

# Xtrfy XS1

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## Precautions before use

Please read the following instructions carefully before using the product.

XS1 is compatible with SATA type 2.5" HDD. The product doesn't include a HDD. Users have to purchase and install their own 2.5" HDD (SATA for Laptop). Xtrfy cannot take any responsibility to any HDD failures, users would need to contact the HDD manufacturers in relation to any HDD malfunction.

XS1 uses 5V/900mA from USB3.0 port.

Please don't place any magnetic material around XS1. It may damage the data of HDD installed in XS1. Also, don't drop or cause any hard impact to the XS1. The data of HDD in the XS1 can be damaged easily by magnetic material or strong impact. It is always advisable to back up important data.

The encryption of XS1 is hardware based. XS1 can connect and work with all OS, Embedded devices and media players which support USB host.

Basically XS1 uses AES (Advanced Encryption Standard) 256 bit encryption algorithms. Additionally, it supports higher level encryption management via Password input and Master-key registration. **If a user loses or forgets a master-key and password, we (Xtrfy) can't rescue or recover any data. User need to format the HDD to use it again.**

XS1 doesn't use any S/W for encryption. Users can set up the security by inputting 4~8 digits password via front touch panel buttons of XS1.

XS1 encrypts the entire HDD, once encrypted it is impossible to read or decode any data on the HDD even though it's connected with other PC systems.

XS1 supports User Password protection feature. If user enter wrong password 3 times in a row, the interval to ask password input is lengthened continuously.

If you forget the Password of XS1, Users that needs emergency rescue have to contact Xtrfy: [rescue@xtrfy.com](mailto:rescue@xtrfy.com) and have both the XS1 Unit with the hard drive inside and the Master key ready. There is also a cost to unlock the unit; this cost will be informed to you when you email [rescue@xtrfy.com](mailto:rescue@xtrfy.com) and the technician knows why the unit needs emergency rescue.

XS1 supports both security and normal mode. In case of security mode (with password input), it takes 10 seconds longer booting-time than normal mode. It's because XS1 is re-connected after stand-by for the security mode activation and safety connection.

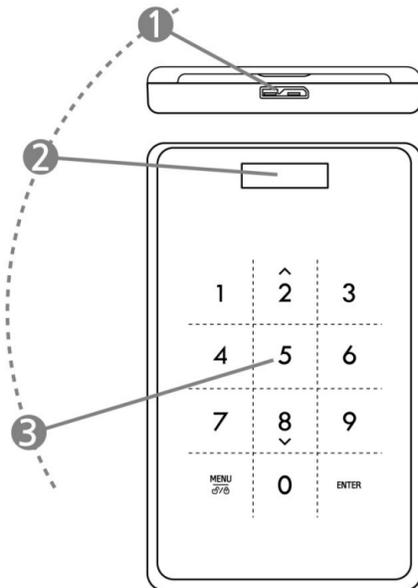
XS1 supports 'un-mount' feature. When disconnecting XS1 from PC, please use 'un-mount' feature on XS1 or 'Safely Remove Hardware' of Windows. If you disconnect USB cable during data transfer, data loss may occur. Please pay attention to it.

XS1 supports USB3.0 Super-Speed. Data transfer speed (reading and writing) of XS1 can be affected by the performance (RPM) of HDD. The data transfer speed of 7,200RPM HDD is rather faster than 5,200RPM HDD.

## Specification

Model Name	XS1
Power Source	USB power
HDD	2.5 inch SATA I, II, III HDD (Max 9.5mm thick HDD available)
Interface	USB 3.0 Super-Speed (Max 5Gbps) (USB3.0 Max speed is available when it's connected with USB3.0 host device.)
OS	All Operation Systems recognizing USB storage device.
Size/Weight	(W) 77 x (H) 123.5 x (D) 13.5mm / 92 g(w/o HDD)
Accessory	Xtrfy XS1 unit, USB3.0 Y-cable (100cm - A to Micro B type), Portable pouch & clean cloth, Manual, Mini driver & screws

## Each part and function



- 1) USB port: Connect XS1 with various PC and devices via USB3.0 port. (Compatible with USB2.0 devices also)
- 2) OLED display window: shows the menu and password input of XS1
- 3) Touch Panel: supports menu navigation and password input via Capacitance Touch switching technology.

