RAIDON

NAS Solution SL3610/20-2S-LB2

User Manual



Version: 1.0 (September, 2008)

Introduction

About this User Manual

Thank you for using the product of RAIDON Technology Inc..

This user manual will introduce the **RAIDON SL3610/20-2S-LB2** products. It is recommended that you read this manual carefully before using the **SL3610/20-2S-LB2** product. Although the information has been verified before published, specifications are subject to change without prior notice. Please refer to **www.RAIDON.com.tw** or contact your sales representative for any product specification or update of related information.

If you have any questions on RAIDON products or need the latest product information, user manual or firmware, please contact us at **supporting@raidon.com.tw** and we will get back to you as soon as possible.

NOTE: **RAIDON Technology Inc.** only provides technical support and service to RAIDON direct customers. For end users or non-direct customers, please contact your distributor for prompt and better responses. If your product is not purchased directly from RAIDON, please do not contact us directly since you may not get any reply.

All the product information in this manual is the property of RAIDON Technology Inc. All rights reserved

Contents

Chapter 1	RAID Introduction	5
1.1	What is RAID?	5
1.2	RAID Functions	
1.3	RAID 0 vs. RAID 1	
Chapter 2	Installation	7
2.1	Accessories Check	7
2.2	Hardware Installation	10
2.3	Initial Setup	
Chapter 3	User Interface Introduction	13
3.1	User Interface Architecture	13
3.2	Login	
3.3	Set RAID Directly without Formatting	16
3.4	Basic	17
3.4.1	Wizard	17
3.4.2	Add User	20
3.4.3	Add Group	21
3.4.4	Add Share	22
3.5	Control Panel	23
3.5.1	Users and Groups	23
3.5.1.1	User Management	23
3.5.1.2	Group Management	23
3.5.2	File	24
3.5.2.1	File Server.	24
3.5.2.2	Share Management	24
3.5.3	System	26
3.5.3.1	LAN Setting	26
3.5.3.2	Time Setting	27
3.5.3.3	Turn Off Server	27
3.5.3.4	Information	28
3.5.3.5	Disk Usage	28
3.5.3.6	Error Notification Setting	29
3.5.4	Network Service	30
3.5.4.1	DHCP Server	30
3.5.4.2	Bonjour	30
3.5.5	Maintenance	30
3.5.5.1	Disk Utility	30
3.5.5.2	RAID Setting	31

3.5.5.3	Firmware Upgrade	32			
3.5.5.4	Save Configuration	32			
3.5.5.5	Restore Configuration	33			
3.5.5.6	Factory Reset	33			
3.5.6	Log File	33			
3.5.6.1	Samba Log File	33			
3.5.6.2	FTP Log File	34			
3.5.6.3	DHCP Server Log File	34			
3.5.6.4	System Log File	34			
3.5.6.5	Administrator Log File	34			
3.6	Personal Information	34			
3.7	Software Update&TorrentFlux	35			
3.8	Operation Methods for Change and Search of the IP Address				
	of SL3610/20-2S-LB2	37			
3.9	Logout	37			
Appendix A	A Use Method of Setup Util.exe	37			
Appendix B Complete Firmware Update Process 4					
Appendix CIntroduction of LCD Display Items4					
Appendix DFrequently Asked Questions4					

Chapter 1 RAID Introduction

1 1 What is RAID?

RAID (redundant array of independent disks or redundant array of inexpensive disks) Whenever and wherever we are, we store our data in a hard drive. Abnormally access, slower speed and unresponsiveness are all expected when an accident occurs or the hard disk reaches its service life because a hard disk is widely used. By then, all data stored within may be destroyed and become permanently irretrievable. RAID technology spares you from the threats of losing your data again!

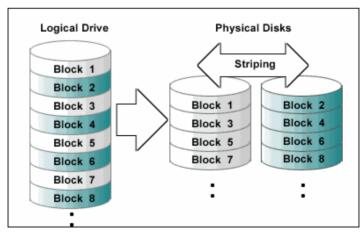
RAID (redundant array of independent disks or redundant array of inexpensive disks) allows you to store your data into multiple drives by dividing them up into segments. It provides data redundancy and creates a fault-tolerant environment for data storage. With multiple drives used (at least 2) in a RAID, it increases storage capacity as well as enhances the speed of data transfer. Be equipped with it and you will never have to worry about the integrity of your data again because your data will be 100% protected.

1.2 RAID Functions

- · Expanding storage capacity
- · Increasing data transfer speed
- · Saving cost
- · Inherent Fault Tolerance
- · Hot Swap Capability
- · Auto-Rebuild of Data
- · Hot Spare Drive
- · On-line Capacity Expansion

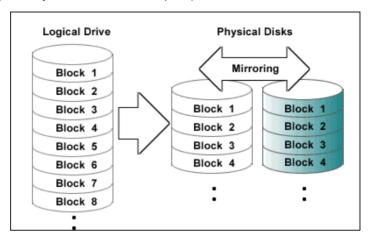
13 RAID 0 vs RAID 1

SL3610/20-2S-LB2 provides RAID 0 and RAID 1 functions described as follows: Striping (fast, has no fault tolerance; requires at least two hard disks)



The RAID 0 array does not backup data, so it is not regarded as a real RAID application. If one of the hard disks is damaged, the entire array will fail, and all data in the array will be lost. Therefore, the fault tolerance of RAID 0 is lower than that of any hard disk in the array. However, RAID 0 is still the term widely used to describe these arrays. It is because that its basic idea is similar to real RAID application.

Mirroring (High security: at least 2 hard disks required)



In the RAID 1 array (commonly referred to as mirroring array), hard disks are paired up; each of the two disks contains identical data. As data is written into the mirroring array, it will be written at once and read simultaneously. Mirroring array is highly reliable. Because it will not fail until the paired hard disks fail at the same time. For instance, in a mirroring array of five-pair hard disks, even as many as five hard disks fail, the array still can maintain the data integrity -- as long as each pair has one good hard disk left.

Below is the comparison between 2 RAID levels:

RAID Level	Basic Operation Method	Hard Disk Available Capacity	Data Reliability	Data Transfer Speed	Minimum Number of Hard Disks
0	Striping data across each drive	Total capacity of all the hard disks	Low	Highest	2
1	Mirroring	Half of total capacity of all the hard disks	High	Lower	2

For more information of RAID, refer to our website at www.RAIDON.com.tw

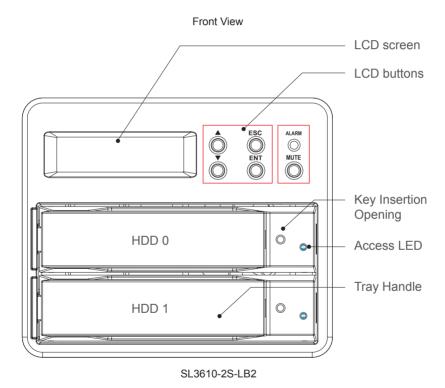
Chapter 2 Installation

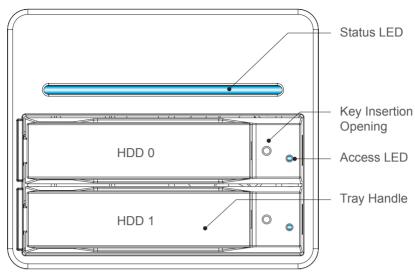
2.1 Accessories Check

After you open the outer package, make sure that the following items are contained in the package:

- · SL3610/20-2S-LB2 product body
- · AC Power Cord
- · CD (including information such as setup software, product specification and user manual, etc.)
- User Manual
- · Accessory Kit

Make sure the related accessories and the product body are not damaged or missing. If you have any questions, contact the distributor or sales.





SL3620-2S-LB2



- A Notice: 1. If the hard disks are inserted and the formatting or disk array setting is completed, do not change the position of the disks arbitrarily.
 - 2. To replace or remove the hard disks, please shut down the machine and turn off the power first. Removing the hard disks while the power is on will result in system malfunction and may damage the data.

Description of LED Indicators

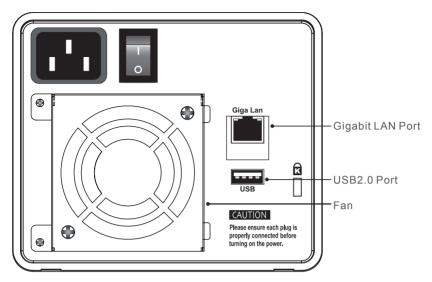
SL3610-2S-LB2

	Alarm LED	Access LED	
Power On	Lights on blue permanently	Blinks blue	
System Ready	Lights on blue permanently	N/A	
RAID Fail	Lights on purple permanently	Blinks red	
Rebuilding	Blinks blue	Blinks between blue and purple	
Fan Fail	Blinks purple	N/A	
Over High Temperature	Lights on purple permanently	N/A	
Access	Lights on blue permanently	Blinks blue	

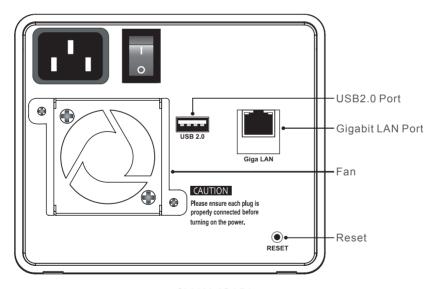
SL3620-2S-LB2

	Status LED	Access LED	
Power On	Blinks blue	Blinks blue	
System Ready	Lights on blue permanently	N/A	
RAID Fail	Lights on blue permanently	Blinks red	
Rebuilding	Blinks between blue and purple	Blinks between blue and purple	
Fan Fail	Blinks between blue and purple	N/A	
Over High Temperature	Lights on purple permanently	N/A	
Access	Lights on blue permanently	Blinks blue	

Rear View



SL3610-2S-LB2



SL3620-2S-LB2

- 1. The indicator on the left will light on green when Gigabit LAN Port is connected to Gigabit LAN and the indicator on the right will light on orange when Host Access is enabled.
- 2. With startup completed, press and hold the "Reset" key for 5 seconds and the system will be reset to default settings.

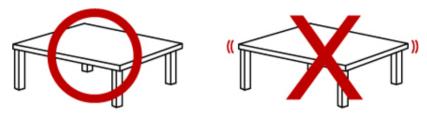
2.2. Hardware Installation

Please follow the procedure below to complete the hardware installation of SL3610/20-2S-LB2:

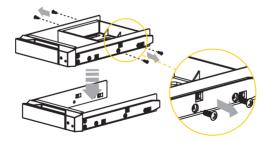
1. Open the outer package and take out the product body. (Make sure the related accessories and the product body are not damaged or missing. If you have any questions, contact the distributor or sales)



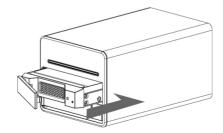
Mount the product to a stable surface. Make sure that the fan is not blocked and there is appropriate space around for heat dissipation. (Do not place the product nearby water area or any environment that may cause damage to the product)



3. Take out the tray and install your hard disk in it. Make sure to fasten the hard disk securing screws to prevent damages caused by unnecessary movement.



4. Once the installation is completed, insert the tray back and fix it firmly in the proper place.



- 5. Connect the Gigabit LAN port and, finally, connect the power cord.
- 6. Hardware installation is completed. You can power on the system to start the related setup and application.
- 7. You can use related management interfaces to make the respective configurations. Please refer to Chapter 3.

2.3. Initial Setup

SL3610/20-2S-LB2 supports the use of the graphic user interface (GUI) for system management. You can manage settings via the GUI. It takes about 2 minutes to start SL3610/20-2S-LB2 after power on. Before the startup is completed, the system will be unable to find SL3610/20-2S-LB2.

