

Blackjack[®] NAS

Network Attached Storage

Non-RAID	RAID1
DW-BJNAS4T	DW-BJNAS8TR
DW-BJNAS6T	DW-BJNAS12TR
DW-BJNAS8T	DW-BJNAS16TR
DW-BJNAS10T	DW-BJNAS20TR
DW-BJNAS12T	
DW-BJNAS16T	
DW-BJNAS20T	



Default login Information for Blackjack[®] NAS[™]

Username : **admin**

Password : **admin1234**

WHAT'S IN THE BOX

12V DC Adapter &
Power Cable



1 Set

NOTE: Download All Your Support Materials and Tools in One Place

1. Go to: <http://www.digital-watchdog.com/support-download/>
2. Search you product by entering the part number in the 'Search by Product' search bar. Results for applicable part numbers will populate automatically based on the part number you enter.
3. Click 'Search'. All supported materials, including manuals, Quick Start Guide (QSG), software and firmware will appear in the results.

Attention: This document is intended to serve as a quick reference for initial set-up.
See the DW Spectrum full manual for more information on features and functionality.

Important

Read Before System Operation. Follow these details to prevent material damage or personal injury.

Warning

1. Use the power cord, which is supplied or recommended by the supplier, or it may cause fire.
2. Do not disassemble or reassemble the product. It may cause malfunction or fire.
3. Enquire to your vendor for repair. It may cause electric shock or fire if the repair is not done properly.
4. Do not touch the product with wet hands. It may cause malfunction or electric shock.
5. Product installation must be ensured to a professional for product installation, or it may cause malfunction, electric shock or fire.
6. Ground connection must not touch gas pipe, water pipe or telephone line. If grounding is not done properly, it may cause electric shock.
7. Prevent metallic foreign substance from going inside the product. It may cause malfunction or electric shock.
8. Do not spray insecticide or flammable spray while driving. It may cause fire.
9. Place the system in an open place where air ventilation is guaranteed, or it may cause over-heating and seriously damage the system to be fired.
10. Prevent water from instilling inside electrical parts. Clean with a dry towel or malfunction or electric shock could result.
11. Must use the outlet of the grounding to connect the power cord, or it may cause fire.
12. Do not connect on the middle of power cord or use extension cord. It may generate heat or cause fire.
13. Do not touch the power cord with wet hands. It may cause electric shock.
14. Keep power cord dry and protect from humidity. It may generate heat or cause fire. The power cord is not waterproof.
15. Hold the body of the plug while removing the power plug. Do not pull the power cord. Damage to the power cord may generate heat or cause fire.
16. Check the power plug regularly. Humidity and moderation in smoking may cause fire.
17. Remove power cord from outlet when product is not used for a long time. It may cause short-circuit or electric shock.

Cautions

1. Do not drop, give strong vibration, or shock to the product. It may cause malfunction.
2. Do not touch the product or the power cord when there is thunder. It may cause electric shock.
3. Do not install the product near or on top of heating source. The internal temperature of the product would be greater than allowable and could cause malfunction or fire.
4. Do not install the product on inclined or unstable location or where vibration could be committed. It may cause malfunction.
5. Do not cut off the power artificially, or give shock or vibration to unit while the hard disk is activating. It may cause hard disk failure or loss of data.

Remarks

- ※ Pictures and buttons are subject to be changed or modified up to different models.
- ※ Function or configuration is subject to be changed or modified without prior notice for improvement of the product.

