Torridon Array Controller

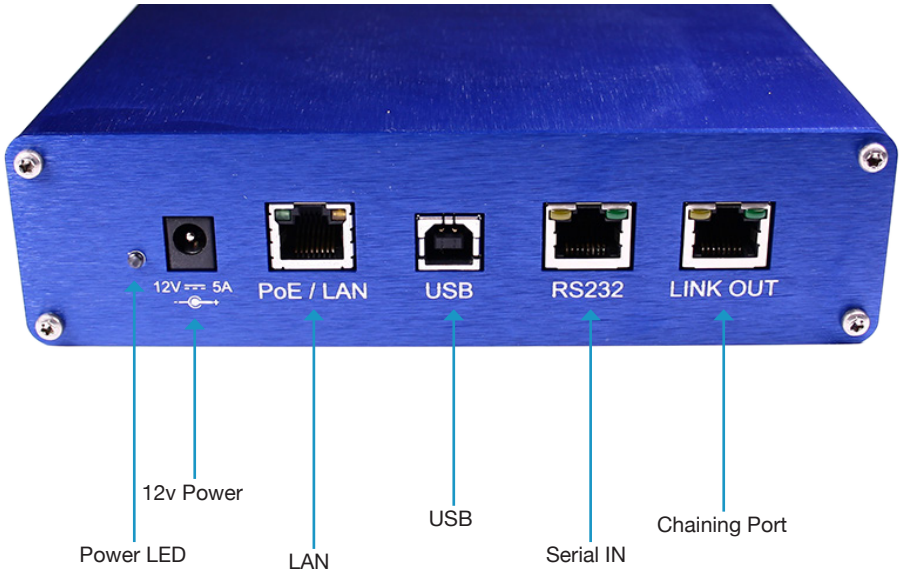
QTL1461 / QTL1079

Quick Start

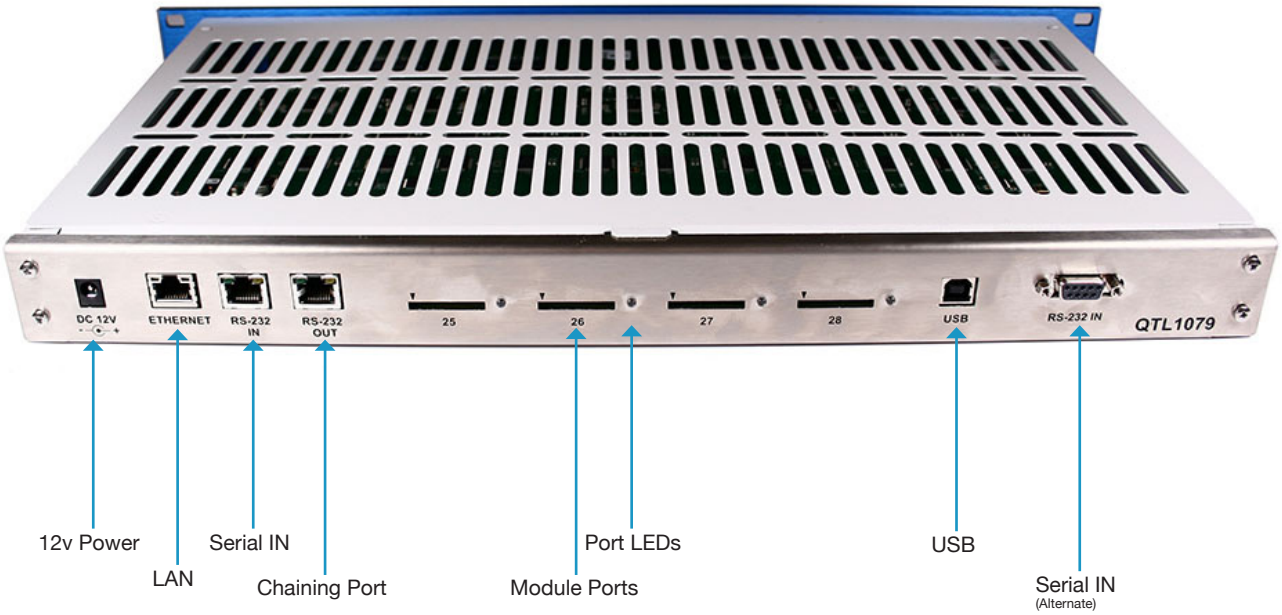
Quarch Technology

Torridon Array Controllers

QTL1461 - 4 Port Torridon Controller



QTL1079 - 28 Port Torridon Controller



Supplied Parts

Description	
12v Power Supply Supplies power for the Controller and attached modules	
Serial Cable DB-9 Serial Cable for use with Terminal Servers and native serial ports	
USB Cable USB 2 cable for Direct USB or USB virtual COM port control	