1. Open the browser and enter the IP address, e.g. http://10.1.2.200 (your own host IP address). Change the IP address of SL3610/20-2S-LB2 first (the factory default IP address is 192.168.1.1) to 10.1.2.XXX. For operation methods, refer to Chapter 3.

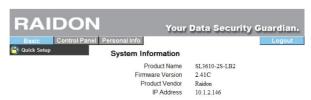




The default account and password are as follows: Login Username: admin

Default Password: admin

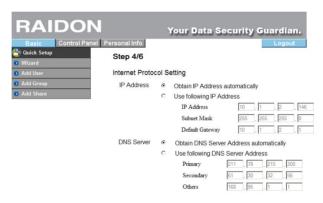
- 2. If you use formatted hard disks, the system will display current system information and setting will be available. If you use 2 new hard disks, you need to format the hard disks or create a disk array first. Enter "Maintenance" and click "Disk Utility" if you want to format the hard disks separately or "Disk Array" if you want to set the disk array directly. Once formatting or disk array setting is completed, the system will restart. After login, the system will display the present system information and setting is available. For detailed descriptions of system setting and hard disk formatting, refer to Chapter 3.
- X If you use formatted hard disks, the system will display the present system information and be ready for setting.



* When a new hard disk is detected, the system will require formatting first.



3. Once setting is available, enter "Basic Setting" and click "Wizard" to change the system related information, including host name, IP address and password, etc. For detailed descriptions, refer to Chapter 3.



Change IP setting



- A Notice: 1. Before the disks are formatted or the disk array is created, be sure not to change any system. information. Since all system information will be recorded in the hard disk, all system will be lost if the hard disk is formatted again or the disk array level is changed.
 - 2. If you need to install another SL3610/20-2S-LB2, be sure to change the host name, IP address and p assword of the first one for recognition by the machines you set subsequently and to make sure that the IP address will not be changed randomly.
- 4. Once the system information is changed, the system will restart automatically. After login, you can use the system normally and installation is complete. You can start to perform related share and authority settinas.

A Notice: 1. If you change the IP address, the system may display "unable to open the web" after restart. Enter the new IP address in the browser and you will see the login page.

Chapter 3 User Interface Introduction

3.1 User Interface Architecture

The following is the UI architecture:

Basic		
Quick Setup	\rightarrow	Wizard
		Add User
		Add Group
		Add Share
Control panel		
Users and Group	\rightarrow	User Management
		Group Management
File	\rightarrow	File Server
		Share Management
System	\rightarrow	LAN Settings
		Time Settings
		Turn Off Server
		Information
		Disk Usage
		Error Notification
Network Service	\rightarrow	DHCP Server
		Bonjour
		BTorrent
Maintenance	\rightarrow	Disk Utility
		RAID Settings
		Firmware Upgrade
		Save Configuration
		Restore Configuration
		Factory Reset
Log File	\rightarrow	Samba Log
		FTP Log
		DHCP Server Log
<u> </u>		System Log
		Administration Log
Personal Info		
Personal Information	\rightarrow	Account

3.2 Login

SL3610/20-2S-LB2 supports graphic user interface (GUI) to manage the system. Make sure that the network wire is connected and the setting program is installed first. Refer to Chapter 2 and 3 for related settings. For the example below, IP address is: 10.1.2.200 (your own host IP address) Open the browser and input: http://10.1.2.XXX





The default account and password are as follows:

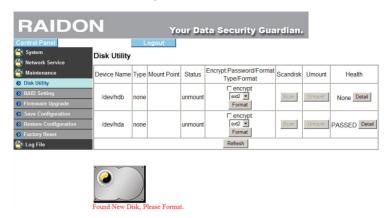
Login account: admin Default Password: admin

After login, you can choose a function from the list to the left side of the window for related configures. NOTE: After login, the system will detect the hard disk automatically. If the hard disk installed is a new one, the system will bring up a dialog window that recommends formatting of the hard disk. Please format the hard disk before performing other related settings.

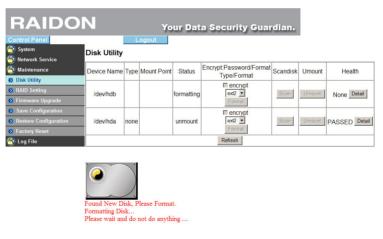


A Notice: You can choose to format the hard disk separately or create the disk array system directly.

1. To format the hard disk separately, refer to the following procedures: Enter "Maintenance" and click "Disk Utility".

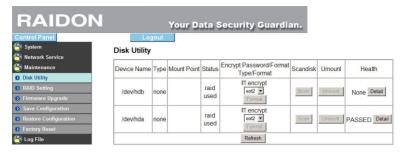


2. Choose the hard disk to be formatted and choose file format. SL3610/20-2S-LB2 provides 3 formats: Fat32, Ext2 and Ext3 After choosing, click "Format". The system will start to format automatically and display the progress.



- A Notice: 1. If you choose to format the hard disks separately, the system information will be recorded on the first hard disk that is formatted, which, once damaged, may result in system malfunction.
 - 2. SL3610/20-2S-LB2 can perform 128bits loop-AES encryption for Ext2 file format only.
 - 3. If you choose the Fat32 file format, you will be unable to set the disk array subsequently.

3. Once formatting is completed, the system will restart automatically. After login, enter "Disk Utility" and you can see related information that formatting is complete. You can repeat the above procedures to finish formatting the other hard disk.





- A Notice: 1. If you choose to format the hard disks separately, the system information will be stored in the first formatted hard disk.
 - 2. The space of the second formatted hard disk will be set to fully open and all users will have the access authority.

