

Document History

FW version	Date	Change List
V1.0	2012/1/23	Initial
V1.1	2013/7/11	<ol style="list-style-type: none"> 1. New HDD compatible 2. Touch panel support 3. Compatible with Windows 8 (32/64 bit) and IE 10 (32 bit)
V1.1.2	2013/9/6	<ol style="list-style-type: none"> 1. Add supported joystick functions 2. Add reminders on compatible monitor 3. Mark NS-8060 compatible HDD
V1.2	2013/10/23	<ol style="list-style-type: none"> 1. Remove AXUS from DAS supporting list due to its possibly unqualified performance 2. Mark NS-8060 compatible HDD (updated)
V2.0	2014/03/03	<ol style="list-style-type: none"> 1. Add HDD compatible list for NS-8065(RAID). 2. Compatible with Mac Safari and Windows Chrome
V2.0.1	2014/07/03	<ol style="list-style-type: none"> 1. Add WD Purple series HDD compatible list
V2.0.1	2014/09/04	<ol style="list-style-type: none"> 1. Add limitation on web browser support
V2.1	2014/09/25	<ol style="list-style-type: none"> 1. Add IE11 support
V2.1	2014/11/11	<ol style="list-style-type: none"> 1. Add Seagate 6TB Enterprise HDD support
V2.1	2014/11/14	<ol style="list-style-type: none"> 1. Add Seagate SV35 + SRS series support 2. Add ezNUUO browser support
V2.1.5	2015/02/05	<ol style="list-style-type: none"> 1. Support new joysticks
V2.2.2	2015/05/05	<ol style="list-style-type: none"> 1. Add Seagate Surveillance 4TB (HDD is CV13)support
V2.2.3	2015/06/10	<ol style="list-style-type: none"> 1. Add Seagate Surveillance support
V2.2.4	2015/10/12	<ol style="list-style-type: none"> 1. Add WD Surveillance 6TB and Toshiba Enterprise 4TB support 2. Add NS-8065 Surveillance support list
V2.2.5	2015/11/04	<ol style="list-style-type: none"> 1. Remote Client
V3.0.0	2016/03/01	<ol style="list-style-type: none"> 1. New client pack 6.1.705.5
V3.0.0 Hotfix	2016/05/05	<ol style="list-style-type: none"> 1. Fix critical Bug
V3.1.0	2016/10/03	<ol style="list-style-type: none"> 1. Seagate rebranding update for Surveillance and SkyHawk 2. Mark NP-8160 compatible HDD (new nvr product)
V3.2.0	2016/12/15	<ol style="list-style-type: none"> 1. NP-8160 support 4K2K local display
V3.3.0	2017/02/18	<ol style="list-style-type: none"> 1. Support USB joystick on local display
V3.5.0	2017/08/25	<ol style="list-style-type: none"> 1. Update Remote Client to 6.1.705.15 2. Add Seagate: ST8000VX022 & ST10000VX0004 for NP-8160

1. Hard Drives

Classify the compatible HDD into three types, enterprise, video surveillance and desktop. We recommend user to choose enterprise-level HDD and video surveillance-level HDD, which are with better command timeout control and reliability.

For the following conditions, we only suggest using enterprise-level HDD:

1. When the number of HDD is more than, or equal to, 5 HDDs.
2. When the NVR is installed on rack.

Green series hard drives should never be used with NUUO recorders to avoid data lost due to long wake up time from a sleeping drive.