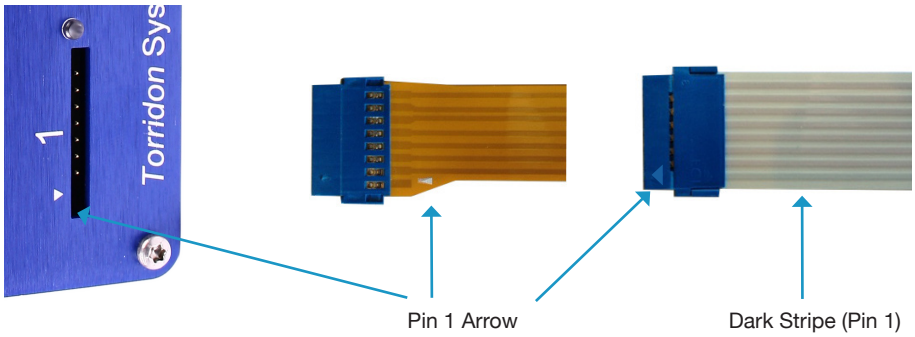
1 BEFORE YOU START

IMPORTANT

Please ensure that the correct power supply is used with this equipment. These will have the Quarch logo and '12V' on the label.

The Array Controller and the device under test should be on the same power supply, with a common ground; As should the controlling PC if connected by Serial or USB.

2 SET UP HARDWARE



Insert your module into the Interface Kit, aligning the Pin 1 marks.

Connect the power supply and check that Power and Port LEDs are lit

3 CHOOSE CONNECTION METHOD

RS-232 Serial

- Connect Serial Cable

Used for Serial Terminal Servers or PCs with a native DB-9 Serial port.

No drivers are needed

LAN

- Connect LAN Cable

Supports single user Telnet. Supports multi-user ReST.

Requires network to support **10BASE-T**

USB

- Connect USB Cable
- Requires Quarch or lib USB driver

Access both the controller and any individual modules that support USB (for FW updates and similar)

4 SOFTWARE / SETUP

Downloads

Serial/Telnet control can be performed from any standard terminal program: Putty, TerraTerm, Python, Perl

Quarch USB drivers for windows can be found here:
http://quarch.com/file/torridon-driver-win7

Torridon Terminal, a simple windows terminal program is here:
http://quarch.com/file/torridon-terminal

The TestMonkey control application (controls a single module) is here:
http://quarch.com/file/testmonkey

Serial Port Settings

19,200	Baud
8	Data Bits
1	Stop Bit
No	Parity
No	Flow Control

Default LAN Settings

QTLxxxx-xx-xxx	netBIOS name: as Serial number on unit
192.168.1.99	Initial IP address
Enabled	DHCP mode
10BASE-T	Switch speed required
255.255.255.0	IP Mask

5 CONTROL

NOTE

Only ONE connection mode can be in active use at a time

Connecting via USB/Telnet will cause the Serial port and ReST to be disabled.

Only one Telnet session can be open at a time. For multi-user access, use ReST

Sending Commands

Simple ASCII commands are used to control the attached module. These commands are common, across all interfaces/connection modes.

Upon success an action command will respond with:
OK

An incorrect command or incorrect command usage will result an error message such as:
FAIL: 0x15 -Invalid argument

Commands ending in '?' return data to the user:

Command Examples

***tst?**	Run self test on the module and return the status
help	View a list of command and available help screens
run:power up <1>	Powers up the device (hot-plug modules)
run:power? <1>	Queries the current power up state

This command returns **PLUGGED** or **PULLED**, depending on the current state of the module on port '1'.

Commands to be executed on a module all require an address list in angle brackets. Address lists can specify ranges and multiple segments:
run:power up <1,3-6,9>

For a full command list, you will need the technical manual for the Module. This can be downloaded from our website: www.quarch.com

6 TROUBLESHOOTING

Controller does not communicate

1) Check power supply is connected and power LED is green

2) Check Pin 1 marks are aligned

3) Check Serial/USB/LAN cable is connected for the comms more used

4) Check the MODE Button is set correctly

Module does not respond

1) Check the green port LED is lit for the module you want to control

2) Check that you are using the correct command address for the port that the module is connected to.

I need more help

1) Check out quarch.com for application notes and examples

2) Email support@quarch.com for a quick response

3) Call the office direct (UK office hours) on +44 1343 508 140