

# **Using an Android phone or tablet with an Oregon RFID long range reader**





The Aceeca Meazura and PTLogger have been the graphic interface to Oregon RFID's long range reader for many years. However Aceeca has discontinued the Meazura and there is no replacement.

The recommended replacement is to use a Bluetooth Serial adapter with threader to connect with an Android phone or tablet and the free application Blue Term.

### **Bluetooth Adapters**

Oregon RFID's web store has two Bluetooth serial adapters Both are powered by the DB9 serial port (5 volts on pin 9) when they are plugged in to any of our long range readers so no power cable is needed.

The Bluetooth Serial Adapter for the Mobile reader has an embedded antenna.



[http://www.oregonrfid.com/index.php?main\\_page=product\\_info&cPath=6&products\\_id=22](http://www.oregonrfid.com/index.php?main_page=product_info&cPath=6&products_id=22)

The Bluetooth Serial Adapter with External Antenna can be installed inside the metal reader enclosure with the antenna mounted on the outside.



[http://www.oregonrfid.com/index.php?main\\_page=product\\_info&cPath=6&products\\_id=40](http://www.oregonrfid.com/index.php?main_page=product_info&cPath=6&products_id=40)

## Android Phone or Tablet

An Android phone or tablet with Bluetooth can be used to connect to the reader. An iPhone cannot be used because Apple iOS will not allow Bluetooth serial connections.

Here are some waterproof Android devices as of Winter, 2015-16.

Kyocera Hydro-Lite Waterproof Phone

<http://www.kyoceramobile.com/hydro-life/>

Sony has Experia Z3 5.2" Waterproof Android Tablet

<http://www.cnet.com/products/sony-xperia-z3-review/>

Samsung Galaxy Tab Active Ruggedized 8" Android tablet.

<http://www.samsung.com/us/business/mobility/tablets/SM-T360NNGAXAR>

## BlueTerm

BlueTerm is a free app available at on Google Play.

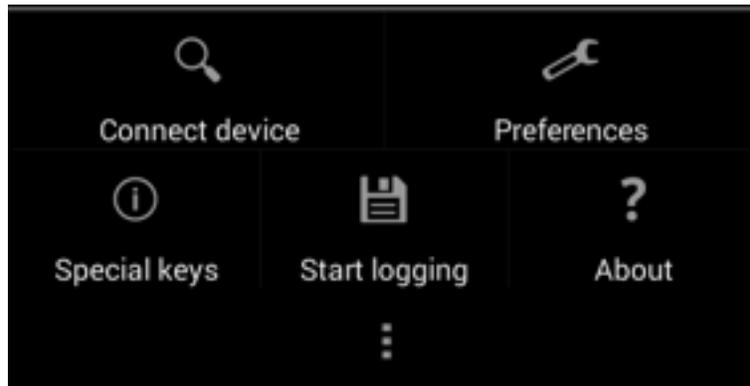
<https://play.google.com/store/apps/details?id=es.pymasde.blueterm&hl=en>



Terminal emulator to connect to any serial device with bluetooth serial adapter.

## Using BlueTerm

Press the three vertical dots at the bottom of the screen to show the menu.



Change the **Preferences** according to page 6.

Press **Connect device** to open a wireless channel. The first time you do this the device will need to be paired. See page 5.

To save data to the SD card, press **Start logging**. It will open a file with a name of the current date and time. Everything that appears on the screen will also be saved to the file. Pressing the button again will **Stop logging** and close the file.

With many Android devices, connecting it to a computer with a USB cable will allow copying the files from the phone.

## Operating the Reader

Once the connection is made with the reader, the command line interface is used to change settings and upload data to the SD card on the Android device.

The commands are described in the Command Line Reference.