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1. Getting started

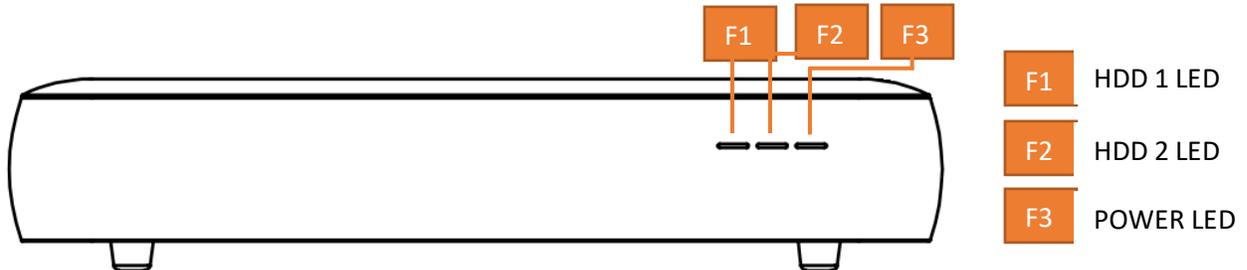
1.1. Checking supplied items

Make sure that you have following items supplied. If any of these items are missing or damaged, notify your vendor immediately. Keep the packing utilities for moving or storage purposes.

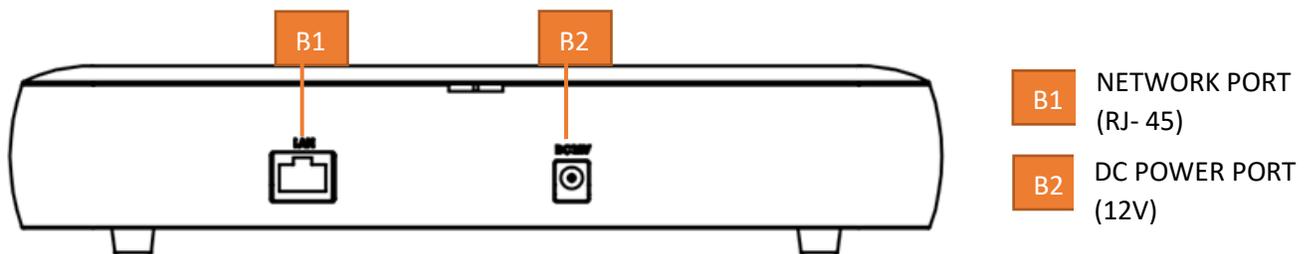
Items	Photo	Quantity
12V DC Adapter & Power Cable		1 set

1.2. Blackjack[®] NAS hardware overview

Front-side



Back-side



2. Setup

2.1. Setting up the Blackjack[®] NAS

STEP 1: Connecting the network cable.

1. Connect the network cable to the network port **B1** and a network switch.

NOTE It is recommended to use Gigabit switch for a stable storage performance.

STEP 2: Connecting the power cable

1. Connect the power cable to the DC power port **B2**. The Blackjack[®] NAS will turn on.
2. The front power LED **F3** will indicate whether the Blackjack[®] NAS is on.

STEP 3: Configure the network settings

On a computer in the same network as your Blackjack[®] NAS unit:

1. Go to: <http://www.digital-watchdog.com>
2. Search for 'IP Finder' on the quick search bar at the top of the page.
3. The latest IP Finder software will appear in the search results. Click on the link to download the file to your computer.
4. The software will scan your network for all supported cameras and display the results in the table. Allow up to 5 seconds for the IP Finder to find the camera on the network.
5. Find "Blackjack NAS" on the devices list, click on the "Click" button in the column of "IP Conf."

