



# Card Reader Installation

## Set up in BO Client

1. Open “BO Client”
2. Navigate to “Setup” menu on the menu bar and click “In-car Unit Setup”.

In-Car Unit Set Up

System

DVD/Radar/GPS/License/LPR

Radar type: Undefined Port: COM 0

GPS type: Standard Port: COM 8

License reader type: 1 Port: COM 10

Speed to trigger recording (0: Never)

GPS: 100 MPH

Radar: 100 MPH

GPS Settings

☐ Send GPS coordinates back to control center

☒ Synchronize system time with GPS

GPS log interval: 30 seconds (0: don't log)

☐ Show GPS speed on video ☐ GPS on laptop

Automatic LPR

LPR integration: None ☐ Dual Channel

| Short Desc | Long Description | Action Type | Cam 1                               | Cam 2                    | Auto Zoom                | Delay | Color  |
|------------|------------------|-------------|-------------------------------------|--------------------------|--------------------------|-------|--------|
| LB         | Lightbar         | ON/OFF      | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 5     | Yellow |
| BRK        | Brake            | ON/OFF      | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | 0     | Red    |
| Ign        | Ignition         | ON/OFF      | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | 0     | Orange |
| CRSH       | Crash Sensor     | ON/OFF      | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | 0     | Blue   |
| Siren      | Siren            | ON/OFF      | <input type="checkbox"/>            | <input type="checkbox"/> | <input type="checkbox"/> | 0     | Black  |

Features to be disabled on "More Functions" screen:

☐ Pre-event playback

☐ Sync GPS time

☐ Turn off record indicator

☐ Switch to black and white mode

Short description: LB Action: ON/OFF Delay: 5 Seconds ☐ Auto zoom

Long description: Lightbar Camera to trigger: ☒ First ☐ Second

Reset

Patrol Unit Configuration

Unit ID: Base station: \$CBSDVMS1

Patrol ID: ☒ This unit can upload to all stations

Streaming IP mask:

Description:

New Save Deactivate Move

Edit Template

☐ Show All Units

New Template Save Template

Delete Template Cancel

Exit

3. Select the template to be updated and click on the “Peripheral Devices” tab.

4. Change the “License reader type” to 1 and set the Port COM to a desired COM port value. NOTE: This will be explained in the “In-car setup” of this guide.

5. Click “Save Template” to save the changes.

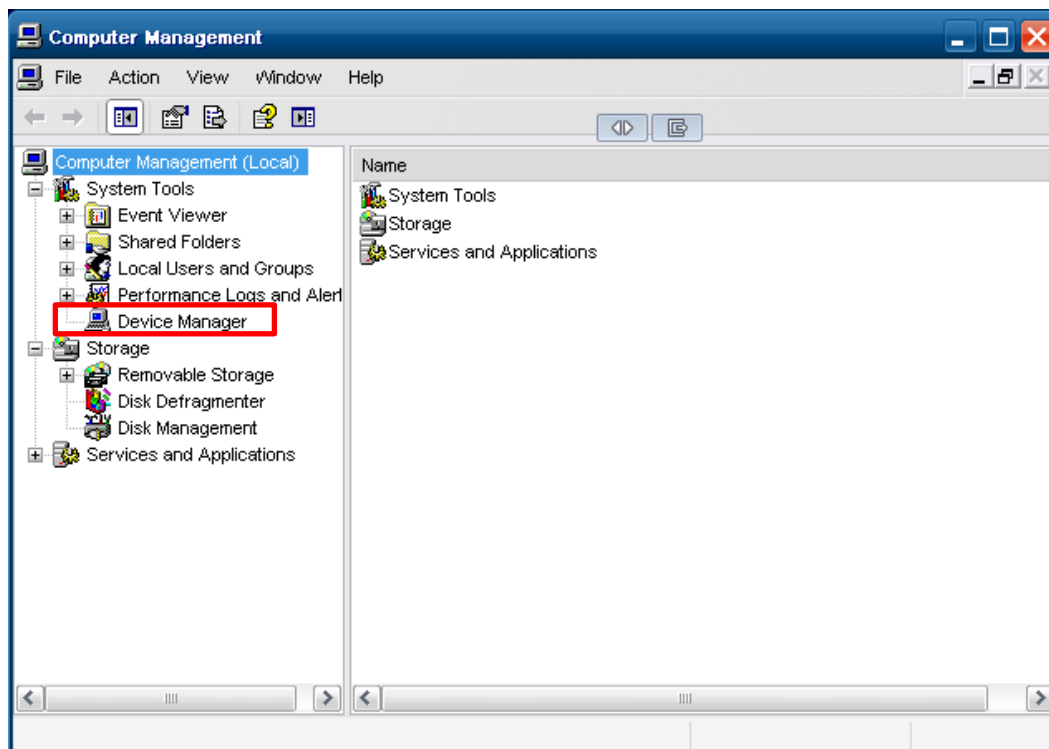
6. Re-checkout the drive or click on “Upload and shut down” or “Upload and stay on” in Mobile Recorder for the unit to take effect.

