

User Manual

datashur[®] SSD



Remember to save your PIN in a safe place. If lost or forgotten, there is no way to access the datAshur SSD.

If you are having difficulty using the datAshur SSD, please contact our technical support department on +44 (0) 20 8991 6260 (Mon-Fri | 09:00 - 17:30 GMT) or email support@istorage-uk.com.

Copyright © iStorage, 2015. All rights reserved.

Windows is a registered trademark of Microsoft Corporation.
All other trademarks and copyrights referred to are the property of their respective owners.

Distribution of the work or derivative work in any standard (paper) book form for commercial purposes is prohibited unless prior permission is obtained from the copyright holder.

DOCUMENTATION IS PROVIDED AS IS AND ALL EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, ARE DISCLAIMED, EXCEPT TO THE EXTENT THAT SUCH DISCLAIMERS ARE HELD TO BE LEGALLY INVALID.

iStorage shall not be liable by virtue of this warranty, or otherwise, for any incidental, special or consequential damage including any loss of data resulting from use or operation of the product, whether or not iStorage was apprised of the possibility of such damages.

iStorage datAshur SSD Manual – v 1.4



All trademarks and brand names are the property of their respective owners

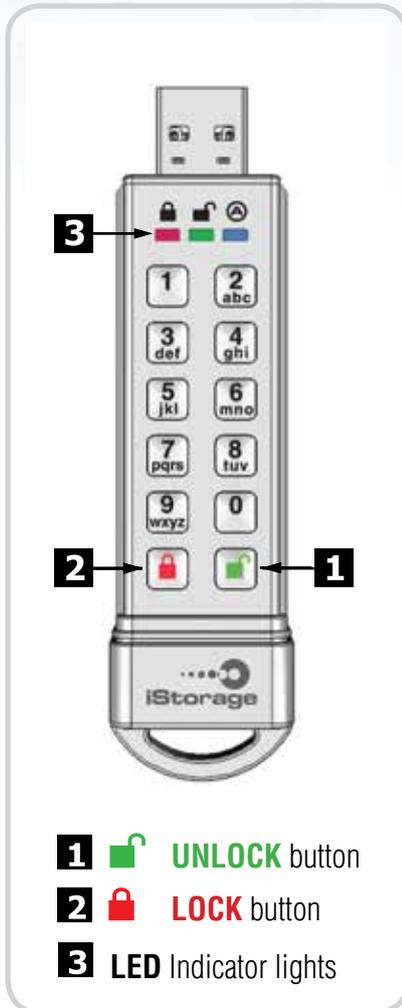


Table of Contents

About the iStorage datAshur SSD	4
1. How to create the Admin PIN	5
2. LED indicators and their actions	5
3. Waking the datAshur SSD	6
4. Unlocking the datAshur SSD	6
5. Locking the datAshur SSD	6
6. Admin Mode	6
7. Adding a new User PIN	7
8. Deleting the User PIN	7
9. Changing the User PIN	7
10. Changing the Admin PIN	8
11. Setting Read-Only or Read/Write modes from Admin Mode	8
12. Setting Read-Only or Read/Write modes from the User Mode	9
13. Setting the Unattended Auto-Lock Feature	10
14. Setting a Self-Destruct PIN	11
15. datAshur SSD Brute Force Protection	12
16. Performing a Complete Reset	13
17. Initializing and Formatting datAshur SSD after a complete reset	14
18. Hibernating, Suspending or Logging Off from the OS	15
19. datAshur SSD Setup for Mac OS	15
20. Diagnostic Mode	16
21. Lock-Override Mode	17
22. Booting from the datAshur SSD	17
23. Troubleshooting	18
24. Technical Support	20
25. Warranty and RMA information	20

About the iStorage datAshur SSD

First Time Use



The datAshur SSD[®] is shipped **without** a preset Personal Identification Number (**PIN**) installed. A **7 to 16 digit Admin PIN** must be created before the datAshur SSD can be used.

This **Admin PIN** is used to access the datAshur SSD and set the Admin mode features of the drive.

PIN REQUIREMENTS:

PINs must be a minimum length of **7** and maximum **16** digits
 Cannot contain all consecutive numbers (2345678 or 9876543)
 Cannot contain all of the same number (i.e. 1111111)

NOTE:

The drive comes preformatted with NTFS file system for Windows. For Mac, Linux or Android, please refer to your OS formatting requirements or this manual.

BATTERY NOTE:

The datAshur SSD has an internal rechargeable battery with a smart charging circuit. For safety, each datAshur SSD ships with a partial charge. Although the drive can be used out of the box, we recommend plugging the datAshur SSD into a powered USB port for 80 minutes to fully charge.

The battery will automatically charge when the drive is inserted into a powered USB port, regardless of its operational mode. In standby mode, the **RED** LED fades in and out slowly to indicate charging and glows solid **RED** to indicate that it's fully charged.

If the battery is completely discharged, the datAshur SSD will go through a self-test (indicated by a **RED**, **GREEN**, and **BLUE** LED sequence) when inserted into a USB port.

Note: It's normal for this device to be warm to the touch during use.



1. How to create the Admin PIN

The datAshur SSD is shipped without a preset Personal Identification Number (PIN) installed. A **7 to 16-digit Admin PIN** must be created before the datAshur SSD can be used. This **Admin PIN** can be used to set any and all of the Admin Mode Features of the datAshur SSD, as well as to access the datAshur SSD's data.

To Create the Admin PIN:

1. Wake up the datAshur SSD by pressing the **UNLOCK** button, both the **BLUE** and **GREEN** LEDs will be solid
2. Press **UNLOCK** + the number **9** button at the same time. The **BLUE** LED will be solid and the **GREEN** LED will blink.
3. Enter your **Admin PIN** and press the **UNLOCK** button.
*If the PIN meets the requirements the **GREEN** LED will blink three times.*
*Should the **PIN NOT** meet the requirements, the **RED** LED will blink three times, before returning to solid **BLUE** and blinking **GREEN** (restart from step 3).*
4. Re-enter the **Admin PIN** and press the **UNLOCK** button again. The **GREEN** LED will illuminate for one second, followed by a solid **BLUE** LED.
*Should the **PINs NOT** match, the **RED** LED will blink three times, before returning to a solid **BLUE** and blinking **GREEN** (restart from step 3).*
5. The datAshur SSD is now in Admin mode (solid **BLUE** LED) and other Admin features can be set. (I.e. adding a User)
6. To exit the **Admin** mode, press the **LOCK** button. The drive will return to the locked standby state. If no action is taken within 30 seconds, the drive will return to a locked sleep state.



Note: The **GREEN** LED will blink if **PIN** is accepted; If the **PIN** is NOT accepted, the **RED** LED will blink, and you will need to return to step 3 to resume the **Admin PIN** setup process. **PINs** must be a minimum of **7** digits and a maximum of **16** digits. Cannot contain all consecutive numbers (2345678 or 9876543) Cannot contain all of the same number (i.e. 1111111)

2. LED indicators and their actions

	Slow Fading RED	Battery charging (when plugged into USB port)
	No LEDs	datAshur SSD locked and asleep
	Blinking RED	Error / incorrect key entry; Mode Not Available; User PIN Change
	Solid RED	Locked / Standby state; Awaiting PIN entry
	Blinking GREEN	PIN entry accepted
	Solid BLUE / Blinking GREEN	Waiting for New User / Admin PIN
	Solid BLUE	Admin Mode
	Solid GREEN	datAshur SSD unlocked
	Alternating RED / BLUE	Indicates a mode has been entered that can result in the deletion of a User or the data on the datAshur SSD (depending on the mode chosen.) Also used when setting Auto-lock feature.
	One second RED followed by one second GREEN followed by one second BLUE	Self-test mode to ensure all components are ready and working properly

3. Waking the datAshur SSD

When the datAshur SSD is not in use, it will enter a sleep state. While in this state, the datAshur SSD is locked and cannot be accessed.

To wake the datAshur SSD so it can accept keypad inputs, press the **UNLOCK** button once. The **RED** LED will be solid (standby state.)



Note: If the datAshur SSD has never been used, the **BLUE** and **GREEN** LED's will be solid indicating that the Admin PIN must be set before the datAshur SSD can be used.

4. Unlocking the datAshur SSD

1. Press the **UNLOCK** button to wake the datAshur SSD from sleep (as described above) the **RED** LED will be solid.
2. Enter either a **User PIN** or **Admin PIN** and press the **UNLOCK** button. If the **PIN** is accepted, the **GREEN** LED will rapidly blink three times, then will slow down to one blink per second until it's plugged in to a USB port at which time it will turn to a solid **GREEN** LED. (If the **PIN** is incorrect, the LED will blink **RED**.)
3. A blinking **GREEN** LED indicates that the datAshur SSD is unlocked and ready for use. The datAshur SSD is now ready to plug into a USB port for use. If it is not plugged into a USB port within 30 seconds, the datAshur SSD will lock and return to sleep state.

5. Locking the datAshur SSD

Press the **LOCK** button. When successfully locked, The LED will turn solid **RED** indicating that it's in standby state. The datAshur SSD will not be recognized by the operating system in the standby state.



Note: If data is still being written to the drive, the datAshur SSD will wait until that operation is completed and then it will lock automatically.

6. Admin Mode

To set up any of the datAshur SSD's **Admin** functions, the **Admin** mode must first be entered. Once in the **Admin** mode, the desired function of the datAshur SSD can be accessed. While in the Admin mode, the data on the datAshur SSD will not be accessible and only the **Admin** functions can be modified.

Prior to your first use of the datAshur SSD, you must first set an Admin PIN. Immediately after setting up your Admin PIN, you may then continue setting up other functions. If you do nothing for a period of 30 seconds, the datAshur SSD will revert to its standby state.

To re-enter the Admin mode, perform the following steps below.

1. Press and hold **UNLOCK** + the number **0** button for five seconds until the LED blinks **RED**. (This indicates that you can enter the Admin PIN.)
2. Enter the **Admin PIN** and press the **UNLOCK** button.
3. The **Admin** Mode is indicated by a solid **BLUE** LED.
4. To exit Admin Mode, either allow 30 seconds of inactivity or press the **LOCK** button.

7. Adding a new User PIN



Note: The **GREEN** LED will blink if the PIN is accepted; If the PIN is NOT accepted, the **RED** LED will blink and you will need to resume the User PIN setup process. PINs must be a minimum of **7** digits and a maximum of **16** digits. Cannot contain all consecutive numbers (2345678 or 9876543) Cannot contain all of the same number (i.e. 1111111)

The datAshur SSD can have one **Admin PIN** and one **User PIN**, making a total of two working **PINs**. Adding a User is a perfect way to securely share the datAshur SSD or deploy it for use where the User does not require access to the Admin features.