## HDD Installation

- 1) There is a small groove near the USB3.0 port on XS1. Simply push up the back panel using your fingertip to open it.



- 2) Install a 2.5" SATA HDD (Check the picture on right side!)



**Please check the thickness of your HDD before HDD installation.**  
XS1 supports maximum 9.5mm thick 2.5" HDD models only. In case of 12.5mm thick HDD (some new and mass capacity models), it can't be installed in XS1. In case of 7mm slim size HDD, it's recommendable to put additional pad or sticker to fix HDD (not to move or shake).

- 3) Close the back panel and screw it tightly by using the driver and screws (basic accessory).



- 4) Connect XS1 to your desktop or laptop with the USB3.0 cable via USB3.0 port. It's also compatible with USB2.0, but in that case, the data transfer speed is dramatically slowed down and it may not supply enough power.



**Note:** Please use an authentic and original USB 3.0 cable for the USB3.0 Super Speed and stable performance.

## USE as an external HDD (Normal Mode)

- 1) When XS1 is connected with PC via USB port, the front OLED display window shows a message "The new HDD is connected. Will you use Password?". Press <0> button on the front touch panel.

Will you use Password?  
0=NO, 1=YES

- 2) XS1 includes separate process on it unlike normal external HDDs, so it needs booting process when it runs for the first time. Front OLED window shows the booting process via bar graph. When booting is finished, the bar graph will disappear.

XS1/Xtrfy

- 3) To use it as an external HDD storage, you have to initialize the HDD under computer's operating system. (See page 2 - HDD initialization)

## USE as an external security HDD (Security Mode)

- 1) When XS1 is connected with PC via USB port, the front OLED display window shows the message "The new HDD is connected. Will you use Password?". Press <1> button on the front touch panel to set up Password.

Will you use Password?  
0=NO, 1=YES

- 2) LCD shows message "Enter a password first time". Then, please enter your password (4~8 digits) by pressing numeric buttons on the front panel of XS1 and press <Enter> button to apply it.

Enter a password first time  
\*\*\*\*

- 3) It's the process to identify your password. Just enter the same password you entered in previous (2) step and press <Enter> button to apply it. (If you enter wrong or different password, you can't go to the next step. You have to re-start the process again.)

Re-enter your password  
\*\*\*\*

- 4) Once the password input process is completed, the LCD will show the 16 digits Master-Key numbers for the installed HDD (**Please write down the master key and keep it safe if emergency rescue is needed**). LCD will show the master-key numbers till you press any other button on XS1.

0A1B3C4D  
5E6F7G8H

< Example display >

### What is the 'Master-Key'?

Master-key is the essential code to recover HDD data. If you forget the password you entered on the security HDD or your XS1 get damaged, you can't connect or read any data on HDD. Even though you connect the HDD to your PC system, your PC can't read anything at all because it's totally encrypted by AES 256 bit encryption technology. Master-key is not for individual user. The data can be recovered only by our special program in the Xtrfy office. To recover HDD data: We consider a user who has both XS1 unit and Master key as the real owner of the XS1 unit, for the emergency rescue. Users that needs emergency rescue have to contact Xtrfy: [rescue@xtrfy.com](mailto:rescue@xtrfy.com) and have both the XS1 Unit with the hard drive inside and the Master key ready. There is also a cost to unlock the unit, this cost will be informed to you when you email [rescue@xtrfy.com](mailto:rescue@xtrfy.com) and the technician knows why the unit needs emergency rescue.

**If you lose Master-key, it's impossible for us to recover your HDD data in any events. So, you should write down Master-Key and keep it safely, just in case.**

### Note

If HDD itself gets physical damage, it's impossible to recover any data on damaged HDD even with Master-key.)