## In-car Setup

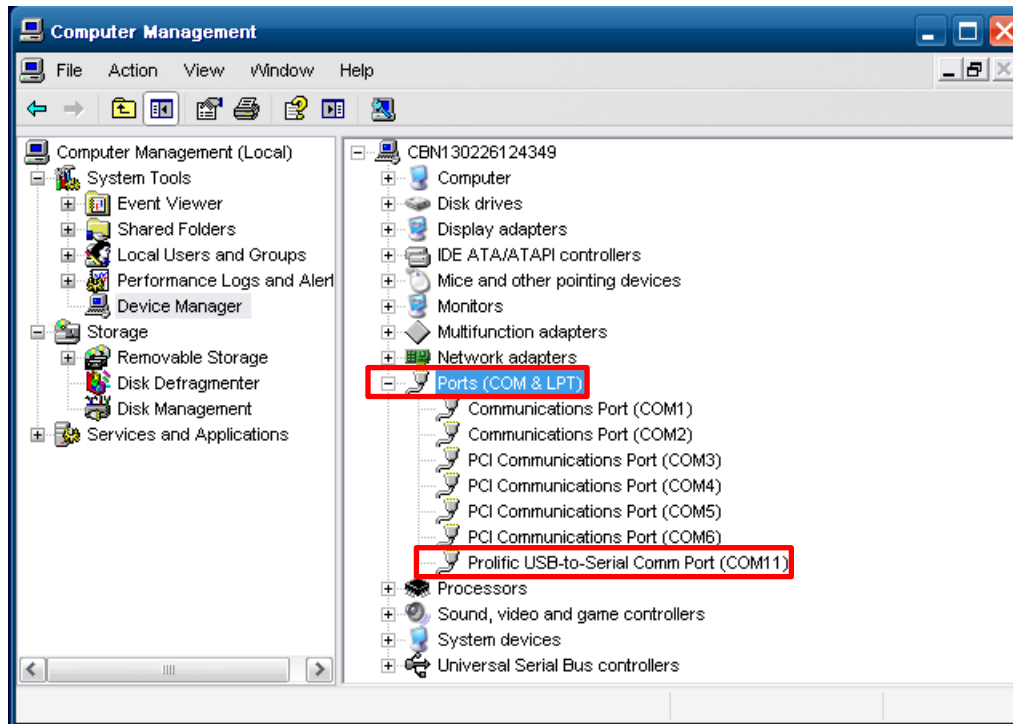
1. Login as Administrator.
2. Go to "Start" and right click on "My Computer" and select "Manage".



3. The "Computer Management" window will pop up. Select "Device Manager".



4. The right panel will populate with the devices available. Select “Ports (COM & LPT)”

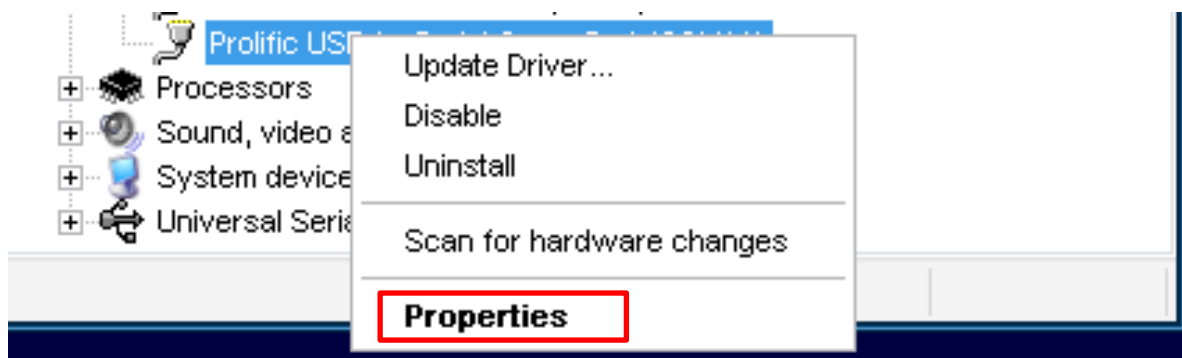


5. With the card reader connected, this will show you which port it is connected to; in this case, the picture above shows that the reader is connected to COM 11. Since the setting in BO client is set to COM 10, it will not work. The card reader needs to be plugged into the same port defined in BO client. This can be changed by moving the USB port to the correct port and verifying in “Device Manager” or could be changed by right-clicking the card reader, selecting properties, Port Settings tab, “Advanced” and changing the COM Port Number. This will be further described in the “Changing COM Port Settings” section. The other way is to change the port number in BO Client. Keep in mind that if multiple vehicles are under the same template, all the cars should utilize the same USB port and setting in BO Client.

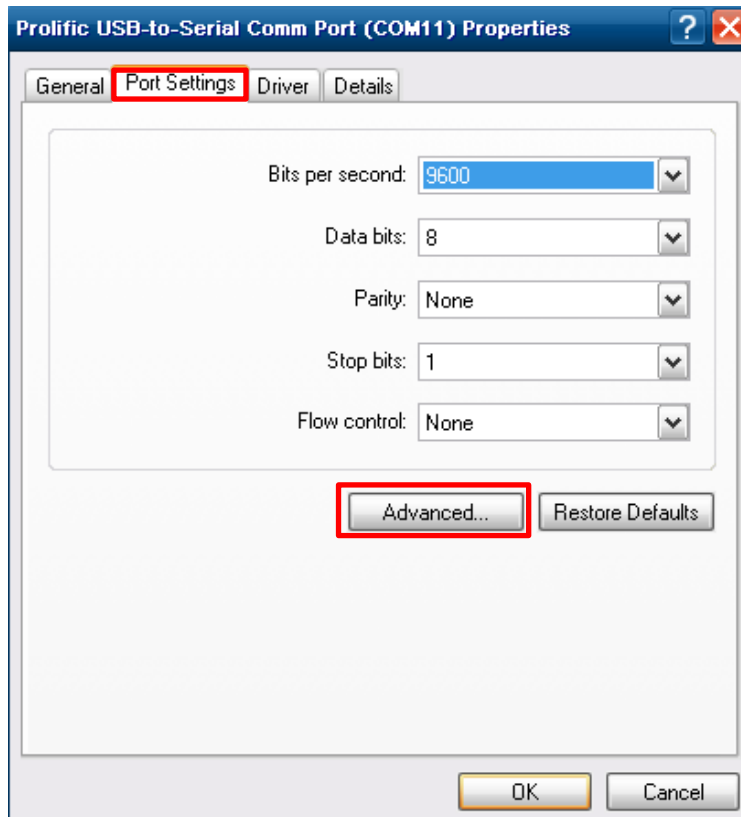
6. After verifying that the card reader is connected to the same port number defined in BO Client, start Mobile Recorder and swipe a driver’s license card while recording to verify that the card reader is working.