While the User has limited functionality and no Admin rights to the datAshur SSD, they can still access the datAshur SSD's data, change their PIN, and set the datAshur SSD to Read Only or Read / Write modes.



Note: Adding a **User PIN** can only be done within the **Admin** mode.

To add a new User PIN:

1. Enter the Admin Mode by holding **UNLOCK** + the number **0** button for five seconds; With the **RED** LED blinking, enter the Admin PIN and press the **UNLOCK** button. The LED will be solid **BLUE**.
2. Press and hold **UNLOCK** + the number **1** button until the **BLUE** LED glows solid and the **GREEN** LED starts blinking.
3. Enter the User PIN and press **UNLOCK** the LED will blink **GREEN** three times, then return to solid **BLUE** LED and blinking **GREEN**.
*Should the **PIN NOT** meet the requirements, the **RED** LED will blink three times, before returning to solid **BLUE** and blinking **GREEN** (restart from step 3).*
4. Re-enter the same **User PIN** and press **UNLOCK**. To verify the User PIN was successfully added, the **GREEN** LED will be solid for three seconds and then a solid **BLUE** LED, indicating that the datAshur SSD has returned to the **Admin** mode.
*Should the **PINs NOT** match, the **RED** LED will blink three times, before returning to a solid **BLUE** and blinking **GREEN** (restart from step 3).*

8. Deleting the User PIN

You can delete the User PIN by doing the following:

1. Enter the Admin mode. (Hold **UNLOCK** + the number **0** button for five seconds – with the LED blinking **RED**, enter the Admin PIN and press the **UNLOCK** button.) The LED will now turn solid **BLUE**.
2. Press and hold the buttons **7 + 8** for five seconds. The **GREEN** LED will blink three times then the **RED** and **BLUE** LEDs will blink alternately.
3. Press and hold the buttons **7 + 8** again for five seconds. The **GREEN** LED will be solid for two seconds.
4. The datAshur SSD will return to Admin mode indicated by the solid **BLUE** LED.



Note: Deleting the User PIN will also delete the Self-Destruct PIN (if it has been set.)

9. Changing the User PIN

The User PIN can be changed within the User mode (datAshur SSD unlocked, **GREEN** LED blinking.)



Note: The Admin PIN cannot be changed while in the User mode. The Admin PIN can only be changed from within the Admin mode.

You can change the User PIN by doing the following:

1. **Unlock** the datAshur SSD with the User PIN. (**GREEN** LED will blink)
2. Press and hold **UNLOCK** + the number **1** button for five seconds (the **RED** LED will blink)
3. Enter the current **User PIN** and press the **UNLOCK** button. (**BLUE** LED will be solid and the **GREEN** LED will blink.)
4. Enter the new **User PIN** and press the **UNLOCK** button. (the **GREEN** LED will blink three times, followed by a solid **BLUE** LED and the **GREEN** LED blinking.)
*Should the **PIN NOT** meet the requirements, the **RED** LED will blink three times, before returning to solid **BLUE** and blinking **GREEN** (restart from step 4).*
5. Re-enter the new **User PIN** and press the **UNLOCK** button. (The **GREEN** LED will be solid for two seconds, then will return to User mode, indicated by the **GREEN** LED blinking.)
*Should the **PINs NOT** match, the **RED** LED will blink three times, before returning to a solid **BLUE** and blinking **GREEN** (restart from step 4).*

10. Changing the Admin PIN

Changes to the Admin PIN can only be made while the datAshur SSD is in the Admin mode.

1. Enter the Admin mode. (Hold **UNLOCK** + the number **0** button for five seconds – with the LED blinking **RED**, enter the **Admin PIN** and press the **UNLOCK** button.) The **BLUE** LED will be solid.
2. Press **UNLOCK** + the number **9** button. The **BLUE** LED will glow solid and the **GREEN** LED will blink.
3. Enter the new **Admin PIN** and press the **UNLOCK** button. The **GREEN** LED will blink three times.
*Should the **PIN NOT** meet the requirements, the **RED** LED will blink three times, before returning to solid **BLUE** and blinking **GREEN** (restart from step 3).*
4. Re-enter the new **Admin PIN** and press the **UNLOCK** button. The **GREEN** LED will be solid for two seconds and then return to solid **BLUE** LED to indicate the datAshur SSD is in the Admin mode.
*Should the **PINs NOT** match, the **RED** LED will blink three times, before returning to a solid **BLUE** and blinking **GREEN** (restart from step 3).*
5. To exit Admin mode, press **LOCK** button and the datAshur SSD will return to sleep mode, or after 30 seconds of inactivity, the drive will automatically lock.

11. Setting Read-Only or Read/Write modes from Admin Mode

With a large number of Viruses and Trojans that attach themselves to USB flash drives, this feature is especially useful if you need to access data on the datAshur SSD when used in a public setting. Additionally, Read-Only is an important feature to implement for forensics, where data must be preserved in its original, unaltered state and can't be overwritten or modified.