- 5) Press any button on XS1, then Master-key disappears. In Security mode, LCD shows 'Lock' icon and 'Xtrfy' message on it.

XS1/Xtrfy

- 6) To use it as an external HDD storage, you have to initialize the HDD under computer's operating system. (See page 2 - HDD Initialization)

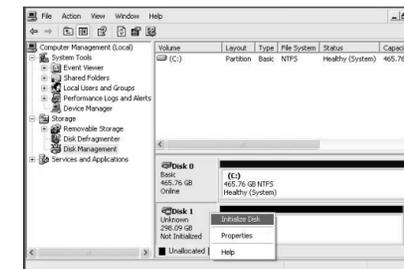
### Note

In case of using Security mode, HDD installed in Lockdown should be initialized newly even though HDD already got formatted or it's used HDD. When user selects "Security Mode", PC recognizes the HDD in Lockdown as a totally new HDD.

## HDD Initialization

In case of a brand new hard drive, it should be initialized, partitioned and formatted first for normal use (reading, writing) regardless of security function. Below instructions are for Windows 7 but the steps are very similar for Windows XP, Vista, Windows 8.

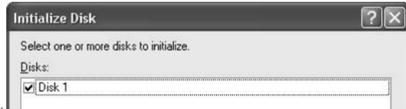
- 1) Select [Control Panel] -> [Administrative Tools], then open up [Computer Management], then go to [Disk Management]
- 2) Your PC can't recognize the HDD installed in XS1.



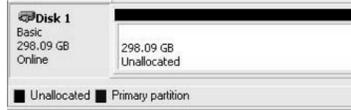
- Right-click on the external hard drive and select [Initialize Disk] to begin the partitioning and formatting process.

**Caution:** Please be careful not to initialize the used or existing HDD which includes any valuable DATA on it.

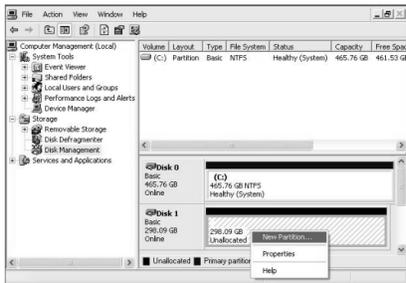
- Select “MBR” in the menu of [Initialize Disk] and press “OK”.



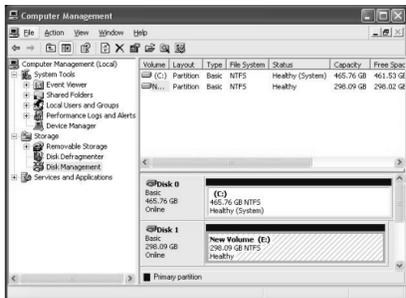
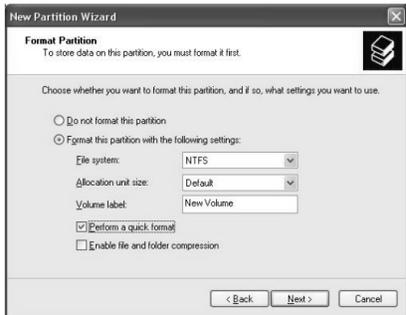
- [Initialize Disk] is completed, then the Hard Disk displays “Online”.



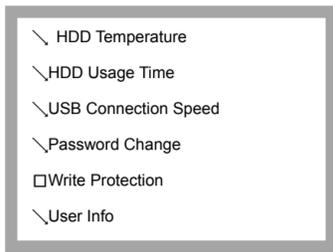
- Now, you can begin the partitioning and formatting process on the Hard Disk. Right-click on the driver’s space details (below picture) and select “New Partition...”.



- “New Partition Wizard” comes up giving you some selections about the new partition. In the first tab select the partition type. The usual is primary. Click ‘Next’ and set the partition size. Set the max size if you want all the space to be allocated to a single partition or smaller size if you want to create more partitions.



by one like the picture. You can move up and down in the menu by using 2 and 8 button. Press (Touch) “ENTER” button to go into the selected menu. Press “MENU” button to return to the previous menu.