### **Changing COM Port Settings**

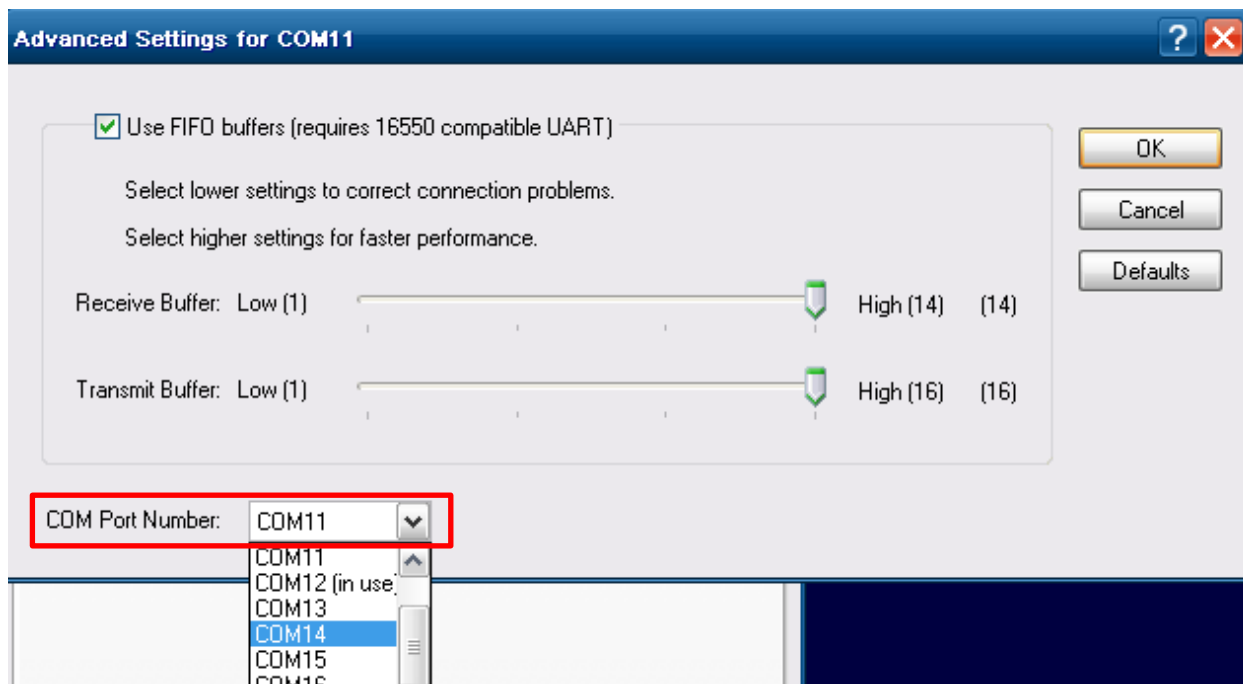
1. Right click the device under Ports (COM & LPT) and select “Properties”.



2. The port properties window will pop-up. Select “Port Settings” and then click on the “Advanced...” button.



3. Look on the bottom of the Advanced Settings window and changed the COM Port Number Setting to the correct setting.




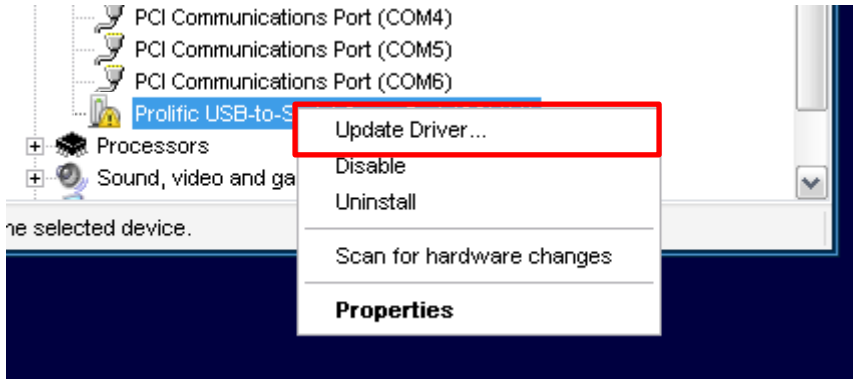
4. Click “OK” to save changes.