The **Admin** can set the datAshur SSD to a Read-Only mode for both the Admin and the User. If set by the **Admin**, the **Admin** is the only one that can change the datAshur SSD back to Read/Write mode.

When the datAshur SSD is unlocked in Read-Only mode and inserted into a USB port, the **GREEN** LED will be solid and the **RED** LED will blink once every three seconds.

To set the datAshur SSD to Read-Only:

1. Enter the Admin mode. (Hold **UNLOCK** + the number **0** button for five seconds – with the **RED** LED blinking, enter the **Admin PIN** and press the **UNLOCK** button.) The LED will now be solid **BLUE**.
2. Press and hold the buttons **r + o (7 + 6)** together for three seconds. The **GREEN** LED will blink three times.
3. The datAshur SSD will return to Admin mode. The LED will now be solid **BLUE**.
4. Until changed, the datAshur SSD can only be read.

To return the datAshur SSD to Read/Write:

1. Enter the **Admin** mode. (Hold **UNLOCK** + the number **0** button for five seconds – with the **RED** LED blinking, enter the **Admin PIN** and press the **UNLOCK** button.) The LED will now be solid **BLUE**.

2. Press and hold buttons **r + w (7+9)** together. The **GREEN** LED will blink three times.
3. The datAshur SSD will return to Admin mode, indicated by the solid **BLUE** LED. The datAshur SSD will be restored to its normal Read / Write condition.



Important: Setting the datAshur SSD to Read/Write from the Admin mode will globally override a Read-Only mode that has been set by the User.

12. Setting Read-Only or Read/Write modes from the User Mode



Caution: When changing Read-Only or Read/Write settings, do not make these changes with the datAshur SSD attached to an operating system. This may cause confusion within the operating system about the status of the datAshur SSD. If this happens, the datAshur SSD may not work properly until the operating system has been restarted.

This mode will allow the User to set the Read/Write status of the datAshur SSD, without having access to the **Admin** functions.

When the datAshur SSD is unlocked in Read-Only mode and inserted into a USB port, the **RED** LED will blink once every three seconds while the **GREEN** LED will glow solid.

If the datAshur SSD is set to be Read-Only in the **Admin** mode, the **User** cannot override that setting. Only the **Admin** can return the datAshur SSD to Read / Write Mode.

To set the datAshur SSD to Read-Only:

1. Press the **UNLOCK** button to wake the datAshur SSD. The LED will be solid **RED**.
2. Press buttons **r + o (7 + 6)** together for three seconds. The **GREEN** LED will blink three times.
3. Enter the **User PIN** and press **UNLOCK**. The **GREEN** LED will blink.
4. The datAshur SSD will be in a Read-Only state the next time it is unlocked.

To return the datAshur SSD to Read / Write:

1. Press the **UNLOCK** button to wake datAshur SSD. LED will be solid **RED**.
2. Press and hold **r + w (7+9)** buttons for three seconds the **GREEN** LED will blink three times.
3. Enter the **User PIN** and press **UNLOCK**. The LED will now be solid **GREEN**.
4. The datAshur SSD will return to unlocked mode and can now be written to, indicated by a blinking **GREEN** LED.



Important: Setting the datAshur SSD to Read/ Write from the User mode will not override a Read-Only setting that was placed by the Admin. To set the datAshur SSD to be in Read-Only mode for both the User and the Admin, set the Read-Only Mode using the Admin function.

13. Setting the Unattended Auto-Lock Feature

To protect against unauthorised access, if the datAshur SSD is unlocked and unattended, the datAshur SSD can be set to automatically lock after a predetermined period of inactivity. In its default state, the datAshur SSD's Unattended Auto-Lock feature is turned off.

The Unattended Auto-Lock can be set to activate after 5, 10 or 20 minutes of inactivity.

To set the Unattended Auto-Lock, perform the following steps:

1. Enter the **Admin** mode. (Hold **UNLOCK** + the number **0** button for five seconds – with the **RED** LED blinking, enter the **Admin PIN** and press the **UNLOCK** button.) The LED will now be solid **BLUE**.
2. Once in **Admin** mode, press **UNLOCK** + the number **6** button. The **RED** and **BLUE** LED's will blink alternately.
3. Press one of the numbers below that corresponds to the amount of inactivity you would like the datAshur SSD to lock itself after:

0 = OFF (The Default is OFF for this feature.)

1 = 5 minutes

2 = 10 minutes

3 = 20 minutes

4. After you have entered the desired amount of allowable inactivity, the **GREEN** LED will blink three times indicating command acceptance, and then will return to the Admin mode, indicated by the **BLUE** LED glowing solid.

14. Setting a Self-Destruct PIN

For certain users, it's important to have a "last-resort" level of security where sensitive data falling into the wrong hands would be catastrophic. The datAshur SSD's Self-Destruct PIN defends against physically compromising situations by erasing the datAshur SSD's contents, leaving it to look as if it never had any data written to it.



USE WITH CAUTION: When this mode is activated and the datAshur SSD is unlocked with the Self-Destruct PIN, it will effectively perform a crypto-erase on the datAshur SSD (complete reset), deleting all of its data. Additionally, the encryption key will be deleted and replaced with a new encryption key. When this Self-Destruct PIN is deployed, the datAshur SSD will unlock and the LED will illuminate **GREEN** as if the datAshur SSD has been normally unlocked. However the datAshur SSD will need to be partitioned and formatted before it can be used again.