DW Device Settings

Camera Name: DW-BJ2NAS6T

MAC Address: OC:F0:19:01:02:79

DHCP

Static IP

IP Address: 192.168.0.155

Netmask: 255.255.255.0

Gateway: 192.168.0.1

Number of volume: 2

Storage URL for Spectrum

-Volume 1: \\192.168.0.155\Recording1

-Volume 2: \\192.168.0.155\Recording2

Username: admin

Password: ●●●●●●●●

Website Apply Cancel

NOTE Initial network information

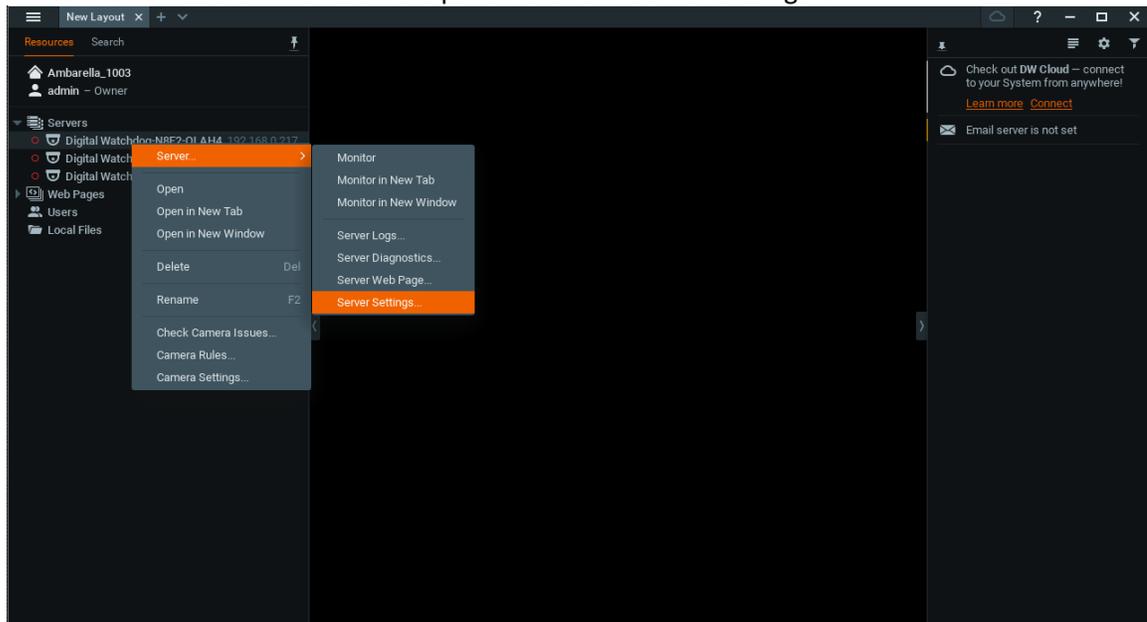
- Network type: Static
- IP Address: 192.168.1.200
- Netmask: 255.255.255.0
- Gateway : 192.168.1.1

6. Enter the network information, username and password.
7. Click on the "Apply" button.

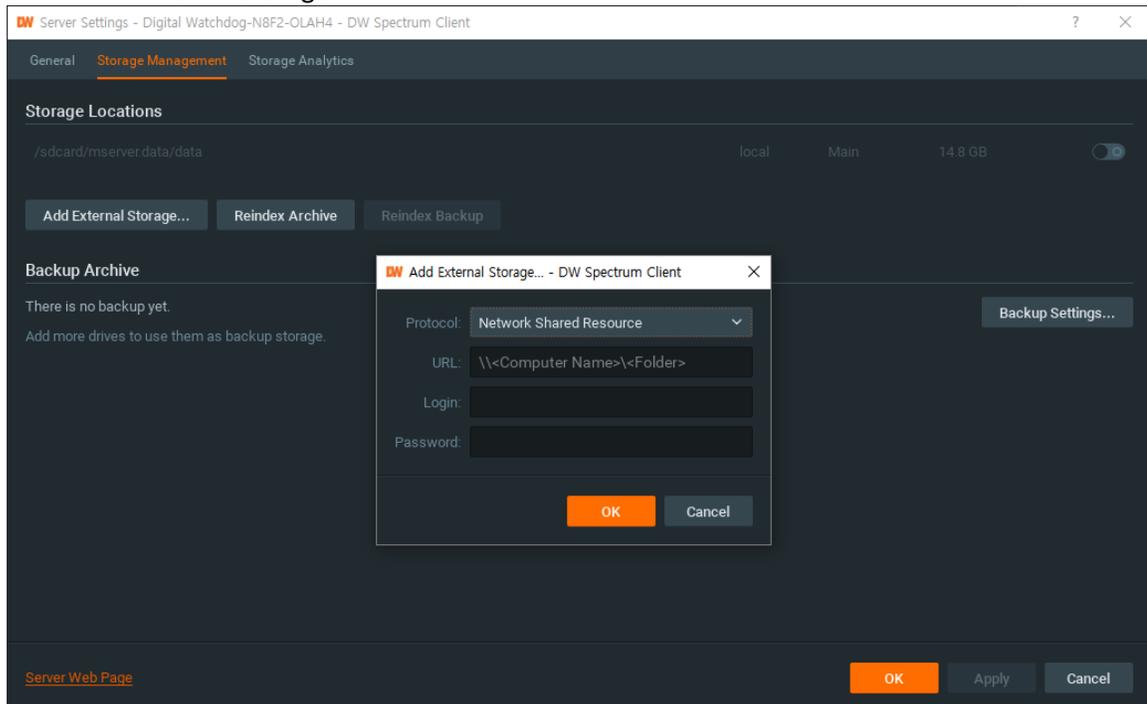
2.2. Add storage to DW Spectrum[®] IPVMS



