

QUOLL XBT

Installation and Setup



TURO TECHNOLOGY PTY LTD



Quoll Installation and Setup

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Revision History

Quoll Installation and Setup

| Date | Revision | Description |
|-------------|----------|---|
| 27 Nov 2010 | R3 | 1. In Quoll and Devil Systems further explanation. |
| 13 Oct 2010 | R2 | 1. In Quoll and Devil Systems section CSIRO Devil support explained. |
| 13 May 2010 | R1 | 2. First edition |
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1 Quoll and Devil Boxes - Turo and Devil XBT Software

Turo XBT software version 4.0 and later supports both all Turo Quoll hardware and all Turo Devil hardware.

Devil XBT Software (pre Turo XBT software versions of the software) only supports the older CSIRO Devil hardware and Turo Devil hardware up to serial number 119.

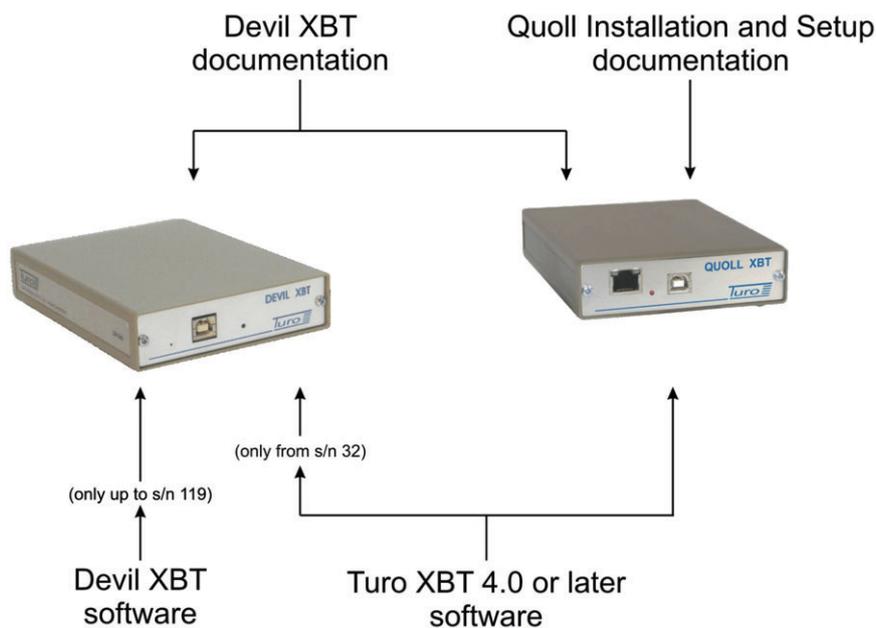
The Quoll can be interfaced using either a USB or an ethernet connection.

The Devil can only be connected using USB.

This document is a supplement to the Devil XBT Manual.

All the documentation in Devil XBT Manual, including Devil Manual, Data Formats, Argos Wildcat Interface, Iridium Transmission and Probe Correction, is directly applicable to the Quoll system and should be referred to when using the Quoll.

The following diagram illustrates the documentation and software relationships with the Quoll and the Devil hardware.



Older versions of the Devil hardware having the CSIRO label are only supported by the Devil XBT software and not the Turo XBT software.