NOTE: This method is not recommended because the COM port number would be different than other units under the same template.

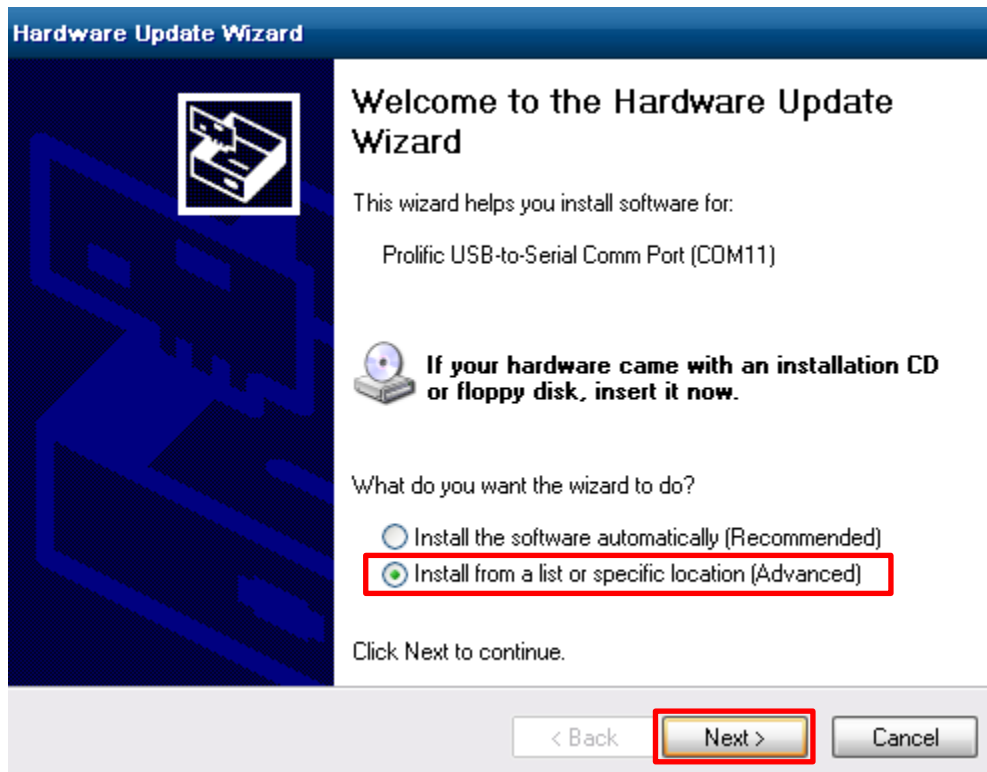
## Troubleshooting

### *Updating the drivers*

1. This step is usually done whenever there is a windows warning on the device in the list and will display a symbol as a yellow exclamation point. ...
2. Right click the device to be modified and select “Update Driver”.



3. The “Hardware Update Wizard” window will appear. Select “Install from a list or specific location (Advanced)” and select “Next”.



4. Select "Don't Search. I will choose the driver to install." Click "Next".

**Hardware Update Wizard**

Please choose your search and installation options.

☐ Search for the best driver in these locations.

Use the check boxes below to limit or expand the default search, which includes local paths and removable media. The best driver found will be installed.

☐ Search removable media (floppy, CD-ROM...)

☒ Include this location in the search:

C:\Program Files\Novatel\Wireless\Drivers

☒ Don't search. I will choose the driver to install.

Choose this option to select the device driver from a list. Windows does not guarantee that the driver you choose will be the best match for your hardware.

< Back **Next >** Cancel

5. Double-click on the card reader, in this case, it is "Prolific USB-to-Serial Comm Port". Click "Next".

**Hardware Update Wizard**

Select the device driver you want to install for this hardware.

Select the manufacturer and model of your hardware device and then click Next. If you have a disk that contains the driver you want to install, click Have Disk.