3.3 Set RAID Directly without Formatting

1. Enter "Maintenance" and click "Disk Array".

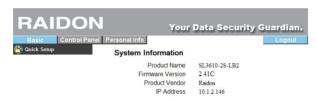


2. Select "Disk Array Mode" and "Format File System". After choosing, click "Create Disk" and the system will start to perform hard disk formatting and RAID system setting automatically.



3. Once formatting is complete, the system will restart automatically. It can be ready for use once startup is complete.

If the hard disk installed needs not be formatted again, the system will display the present system information and you can make related setting changes immediately.





- A Notice: 1. Since SL3610/20-2S-LB2 will store the system settings in the hard disk, you must format the hard disks prior to setting so that the new settings can be stored in the hard disk.
 - 2. Once the setting is complete, if you change the format of the hard disk or format the hard disk again, the system will be reset to the default values automatically and you must perform the system setting again.

3.4 Basic

Enter basic setting and you can see the "Quick Setting" function group which have 4 functions: "Wizard", "Add User", "Add Group" and "Add Share".

3 4 1 Wizard

The installation wizard may guide you to complete the basic function setting of the system within 6 steps which are described in turn as follows:

1. Select Language

SL3610/20-2S-LB2 can display a language in accordance with the language used by the browser or you can select any of the 3 default languages: "English", "Simplified Chinese" and "Traditional Chinese".



2. New Password Setting (for admin)

A new password can be set for the "admin" account If you do not want to change the password, click "Next" directly.



- A Notice: 1. The password shall not exceed 16 characters and must be English letters in lower case and numeric numbers.
 - 2. To install more than 2 SL3610/20-2S-LB2s, it is recommended that you change the password to prevent other persons from changing your system information via the default password.
- 3. Host Name Setting

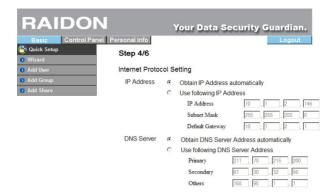
Please set the host name of SL3610/20-2S-LB2 over the network in this step.



- A Notice: 1. The number of characters is limited to 15 characters, which must consist only English letters, numeric numbers or "-".
 - 2. Since each SL3610/20-2S-LB2 has an identical default host name, if you want to install more than 2 SL3610/20-2S-LB2s, be sure to change the host name of each of them to avoid recognition errors on the IP setting software.

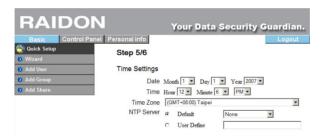
4. Network Communication Protocol Setting

Through this procedure, you can perform related network IP address settings.



5. Time Setting

Here, you can set system date, time and time zone and designate the NTP server.



The NTP (network time protocol) server is one that is provided over the network primarily for network time checking of the user's host. The system is to provide two NTP server addresses: time.windows.com and time.nist.gov for users to choose.

6. Verifying the related equipments

All setting information will be displayed together. If you are sure everything is OK, click "Finish" to finish the setting; if the data is wrong, click "Previous Page" to return to the procedure to set again.



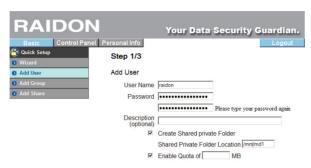
Once the above procedures are complete, the basic setting of the SL3610/20-2S-LB2 system is finished.

3.4.2 Add User

With this function, we can add a user within 3 steps. Please refer to the following instructions:

1. User ID and Password Setting

Click "Add User" and the system will require you to fill in the name and password of the new user first and set whether there is an independent folder and limited size of the capacity.



- A Notice: 1. User ID shall be 20 characters in length at maximum which must be English letters in lower case and numeric numbers, "-", "_" or "." and its first character must be an English letter.
 - 2. The password is 16 characters in length at maximum which must be English letters in lower case.

2. User Management

After setting the ID and password, you can set the group of new users or click "Next Page" to proceed with the next step directly without performing any setting. (If you are setting for the first time, only the "guest-share" group is available.



3. Access Authority Setting Set the user's access authority.



Once the setting is complete, you can find the exclusive folder of the newly added user on Net Neighbors.



3.4.3 Add Group

Add a user group rapidly through 3 steps.

1. Group Name Setting Set the name of a newly added group.



2. Group Members Selection All users displayed on the right can be set as group members.



3. Access Authority Setting Set the authority to access folders of the group.



3 4 4 Add Share

Add a share folder rapidly through 3 steps

1. Setting of the Share Folder's Name Input the name of the folder, move the mouse to a blank area on the screen, click the left mouse key and the system will set the folder path automatically.



A Notice : The share name is 20 characters in length at maximum which must be English letters in lower case, numeric numbers, "-", " " or "." and its first character must be an English letter.

2. Setting of Windows and FTP Access Authority To set the authority to access the folder, check the "allow access by all users" on the upper left to allow all users to access or set via the list at the bottom.



The prefix "@" denotes Group Name.

3. Setting of NFS Access Authority To set the access authority of NFS, check "allow access by all users" to allow all access or fill in the IP address of the access device allowed directly.



3.5 Control Panel

3.5.1 Users and Groups

In Users and Groups, you can set and manage two items; users and groups.

3.5.1.1 User Management

The user management menu will display all users in the present system. You can add or delete a user via the "Save" or "Delete User" button. Click "Add to Group" to add it to a group.

Add User

* Fill out the table with related contents and then click "Save".



- A Notice: 1. User ID shall be 20 characters in length at maximum which must be English letters in lower case and numeric numbers, "-", " " or "." and its first character must be an English letter.
 - 2. The password is 16 characters in length at maximum which must be English letters in lower case.

To add a user to a group, click the name of the user first and then click "Add to Group" to enter group setting to add the user to the group.



3.5.1.2 Group Management

The group management menu will display all groups in the present system. You can add or delete groups via the "Save" or "Delete User" button. To add or remove a user in an existing group, click the group and then click "Add a User" for management.

To add a user to a group, click the name of the group first and then click "Add a User" to enter group member setting to add the user to the group.