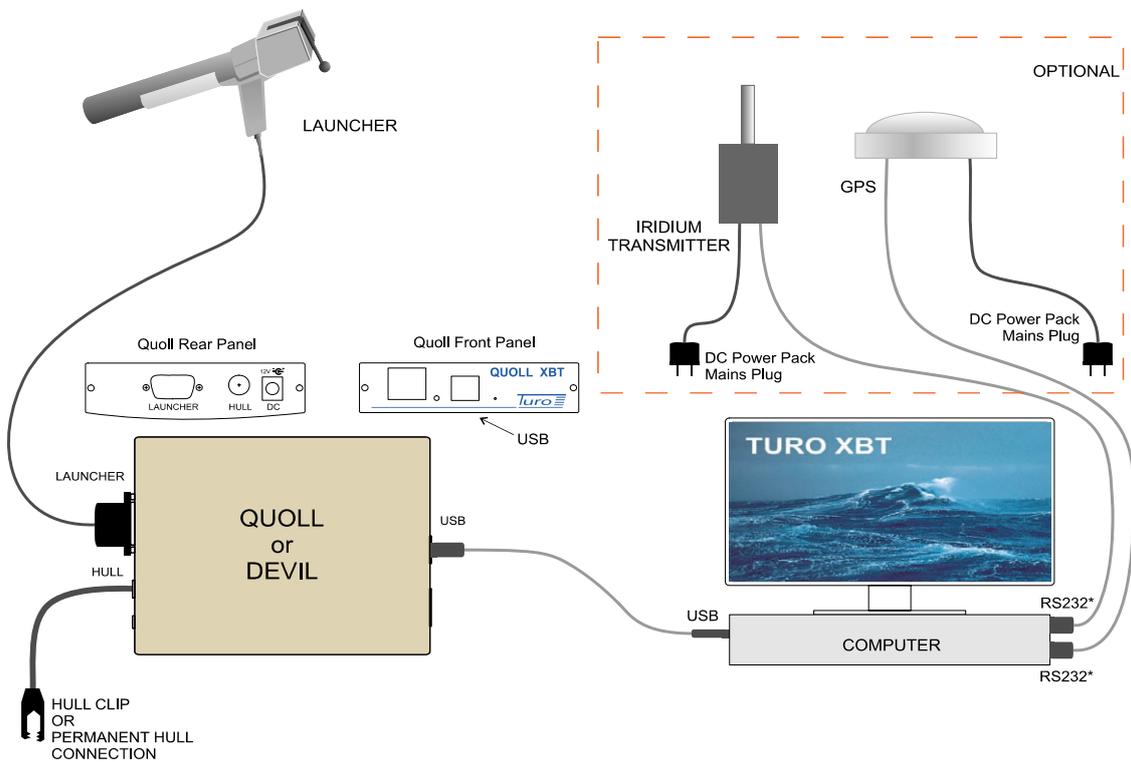
2 Computer Quoll Connection

The Quoll can be powered and connected to the computer in several different ways using USB or network connections with power supplied from USB or PoE or external supply.

2.1 USB Connection

This connection interfaces the Quoll to the computer through the USB.

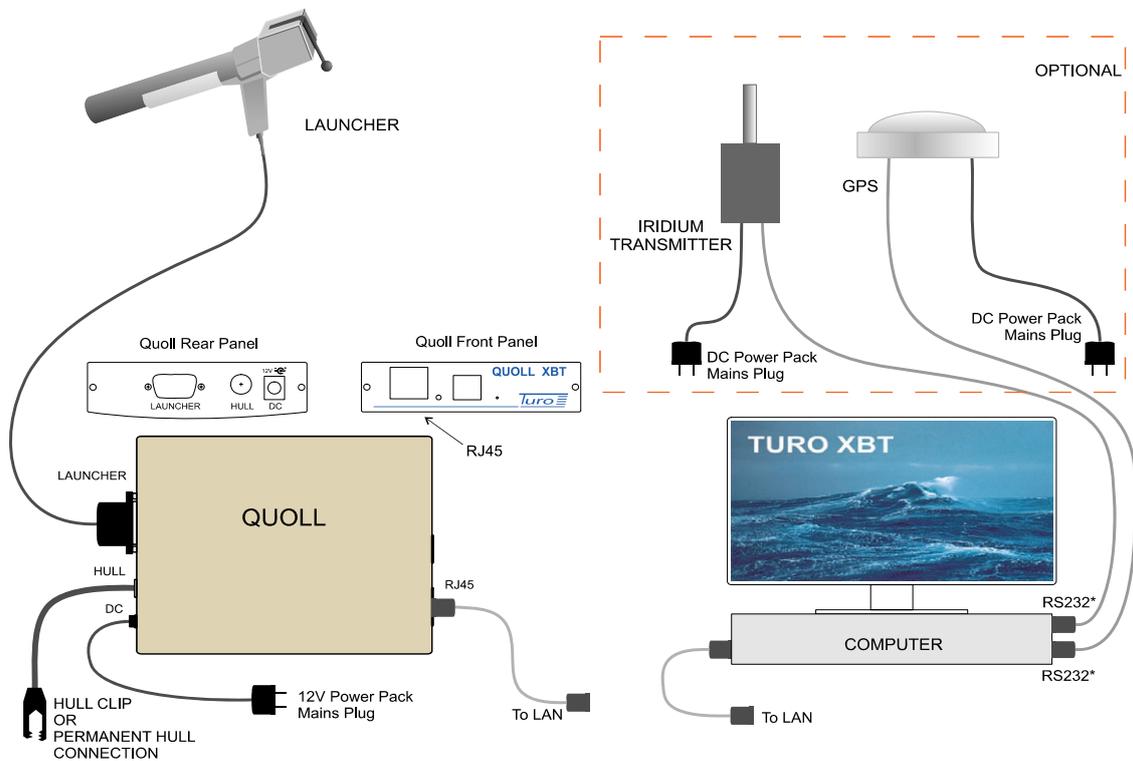
This configuration is identical for both Devil and Quoll. Power is supplied to the Quoll by the USB.