1. Open DW Spectrum[®] Client by double click on the DW Spectrum[®] icon.
2. Right click on the name of the server you want to assign the external storage to. The server's name will be listed on the resources panel. Click on "Server Settings".



3. Click "Add External Storage".

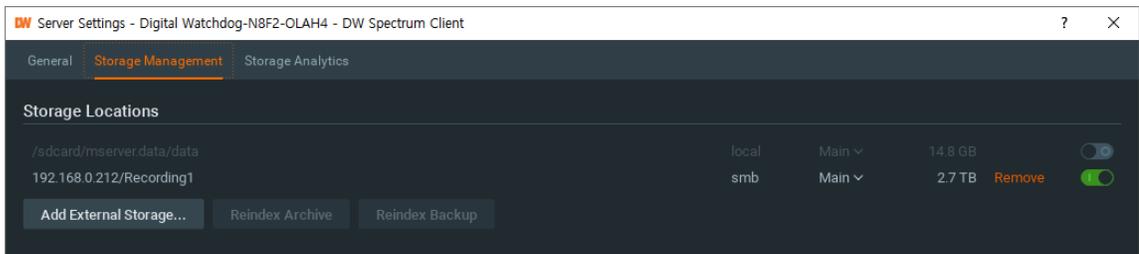


4. Input the URL : \\ (Blackjack NAS IP Address) \Recording1

E.g. \\192.168.0.212\Recording1

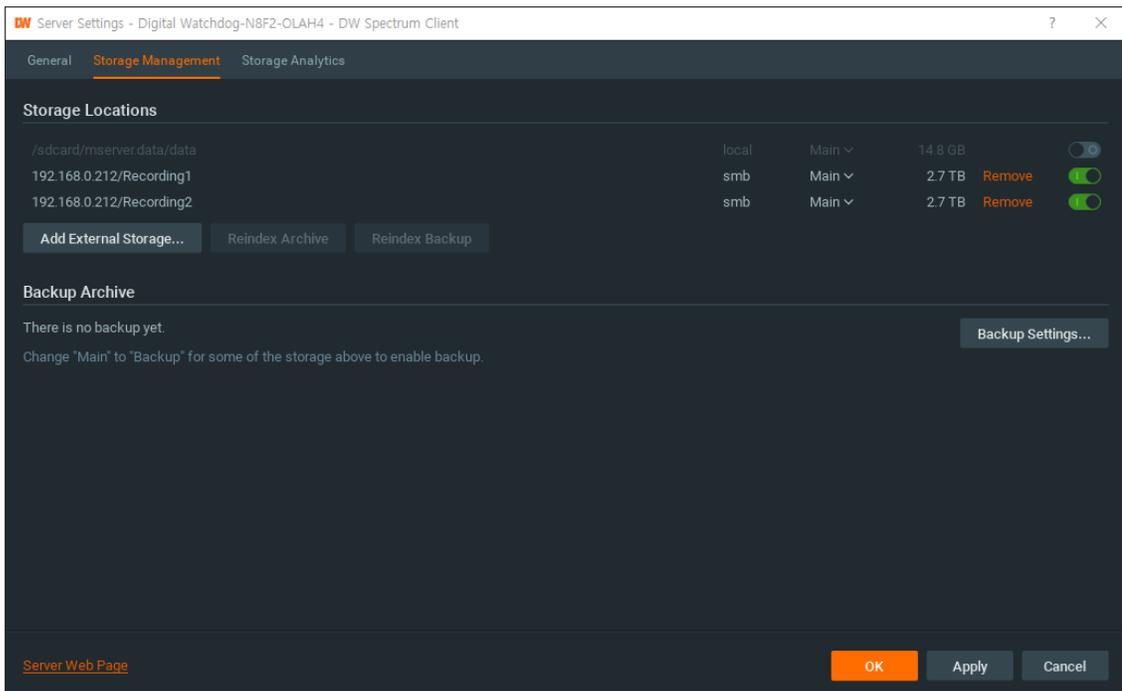
5. Input the login name and the password then click on the “OK” button.

NOTE Default login Information
Login name: **admin**, Password: **admin1234**



6. If you are adding a Blackjack[®] NAS model with 2HDDs (**DW-BJNAS12T**, **DW-BJNAS16T** and **DW-BJNAS20T**), add the second external storage by using the following URL:\\(Blackjack NAS IP Address)\Recording2

E.g. \\192.168.0.212\Recording2



7. Click on the “OK” button.

3. Web manager

The Blackjack[®] NAS web manager allows you to check on the status of the unit and change settings remotely with no need to install a separate application.

3.1. Web login

- ① Open a web browser and enter the address below in the address bar. The login screen below will be displayed.

