

CHC i86 with Carlson SurvCE 6.08

5/30/2024

The CHC i73+, i86, i89, i93 and iBASE can all be used with SurvCE version 6.05 - 6.08 using the CHC i90 drivers. A suitable User Antenna definition will need to be manually entered once for these devices.

SurvXX versions lower than 6.05 will not have drivers for the i90. You can update from any version 6.xx to 6.08, call us for a prebuilt .CAB file to assist in the update.

SurvXX version 6.08 is geofenced for some of these devices which requires reverting to 6.05. This entire SurvXX situation is a mess and iGage strongly recommends that you NOT consider using SurvXX field software. LandStar8, X-PAD and Field Genius Android are modern, supported tools. They are worth the small investment in time to switch to.

Disclosure

Carlson no longer supports CHC or iGage equipment so SurvCE 6.08 is the highest version that you can use for our equipment. This version from September 2020 is very dated, has many known bugs and is nearly unsupportable for any issue. Windows Mobile Devices (SurvCE) are no longer available. The communication tool Windows Mobile Device Center barely functions on modern computers.

Windows 10 tablets, like the Carlson RT4 are expensive and slow. Modern Android devices like the Samsung Tab Active 5 and Tripltek 9 Pro are fast, bright and more reliable for 1/5th the cost.

Consider updating to LandStar8. You don't need to be stuck with old, unsupportable field software tools!

Configuring

From the Equip menu, click on GPS Rover:



Set the Manufacturer to CHC and Model to i90.

All of the CHC devices have the same API interface, so other than the antenna model, most devices are interoperable.

Select the Comms tab:



Click the **Hammer/Wrench** button to the right of the **BT Type**.





Click the Find Device button.



After a while, a list of nearby Bluetooth devices will be shown:



Highlight the receiver, identified by serial number, then click the green checkmark.





If asked for a Device PIN, enter 0000:



If you were not asked for a PIN, consider clicking the Set Device PIN button and enter 0000:



Click the Bluetooth Connect button



Wait for the Bluetooth connection to be made:



Select the Receiver tab:



Click the antenna button then click New.



Enter the Radius, SHMP, then click the L1 and L2 Offsets button:



Here are values for these receivers:

Descripton	Part Number	SHMP	RADIUS	L1 Offset	L2 Offset
CHC 173+	173	0.0000	0.1240	0.08364	0.06905
CHC 183	183	0.0000	0.1240	0.07664	0.06905
CHC 189	189	0.0000	0.1240	0.07996	0.07996
CHC 193	193	0.0000	0.1240	0.08168	0.08168
CHC IBASE	IBASE	0.0000	0.1240	0.08834	0.08995
CHC 176	176	0.0000	0.1240	0.05120	0.05120

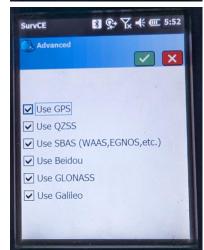
Click the green check mark.

Click the Advanced button:



Click the **Configure Constellations** button:





Make sure EVERY button is checked. There is a known bug in SurvXX where these constellation check boxes are mysteriously unchecked. If Beidou, GLONASS or Galileo are not checked, under canopy performance will be impacted.

Click the green check mark, click the green check mark:



Click the RTK tab:



If you choose to change the Internal UHF settings by clicking the hammer wrench button, the radio setup process may fail.





Once you exit the device setup, use Monitor Skyplot to verify that all satellites are tracked and mostly used:

