



Alien ALR-F800 readers support command line interface connections over the Bluetooth link using an optional Bluetooth USB adapter. The following application note contains detailed instructions on how to configure the reader in order to establish a Bluetooth connection.

### Reader Setup

Minimum reader firmware requirements:

- reader firmware version (ReaderVersion) 17.07.17
- reader OS version 170718 or installation of two system update patches

Check the reader OS version by either issuing the Alien `ri os?` command or looking at the OS section of the reader's `Administration->System` web page menu.

If the OS version is 170718 or later, then no additional updates are required.

If the OS version is earlier than 170718, then two additional patches must be installed in order to add Bluetooth support to the reader OS. The patches are available at the Alien FTP or web site:

- reader kernel update patch:  
`alien-kernel-f800_16.08.12_armel.aep` or later
- reader OS Bluetooth support patch:  
`alien-bluetooth_16.08.11_armel.aep` or later

After the patches are installed, reboot the reader and plug-in the Bluetooth USB adapter.

Issue the following reader command to start the serial Bluetooth service:

```
Alien> service serialbt start  
R d 30 serialbt          (the service state must show 'R' for Running)
```

Determine the reader hostname (the hostname will be used at a later stage to identify the reader when adding Bluetooth serial port):

```
Alien>hostname?  
Hostname = alr-0107d1
```

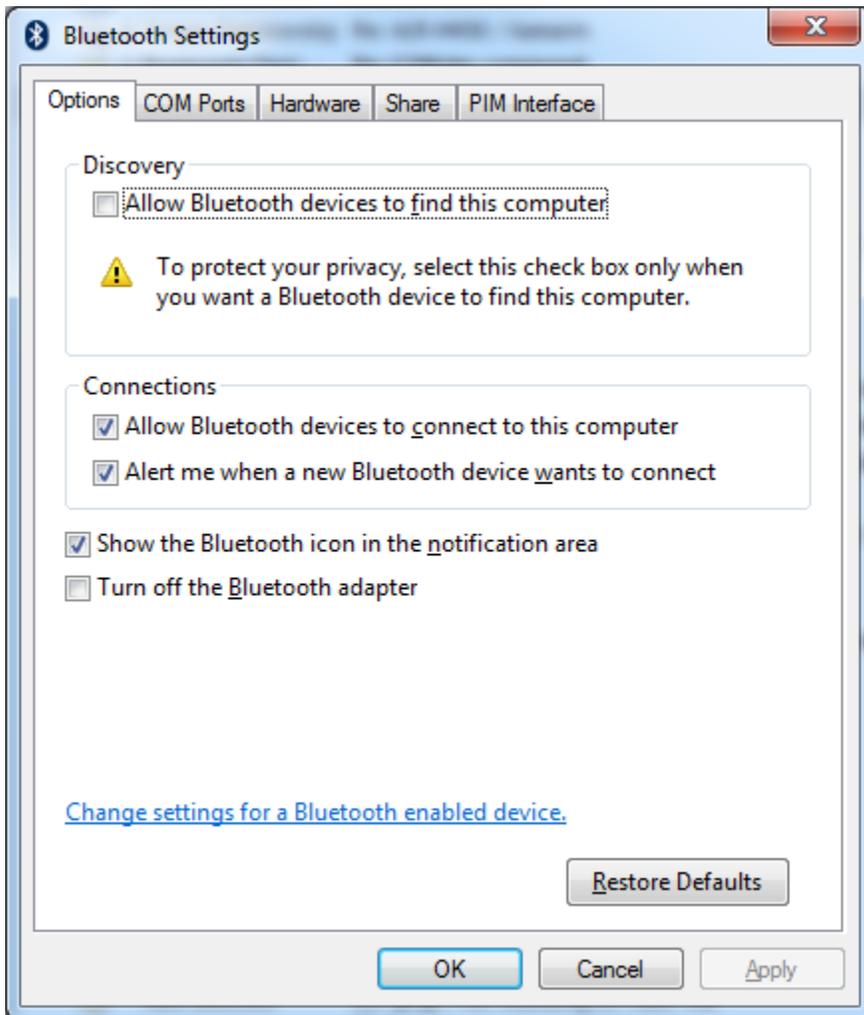


## **Client PC Setup**

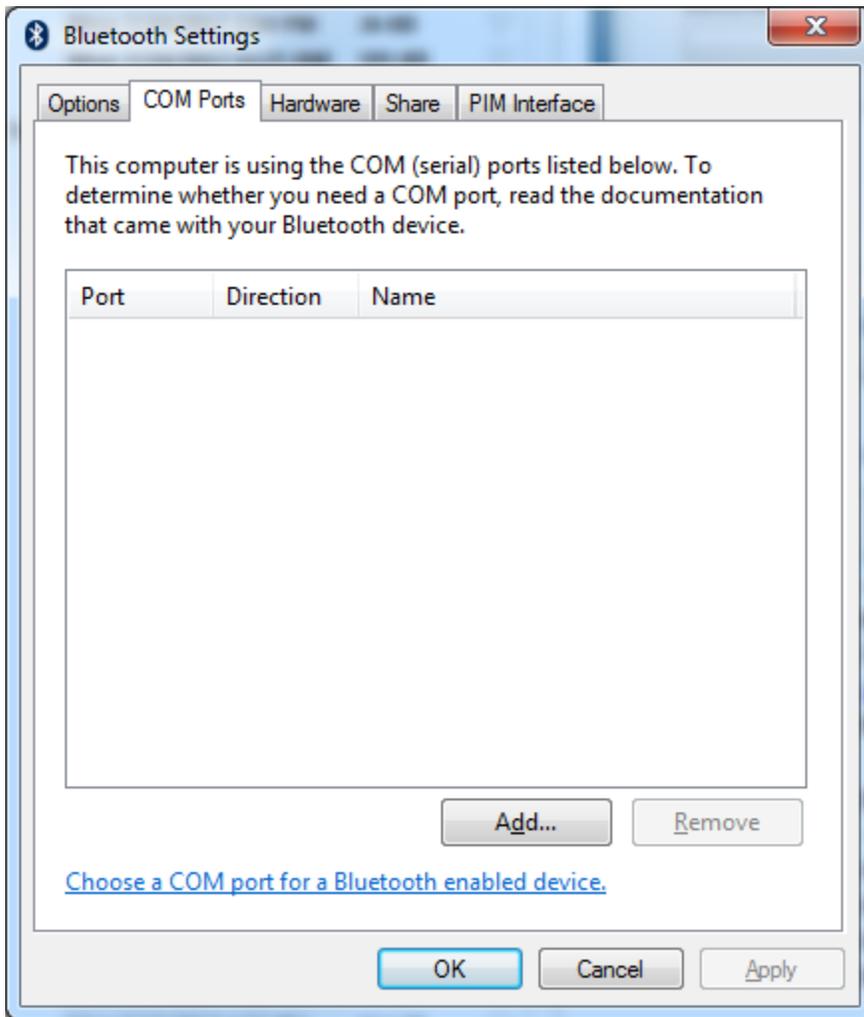
The next step is to configure a client PC to add a new Bluetooth COM port device (using Bluetooth SPP, Serial Port Profile). The specific instructions vary depending on whether this is done using the built-in (Windows/Linux) OS Bluetooth configuration utility, as well as the OS version, or Bluetooth configuration is done using the third party setup software that came with the Bluetooth device used on the PC.

Below are screenshots and instructions showing how to add Bluetooth serial port on a Windows 7 PC. Ultimately you should see a new COM port (implementing serial connection over Bluetooth link) that could be used as just like a regular serial port to communicate with the reader using ARP commands, stream tag data, or send notifications to the 'serialbt' address.

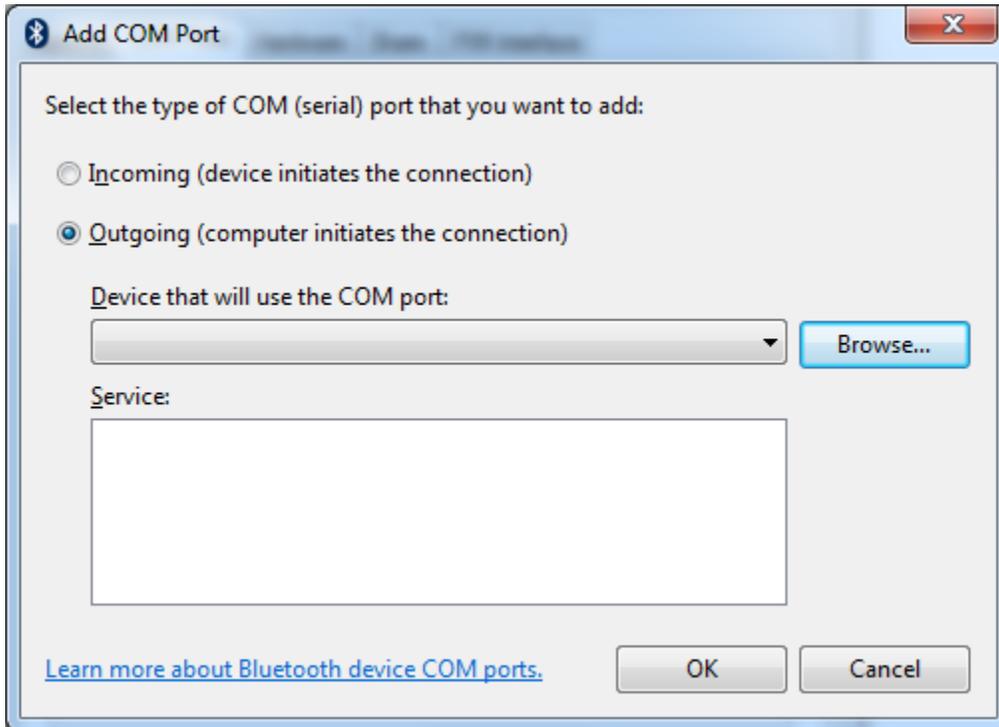
Open the Bluetooth Settings dialog:



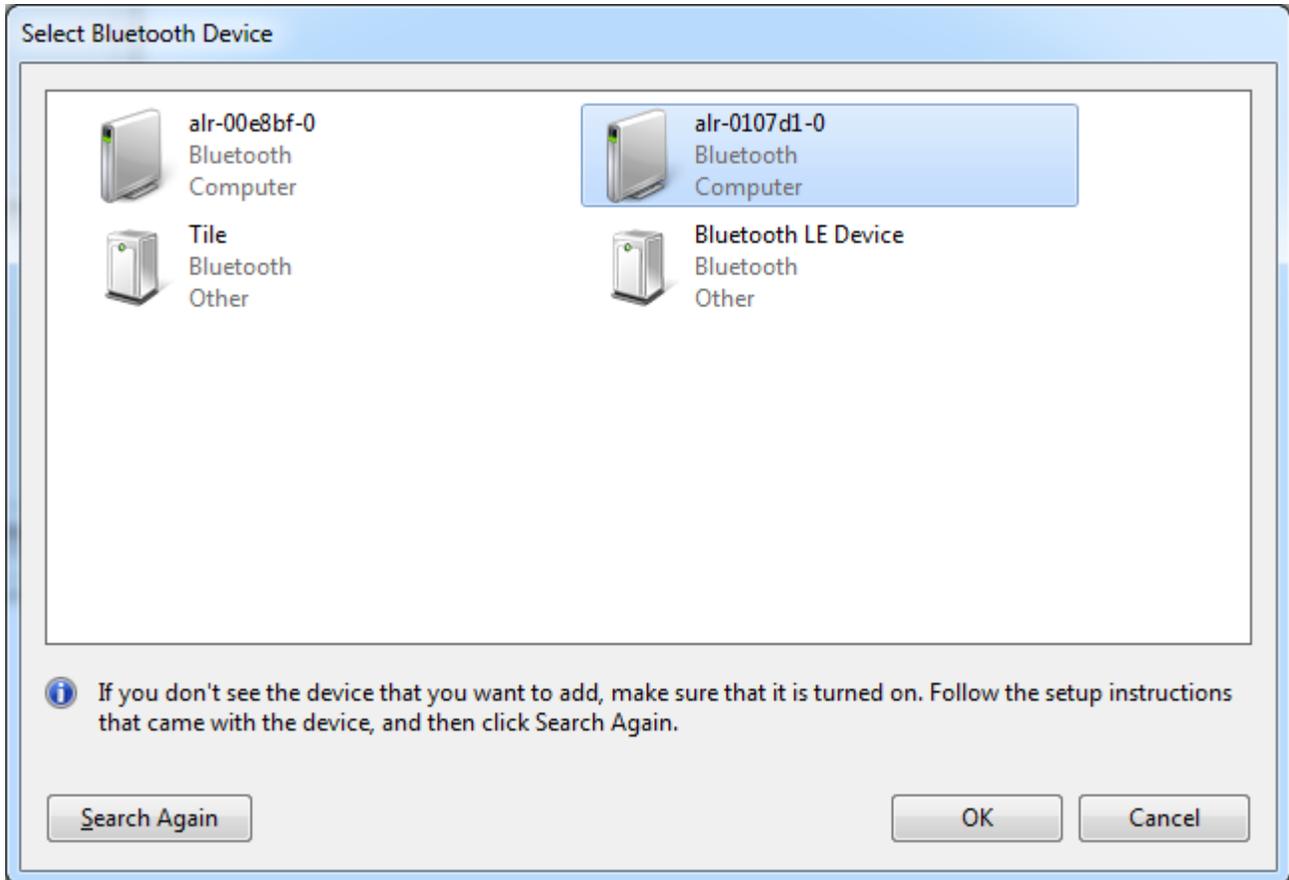
Select the 'COM Ports' tab:



Click the 'Add' button, then select Outgoing -> Browse...

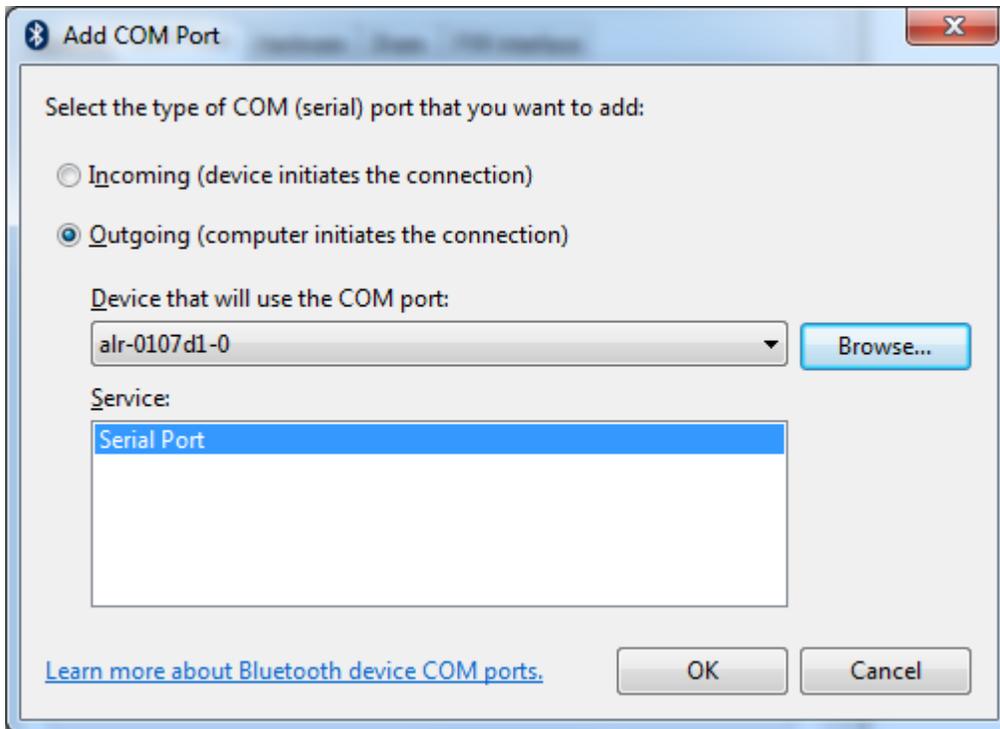


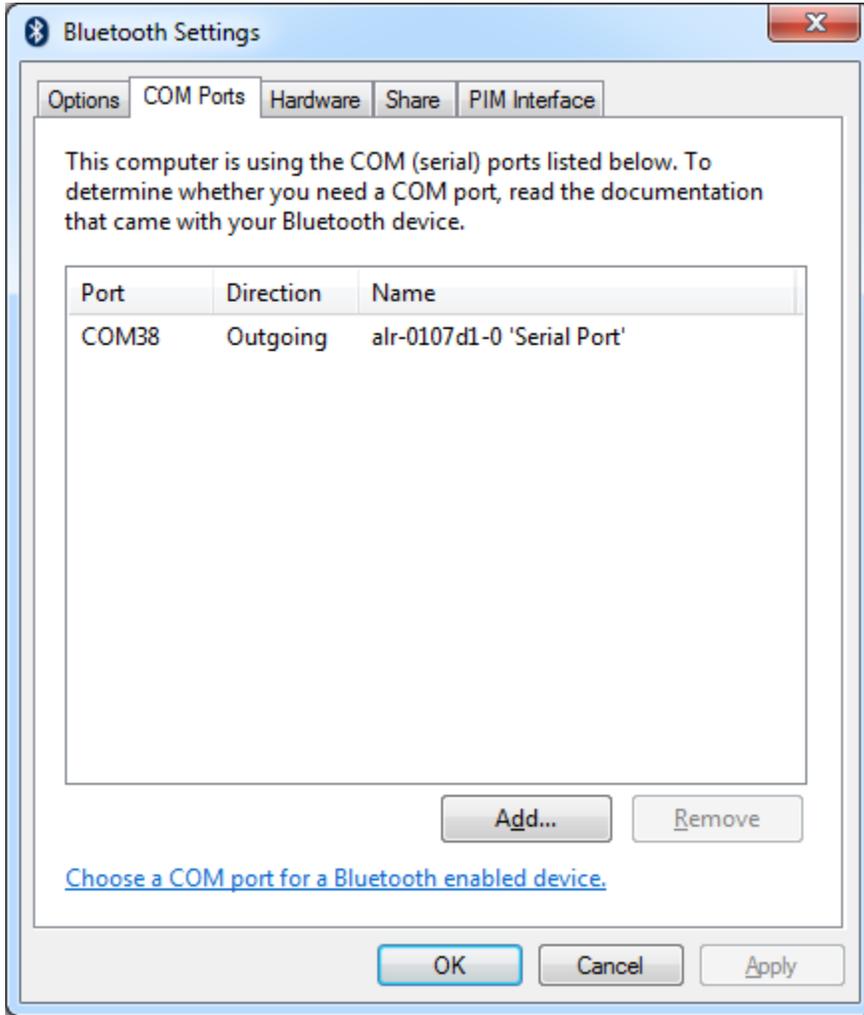
Find the Bluetooth Device with the name matching the reader hostname determined at an earlier step (usually one of the 'alr-xxx' devices), and click OK