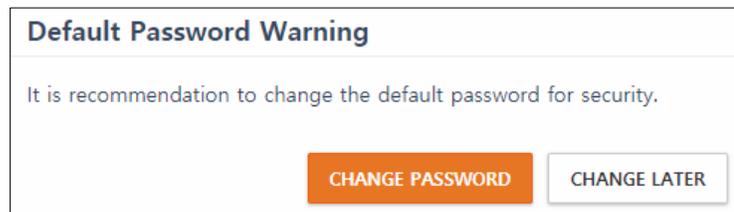
NOTE Web Viewer Address: HTTP://<EQUIPMENT IP ADDRESS>
(E.G.) HTTP://192.168.1.200



- ② Enter the user name and password. The user name is set to admin by default.

NOTE Default login Information
Login name: **admin**, Password: **admin1234**

- ③ Click on the “LOGIN” button.
- ④ If using the default password “admin1234”, the following message will appear.



3.2. Storage management

- ① To manage the storage setting, click on the “Storage” tab. You can view the storage mode, usage, connection information and internal HDDs information.

The screenshot shows the 'Storage' tab in the web interface. At the top, there are tabs for 'Storage' and 'System', and a 'Logout' button. The main content area is titled 'Storage' and displays the following information:

- Storage Mode:** Maximum Capacity (Basic). A 'FORMAT' button is visible below this section.
- Storage Usage:** Two progress bars for HDD 1 and HDD 2, both showing '2.8 TB free of 3 TB'.
- Storage Connection Info:** Two buttons: 'SPECTRUM CONNECTION GUIDE' and 'SAMBA CONNECTION STATUS'.
- HDD List:** A table with columns: Model, Temperature, Capacity, Status, and Health.