[3.5-inch Hard Drives] Enterprise

Vendor	Family	Model	Capacity	Interface	FW	Tested Model			
						NS-1040 NS-1080	NS-8060	NS-8065 (RAID)	NP-8160
HITACHI	Ultrastar A7K2000	HUA722010CLA330	1TB	SATA 3Gb/s	JP40	V			
SEAGATE	Constellation ES.3/ Enterprise 3.5	ST6000NM0024	6TB	SATA 6Gb/s	SN02	V	V		
		ST4000NM0033	4TB	SATA 6Gb/s	0001	V			
		ST3000NM0033	3TB	SATA 6Gb/s	0001	V			
		ST31000524NS	1TB	SATA 3Gb/s	SN12	V			
	Constellation CS/ Terascale	ST2000NC000	2TB	SATA 6Gb/s	CE02	V	V	V	
		ST4000NC000	4TB	SATA 6Gb/s	CE02	V	V	V	
WD	WD RE4	WD2003FYYS	2TB	SATA 3Gb/s	01.0	V			
		WD1003FBYX	1TB	SATA 3Gb/s	01.0	V	V		
		WD5003ABYX	500GB	SATA 3Gb/s	01.0	V			
	WD RE	WD4000FYYZ	4TB	SATA 6Gb/s	01.0	V	V		
		WD3000FYYZ	3TB	SATA 6Gb/s	01.0	V	V		
		WD2000FYYZ	2TB	SATA 6Gb/s	01.0	V	V		
Toshiba	MG03ACAxxx	MG03ACA300	3TB	SATA 6Gb/s	FL1A	V	V		
		MG03ACA200	2TB	SATA 6Gb/s	FL1A	V	V		
		MG03ACA100	1TB	SATA 6Gb/s	FL0A	V	V		
	MC04ACA xxx	MC04ACA400E	4TB	SATA 6Gb/s	FP2A	V	V		

Some listed devices may not be available, please check with your local vendors.

Video Surveillance

Vendor	Family	Model	Capacity	Interface	FW	Tested Model			
						NS-1040 NS-2080	NS-8060	NS-8065	NP-8160
SEAGATE	SV35+SRS	ST3000VX004	3TB	SATA 6Gb/s	CV26	V	V		
		ST2000VX004	2TB	SATA 6Gb/s	CV26	V	V		
		ST1000VX002	1TB	SATA 6Gb/s	CV26	V	V		
	SV35 Series	ST3000VX000	3TB	SATA 6Gb/s	CV12/CV26	V	V		
		ST2000VX000	2TB	SATA 6Gb/s	CV12/CV26	V	V		
		ST2000VX002	2TB	SATA 6Gb/s	CV01	V			
		ST1000VX000	1TB	SATA 6Gb/s	CV12/CV26	V	V		
		ST6000VX0001	6TB	SATA 6Gb/s	VN02	V	V	V	V
	Surveillance	ST5000VX001	5TB	SATA 6Gb/s	VN02	V	V		
		ST4000VX000	4TB	SATA 6Gb/s	CV13	V	V		V
		ST3000VX006	3TB	SATA 6Gb/s	CV11	V	V		
		ST2000VX003	2TB	SATA 6Gb/s	CV11	V	V		
		ST1000VX001	1TB	SATA 6Gb/s	CV11	V	V		
		ST10000VX0004*	10TB	SATA 6Gb/s	AV01				V
		ST8000VX022 *	8TB	SATA 6Gb/s	AV01				V
	SkyHawk	ST4000VX007	4TB	SATA 6Gb/s	CV13	V	V		
		ST3000VX010	3TB	SATA 6Gb/s	CV11	V	V		
		ST2000VX008	2TB	SATA 6Gb/s	CV11	V	V		
		ST1000VX005	1TB	SATA 6Gb/s	CV11	V	V		
		ST6000VX011	6TB	SATA 6Gb/s	VN02	V	V		
	Surveillance + SRS	ST5000VX011	5TB	SATA 6Gb/s	VN02	V	V		
		ST4000VX002	4TB	SATA 6Gb/s	CV13	V	V		

