Show Disk Info] Show the information of connected HDD to the port. Press   key to read further information.

```
┌─────────────────────────────────┐        ┌─────────────────────────────────┐
│ 2015/02/16            10:10     │   ▶    │ [Utility]                       │
│ 10. Utility                     │        │ 1.Show Disk Info                │
└─────────────────────────────────┘        └─────────────────────────────────┘
```

Information you can get on your HDD:

```
┌─────────────────────────────────┐        ┌─────────────────────────────────┐
│ Model:    Hitachi               │        │ DCO Size:                       │
│ ST3160318AS                     │        │     25MB                        │
└─────────────────────────────────┘        └─────────────────────────────────┘


┌─────────────────────────────────┐        ┌─────────────────────────────────┐
│ Version:                        │        │ HPA Size:                       │
│ CC38                            │        │     25MB                        │
└─────────────────────────────────┘        └─────────────────────────────────┘


┌─────────────────────────────────┐        ┌─────────────────────────────────┐
│ Serial Number:                  │        │ Secure Erase:                   │
│ 9VM8F8QT                        │        │     28 minute                   │
└─────────────────────────────────┘        └─────────────────────────────────┘


┌─────────────────────────────────┐        ┌─────────────────────────────────┐
│ Capacity:                       │        │ Enhanced Secure Erase:          │
│ 149.1GB                         │        │     28 minute                   │
└─────────────────────────────────┘        └─────────────────────────────────┘
```

2. Show Eraser Information

Information you can get from [System Info]: Eraser firmware version, System version and date.
Press ▼ key to get further information

```
┌─────────────────────┐   ┌─────────────────────┐   ┌─────────────────────┐
│ HDD Eraser          │   │ HD3551_0001         │   │ Build:2015010701    │
│ ver 2.34.4          │   │                     │   │ [10000,0]           │
└─────────────────────┘   └─────────────────────┘   └─────────────────────┘
```

⌘ Specification Table

Name	TP Evidence Eraser
Model	TP100-G
Port	Single port erasing
Maximum speed	7.2 GB/min (120MB/sec)*(Actual performance would depend on HDD quality)
Erase Function	Quick Erase, Full Erase, DoD Erase(DoD5220.22-M), 3-Pass Erase(CSEC ITSG-06, HMG Enhanced IS 5), 7-Pass Erase(VSITR), Custom Erase, Secure Erase, Enhanced Secure Erase
Connector	SATA-HDD, IDE-HDD, HDD power port
Interface	1.8"/2.5"/3.5" SATA 1.0/2.0/3.0 HDD, SSD, IDE HDD
Display	2x20 backlight Monochrome LCD display
LED status	LED light: Red(Fail)/Green(Pass)/Yellow(Powering) on each slot
Control key	4 types of keys: ▲ /UP, ▼ /DOWN, ◯ /OK, X /ESC
Operating type	Stand-alone operation, Output log via USB A/B cable
Eraser Language	English
Power Supply	HDD auto power control
	Adjustable voltage 100V-240V, 50/60Hz
	12V 5A
Temperature	Working: 5℃ ~45℃ ; Storage-20℃ ~85℃
Humidity	Working: 20%~80%; Storage: 5%~95%
Certification	CE, FCC, RoHS