3 5 2 File

This menu includes "file server" and "share management".

3 5 2 1 File Server

- Windows Setting
- · Check "Enable" to permit the Microsoft Windows connection.
- · Set group name and description
- Set the IP address of the WINS server (not mandatory)
- · FTP Server Setting

*Check "Enable" to initiate the FTP function. The port is 21 by default.



A Notice : You can change the position of the FTP port, which, however, shall not be in conflict with the port position used by other related applications. For instance, do not use port 80 as the position is used by the Web Browser.

- NFS Server Setting
- *Check "Enable" to initiate the NFS server function.
- · Guest Access Setting
- Click "Enable" to permit quest access.
- *Check "Enable Disk Quota" to set the upper limit of data (Mega Bytes) uploaded by the guest.



3.5.2.2 Share Management

The share management screen will display all existing share names. "public" is the factory default

· Add Share

%Fill in the "Share Name" with the new share folder's name, move the mouse to a blank area, click the left mouse key and the system will fill in the "Path" automatically and then click "Save" to add a new share name.



A Notice : The share name is 20 characters in length at maximum which must be English letters in lower case, numeric numbers, "-", " or "." and its first character must be an English letter.

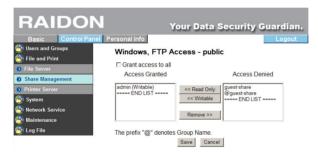
· Property Change

**Click a share name in the "Existing Shares" and click the "windows, FTP access" or "NFS access" button to change the property of the share folder.



· Windows and FTP Access

**Check "Allow access by all users" to permit all users to access the share space in the server or select a user or group name from the list and set the "Read Only" or "Write-in" authority.



· NFS access

**Check "Allow access by all users" to permit all users to access. Or add the IP of the access computer or subnet mask in the list to permit access.



· Delete Share

*After selecting a folder name, click "Delete Share" to delete the designated share name.

A Notice: To delete the data in the folder, please backup the data prior to deletion. Once a folder is deleted, the data originally stored in the folder will also be deleted.

3.5.3 System

System setting includes 6 functions: "Network Setting", "Time Setting", "Server Startup", "Information", "Disk Capacity" and "Error Notice Setting".

3.5.3.1 LAN Setting

Hostname

XYou must set an independent name for SL3610/20-2S-LB2 over the LAN.



A Notice: 1. The number of characters is limited to 15 characters, which must consist only English letters, numeric numbers or "-".

> 2. Since the default host names of SL3610/20-2S-LB2 are identical, if you want to install more than 2 SL3610/20-2S-LB2 be sure to change the host name of each SL3610/20-2S-LB2 to avoid recognition error on the IP setting software.

· IP Address Setting

Obtain IP address automatically

If you have installed the DHCP server, the system will obtain the IP address from the DHCP server automatically. If the IP address cannot be obtained from DHCP, the default IP address is 192.168.1.1.

You can consult related MIS personnel to obtain the IP address, subnet mask and default gate and fill them in related fields.

The system obtains the IP address of the DNS server from the DHCP server automatically.

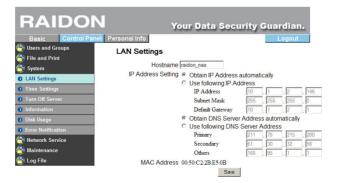
You can consult related MIS personnel to obtain the DNS address and fill it in the related field.



A Notice: When SL3610/20-2S-LB2 is connected to the network, the system will obtain the IP address automatically through the DHCP server. In case that the IP address cannot be obtained through the DHCP server. SL3610/20-2S-LB2 will initiate its own DHCP function to become the DHCP server. Confirm the IP address of SL3610/20-2S-LB2 (by default, 192.168.1.1) first and then set the PC to the same LAN to enter the system login screen.

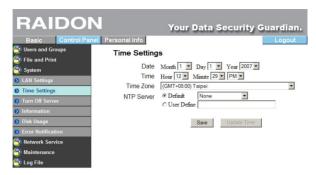
· Physical Address

*The physical address is displayed as SL3610/20-2S-LB2.



3.5.3.2 Time Setting

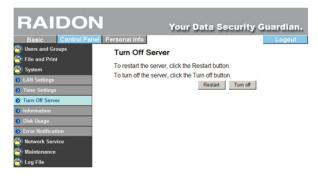
The date, time and time zone can be set. Or you can designate an NTP server to synchronize the time and date



The NTP (network time protocol) server is one that is provided over the network primarily for network time checking of the user's host. By default, the system now provides two NTP server addresses, time. windows.com and time.nist.gov, for users to choose.

3.5.3.3 Turn Off Server

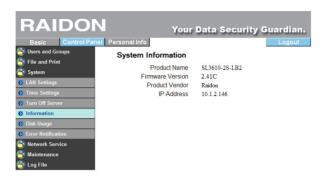
- XClick the "Restart" key to restart the server.
- XClick the "Shutdown" key to shut down the server.



3 5 3 4 Information

Display system related information:

- **%Product Name**
- **※Firmware Version**
- **XIP** Address

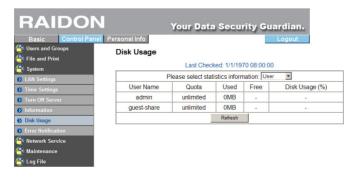


3.5.3.5 Disk Usage

Display information about the use status of the present hard disk and restriction on user capacity. ※Overview of present hard disk status



*Use status and capacity restriction for each user.





3.5.3.6 Error Notification Setting

· Monitoring Services Setting

Disk Usage

If checked, the system will notify the administrator in case of 90% of hard disk capacity.

Windows File Sharing Server

Once checked, if Samba operates abnormally, the system will notify the administrator.

※FTP Server

Once checked, if FTP server operates abnormally, the system will notify the administrator.