	Model	Temperature	Capacity	Status	Health
HDD 1	ST3000DM001-9YN166	46°C	3.00 TB	WORKING	GOOD
HDD 2	ST3000VX002-1F416R	42°C	3.01 TB	WORKING	GOOD

- ② To format the HDDs, click on the “FORMAT” button. The storage format screen will pop up.

The 'Storage Format' dialog box contains the following options and information:

- Maximum Capacity (Basic)**
Available Capacity : 3.00 TB + 3.01 TB
Combines a collection of drives into a single storage space, with capacity equal to the sum of all drives' capacity. Does not provide data redundancy.
- Maximum Protection (Mirroring)**
Available Capacity : 3.00 TB
Data on the drives are mirrored, providing fault tolerance in case of drive failure. A single drive failure can be sustained without data loss.

All data stored on the HDD will be deleted.
If you like to continue, please enter the password.

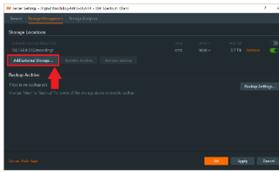
Password:

Buttons: CLOSE, APPLY

- Select the storage mode
 - Basic: Make the mounted HDDs each volume. Blackjack[®] NAS uses all capacity of the mounted HDDs.
 - Mirroring: Data on the drives are mirrored, providing fault tolerance in case of drive failure. It needs two HDDs.
 - Enter the administrator password.
 - Click on the “APPLY” button. Then all data stored on the HDD will be deleted, and reset the storage mode.
- ③ To view the guide of connecting to DW Spectrum[®] IPVMS, click on the “SPECTRUM CONNECTION GUIDE” button.

Spectrum Connection Guide

In Spectrum, Go to
[Server Settings > Storage Management > Add External Storage](#)



Step 1. Input the URL below URL information table

Volume	Storage URL for Spectrum
Volume 1	\\192.168.11.212\Recording1
Volume 2	\\192.168.11.212\Recording2

Step 2. Input the Login: **admin**
 Step 3. Input the Password: **admin1234**

- ④ To view the status of the SAMBA connections, click on the “SAMBA CONNECTION STATUS” button.

SAMBA Connection Status

Connected Target	Connected from	Connected at
Recording1	192.168.11.214	2017-12-29 02:29:39
	192.168.11.213	2017-12-29 02:29:39
	192.168.11.215	2017-12-29 02:29:42
	192.168.11.216	2017-12-29 02:29:42
	192.168.11.218	2018-01-03 08:00:13
Recording2	192.168.11.219	2017-12-29 02:29:46
	192.168.11.217	2017-12-29 08:41:47
	192.168.11.214	2017-12-29 02:29:39
	192.168.11.213	2017-12-29 02:29:39
	192.168.11.217	2017-12-29 02:29:43
	192.168.11.215	2017-12-29 02:29:42
	192.168.11.219	2017-12-29 08:54:58

- ⑤ To View the S.M.A.R.T. information of the HDD, click on the link of the health status in the column of the “Health”.

[HDD 1] S.M.A.R.T. Information

ID	Attribute Name	Value	Status
1	Rair_Read_Error_Rate	33099000	OK
3	Spin_Up_Time	0	OK
4	Start_Stop_Count	840	OK
5	Reallocated_Sector_Ct	0	OK
7	Seek_Error_Rate	635863122481	OK
9	Power_On_Hours	8478	OK
10	Spin_Retry_Count	0	OK
12	Power_Cycle_Count	765	OK
183	Runtime_Bad_Block	34	OK
184	End-to-End_Error	0	OK
187	Reported_Uncorrect	297	OK
188	Command_Timeout	4	OK
189	High_Fly_Writes	0	OK
190	Airflow_Temperature_Cel	43	OK
191	G-Sense_Error_Rate	0	OK
192	Power-Off_Retract_Count	806	OK
193	Load_Cycle_Count	14768	OK
194	Temperature_Celsius	43	OK
197	Current_Pending_Sector	0	OK
198	Offline_Uncorrectable	0	OK
199	UDMA_CRC_Error_Count	2	OK
241	Total_LBAs_Written	109649362389024	OK
242	Total_LBAs_Read	225488263577937	OK

3.3. General management

- ① To manage the general setting, click on the “System” tab and then click on the “General”.

