

Vancouver Office #10, 3671 Viking Way Richmond, BC V6V-2J5 Phone: (604) 214-9453 Fax: (604) 214-9455 Calgary Office #2,21 Highfield Circle SE Calgary, Alberta T2G 5N6 Phone: (403)252-0070 Fax: (403)259-3992 Edmonton Office 16304 111 Avenue Edmonton, Alberta T5M 4G3 Phone: (780) 486-2111 Fax: (780) 486-2155 - when it has to be **right**



Leica iCON GPS 60 Base Setup

This is to setup the **Leica iCON GPS 60** as a BASE receiver transmitting base correction through its COM port (P1). Although this setup is generic, this is mainly used in conjunction with a senseFly eBee RTK system. The iCON GPS 60 will be directly plugged into the flight control/monitoring computer for the eBee RTK system. For specific setup on the eBee and computer, please refer to relevant reference documents/manuals.

Step	Screen Menu	Instructions	Visual
1.	Main Screen	 Setting Up the Equipment Set up the tripod, mount and level the tribrach onto the tripod. Check that the tribrach is correctly centred over the marker. Take the GEV269 cable from Port 1 and connect to computer's USB port. Turn on the antenna and make sure the receiver is in a relative open area and is tracking satellites. 	a) Position icon b) Satellite icon c) Radio icon d) Modem icon e) Batter/Power icon f) Bluetooth icon g) ICON telematics/Port Summary icon h) Memory and logging icon i) Settings icon
2	Settings >> Tools	 Base Setup Access the wizard via Settings > Tools > Base Setup. In the Position screen highlight Modify and press ▲ The instrument can be manually set up as a stand-alone base station with in three different ways using the Base Setup wizard: Get here: Instrument determines position and uses current position as a new base point. Edit: Manual input of coordinates to generate a new base point. Find nearest: Searches through the Base Point List for a known base point within a radius of 20 m of the current instrument position. 	Settings Dois System Information System Configuration System Configuration System Configuration Source Dopyrights Dopy
	Base Setup : Position	For most case: In the Position screen highlight Modify and press <u>I</u> If the base point is unknown, select Get here and press to confirm (See above for options)	Position Point ID :



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Communication External Radio (1) RTK settings: Save Settings	In the Communication screen, highlight External Radio P1 press enter and using the left/right button, select Edit and press to confirm. • For External Radio P1 (1) follow the following settings for Baud rate, Parity and Flow contr. Model : Generic RS232 Baud rate : 115200 Parity : None Flow contr : None Model • In the RTK Settings screen select RTCM 3.1, 1s and off for Corr. Format, Corr. every, and Time Slicing respectively • When finished, confirm in the Save Settings screen by pressing .	Communication Derensi Radio P1 : ddi Derensi Radio P1 : ddi<
Communication	This setup will facilitate the streaming of RTK base correction through its external port 1.Internal Radio:OffExternal Radio P1:OnNetwork:Off	Communication Internal Radio : Off External Radio P1 : On Network : Off Deese
Antenna	Use the navigation key to proceed to the Antenna screen. The Height of the active antenna, the Measure mode of antenna height and the Ref.Stn.ID (Reference Station Identification) might be changed.	Antenna: ICG60 Height : 1.800 m Measure : Vertical Ref.Stn.I : 0



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	Base Setup	Use the navigation key to proceed to the final step. • To save and apply the new Base Station settings select Save and press 4. to confirm.	Base Setup Base setup done. Save new base config or undo changes?
3.		 Configure the Raw Data Logging Navigate to the Setting icon in the main menu Following into Tools > Raw Data Logging In Raw Data Logging follow into Setup/Start Logging In Set up logging (1), enter in the appropriate height, and use the correct Measure format. In Set up logging (2), enter in the any unique Point ID, set the Interval as: 1s, set Method as: Manual Stop, At power Cycle: Resume In Set up logging (3), Split files: No Upon hitting right arrow after set up logging (3), logging will commence. Exit Raw Data Logging and make sure "Exit – Continue Logging" is entered 	Tools Base Setup Rover Setup NMEA Output Raw Data Logging ICON Telematics ICON Telematics
	Main Display Screen	In the main display screen verify the following: The Position Icon This icon means the receiver is correctly setup as a base. The Radio Icon: Although there is no physical radio involved, but the icon shows that the P1 (port 1) is streaming correction out. Lastly, make sure the receiver is tracking with enough satellites in an open area (free of canopy/obstructions) in order to achieve an optimal position.	