XDHCP Server

Once checked, if DHCP server operates abnormally, the system will notify the administrator.

· Check Interval

System can be set to be detected on an hourly or daily basis.

· Email Notification Setting

Check "Enable" to set whether to notify the administrator by Email.

※Error Handling Mail Server

Please fill in your mail host address (should be in the same LAN without passing through the Router).

※Error Handing Mail Addresses

Please fill in the administrator's mailbox.

· Pop-Up Notification Setting

**Check "Enable" to choose whether to display related information by means of popping up a window.

※Error Handling Pop-Up Machines

The host name of the administrator computer that displays the error window can be designated.

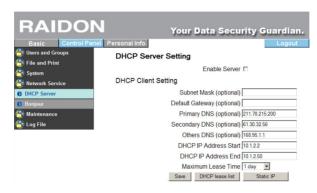
3 5 4 Network Service

3.5.4.1 DHCP Server

Check "Server Enable" to start the DHCP server. If the DHCP function is selected, fill in a related IP address



- ▲ Notice: 1. If SL3610/20-2S-LB2 cannot obtain the IP address from DHCP, the system will initiate its own DHCP
 - 2. If SL3610/20-2S-LB2 has obtained the IP address from DHCP, you should set "use the static IP mode" and designate a static IP for SL3610/20-2S-LB2 before initiating the DHCP server function.



3.5.4.2 Boniour

SL3610/20-2S-LB2 supports Apple's Bonjour protocol and iTunes server *Check "Enable" to initiate the Bonjour protocol.



3.5.5 Maintenance

System maintenance includes: There are six options: disk utility, disk area, firmware update, storage configuration, restore configuration and factory reset.

3.5.5.1 Disk Utility

Disk information will display hard disk name, file system type, total capacity, used capacity, cluster configuration and all configured hard disks.

Encrypt Box

SL3610/20-2S-LB2 can perform 128bits loop-AES encryption for Ext2 file format only. To perform this function, you need to input the 20-character password and format the hard disks again.

Format

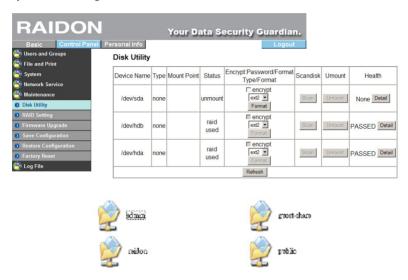
You can format the hard disks via this key. SL3610/20-2S-LB2 supports 3 file formats: Fat32, Ext2 and Ext3.

Scan

You can check whether the hard disks are normal via this key.

If your hard disks support the S.M.A.R.T function, click this key to display related status information of the hard disks

To avoid wrong commands, before formatting and scanning of the hard disks, the system will bring up a window requesting you to confirm. Moreover, SL3610/20-2S-LB2 supports USB disks and you can share the data by inserting the USB disk into the USB port at the rear of the unit. When you insert a USB hard disk, the system will display /mut/usb1 in "Disk Utility" and name the share folder as "usb 1" automatically in Network Neighborhood.





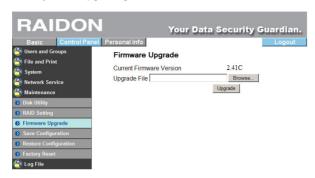
- ⚠ Notice : 1. Once the USB disk is detected by the system, you need to set the read authority before reading the "usb1" folder.
 - 2. To remove the USB disk, click "Uninstall" before removal.

3.5.5.2 RAID Setting

SL3610/20-2S-LB2 supports two disk array level applications: RAID 0 and RAID 1. If only one hard disk is inserted, the "disk array" window will display "unable to set the disk array"; if two hard disks are inserted, the "disk array" window will display two options: "RAID0 and RAID1". After selecting the RIAD mode and file format, click "Create Disk" to set the disk array.

3.5.5.3 Firmware Upgrade

Click firmware upgrade to display the present firmware version. You can download the latest firmware version onto your PC and designate the correct file path in "Updated File" to upgrade the firmware. When you are upgrading the firmware, all network services will stop.



Once the firmware is upgraded, the system will restart automatically.



A Notice : Random firmware upgrade may cause your system unable to operate normally. If your system operates normally, it is recommended that you not upgrade the firmware. If you have any question about firmware upgrade, contact the technical service personnel of Raidon or write to supporting@raidon.com.tw.

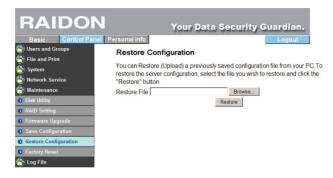
3.5.5.4 Save Configuration

This function can save the present system configuration file and save it in the hard disk. The file name is "config.tar" by default.



3.5.5.5 Restore Configuration

When the system's configuration file is destroyed, lost or changed incorrectly, you can use this function to restore the configuration file you saved previously. You need to designate the file location of the configuration file and click the "Restore" key only.



3.5.5.6 Factory Reset

By entering the factory default page, you can reset the system configuration file to the factory default. Once a decision is made to reset to the factory default, all system settings, including users and network, etc. will be lost.

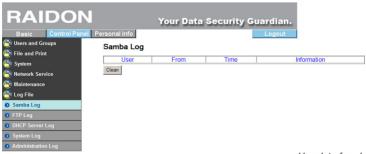


3.5.6 Loa File

Login records include: Five items: "Samba Log File", "FTP Log File", "DHCP Server Log File", "System Log File" and "Administrator Log File".

3.5.6.1 Samba Log File

Can display all system related records.



3.5.6.2 FTP Log File

Can display all related log files connected through FTP. If you do not initiated the FTP function, no information will be displayed.

3.5.6.3 DHCP Server Log File

Can display all DHCP related log files. If you do not initiated the DHCP function, no information will be displayed.

3.5.6.4 System Log File

Can display all system related records.



3.5.6.5 Administrator Log File

Can display all records relating to the "Administrator".

