



Q-Link Addendum
to the
*TLS Installation &
Operation Manuals*

(No.501300, 501370 and 501450)

May 13, 2002

Introduction

This addendum supplements the TLS Installation & Operation Manuals, (Qualstar document numbers 501300, 501370 and 501450). Where possible, additional or revised text will be herein underlined.

This addendum adds additional information about the Q-Link™ Web Interface features and configuration procedure.

Application

The additions or changes in this addendum apply to the following manual sections:

Pages	Section	Subject	Remarks
3-1	3.1	Q-Link	New text
3-5	3.4.1.2	Q-Link	Modified the figure
new	8	Q-Link	New text and graphics

Section 3.1 General Description

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Q-Link provides a remote interface to any model of Qualstar's TLS series tape libraries. This allows a user/supervisor to observe, configure, control and possibly troubleshoot any TLS library over the Internet or a LAN using Microsoft's Internet Explorer V6.0 or Netscape V6.2 browsers. Q-Link communicates to the outside world via a standard 10-BaseT interface. It derives its power from, and communicates with the TLS via a serial communications channel already provided on the TLS's executive printed circuit board.

Q-Link can provide the following features:

- Display Inventory and General Status
- Configure the TLS including Drives, SCSI, Logical Libraries
- Dump diagnostic logs
- Upload new TLS firmware
- Upload new Q-Link firmware
- Move inventory
- Clean or unload tape drives

Additionally, Q-Link can be configured to e-mail event or fault messages to a list of support staff when a name server and SMTP server are available.

Section 3.4.1.2 Rear Panel

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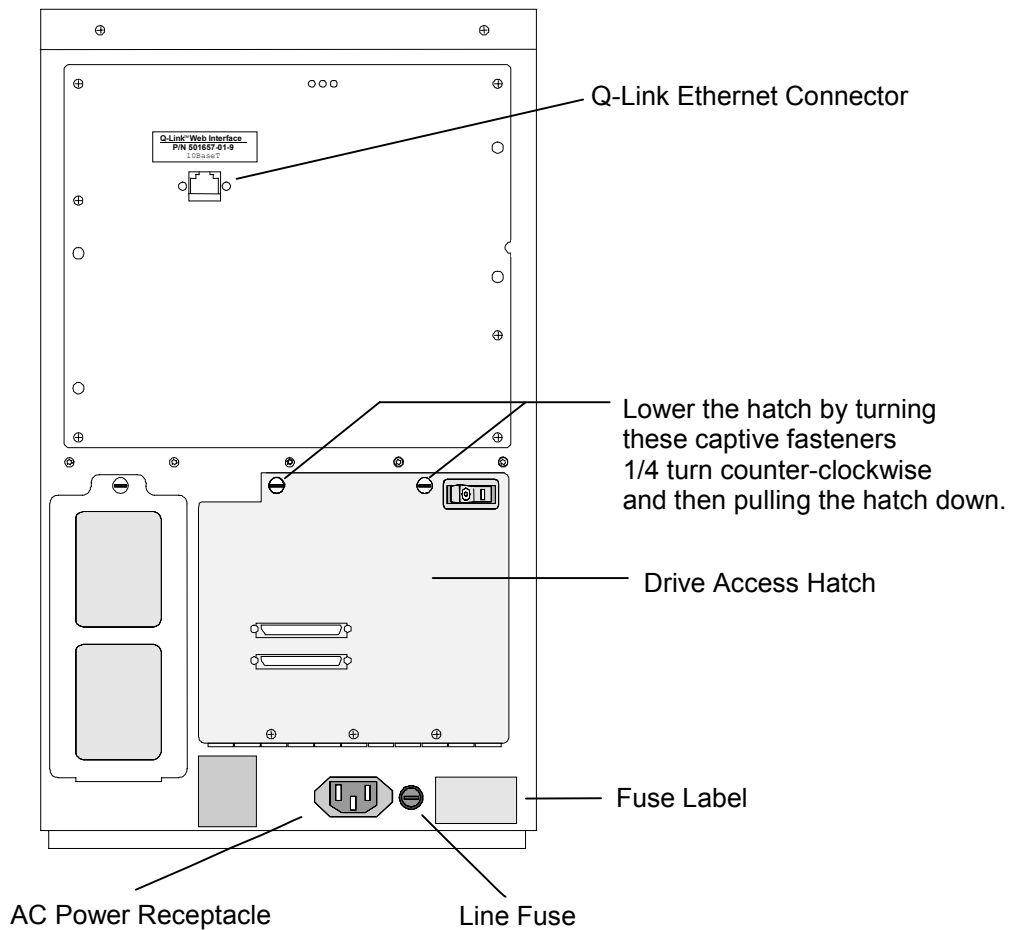


Figure 3-4 TLS-4210 Rear View

Note that the Q-Link Ethernet Connector is in a similar location on all TLS models.

Section 8. [new] Configuring Q-Link Ethernet LAN Address

Q-Link's Ethernet address may be configured manually or automatically if your LAN uses DHCP to assign network addresses. The TLS library door must be opened to allow this menu selection to be accessed.

8. [new].1 Configuration\Q-Link Menu

If the TLS library and Q-Link module are operational, these default address values will be displayed.

```
C.....Q-Link
>Ip:192.168.000.002
Ma:255.255.255.000
Gw:000.000.000.000
Use DHCP:      OFF
SET ADDRESSES
SET TO DEFAULTS
```

The Configuration\Q-Link menu displays the network address information obtained from the Q-Link module.

8. [new].1.1 Ip

This value is Q-Link's current IP address. When the Use DHCP value is set to ON, this value is supplied via DHCP. When Use DHCP is OFF, the IP address may be manually edited.

8. [new].1.2 Ma

This value is Q-Link IP mask. When the Use DHCP value is set to ON, this value is supplied via DHCP. When Use DHCP is OFF, the IP mask may be manually edited.

8. [new].1.3 Gw

This value is the IP address of Q-Link network gateway. When the Use DHCP value is set to ON, this value is supplied via DHCP. When Use DHCP is OFF, the IP address may be manually edited.

8. [new].1.4 Use DHCP

This option enables the Q-Link network interface to use DHCP to obtain its network address values. If Use DHCP is set to YES, the Ip, and Ma and Gw fields cannot be edited.

8. [new].1.5 SET ADDRESSES

This command sets the Q-Link network values edited above. The SET ADDRESSES command only appears if an address field has been edited.

8. [new].1.6 Setup Q-Link IP Address

Navigate to the TLS menu item Configuration\Q-Link. This menu panel is used to set Q-Link network addresses. Consult your LAN Administrator for the correct setup values.

1. If the TLS library and Q-Link module are operational, the default address values will be displayed.

```
C.....Q-Link
>Ip:192.168.000.002
Ma:255.255.255.000
Gw:000.000.000.000
Use DHCP:      OFF
SET ADDRESSES
SET QLINK DEFAULTS
```

2. To change the IP address, use the ▲ (UP) and ▼ (DOWN) keys to navigate the selection indicator to the Ip field. Press the ENTER key to position the edit cursor to the desired character location. Use the ▲ (UP) and ▼ (DOWN) keys to change the digit to the required value. Press the EXIT key to end the edit operation. Note that this field cannot be edited if Use DHCP is ON.

```
C.....Q-Link
Ip:192.168.000.002
Ma:255.255.255.000
Gw:000.000.000.000
Use DHCP:      OFF
SET ADDRESSES
SET QLINK DEFAULTS
```

3. Use the same procedure to change the Mask (Ma) and Gateway (Gw) network address fields. Note that these fields cannot be edited if Use DHCP is ON.
4. If DHCP is to be used, the network address values are provided by Q-Link interface. Use the ▲ (UP) and ▼ (DOWN) keys to navigate the selection indicator to the Use DHCP field. Press the ENTER key to edit the selection. Use the ▲ (UP) or ▼ (DOWN) key to change the selection to ON. Press the EXIT key to end the edit operation.

```
C.....Q-Link
Ip:192.168.000.002
Ma:255.255.255.000
Gw:000.000.000.000
>Use DHCP:      OFF
SET ADDRESSES
SET QLINK DEFAULTS
```

5. Use the SET ADDRESSES command to complete the address setup procedures. The changes are sent to Q-Link module, and the display will refresh with the values accepted by Q-Link interface. Use the ▲ (UP) and ▼ (DOWN) keys to navigate the selection indicator to the SET ADDRESSES command.

```
C.....Q-Link
Ip:192.168.000.002
Ma:255.255.255.000
Gw:000.000.000.000
Use DHCP:      OFF
SET ADDRESSES
SET QLINK DEFAULTS
```

NOTE

The SET ADDRESSES command will only appear if the Ip, Ma or Gw addresses have been edited.