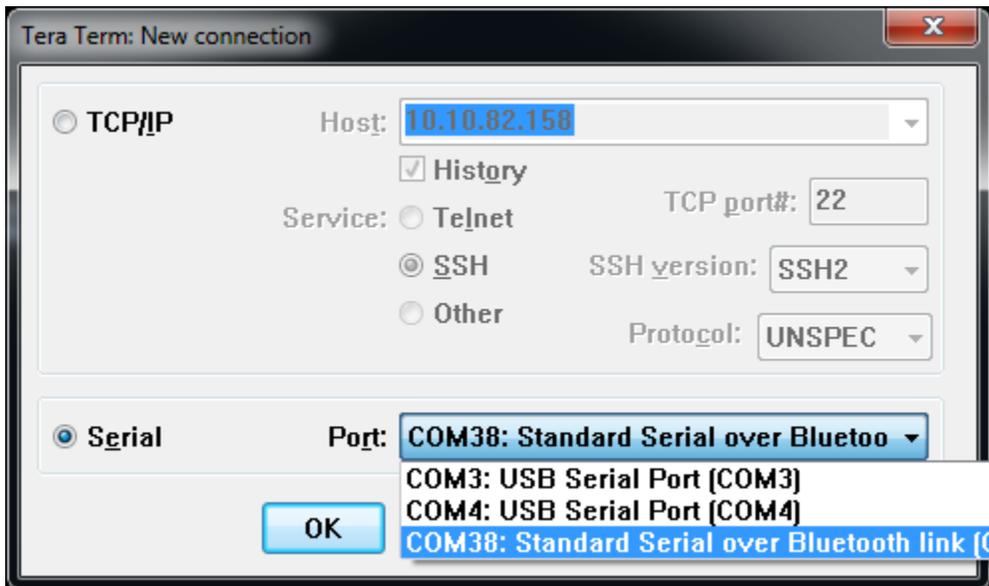


Click OK and Windows will install a new serial port device and a new COM port will be added to the system:

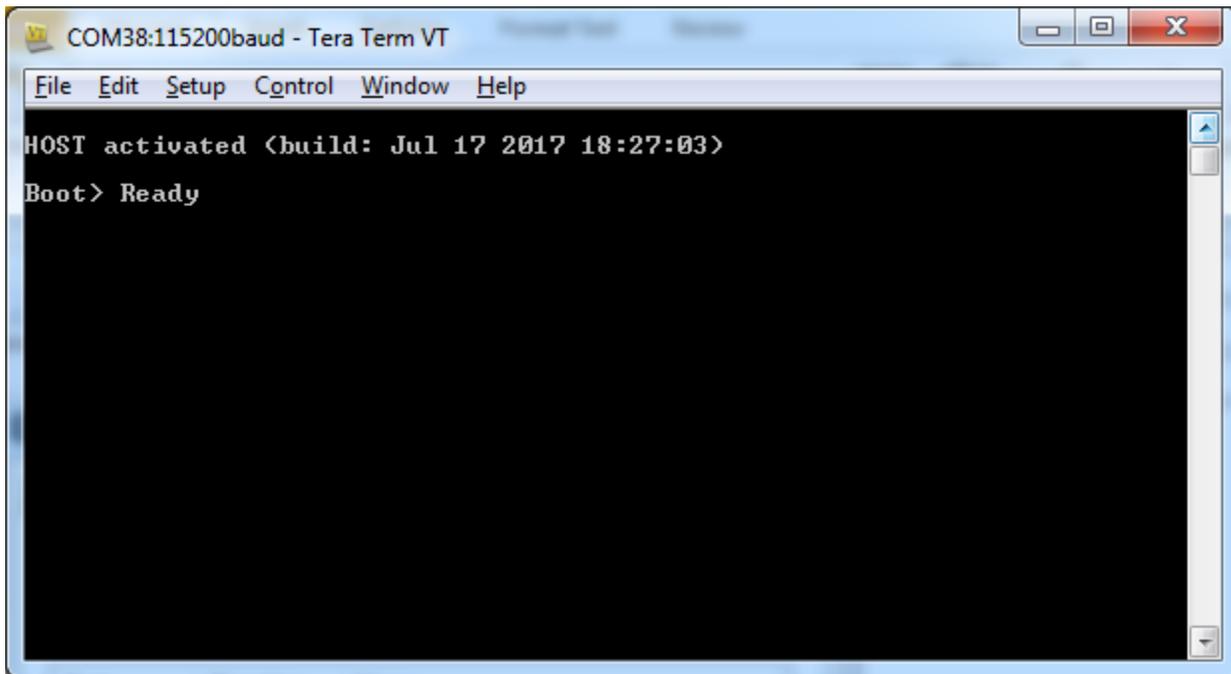




Open the serial terminal software (e.g. TeraTerm) and select the Bluetooth COM port:



Click OK and you should see the Alien prompt:





### Supported Bluetooth Devices

Currently ALR-F800 readers support Bluetooth USB adapters that are based on the Broadcom BCM20702 chipset. The following adapters have been verified to work with the ALR-F800:

- IOGEAR GBU521
- Medialink MUA-BA3

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