3.6 Personal Information

"User Account" is the only option in this item. In the user account page, you can change the password of "admin" and displayed language. In addition, "Share List", "System Disk Quota" and "Percentage of Used Disk Capacity" will also be displayed.

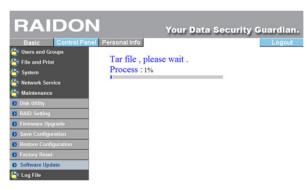


3.7 Software Update&TorrentFlux (SL3620-2S-LB2)

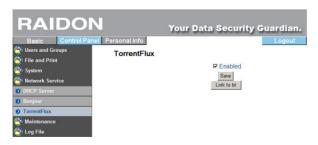
1. To use the BT option on SL3620-2S-LB2, you must perform the procedures of Software Update first. Click the control panel, maintenance and software update to bring up the screen below and then select the source of the file for updating (you can download the latest software version onto your PC and designate a correct file path to update the software).



2. The screen of ongoing software update is as follows: Once the software is updated, the system will restart. Input the account and password again to enter the system setting screen.



3. Click the control panel and network server and you will find that the TorrentFlux option is added. Click TorrentFlux to bring up the screen below, press Save and then click Link to bt.



4. Click Link to bit to bring up the screen below. Input the account and password and press Login.

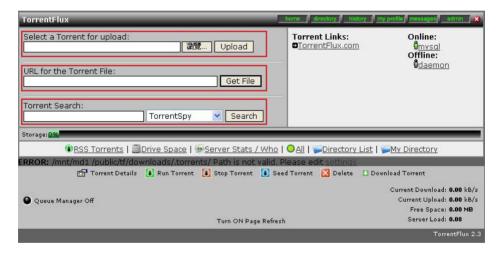
Account: mysgl or admin Password: 123456 or admin



5. After this screen appears, you can start to use the TorrentFlux function to upload and download BT

Select a Torrent for upload: Select a seed to be uploaded.

URL for the Torrent File: Address of the seed Torrent Search: Search seeds from the browser



3.8 Operation Methods for Change and Search of the IP Address of SI 3610/20-2S-I B2

- 1. To change the IP address of SL3610-2S-LB2, press the "ENT" key on the panel and then press the "Down" key on the right of the LED, press the "ENT" key after "System Setup" appears to bring up "Input Password" and there will be 8 0s on the screen. Press the "ENT" key 8 times continuously to bring up "Network Setup". Press the "ENT" key again, move the cursor to the "No" position (use the up/down key", press the "ENT" key again and you can use the up/down key and the "ENT" key to input the IP address you want to change. Then, start the machine, connect the network wire and SL3610-2S-LB2 and then restart to finish the setting.
- 2. Search the IP address of SL3610-2S-LB2, press the "ENT" key on the lower panel and then the "Down" key on the right of the LCD to bring up "Network Info", press the "ENT" key again and you will see the address and status of the present IP on the LCD screen.
- 3. As to the IP address of SL3610/20-2S-LB2, you can refer to Steps A and B in the use method of Appendix A Setup Util.exe to find out the IP address of the present SL3610/20-2S-LB2. To change the IP address, refer to basic setting of Step 3.4.

3.9 Logout

Click "Logout" to log out the system directly.

Appendix A Use Method of Setup Util.exe

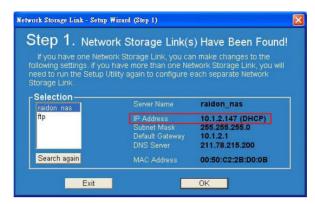
1. Change System Information via Software (For Windows)

In addition to changing system information through Web GUI, (e.g. IP address and time, etc.), you can change these system information by running "SetupUtil.exe", which is described as follows:

1.1 Please run "Setup Util.exe" and click "Setup".



1.2 Click "Setup" and the setting software will detect automatically and present the following result screen. In case multiple SL3620-2S-LB2s are installed over the network, the blank on the left will display all devices detected.



In this screen, you can learn related IP address of the present server. To change such information of the server as related IP address, etc. select the name of the server first and then click "OK".

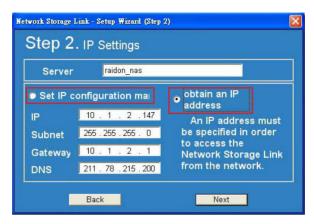


⚠ Notice : If you need to install more than 2 SL3610/20-2S-LB2s at one time, change the host name and IP address of the first SL3610/20-2S-LB2 after installation and setting and then power on the another one to set so as to avoid system confusion or IP conflict due to simultaneous setting and reduce the possibility of setting errors

1.3 After you click "OK" and change the system setting, the system will require you to input the administrator password. The preset password is "admin". If you have changed the password, input the new password.



1.4 After entering the setting screen, connect the network wire to your host and SL3610/20-2S-LB2, click Set IP configuration mai to input the IP address (the default IP of SL3610/20-2S-LB2 is 192.168.1.1) or click "obtain an IP address" to obtain the IP address from the server after connecting SI 3610/20-2S-I B2 to the network



1.5 Once the setting is complete, click "Next" and the system will require you to set the date and time. You can choose to correct the time through the NTP server.



1.6 After setting the date and time, click "Next" and the system will display the confirmation screen. If related information is correct, click "Save".



1.7 After you click "Save", the system will again ask you if you are sure to change the setting. If so, click "OK". If you do not want to change, click "Cancel".



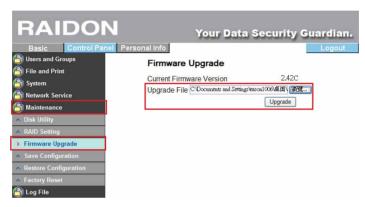
1.8 Setting is completed. Once the system is reset, it will jump back to the beginning screen. To change other servers, repeat the above procedures. If you have finished setting, click "Exit", It takes about 2 minutes to start SL3610/20-2S-LB2 after power on. Before the startup is completed, the system will be unable to find SL3610/20-2S-LB2. In case multiple SL3620-2S-LB2s are installed over the network, the blank on the left will display all devices detected.