2.2 Network Connection

This connection interfaces the Quoll to the computer through the network via the ethernet port.

Power to the Quoll is supplied via an external 12 volts.

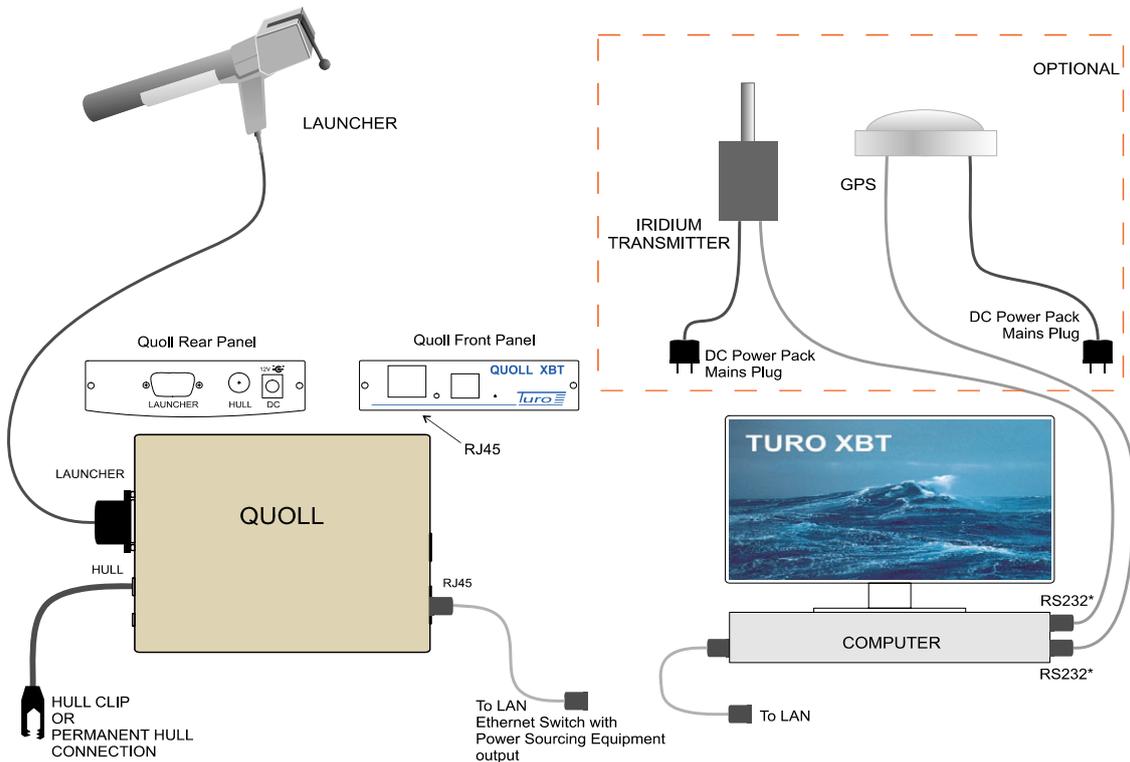


2.3 Network Connection with PoE

This connection interfaces the Quoll to the computer through the network.