		ST3000VX005	3TB	SATA 6Gb/s	CV11	V	V		
		ST2000VX005	2TB	SATA 6Gb/s	CV11	V	V		
		ST1000VX005	1TB	SATA 6Gb/s	CV11	V	V		
	Enterprise NAS	ST6000VN0001	6TB	SATA 6Gb/s	AN02	V	V		
		ST5000VN0001	5TB	SATA 6Gb/s	AN02	V	V		
	Enterprise NAS+SRS	ST6000NV011	6TB	SATA 6Gb/s	AN02	V	V		
ST5000NV011		5TB	SATA 6Gb/s	AN02	V	V			
WD	Purple Series	WD60PURX	6TB	SATA 6Gb/s	0A80	V	V	V	V
		WD40PURX	4TB	SATA 6Gb/s	80.0	V	V		V
		WD30PURX	3TB	SATA 6Gb/s	80.0	V	V		
		WD20PURX	2TB	SATA 6Gb/s	80.0	V	V		
		WD10PURX	1TB	SATA 6Gb/s	01.01A01	V	V		

Some listed devices may not be available, please check with your local vendors.

*Newly tested compatible hard drive models

Desktop

Vendor	Family	Model	Capacity	Interface	Firmware	Tested Model			
						NS-1040 NS-1080	NS-8060	NS-8065	NP-8160
HITACHI	Deskstar 7K1000.D	HDS721010DLE630	1TB	SATA 6Gb/s	5R0	V	V		
		HDS723030ALA640	3TB	SATA 6Gb/s	MKA0	V			
	Deskstar 7K3000	HDS723020BLA642	2TB	SATA 6Gb/s	MN60	V			
		HDS723015BLA642	1.5TB	SATA 6Gb/s	MN60	V			
SEAGATE	Barracuda 7200.11	ST31500341AS	1.5TB	SATA 3Gb/s	CC1H	V			
		ST31000528AS	1TB	SATA 3Gb/s	CC38	V			
	Barracuda 7200.12	ST3500413AS	500GB	SATA 3Gb/s	CC35	V			
		ST3000DM001	3TB	SATA 6Gb/s	CC46	V			
		ST2000DM001	2TB	SATA 6Gb/s	CC46	V			
	Barracuda 7200.14	ST1000DM003	1TB	SATA 6Gb/s		V			
		Barracuda LP	ST31500541AS	1.5TB	SATA 3Gb/s	CC34	V	V	
Barracuda XT	ST33000651AS	3TB	SATA 6Gb/s	CC45	V	V			
	ST32000641AS	2TB	SATA 6Gb/s	CC13	V				
WD	WD Caviar Black	WD2002FAEX	2TB	SATA 6Gb/s	05.0	V			
		WD1002FAEX	1TB	SATA 6Gb/s	05.0	V	V		
	WD Red NAS Hard Drives	WD30EFRX	3TB	SATA 6Gb/s	80.0	V	V		
		WD20EFRX	2TB	SATA 6Gb/s	80.0	V			
		WD10EFRX	1TB	SATA 6Gb/s	01.0	V			

Some listed devices may not be available, please check with your local vendors.

[2.5-inch Hard Drives] For 1bay device only Enterprise

Vendor	Family	Model	Capacity	Interface	Firmware
WD	WD AV-25	WD 10JUCT	1TB	SATA 3Gb/s	01.0
		WD5000LUCT	500GB	SATA 3Gb/s	01.0

Some listed devices may not be available, please check with your local vendors.

2. Monitor Support

Output Source	Resolution
HDMI VGA	1024x768, 60Hz
	1280x720, 60Hz
	1280x1024, 60Hz
	1920x1080, 60Hz
	2560x1440, 60Hz
	3840x2160, 60Hz

We improve HDMI compatibility in FW v1.1.2.

- 1) HDMI cable should be HDMI certificated, and its signal transmission quality depends on the diameter of wire (AWG) and the length of cable. If the length of your HDMI/VGA cable is over 1M, add a "repeater" to strengthen the signal.
- 2) When the UI/video image isn't at the correct location, correct it by the "auto adjust" function on the monitor or adjust it manually.
- 3) If encountering display issue, please use remote control to press the "10+" button, release it and press the "." button to switch monitor resolution (switching sequence: auto (default) → 1024x768 → 1280x720 → 1280x1024 → 1920x1080 → 3840x2160 (Only NVRsolo Plus support)). If it fails, please check the signal out via PC to make sure monitor is under standard regulations.