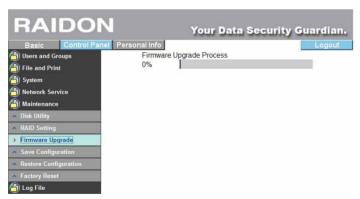
Notice: When SL3610/20-2S-LB2 is connected to the network, the system will obtain the IP address automatically through the DHCP server. In case that the IP address cannot be obtained through the DHCP server, SL3610/20-2S-LB2 will initiate its own DHCP function to become the DHCP server. Confirm the IP address of SL3610/20-2S-LB2 (by default, 192.168.1.1) first and then set the PC to the same LAN to enter the system login screen.

Appendix B Complete Firmware Update Process

- 1. In order to prevent from data loss caused by software update please backup data to other storage before starting update process.
- 2. Start to update software firmware after backup. Related update process please refer to the following description.
- 2.1 First, please follow the process to update firmware: click "Control Panel", "Maintenance", "Software Update", the following image will appear. Then upload firmware (please download the latest firmware for update).



2.2 Following is the image of update process. Once the update process is completed, the system will reboot and ask for username and password to login the system.

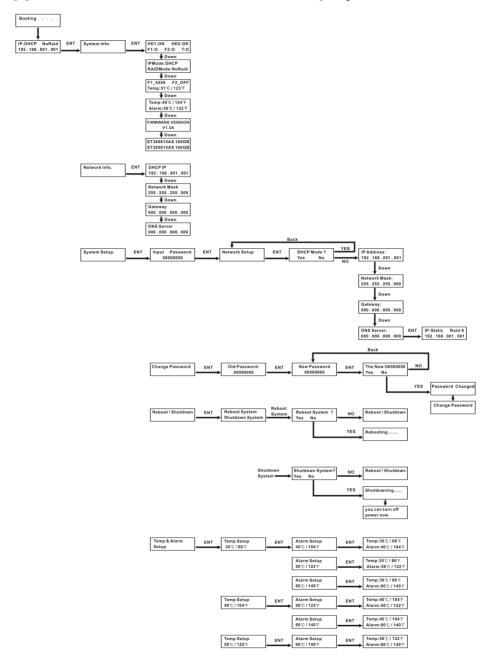


2.3 After completing update, please click "Remove raid system" to rebuild RAID system. For detail information please refer to Chapter 3.



2.4 After completing above process, please move data back to SL3610-2S-LB2 and the update process is finished.

Appendix C Introduction of LCD Display Items



Appendix D Frequently Asked Questions

1. Unable to detect SL3610/20-2S-LB2 on the setting software?

- A . 1) Make sure that SL3610/20-2S-LB2 and the RJ-45 network on the PC are connected to the switch and the power is turned on.
 - 2) It takes about 2 minutes 2 minutes to start SL3610/20-2S-LB2 after power on. Before the startup is completed, the system will be unable to find SL3610/20-2S-LB2.
 - 3) Check if related IP addresses are in conflict. In case of conflicts, change the IP address.
 - 4) Press "Reset" at the rear of SL3610/20-2S-S2 and allow the system to restart and run the setting software.

2. Unable to access SL3610/20-2S-LB2?

- A. 1) Check whether the network connection is normal.
 - 2) Check SL3610/20-2S-LB2 for abnormal light.
 - 3) Restart SL3610/20-2S-LB2.

3 Unable to access the folder?

- A . 1) Confirm whether the account and password are correct.
 - 2) If you have logged in any folder, when you want to use another account and password to log in other folders, log out your operating system first and then log in again.

4. Unable to use SL3610/20-2S-LB2 normally after replacing the hard disk?

A . The system configuration file of SL3610/20-2S-LB2 is stored in the hard disk and does not support the hot swap function. If you need to replace the hard disk, be sure to shut down the system normally and turn off the power before removal. If you remove the hard disk when the power is on or the system is not fully shut down, it will result in system confusion or cause you unable to use SL3610/20-2S-LB2 normally. The originally stored data may be destroyed. If you remove the hard disk without turning off the power and shutting down the computer, turn off the power first. If you can use SL3610/20-2S-LB2 normally after placing the original hard disk into the original position, replace the hard disk once again after shutdown; if you cannot use SL3610/20-2S-LB2 normally, it means that the original default value has been damaged and you need to install and set SL3610/20-2S-LB2 again.

5. How to know the IP address of SL3610/20-2S-LB2 and set upon initial installation under the Mac or Linux System?

- A . Under the Mac or Linux system, no query about the IP address of SL3610/20-2S-LB2 through the IP setting software can be done, because it is impossible to run the ".exe" file . In this case, it is necessary to set SL3610/20-2S-LB2 and the host to the same LAN through the independent LAN mode and the default IP address, 192.168.1.1 of SL3610/20-2S-LB2 for the login setting. For related setting methods, refer to the following procedures:
 - 1) Connect SL3610/20-2S-LB2, the host and switch and turn on the power. (Note: make sure there is no other network wire connected to the switch in the meantime)
 - 2) Set the IP address of the host to 192.168.1.x, in which x must not be 1
 - 3) Open the browser and input the IP address: 192.168.1.1 and you will see the login screen.

6. Why the error window cannot be displayed on the administrator computer after setting Pop-Up Notification.

A . When setting the Pop-Up Notification function, fill in the host name of the administrator computer, enter the "Service" option in "Computer Management" and enable the "Alerter" and "Messenger" functions.

7. Why the mails cannot be received after setting the "mail notification" function? A. Make sure that your mail host is in the same LAN without the need for passing through the router. If your mail host is installed on ISP or needs to be connected via router, you will be unable to use this function.			