### HDD Temperature

Show the temperature of HDD which is installed in XS1. (In case of SSD and some HDD models, it may not show the temperature info)



### HDD Usage Time

It shows the usage time of HDD installed in XS1. XS1 manages each usage time per HDD separately. If users initialize HDD, HDD usage time is also initialized.

‘A’ means the total usage time which users make real data reading and writing process on the installed HDD. ‘T’ means the total cumulative time which the installed HDD is connected to USB port regardless of data reading or writing process.

(‘H’: Hour / ‘M’: Minute / ‘S’: Second).



**HDD has a limited life (life-cycle).** It is always advisable to back up important data. ‘HDD Usage Time’ info can be useful for you to check and guess the life-cycle of your HDD.

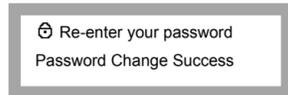
### USB Connection Speed

It shows the current USB port speed between XS1 and the connected PC or Laptop. It shows total 3 different USB connection types (USB 3.0, USB 2.0, USB1.0).



### Password Change

User can change the password which is being used under security mode. Go to [Password Change] in the menu and press [ENTER] button to run it. After inputting current password, new password input window come up.



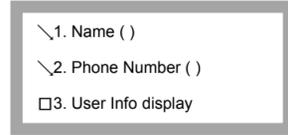
### Write Protection

Users can set up ‘write protection’ feature on the installed HDD. To use this feature, users have to select and check on the square box in menu by pressing “Enter” button. Under the write protection, nobody write or delete the data on the HDD, only read available.

### User Info

Users can show and display “User Name or Nick name” instead of Xtrfy logo. Also, in case of input wrong password, phone number can be displayed via front OLED display. It’s useful

function when users lost XS1 (security mode). To display Name and Phone number, users have to select and check on the square box in menu (3.User Info Display) by pressing “Enter” button.



Refer to below combination table for letter input method of Name. In case Phone Number, use front numeric tough panel to input the number. To input ‘-’, use ‘Enter’ button.

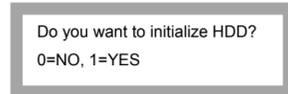
### How to input letters for Name

Check the below combination table of letter creation. Then, input each related numbers and press “Enter”, then the numbers is changed into the letter. After inputting all letters, just press ‘Menu’ button to apply.

0	SP	14	.	28	<	42	J	56	X	70	f	84	t
1	!	15	/	29	=	43	K	57	Y	71	g	85	u
2	"	16	0	30	>	44	L	58	Z	72	h	86	v
3	#	17	1	31	?	45	M	59		73	i	87	w
4	\$	18	2	32	@	46	N	60	\	74	j	88	x
5	%	19	3	33	A	47	O	61		75	k	89	y
6	&	20	4	34	B	48	P	62	^	76	l	90	z
7	'	21	5	35	C	49	Q	63	_	77	m	91	{
8	(	22	6	36	D	50	R	64	`	78	n	92	
9	)	23	7	37	E	51	S	65	a	79	o	93	}
10	*	24	8	38	F	52	T	66	b	80	p	94	~
11	+	25	9	39	G	53	U	67	c	81	q	95	
12	,	26	:	40	H	54	V	68	d	82	r		
13	-	27	:	41	I	55	W	69	e	83	s		

### Initialization of HDD usage mode

Users can initialize the HDD installed in XS1. Press (Touch) <I> button to initialize HDD. To make it clearly, press <I> button once again.



After HDD initialization, it’s impossible to rescue or recover any data on it. So, please be careful not to lose your valuable data and double check before HDD initialization.

### HDD Connection / Disconnection (Smart Mount/Un-mount Function)

Abruptly removing storage devices or external hardware from your PC can damage to the device and result in loss of data. So, it’s recommended to get in the habit of safely removing your external hardware via “Safely Remove Hardware”. But, it’s rather annoying job.