The previous Admin and User codes will be deleted in the crypto-erase and the Self-Destruct PIN will then become the new Admin PIN to unlock the datAshur SSD.

Note: The Self-Destruct PIN cannot match the Admin or User PIN.

1. Enter the **Admin** mode. (Hold **UNLOCK** + the number **0** button for five seconds – with the **RED** LED blinking, enter the **Admin PIN** and press the **UNLOCK** button.) The LED will now be solid **BLUE**.
2. Press **UNLOCK** + the number **3** button. The **RED** and **BLUE** LED's will blink alternately.
3. Enter the new Self-Destruct PIN and press **UNLOCK**. The **GREEN** LED will blink three times and then will return to **RED** and **BLUE** LED's blinking alternately.
*Should the **PIN NOT** meet the requirements, the **RED** LED will blink three times, before returning to solid **BLUE** and blinking **GREEN** (restart from step 3).*
4. Re-enter the Self-Destruct PIN and press **UNLOCK**. The **GREEN** LED will be solid for three seconds and then will return to **Admin** mode, indicated by the solid **BLUE** LED.
*Should the **PINs NOT** match, the **RED** LED will blink three times, before returning to a solid **BLUE** and blinking **GREEN** (restart from step 3).*

To remove the Self-Destruct PIN, the User PIN must be deleted. This will leave the Admin and all data intact.

1. Enter the **Admin** mode. (Hold **UNLOCK** + the number **0** button for five seconds – with the **RED** LED blinking, enter the **Admin PIN** and press the **UNLOCK** button.) The LED will now be solid **BLUE**.
2. Press and hold buttons **7 + 8** together for five seconds. The **GREEN** LED will blink three times and then will return to **RED** and **BLUE** LED's blinking alternately.
3. Press and hold buttons **7 + 8** together for five seconds again. The **GREEN** LED will be solid for three seconds and then will return to **Admin** mode, indicated by a solid **BLUE** LED.

15. datAshur SSD Brute Force Protection

What is Brute Force Attack?

A Brute Force Attack is a means of breaching a cryptographic data defense scheme by systematically running an astronomical number of decryption possibilities. With AES 256 having never been cracked, the data stored on a datAshur SSD is well protected against Brute Force. Brute Force attacks aren't necessarily aimed at the bulk of the data itself, but rather, at the drive's access PINs. PINs are usually the weakest links of any data protection plan, and as such, PINs are essentially all that a brute-force attack needs to decrypt.

Brute Force Feature:

1. After three unsuccessful attempts, the datAshur SSD will add additional time delays to each subsequent try thereafter. The **RED** LED will blink the number of failed attempts after three, all the way to the tenth (and final) try.
2. After up to ten unsuccessful attempts, the keypad will lock and no functions will work and the LED will blink **RED** at a rate of three flashes per second.
3. From this point, the datAshur SSD will only allow up to ten additional attempts before the datAshur SSD assumes that it is under brute-force attack and automatically deletes all of its data.
4. To gain these ten extra attempts, press and hold the **5** button and then press the **UNLOCK** button until the **RED** and **GREEN** LED's blink alternately.
5. Enter the code "LastTry" (**5278879**) and press the **UNLOCK** button.

You will now have ten additional attempts. If after this point 10 more attempts have failed, the datAshur SSD will need to be reset

6. When the datAshur SSD is successfully unlocked, the Brute Force counter will return to zero.



Note: The number of attempts possible, both before and after the LastTry (**5278879**) code is entered, can be set (in **Admin** mode) between two and ten attempts. Setting the before/after attempts to the minimum of two would allow for a total of four attempts (two before entering the last try code and two after.)

To reduce the number of Brute Force attempts:

1. Enter the Admin mode. (Hold **UNLOCK** + the number **0** button for five seconds – with the **RED** LED blinking, enter the Admin PIN and press the **UNLOCK** button.) The LED will now be solid **BLUE**.
2. Press and hold the **UNLOCK** + the number **5** button for three seconds. The **RED** LED will double-blink.
3. Press the number of before/after attempts desired on the numeric keypad (**2 - 9** .) The **GREEN** LED will blink the same number of times to correspond to the number you have entered (**for example:** the 8 button will result in eight blinks, and yield eight attempts before the LastTry code and another eight attempts after, yielding a total of 16.) To return the datAshur SSD to its default setting, press the 1 then the 0 button to change the number back to ten attempts.



Note: The number of before and after attempts are the same, i.e. 4 before / 4 after, 8 before / 8 after, etc.

16. Performing a Complete Reset

A complete reset will erase encryption keys and PINs (destroys all data), and leave the datAshur SSD in an unformatted condition.



Caution: Performing this action will require the datAshur SSD to be formatted before it can be used again. All previous Admin/User PINs, settings and data will be deleted in the crypto-erase, and a new encryption key will be generated. Once this action has been performed, it cannot be undone

There may be circumstances (forgotten **PIN**, redeployment, return to factory default settings) when you need to completely reset the datAshur SSD. The complete reset feature will perform a crypto-erase on the datAshur SSD, generate a new encryption key, delete all users, and return all of the settings to factory default.