In this configuration the Quoll sources its power from the ethernet connection using Power over Ethernet (PoE). This requires the ethernet to be plugged into a network switch that is a Power Sourcing Equipment (PSE) device.

The Quoll is an IEEE 802.af compliant Powered Device (PD).



2.4 Multiple Devices

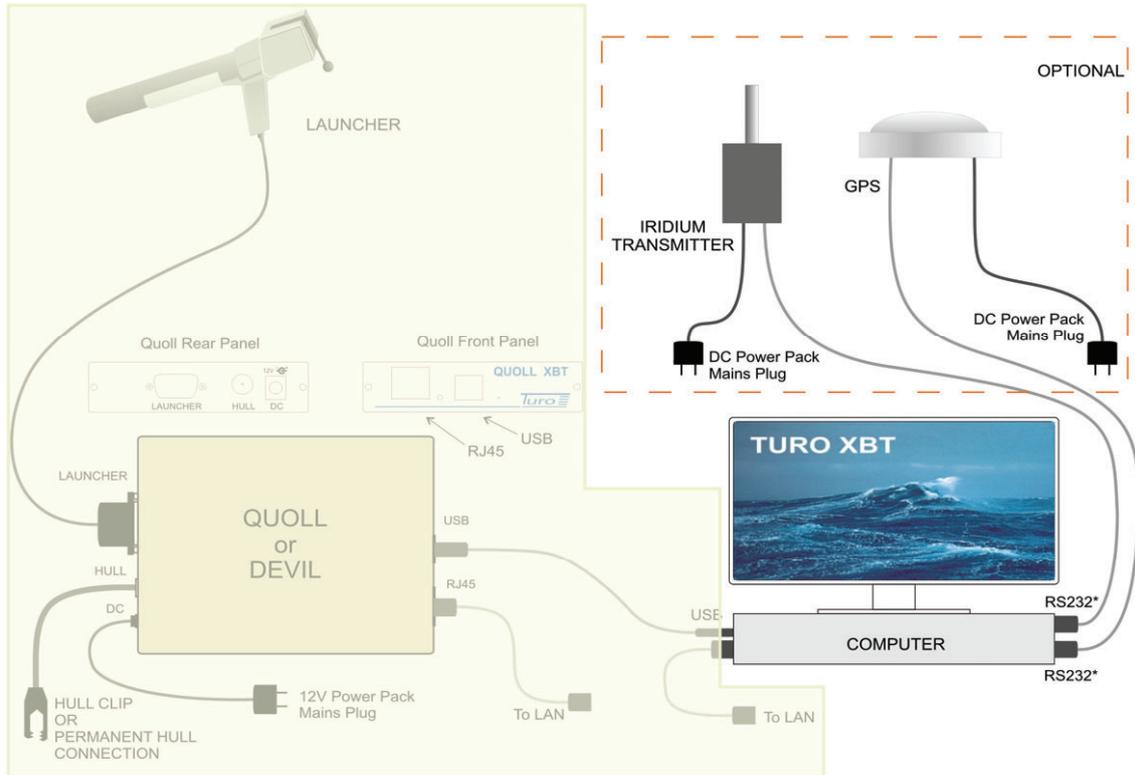
Only one XBT recorder at a time should be connected to the computer.