<http://www.oregonrfid.com/pdfdocs/commandline.pdf>

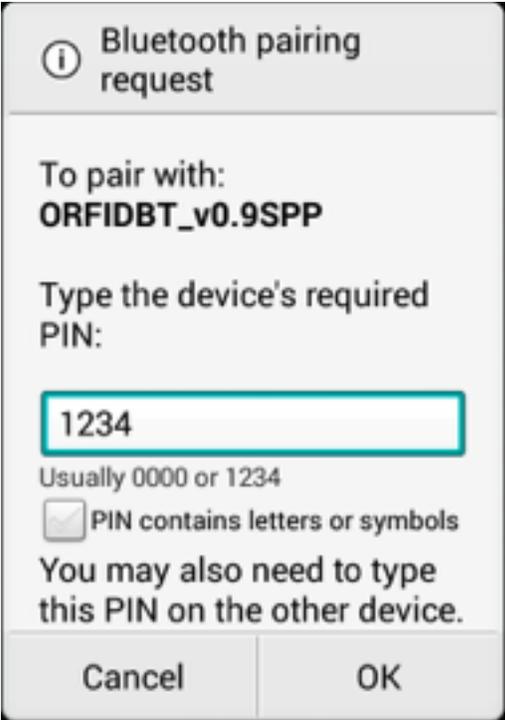
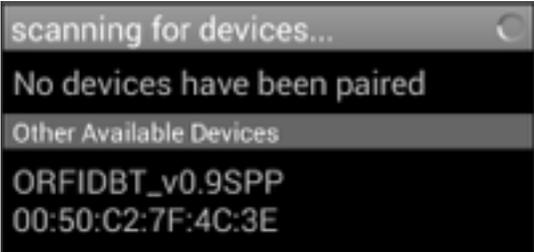
```
BlueTerm connected: ORFIDBT_v0.9SPP
p>he
Oregon RFID Datalogger Version 5.07
Reader name: Smith Cr Site code: AA
Datalogger functions
UP upload detection records
UH show upload history
RP enter report interval
TF select tag format (D=decimal, H=hex, B=bi-hex)
CS column separator (S=spaces, T=tabs, C=commas)
RN enter reader name
UD upload reader status by date
TagTracker functions
EX export TagTracker database
IM import TagTracker database
Reader configuration
DT set date and time
FR factory reset datalogger and reader
ON set automatic on/off times
CG change reader settings
MX enter mux sequence
MV set minimum voltage before shutdown
DM select detection messages to display
PM PTAGIS compatibility mode (PM0 = disable, PM1 = enable)
CO enter comment to log file
RE reboot datalogger
```

To collect the detection log data from the reader, press **Start logging**, type UP to upload the newest data and when it is complete, press **Stop logging** to close the file.

## Pairing Bluetooth (first time)



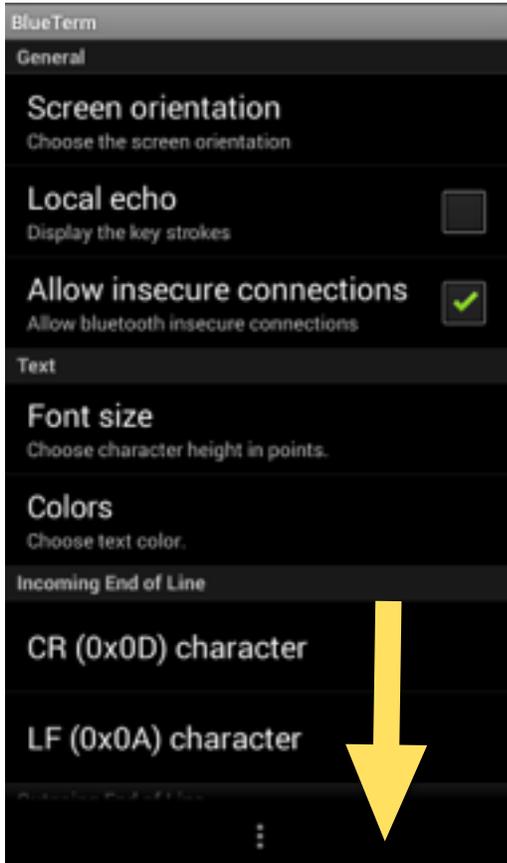
After starting BlueTerm, scan for nearby Bluetooth devices and select the Serial Adapter. Oregon RFID adapters have the name ORFIDBT.



After the device is connected, a PIN is needed to pair. This number only needs to be entered the first time. The Android device will remember the PIN.

# BlueTerm Settings

Here are the settings to use with the Oregon RFID datalogger. Be sure to select the four options at the bottom of the page to define the incoming and outgoing end of line characters.



Scroll down for the outgoing character definitions