The screenshot shows the 'System' tab selected in the top navigation bar. The 'General' settings page is displayed, featuring a 'General' title and two main sections: 'Information' and 'Password Settings'. The 'Information' section includes input fields for 'Model Name' (DW-8J2NAS6T), 'Serial Number' (MCB17000009), and 'Firmware Version' (1.0.0_171226). Below these fields are three buttons: 'UPDATE' (orange), 'FACTORY RESET' (white), and 'RESTART' (white). The 'Password Settings' section has input fields for 'New Password' and 'Confirm Password', with a note below the first field stating 'Password must be 8-15 characters in length. DETAILS'. An 'APPLY' button (orange) is located at the bottom of the password settings.

- ② To update a firmware, click on the “UPDATE” button.
- Select the firmware update file.
 - Click on the “OK” button.
 - After updating the firmware, the BlackJack NAS will restart.
- ③ To restore BlackJack[®] NAS to default settings, click on the “FACTORY RESET” button. The confirmation window below will pop up.

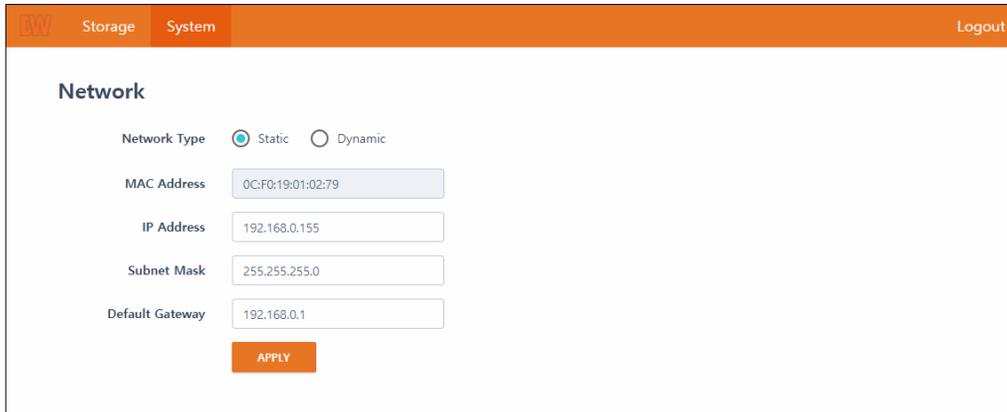
The dialog box is titled 'Factory Reset'. It contains the following text: 'You can restore the system to its default settings. All data stored on the HDD will be deleted and the entire system will be restored to default settings. If you like to continue, please enter the password.' Below the text is a 'Password' input field. At the bottom right, there are two buttons: 'CLOSE' (white) and 'APPLY' (orange).

- Enter the administrator password.
 - Click “APPLY”. All data stored on the HDD will be deleted and the entire system will be restored to default settings, including network setting.
 -
- ④ To restart the BlackJack[®] NAS, click “RESTART”. The confirmation window below will pop up. Click on the “OK” button, then the BlackJack[®] NAS will restart.

The dialog box asks 'Are you sure you want to restart the system?' and has a close button (X) in the top right corner. At the bottom, there are two buttons: 'CANCEL' (white) and 'OK' (orange).

3.4. Network management

① To manage the network setting, click on the “System” tab and then click on the “Network”.



