Carlson®

Carlson Software Inc.   www.carlsonsw.com
102 West 2nd Street   Phone: (606) 564-5028
Maysville, KY 41056   Fax: (606) 564-6422

This is in regards to using the TDS Epoch 35 GPS receiver with Carlson SurvCE Version 2.09 or earlier

***Please note**: this equipment has NOT BEEN TESTED by Carlson Software staff and we currently do not have a driver written specifically for the Epoch 35 so *we do not offer Technical Support for it* at this time. The suggestions below are intended for informational purposes only.

The TDS Epoch 35 GPS Equipment uses a **Novatel OEMV** GPS board

COM1 – shared by Bluetooth and cable. When cable is plugged in, Bluetooth is turned off. $GGA comes out of COM1 by default. This is also used to update the status LED on the receiver. Turning off GGA turns off the sats and status letter. Baud rate is always 57600.

COM2 – shared by internal Pacific Crest PDL and external cable. When cable plugged in, it looks for external radio. When cable unplugged, internal radio activated. Default baud is 9600. Internal radio is at 9600 on COM2.
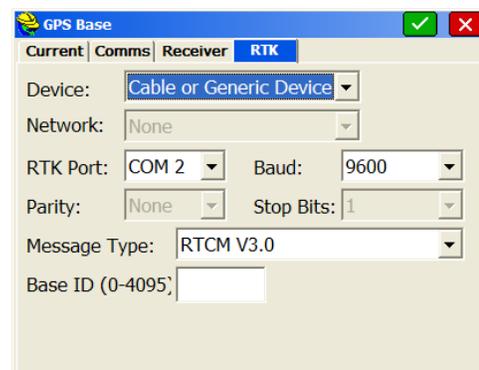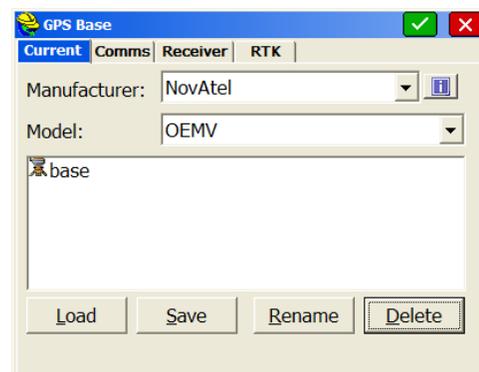
To use SurvCE 2.09 and earlier:

Using internal Radio:
1) Tap Equip / GPS Base = set if for Novatel OEMV

2) tap the "**Comms**" tab and select either Bluetooth or Cable as the "Type"

3) then tap the "**RTK**" tab set Cable, COM2, baud to match external radio. Recommend 9600 for base radio because PDL is programmed to 9600 baud automatically by receiver when turned on after reset. RTCMV3 is recommended for Message Type. Tap Green Check to complete the GPS Base setup.

After starting the Base = tap Equip / GPS Rover using Bluetooth or cable. On RTK tab set Cable, COM2, 9600 baud, Message Type to match base.

Note*: Rover can be getting bad information over the Radio but still blink the receive LED (Base Radio could have the wrong Baud, wrong Message Type, etc.)*

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Known Issues:

- The Epoch35 has a simple LED display that can show about 10 characters. Usually it shows a single letter A, D, or F to indicate autonomous, differential or fixed and the number of sats eg "A/08". When SurvCE configures the receiver, the receiver starts just showing "0/00".

The status display panel on the Epoch35 GPS receiver shows current Mode {Fixed, Float or Autonomous} and number of Satellites by using default GGA on COM1. SurvCE turns this off to be able to control the GPS Receiver so the External Display on the GPS Receiver changes to show "0/00". This is normal and unavoidable at this time when using the Epoch35 GPS equipment.

All the normal data is still shown in SurvCE inside Equip / Monitor Skyplot and other Live Routines including Sats, Mode, HRMS, VRMS, DOPS, etc.

- We do not have any method of using "Data Collector Internet" in the RTK tab for a Bluetooth Cellphone connection on a GPS Rover with NTRIp at this time because SurvCE hardcodes it to 115200 baud. I can change the baud of the receiver port but it only seems to work at 9600 baud.

- The steps above are just referring to a "Base / Rover" setup onsite with a UHF radio for communications. You could also connect an External Modem like an Airlink Raven if the airlink is set to 9600 for a possible GPS Rover NTRIP solution.