☒ Show compatible hardware

Model

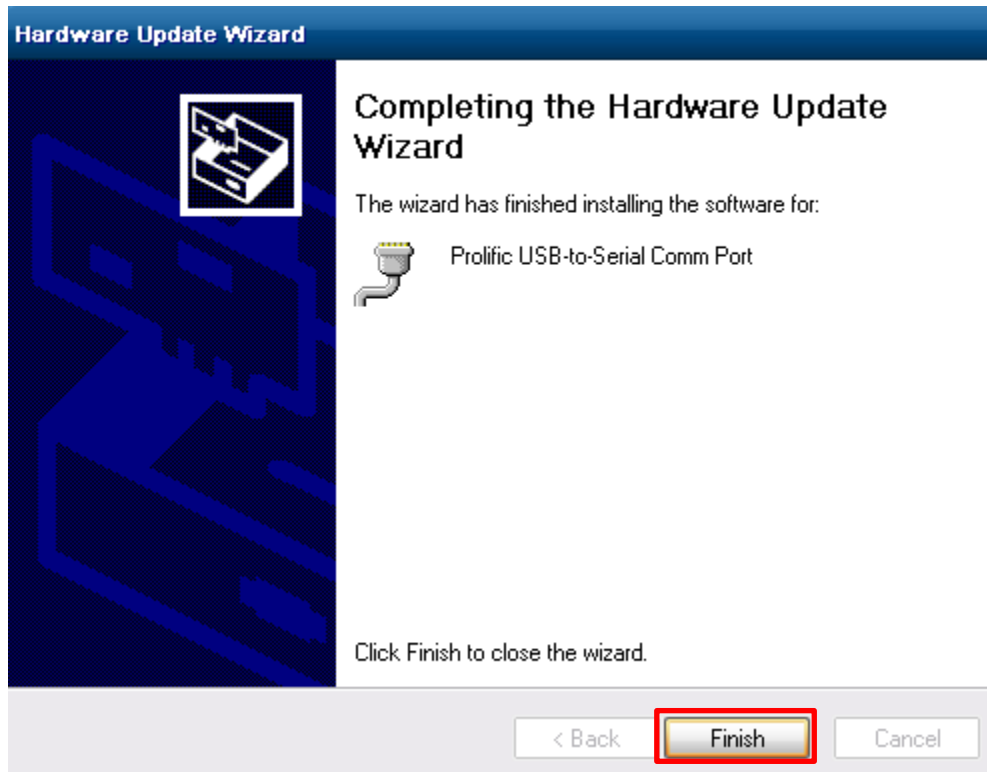
HOLUX GPS USB DEVICE

**Prolific USB-to-Serial Comm Port**

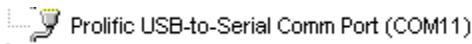
This driver is digitally signed.  
[Tell me why driver signing is important](#)