To perform a complete reset of the datAshur SSD, perform the following:

1. Press and hold **UNLOCK** + **LOCK** + the number **2** button together for ten seconds. The **RED** and **BLUE** LED's will blink alternately.
2. The **GREEN** LED will be solid for three seconds, followed by solid **GREEN** and **BLUE** LED's when complete.
3. A new **Admin PIN** will need to be entered and the datAshur SSD will need to be reformatted.

17. Initializing and Formatting datAshur SSD after a complete reset



Caution: A complete reset of the datAshur SSD will erase all disk partitions and information settings. You will need to initialize and format the datAshur SSD again after reset.

To initialize your datAshur SSD, perform the following steps:

1. After a complete reset, press **UNLOCK** + the number **9** button. The **BLUE** LED will be solid and the **GREEN** LED will be blinking.
2. Enter the new **Admin PIN** and press the **UNLOCK** button. If accepted the **GREEN** LED will quickly blink three times, then return to solid **BLUE** LED and blinking **GREEN** LED.
*Should the **PIN NOT** meet the requirements, the **RED** LED will blink three times, before returning to solid **BLUE** and blinking **GREEN** (restart from step 2).*
3. Re-enter the Admin PIN and press the **UNLOCK** button. If accepted, the **GREEN** LED will be Solid for two seconds.
*Should the **PINs NOT** match, the **RED** LED will blink three times, before returning to a solid **BLUE** and blinking **GREEN** (restart from step 2).*
4. The **BLUE** LED will remain in Admin mode for 30 seconds (or until the **LOCK** button is pressed, which will return the datAshur SSD to its standby state.)
5. The **Admin PIN** is now set and will allow access to the datAshur SSD or the **Admin** features.
6. To unlock the datAshur SSD, enter the new **PIN** and press **UNLOCK**.
7. **Windows 7 and earlier:** Right-click **Computer**, and then click **Manage** from the Windows desktop.
Windows 8: Right-click left corner of desktop and select **Disk Management**.
8. In the Computer Manage window, click **Disk Management**. In the Disk Management window, the datAshur SSD is recognized as an unknown device that is uninitialised and unallocated.
9. Do the following to make the datAshur SSD recognized as a basic drive.



Note: If the Initialise and Convert Disk Wizard window opens, click Cancel and initialise the disk manually using the following steps:

- a. Right-click **Unknown Disk** and then select **Initialise Disk**.
 - b. In the Initialise Disk window, click **OK**.
10. Right-click in the blank area under the **Unallocated section**, and then select **New Partition**. The **Welcome to the New Partition Wizard** window opens.
 11. Click **Next**.
 12. Select **Primary Partition** and then click **Next**.
 13. If you need only one partition, accept the default partition size by clicking **Next**.
 14. Click **Next**.
 15. Create a volume label, select **Perform a quick format**, and then click **Next**.
 16. Click **Finish**.
 17. Wait until the format process is complete.
- The datAshur SSD will now be recognized and is available for use.

18. Hibernating, Suspending or Logging off from the OS

Be sure to save and close all the files and log off the datAshur SSD before hibernating, suspending, or logging off from the Windows operating system.

To log off the datAshur SSD, double-click *Safely Remove Hardware* on the Windows desktop and remove the datAshur SSD from your computer.



Attention: To ensure the data integrity of your datAshur SSD, be sure to lock or log off your datAshur SSD if you are:

- Away from your computer
- Using the switching user function by sharing a computer with others

19. datAshur SSD setup for Mac OS

Your datAshur SSD is pre formatted in NTFS for Windows. To reformat the datAshur SSD to a Mac compatible format please perform the following:

1. Unlock the datAshur SSD with either a **User** or **Admin PIN**, open **Disk Utility** from Applications/Utilities/Disk Utilities.
2. To format the datAshur SSD, select the **datAshur SSD** from the list of keys and volumes. Each key in the list will display its capacity, manufacturer, and product name, such as 232.9 iStorage datAshur SSD.
3. Click the Erase tab.
4. Enter a name for the datAshur SSD. The default name is **Untitled**. The datAshur SSD's name will eventually appear on the desktop.
5. Select a volume format to use. The Volume Format dropdown menu lists the available drive formats that the Mac supports. The recommended format type is **Mac OS Extended (Journaled)** for Mac only. Please choose EX-FAT to use on Macs and Windows.
6. Click the **Erase** button. Disk Utility will unmount the volume from the desktop, erase it, and then remount it on the desktop.

20. Diagnostic Mode

The keypad has a manual diagnostic mode built-in to verify keypad function. This mode will not allow access to any data or admin function. It can only be used to identify the firmware level and to test button recognition.

To enter the diagnostic function:

1. Press **UNLOCK**, then press **UNLOCK** + the number **1** button, then press and hold **0** for five seconds. The **RED** and **BLUE** LED's will blink alternately.
2. The **BLUE** LED will blink a number of times to represent the number of both the major and minor revisions. The decimal point will be represented by a single **RED** LED blink. Upon completion, the **BLUE** LED will be solid. (**Example: VERSION 4.1** would be indicated by four **BLUE** LED blinks, one **RED** LED blink, one **BLUE** LED blink, and one **RED** LED blink, then revert to a solid **BLUE** LED.)
3. **To check the keypad's button functionality:**

Press each button and the number of the button pressed will be expressed by the **RED** LED blinking. (Example: 1 Button = 1 blink, 2 Button = 2 blinks, 3 Button = 3 blinks...0 Button = 10 blinks, Unlock Button = 11 blinks, Lock Button = 12 blinks.)

