



## Brief eBee RTK setup with Leica Viva

2015-06-12

1. Flight planning (Cache aerial image before going into field. NOTE: Google images cannot be cached)
  2. Set up Viva base station over one of the following:
    - 1) Arbitrary point (not recommended for repeatability of results)
    - 2) or A peg in the ground that we have put in
    - 3) or A known survey mark
  3. Turn on GS15 GNSS receiver
  4. Turn on handheld CS15 field controller
    - 1) Select **USE GPS Only** if asked
    - 2) Select **New Job** or **Choose Working Job** if asked, jump to 4)
    - 3) On main manual, go to **Jobs & Data** to choose a new or an existing job
    - 4) Select **Go to Work**
    - 5) Select **Go to base menu**
    - 6) Instrument → Base Settings → Satellite Tracking → Tick GPS, Glonass and Show Message in Tracking tab → Set 10, None, Auto & Auto in Advanced tab → OK
    - 7) Instrument → Base Settings → Raw data logging → Tick Log base data... 1.0s, RINEX2 → OK
    - 8) Instrument → Base connections → Connect to Base → Sensor: GS10/GS15; Connection using: Bluetooth (Search GS15#### if not displayed) → OK
    - 9) Instrument → Base connections → All other connections → The first line should be “Base Sensor, Bluetooth and GS10/GS15” → select the 3<sup>rd</sup> line “Base RTK 1” → Edit → (General tab) Tick Transmit RTK base info; Connect using: GS Port 2; RTK data format: RTCM3 → (Data rates tab) RTK data format: RTCM3; Data: 0.1s; Message type: Extended; Coords: 10s; Info:60s; End of message: Nothing; and RTK base ID: 0 → (Time slicing tab) untick Use time slicing → OK → OK
    - 10) Go to work → Over any point → Antenna height: (measure to  MRP); RTK base antenna: GS15 Pillar; Vertical offset: 0.000m → Next → Enter a point ID → Next → Base setup complete.
  5. Open eMotion, connect Radio and connect to drone. If you update the version of eMotion on the tablet then you MUST update the firmware on the eBee RTK.
  6. Plug Viva cable [GEV268](#) into tablet and Port 2 in GS15
  7. In eMotion, click yellow drop down and select eBee RTK Base
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8. Make sure eBee drone icon status is “RTK fixed” (a status of “RTK Standalone” means that you don’t have a proper RTK connection)
  9. Perform pre-flight checklist
  10. (disable Auto Standby on Windows)