< Back **Next >** Cancel

6. Click “Finish” to complete the steps.



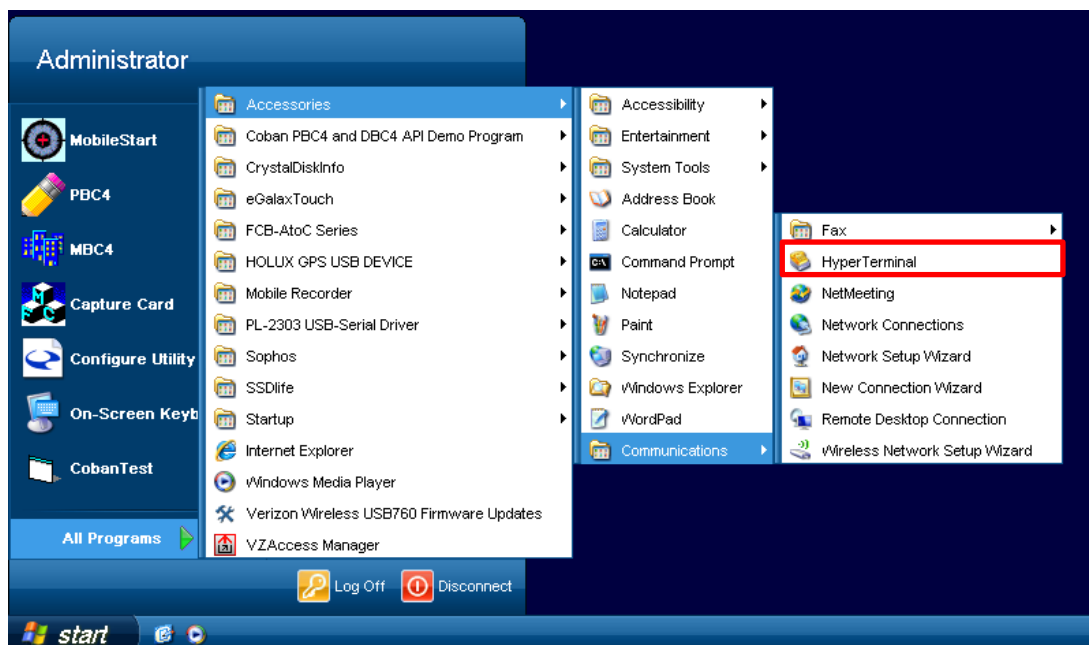
7. Verify that the device now does not have a warning to the left of it. Otherwise, repeat the steps or right-click the device and uninstall the driver and re-plug in the card reader for windows to look for it.



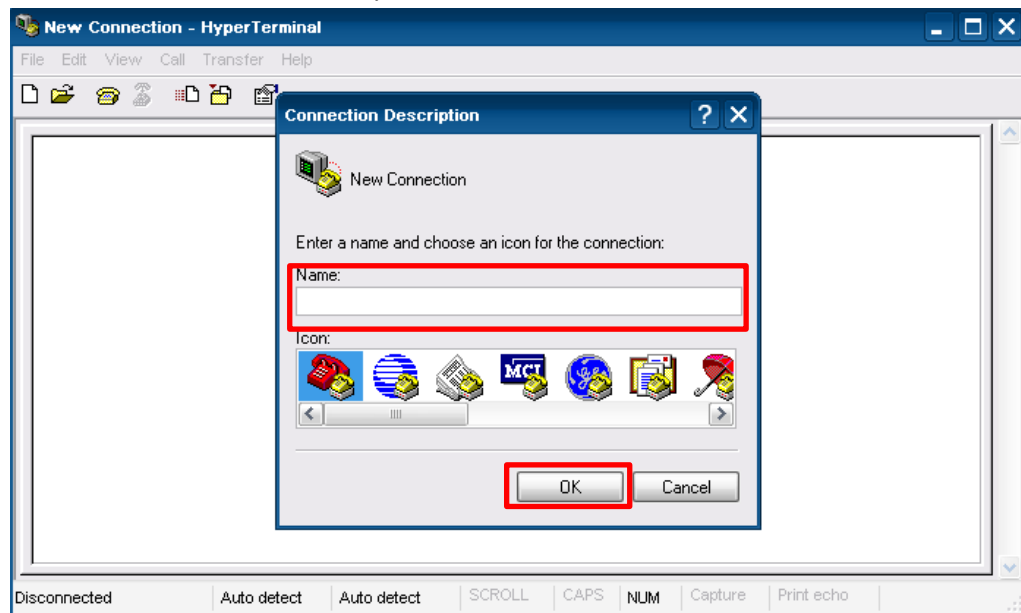
### Testing the card reader with Hyper Terminal

NOTE: This only works for EDGE.