If multiple recorders, either Devils or Quolls or combinations of them, are connected at the same time through USB ports, only one will be detected and it is indeterminate which one that may be.

If there is more than one Quoll connected through the network then only one will be detected when DHCP is used. However, if they are all assigned static IP addresses then they can be individually selected by using the “Suggested IP address” parameter in the *Configure->XBT and Interface...* menu item. See Section 5 Network IP Address .

3 Options – GPS and Iridium

The Quoll and Devil both have options for using a GPS receiver and an Iridium transmitter. The integration and configuration of these options is identical and is described in the Devil documentation.



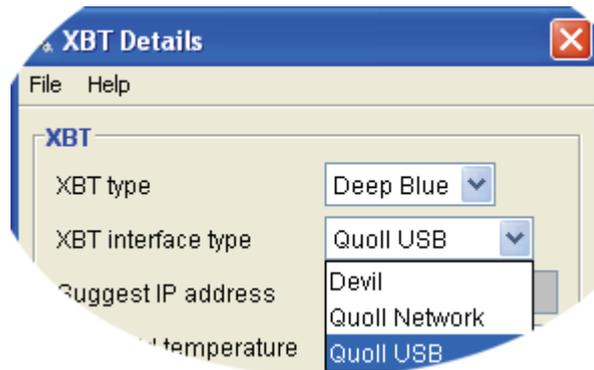
4 XBT Device Selection

Once the Quoll is connected to the computer the appropriate XBT Recorder has to be selected in the Turo XBT software configuration menu.

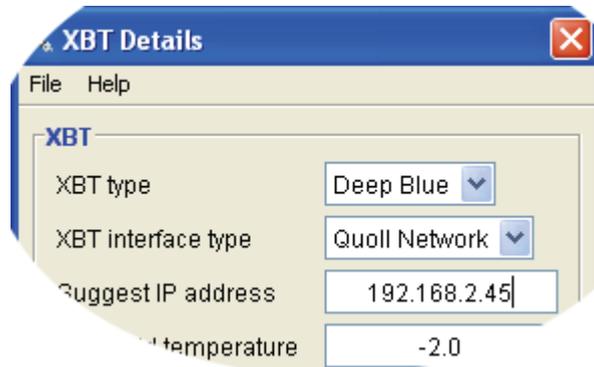
Change the operator to an Administrator and go to menu item:

Configure->XBT & Interface...

use the *XBT interface type* selection to pick the desired device – Devil, Quoll Network or Quoll USB:



If the *XBT interface type* selected is *Quoll Network* then a text box, labelled *Suggest IP address*, allows entry of an IP address:



If an address is entered here then the software first checks to determine if a Quoll device is located at this address. If it finds there is no Quoll at this address, the software then searches the rest of the local area network for a Quoll.

This *Suggest IP address* is optional and can be left blank.

5 Network IP Address

When connected through the network the Quoll requires an IP address. This address can be set by a DHCP server or be statically assigned.

5.1 Default DHCP

When delivered, the network connection on the Quoll is configured for DHCP. This requires a DHCP server to be on the network to dynamically allocate IP addresses.

If the Quoll fails to obtain an IP address from the DHCP server, it will automatically generate a new address. This address will be within the 169.254.x.x space.

5.2 Quoip – Quoll IP Configuration

A utility program, called **Quoip**, is supplied to configure the Quoll for DHCP or to assign a static IP address.

To use the program do the following:

1. Disconnect external power (and PoE) from the Quoll and connect a usb cable between the Quoll and computer.
2. Run Quoip, go to:
Start->All Programs ->TuroXBT->Utilities->Set Quoll IP Address).
3. Click the Start button.
4. When prompted, apply either external power or PoE power.
5. Then follow the prompts to enable DHCP or assign a static IP address.
6. The Quoll has to be restarted to resume proper operation. This requires all power to be disconnected from it, including USB power.

The configuration will be saved in the Quoll.



Spotted Tail Quoll
(*Dasyurus maculatus*)
Tasmanian marsupial