The screenshot shows the 'Network' configuration page in the Blackjack NAS web interface. At the top, there is a navigation bar with 'Storage' and 'System' tabs, and a 'Logout' link on the right. The 'System' tab is active. Below the navigation bar, the page title is 'Network'. The configuration options are as follows:

- Network Type:** Radio buttons for 'Static' (selected) and 'Dynamic'.
- MAC Address:** Text input field containing '0C:F0:19:01:02:79'.
- IP Address:** Text input field containing '192.168.0.155'.
- Subnet Mask:** Text input field containing '255.255.255.0'.
- Default Gateway:** Text input field containing '192.168.0.1'.
- APPLY:** An orange button to save the changes.

- Select the network type “Static” or “Dynamic”.
- If you select the “Static” option, you need to manually enter the IP address, subnet mask and default gateway information.
- Click on the “APPLY” button to apply all changes.

3.5. SMTP (e-mail) management

- ① To manage the SMTP (e-mail) settings, click on the “System” tab and then click on the “SMTP (e-mail)”.

The screenshot shows the 'SMTP(E-Mail)' configuration page. At the top, there are navigation tabs for 'Storage' and 'System', and a 'Logout' link. The page title is 'SMTP(E-Mail)'. Below the title, there are three main sections: 'SMTP Settings', 'SMTP Server Settings', and 'E-Mail Settings'. In the 'SMTP Settings' section, there is a 'Use' checkbox which is currently unchecked. The 'SMTP Server Settings' section includes: 'SMTP Server Address' (text input), 'SMTP Server Port' (text input with '25' entered), 'Enable encrypted connection(TLS)' (checkbox, unchecked), and 'Use authentication to log in the SMTP server' (checkbox, unchecked). Below these are 'User ID' and 'Password' text input fields. The 'E-Mail Settings' section includes 'E-Mail Sender' and 'E-Mail Receiver' text input fields. At the bottom of the form is an orange 'APPLY' button.

- ② To send a notification email to a designated email account when an event occurs, such as device malfunction, check the “Use” in the SMTP Settings.
 - a. Enter the SMTP server address and the SMTP server port.
 - b. If the server uses the encrypted connection (TLS), check the box.
 - c. If the server use authentication to log in, check the box. Enter the user ID and the password.
 - d. Enter the e-mail sender address and e-mail receiver address.
 - e. Click on the “APPLY” button.

3.6. Date & time management

- ① To manage the date & time setting, click on “System” tab, and then click on the “date & time”.

The screenshot shows the 'Date & Time' configuration page. It includes a 'Current Time' field showing '2018-01-03 06:10:13'. The 'Time Zone Settings' section has a dropdown menu for 'Time Zone' set to '(GMT-08:00) Pacific Time (US & Ca)'. The 'Time Settings' section has a 'Mode' section with 'Manual' selected. Below that, there are 'Date' and 'Time' input fields with calendar and clock icons. The 'Synchronize with Time Server (NTP)' option is checked, and the 'Server' field contains 'pool.ntp.org'. An 'APPLY' button is located at the bottom of the form.

- a. To setup the time zone, select the time zone.
- b. To setup time manually, check the “Manual” option and select date and time.
- c. To synchronize with a time server (NTP), check the “synchronize with time sever (NTP)” option and enter the address of the time server.
- d. Click on the “APPLY” button.

3.7. Log management

- ① To manage the system log, click on the “System” tab, and then click on the “Log”.

The screenshot shows the 'Log' management page. It features a table with the following data:

DATE	TYPE	MESSAGE
2018-01-03 06:11:06	INFO	Log data is deleted.

At the top right of the table area, there are two buttons: 'DELETE' and 'DOWNLOAD'. A small red box with the number '1' is located below the table.

- ② To delete all log data, click on the “DELETE” button and click on the “OK” button in the confirmation window. Then all the log data will be deleted.
- ③ To download all log data, click on the “DOWNLOAD” button and click on the “OK” button in the confirmation window. Then all the log data will download as a text file.



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