7. To set the changes press the ENTER key. The display will change to indicate the setup operation is in progress.

```
.....PLEASE•WAIT.....  
IP Setup operation  
in progress.
```

8. The display will refresh with the values accepted by Q-Link interface. This example uses DHCP. Q-Link module has returned address values obtained from the network DHCP server.

```
C.....Q-Link  
Ip:192.168.000.010  
Ma:255.255.255.000  
Gw:000.000.000.001  
Use DHCP: ON  
SET ADDRESSES  
SET QLINK DEFAULTS
```

8. [new].2 Connect Q-Link to the Ethernet LAN

After Q-Link's Ethernet address is configured, it can be attached to your LAN.

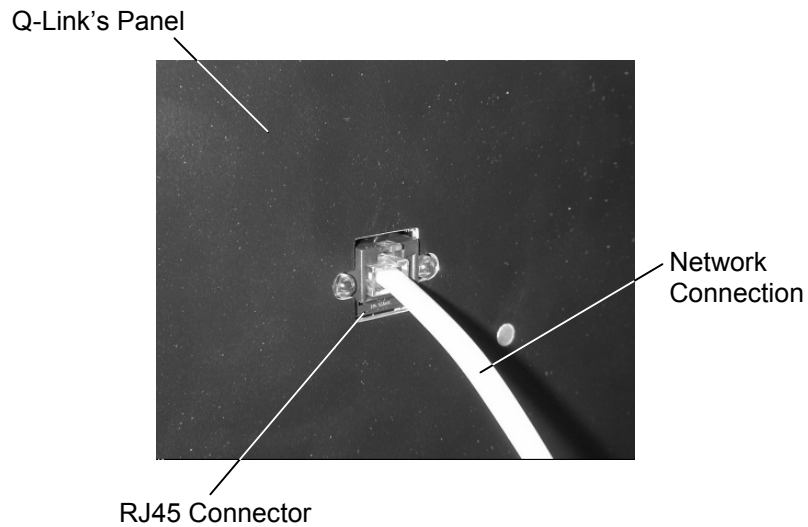


Figure [New] Detail of Network Connection Attached to Q-Link

8. [new].3 Access Q-Link with a Web Browser

After Q-Link is connected to the Ethernet LAN, it can be accessed via Internet Explorer 6 or Netscape 6.2 web browsers. Target the web browser to Q-Link's IP address. The sample address shown in the following example is:

```
http://216.101.063.177
```