1. Open “Hyper Terminal” from Start → All Programs → Accessories → Communications → Hyper Terminal



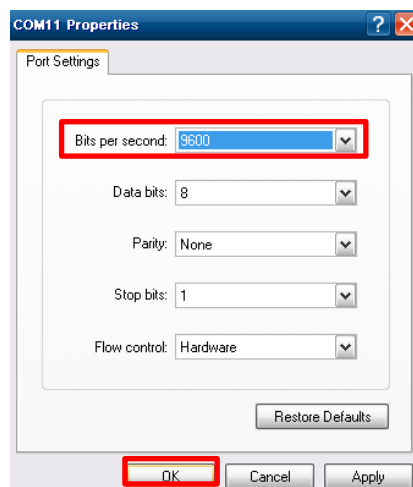
2. Give the new connection any name desired. Select “OK”



3. Select the correct COM port when prompted. This COM port should match the one seen in the “Device Manager”.

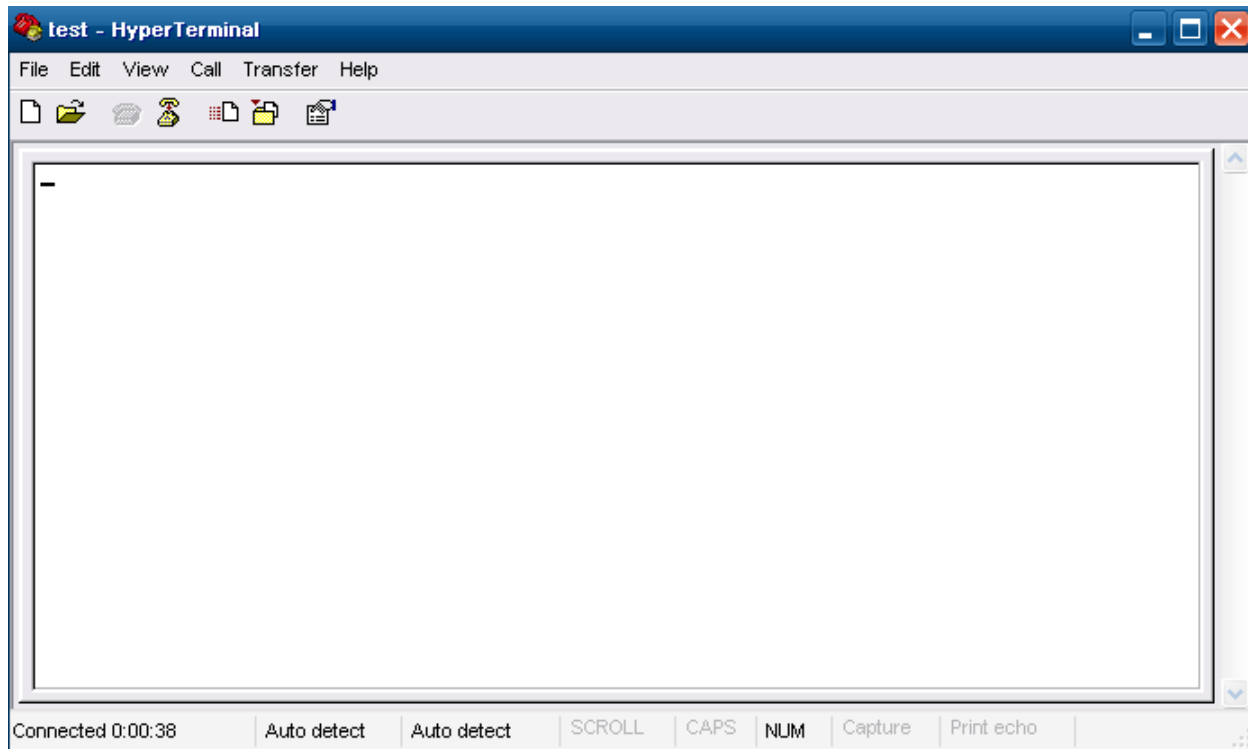


4. Change the “Bits per second” to 9600 and click “OK”.





5. While in the Hyper Terminal window, Swipe a card to verify that the card reader is working.



6. If swiping a driver's license card populates the window above, the card reader is installed and configured correctly. If not, check to see if the COM port is selected correctly in step 3. This COM port should match the COM port number in device manager. If the card reader works in Hyper Terminal and not in Mobile Recorder, make sure the setting is correct in BO client in-car setup and that either the drive has been re-checked out or "Upload and shutdown" or "Upload and stay on" has been selected.

### Verification

All the COM ports should be the same in order for the card reader to work.