4. To exit the Diagnostic Mode, wait for the 20 second timeout to return the datAshur SSD to normal operation.

Self-Diagnostics:

During the initial power up, after the datAshur SSD has been plugged into a USB port, the datAshur SSD will perform self-diagnostics on the encryption algorithm and critical hardware components. If the **RED** LED blinks at a rate of one blink per second for 15 seconds, returns to standby and will not unlock, unplug the datAshur SSD from USB port and try again.

If the **RED** LED continues to blink in the manner mentioned above and won't unlock upon USB re-insertion, a critical component has failed and the datAshur SSD can no longer function.

If the datAshur SSD blinks a triple-**RED** LED pattern that is repeated every two seconds when unlocked, a failure has occurred that will not immediately stop the device from working nor affect the security of the device, but should be considered as a warning that the device needs to be replaced in the near future. Additionally, Admin features may be limited in this mode.

If either condition should appear, remove the datAshur SSD from the USB port and allow the datAshur SSD to go to sleep, and try to unlock the datAshur SSD again.

The event of either diagnostic failure will be very rare, but if the datAshur SSD cannot recover, it must be replaced.

21. Lock-Override Mode

Certain users may encounter a case where they need the datAshur SSD to remain unlocked during a reboot, passing the datAshur SSD through a virtual machine or other similar situation which, under normal circumstances, would cause the datAshur SSD to lock.

To help facilitate this use case, “Lock-Override Mode” will allow the datAshur SSD to remain unlocked through USB port re-enumeration and will not lock again until USB power is interrupted.



Note: When in this mode, the datAshur SSD is vulnerable to being moved from one computer and connected to another computer provided USB power is uninterrupted. Due to this vulnerability, we strongly recommend this mode be used **ONLY** in circumstances where the datAshur SSD can be physically secured (as in a locked Server Room) or in a place where it can be visually monitored while in this mode. Use of a powered hub or a Y-cable increases this security risk. Always return the datAshur SSD to the default **Lock-Override Mode OFF** when returning to normal service.

To set the “Lock-Override” to On:

1. Enter the **Admin Mode** (Press and hold **UNLOCK** + the number **0** button for five seconds until **RED** LED blinks, then enter the **Admin** code and press the **UNLOCK** button. The LED will be solid **BLUE**.)
2. Press and hold buttons **7 + 1** for three seconds. The **GREEN** LED will blink three times, then the **BLUE** LED will glow solid.
3. When the datAshur SSD is unlocked and attached to a USB port in “Lock-Override Mode”, the **BLUE** LED will blink once every three seconds to alert you that “Lock-Override Mode” is active.



Note: If “Unattended Auto-Lock Mode” has been turned on, “Lock-Override” will not override it; the datAshur SSD will lock at the selected time. If you need the datAshur SSD to stay unlocked, Enter the Unattended Auto-Lock Feature and set the lock timer to “**0**” (0 = OFF.) See Page 10.

To turn Lock-Override Mode off and return to normal operation:

4. Enter the Admin Mode (Press and hold **0** + the **UNLOCK** button for five seconds until the **RED** LED blinks. Then enter the **Admin** code and press the **UNLOCK** button. The **BLUE** LED will be solid.)
5. Press and hold buttons **7 + 0** for three seconds. The **GREEN** LED will blink three times then the **BLUE** LED will be solid.
6. To verify, unlock the datAshur SSD in **User** mode and check the **BLUE** LED is no longer blinking.

22. Booting from the datAshur SSD

iStorage datAshur SSD USB drives are equipped with a 30 second delay feature in order to accommodate power cycling during a host boot process.

There may be occasions where you might want to boot from the datAshur SSD for various reasons.

When booting from the datAshur SSD, you are running your computer with the operating system that’s installed on the datAshur SSD.

No special actions are required on the part of the user, and to use this feature, simply unlock the drive and connect to the USB port of a host computer.

To force an immediate lock, **always** unplug to remove USB power to the drive.

23. Troubleshooting

This section contains troubleshooting information for the datAshur SSD. If you encounter any of the following problems when using the datAshur SSD, refer to the corresponding answers.

Q: What can I do if I forget the User PIN?

A: Use your **Admin PIN** to enter **Admin Mode**, and then create another **User PIN** in **Admin Mode**.

Q: What can I do if I forget the Admin PIN?

A: There is no other way to retrieve the **Admin PIN** except a complete reset of the datAshur SSD. After a complete reset, all data will be lost and you will need to initialise, allocate and format the datAshur SSD manually.

Q: Why did the operating system not recognise the datAshur SSD, after I did a complete reset of the drive?

A: You need to initialise, allocate and format the datAshur SSD manually. For more information, refer to Initialising and formatting the datAshur SSD after a complete reset in this manual.

Q: How do I use the datAshur SSD without a PIN?

A: As a full disk encryption product, the datAshur SSD can never be used without a PIN.

Q: What encryption algorithm is used in this product?

A: The datAshur SSD uses AES 256-bit algorithm.

Q: Why could I not initialise, partition, or format the datAshur SSD?

A: Ensure that you have administrator privileges. You will need Admin privileges to use the Disk Management Utility.

Q: The LED is blinking RED and I can't enter a code. Why?

A: Somebody has tried to access the datAshur SSD and the code has been entered 10 times incorrectly (see Brute Force section of this manual.)

Q: The datAshur SSD seems warm to the touch, is this normal?

A: Yes. The SSD in the case runs hotter than a standard flash drive. The cooling features use the case to dissipate the heat.

Q: Is there any way to recover my data if I forget the User PIN?

A: If an **Admin PIN** has been previously set, the **Admin PIN** can be used to unlock the datAshur SSD and recover the data. If you forget the **PIN** and do not have an **Admin PIN**, the datAshur SSD can be reset so it can be used again, but the data cannot be recovered.

Q: Why does the LED indicate an error when I try to change the PIN?

A: **PIN** requirements for the datAshur SSD must meet a minimum security level. There are several combinations that are not allowed, such as repeating numbers or sequential numbers. The **PIN** must be a minimum of 7 digits, and not longer than 16 digits.

- **PIN** must be between 7-16 digits in length
- **PIN** must not contain all of the same number, e.g. (1111111)
- **PIN** must not contain all consecutive numbers, e.g. (2345678) or (9876543)

Password Tip: You can create a word, name, phrase or any other Alphanumerical **PIN** combination by simply pressing the buttons with the corresponding letters on it.

Examples of these types of Alphanumerical PINs are:

- For "**Password**" you would press the following keys:
7(pqrs) 2(abc) 7(pqrs) 7(pqrs) 9(wxyz) 6(mno) 7(pqrs) 3(def)
- For "**iStorage**" you would press:
4(ghi) 7(pqrs) 8(tuv) 6(mno) 7(pqrs) 2(abc) 4(ghi) 3(def)

Using this method, long and easy to remember **PIN** CODES can be created.

Q: How many unique User ID's can I create?

A: The Administrator feature allows enrollment of **1** unique User ID and one **1** Administrator. If a user forgets their **PIN**, the datAshur SSD can be unlocked using the Admin PIN.

24. Technical Support

iStorage provides the following helpful resources for you:

iStorage's Website

<http://www.istorage-uk.com>

<http://www.istorage-uk.com/support>

E-mail correspondence

support@istorage-uk.com

Telephone support with our Technical Support Department on **+44 (0) 20 8991-6260**.

iStorage's Technical Support Specialists are available from 9:00 a.m. to 5:30 p.m.
GMT - Monday through Friday.

25. Warranty and RMA information

Three Year Warranty:

iStorage offers a 3-year warranty on the datAshur SSD against defects in materials and workmanship under normal use. The warranty period is effective from the date of purchase either directly from iStorage or an authorised reseller.

Disclaimer and terms of warranty:

THE WARRANTY BECOMES EFFECTIVE ON THE DATE OF PURCHASE AND MUST BE VERIFIED WITH YOUR SALES RECEIPT OR INVOICE DISPLAYING THE DATE OF PRODUCT PURCHASE. I STORAGE WILL, AT NO ADDITIONAL CHARGE, REPAIR OR REPLACE DEFECTIVE PARTS WITH NEW PARTS OR SERVICEABLE USED PARTS THAT ARE EQUIVALENT TO NEW IN PERFORMANCE. ALL EXCHANGED PARTS AND PRODUCTS REPLACED UNDER THIS WARRANTY WILL BECOME THE PROPERTY OF I STORAGE.

THIS WARRANTY DOES NOT EXTEND TO ANY PRODUCT NOT PURCHASED DIRECTLY FROM I STORAGE OR AN AUTHORISED RESELLER OR TO ANY PRODUCT THAT HAS BEEN DAMAGED OR RENDERED DEFECTIVE: 1. AS A RESULT OF ACCIDENT, MISUSE, NEGLIGENCE, ABUSE OR FAILURE AND/OR INABILITY TO FOLLOW THE WRITTEN INSTRUCTIONS PROVIDED IN THIS INSTRUCTION GUIDE; 2. BY THE USE OF PARTS NOT MANUFACTURED OR SOLD BY I STORAGE; 3. BY MODIFICATION OF THE PRODUCT; OR 4. AS A RESULT OF SERVICE, ALTERNATION OR REPAIR BY ANYONE OTHER THAN I STORAGE AND SHALL BE VOID. THIS WARRANTY DOES NOT COVER NORMAL WEAR AND TEAR.

NO OTHER WARRANTY, EITHER EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OR MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, HAS BEEN OR WILL BE MADE BY OR ON BEHALF OF I STORAGE OR BY OPERATION OF LAW WITH RESPECT TO THE PRODUCT OR ITS INSTALLATION, USE, OPERATION, REPLACEMENT OR REPAIR.

I STORAGE SHALL NOT BE LIABLE BY VIRTUE OF THIS WARRANTY, OR OTHERWISE, FOR ANY INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGE INCLUDING ANY LOSS OF DATA RESULTING FROM THE USE OR OPERATION OF THE PRODUCT, WHETHER OR NOT I STORAGE WAS APPRISED OF THE POSSIBILITY OF SUCH DAMAGES.



© iStorage, 2015. All rights reserved.
iStorage Limited, iStorage House, 13 Alperton Lane
Perivale, Middlesex. UB6 8DH, England
Tel: +44 (0) 20 8991 6260 | Fax: +44 (0) 20 8991 6277
e-mail: info@istorage-uk.com | web: www.istorage-uk.com