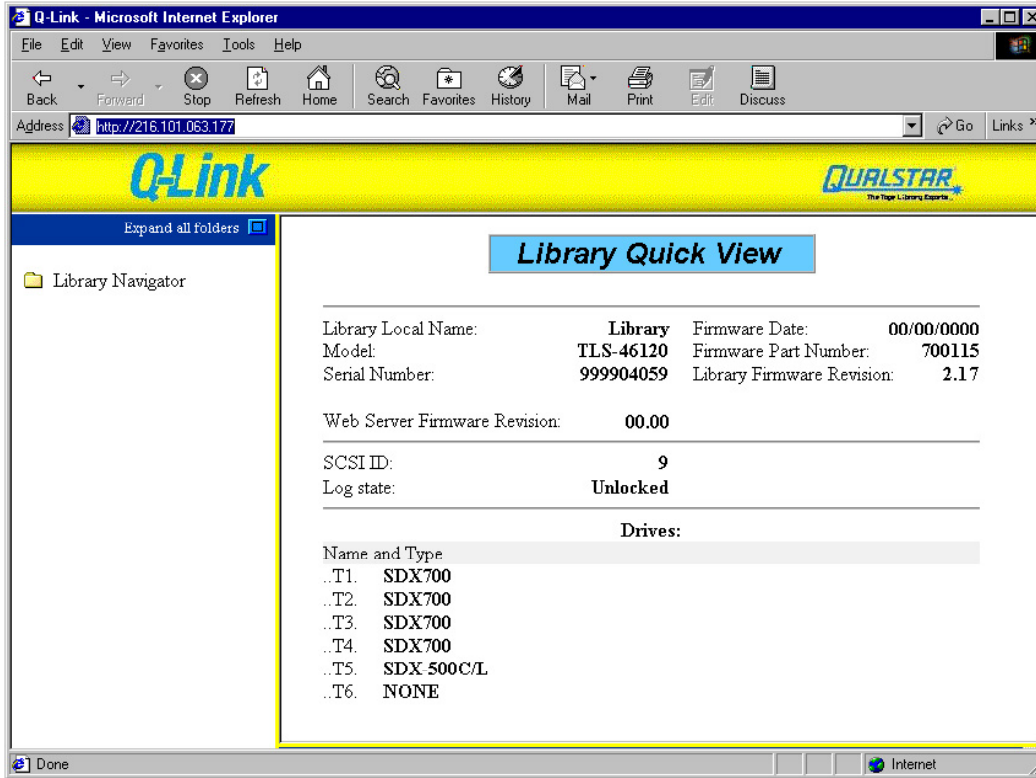


Figure [New] Example of the TLS Q-Link Interface as seen on a Web Browser

8. [new].4 Browser Compatibility Issues

Q-Link Option was developed and tested with Internet Explorer 6 and Netscape 6.2 web browsers. While other browser can be used, the page display and operation may not be correct.

8. [new].5 E-mail Requirements

For e-mail capability, an SMTP server and a Name server must be specified.

8. [new].6 The Sign-In Screen

The User Name and Password are blank when Q-Link is shipped from Qualstar. Simply clicking on the Sign In button will allow access to Q-Link's menus.

A yellow rectangular form with a blue border. At the top, it says "User Name and Password required to enter this site." Below this, there are two text input fields. The first is labeled "User Name:" and the second is labeled "Password:". Below the input fields is a "Sign In" button.

Figure [New] User Name and Password required to enter this site sign in screen

If desired the Password can be changed, however the User Name will remain as blank. Follow the instructions below to change the Password under the Private menu.

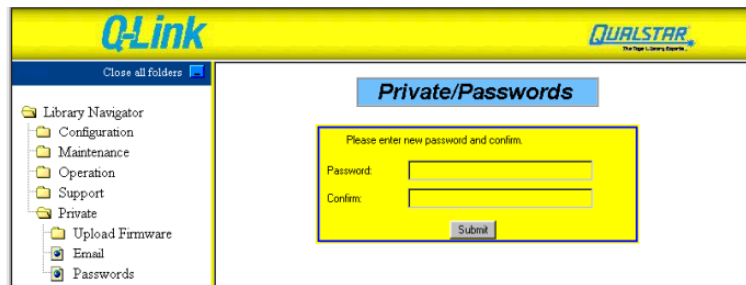
A screenshot of the Q-Link web interface. The top header is yellow with "Q-Link" on the left and "QUALSTAR The Next Library Experience" on the right. Below the header is a blue navigation bar with "Close all folders" and a "Library Navigator" folder icon. The "Library Navigator" is expanded to show a tree of folders: Configuration, Maintenance, Operation, Support, Private, Upload Firmware, Email, and Passwords. The "Private" folder is selected, and the "Passwords" icon is highlighted. The main content area is white and contains a yellow box with a blue border titled "Private/Passwords". Inside this box, it says "Please enter new password and confirm." Below this are two text input fields, one labeled "Password:" and one labeled "Confirm:". Below the input fields is a "Submit" button.

Figure [New] Q-Link Menu Tree Expanded to the Private/Passwords Screen

1. In Q-Link menu, click once on the Library Navigator folder to expand the menu tree.
2. Click once on the Private folder to expand the Private menu tree.
3. Click once on the Passwords icon to enter the Private\Passwords screen.
4. Click once in the Password text entry box and then type in your chosen password.
5. Press the Tab key or click once in the Confirm text entry box and then type in the password exactly the same as it was in the Password text entry box.
6. Click once on the Submit button to complete the changing of the Sign In screens password.