XS1 supports smart MOUNT and UN-MOUNT feature to make simple, convenient and safe hardware removal. Press “MENU” button over 2 seconds, then HDD is automatically disconnected. It works like [Safely Remove Hardware]. \* To run this function, there should be no data transfer between PC and XS1 at that time.



Again, press “MENU” button over 2 seconds, then HDD is automatically connected. (If XS1 is Security Mode, Password input window pops up. In case of normal mode, directly HDD is connected).



It’s very convenient feature when you step out for a moment leaving the connected XS1 on the desk.

## Q & A

- XS1 supports 2.5” SATA I, II, III?
  - Yes, it supports all.
- Is there a limit on 2.5” HDD Capacity which XS1 can use?
  - There’s no limit on 2.5” HDD capacity, but there’s a limit on the depth of 2.5” HDD. XS1 can install standard 9.5mm depth (thick) 2.5” HDD only. In case of 12.5mm thick HDD, it can’t be installed and used.

- How’s the data transfer speed under Security Mode? Is there any slow down or delay in data transfer due to using Security Mode?
  - Regardless of Security Mode, XS1 supports the same USB3.0 Super Speed.

- What’s AES 256 Encryption?
  - AES (Advanced Encryption Standard) is symmetric-key encryption standard adopted by the U.S. government. The AES ciphers have been analyzed extensively and are now used as a world top level security standard. AES 256 is the most advanced algorithm among AES standards (AES 128, 192, 256).

- I forgot my Password. Can I recover the data on HDD?
  - Without the correct password, nobody can connect and read the data on HDD of XS1.

To recover the DATA on HDD, We consider a user who has both XS1 unit and Master key as the real owner of the XS1 unit, for the emergency rescue. Users that needs emergency rescue have to contact Xtrfy: rescue@xtrfy.com and have both the XS1 Unit with the hard drive inside and the Master key ready. This is a precaution to prevent unauthorized access when it’s stolen There is also a cost to unlock the unit; this cost will be informed to you when you email rescue@xtrfy.com and the technician knows why the unit needs emergency rescue.

- In case the XS1 device gets damaged while in Security Mode and I can’t read any data on the HDD, even though there is no problem with the installed HDD. How can I recover the data HDD?
  - It is impossible. To recover the data, you have to contact Xtrfy: rescue@xtrfy.com and have both the XS1 Unit with the hard drive inside and the Master key ready. After checking Master key, Xtrfy will try to do support data recover & back-up for you.

- If I take off HDD from XS1 and connect it to PC, PC can read any data on HDD?
  - No! PC can’t read anything because it’s fully encrypted. It just recognizes it as an unformatted HDD.

- If I change HDD and set the same password, but why a new Master-key is created?
  - XS1 create a unique Master key per HDD. XS1 can remember and save max 50 different Master-key info on it.

- I change HDD and set the same password, but why a new Master-key is created?
  - XS1 create a unique Master key per HDD. XS1 can remember and save max 50 different Master-key info on it.

Exceed in HDD number limit. The first HDD information will be deleted. Do you want to continue? 0=No, 1=Yes

If the number of HDD exceed 50 (Max available quantity), the above message appears. If users select <1, Yes>, the first HDD info (among 50) is deleted and the HDD is totally initialized. If users select <0, No>, the connected HDD is just connected as a Normal mode (Not encrypted).

- My TV supports Media Play (Audio and Video). Can I connect XS1 to my TV and play the media files even under Safety Mode?
  - Yes, it’s the greatest advantage of XS1. You can connect XS1 to any device which supports USB Host. After entering Password, it works just like USB 3.0 super speed storage. (Blu-ray Player, Mobile phone, Media Player, TV, PC, MAC ...)

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## MENU of XS1

XS1 supports additional functions via “MENU” on it.

Press (Touch) ‘MENU’ button on the front touch panel, then OLED shows 5 main features one