3. Touch Panel Support

Vendor	Model
Acer	T232HL
ViewSonic	TD2220

4. UPS Support

Vendor	Model
APC	APC Smart-UPS XL 3000VA (SUA3000XL)
APC	APC Back-UPS ES 500VA (BE500TW)

5. DAS Support

Vendor	Model	Host Interface	HDD
Promise	SmartStor DS4600	eSATA	SATA

6. UPnP Router (auto port-forwarding)

Vendor	Model
D-Link	DIR-300

Note: This is the model we tested for auto port-forwarding function. Basically, all router possess UPnP function should be compatible.

7. Joystick Support

Vendor	Model
Axis	T8311
Axis	295
Logitech	Attack 3

Note: NUUO supports all the models of joysticks that are compatible with Windows.

Supported functions:

Type	Function
View & Camera	Goto View # Goto Previous Camera Goto Next Camera
Screen Layout Switch	Switch Screen Layout Toggle Single Camera View Toggle Full Screen
PTZ Control	Goto Preset Point # Zoom Out Zoom In Start/Stop Patrol

8. Web Browser

Web Internet Explorer 8 (32 bit)						
OS	Windows XP-SP3 32 bit	Windows 2003-SP2	Windows Vista-SP2	Windows 7 32/64 bit	Windows 8 32/64 bit	Windows 10 32/64 bit
PASS/FAIL	PASS	X	X	PASS	-	-
Web Internet Explorer 9 (32 bit)						
OS	Windows XP-SP3 32 bit	Windows 2003-SP2	Windows Vista-SP2	Windows 7 32/64 bit	Windows 8 32/64 bit	Windows 10 32/64 bit
PASS/FAIL	-	X	X	PASS	-	-
Web Internet Explorer 10 (32 bit)						
OS	Windows XP-SP3 32 bit	Windows 2003-SP2	Windows Vista-SP2	Windows 7 32/64 bit	Windows 8 32/64 bit	Windows 10 32/64 bit
PASS/FAIL	-	-	-	PASS	PASS	-
Web Internet Explorer 11						
OS	Windows XP-SP3 32 bit	Windows 2003-SP2	Windows Vista-SP2	Windows 7 32/64 bit	Windows 8/8.1 32/64 bit	Windows 10 32/64 bit
PASS/FAIL	-	-	-	PASS	PASS	Pass
Web Chrome*						
OS	Windows XP-SP3 32 bit	Windows 2003-SP2	Windows Vista-SP2	Windows 7 64 bit	Windows 8 64 bit	Windows 10 64 bit
PASS/FAIL	-	-	-	PASS	PASS	Pass
Web Safari v6.1*						
OS	MAC OS X 10.6	MAC OS X 10.7	MAC OS X 10.8	-	-	
PASS/FAIL	-	PASS	PASS	-	-	
Web Safari v7.0*						
OS	MAC OS X 10.6	MAC OS X 10.7	MAC OS X 10.8	-	-	
PASS/FAIL	-	PASS	PASS	-	-	

-: not available

X: not compatible

*Below functions are not supported on Safari or Chrome.

- POS
- Fisheye dewarp

9.ezNUUO

ezNUUO is supported on Windows Internet Explorer and Windows Chrome only. It is not supported on Mac Safari.

10.FTP

OS	Windows XP-SP3 32 bit	Windows 2003-SP2	Windows Vista-SP2	Windows 7 32/64 bit	Windows 8 32/64 bit
PASS/FAIL	PASS	X	X	PASS	PASS

X: not compatible

11. Remote Client

Remote PC System Requirements

Remote PC Minimum Requirements	
OS Supported	Windows XP 32 bit, Windows 7 32/64 bit, Windows 8 32/64 bit, Win10 32/64-bit
CPU	Intel Core 2 Duo, 2.6GHz
RAM	1GB
User Interface	HTTP Web browser - Internet Explorer 8, 9, 10,11 (32 bit) NUUO client application program