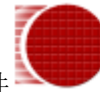




1NV08C-EvKit-CSM,NV08C-EvKit-MCM 评估套件测试步骤



Storegis



CDM20802_Setup

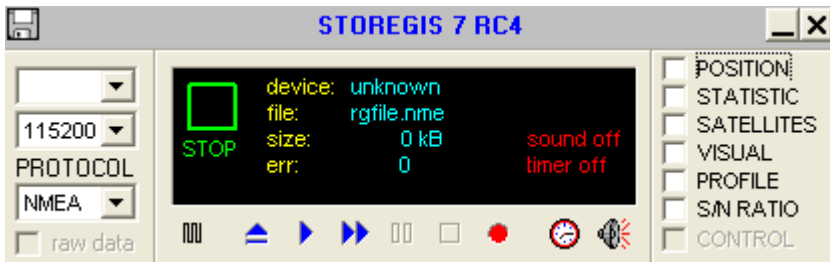
1. 一台笔记本或台式机，预装 StoreGIS、USB 线驱动软件；

2. 用 USB 线连接电脑 USB 口与测试板 USB 端口，安装好 USB 线驱动，天线置于户外或窗台并连接测试板（由于测试板电路将 NV08C 模块 2 个串口输出其中一个作了串口转 USB 口，USB 线起测试板与电脑通信兼测试板供电作用）。也可直接用测试板串口连接电脑通信；



3. 电脑找到新设备后，打开 StoreGIS，选好左上角正确的通信端口 VCPO、协议如 NMEA、波特率如 115200，

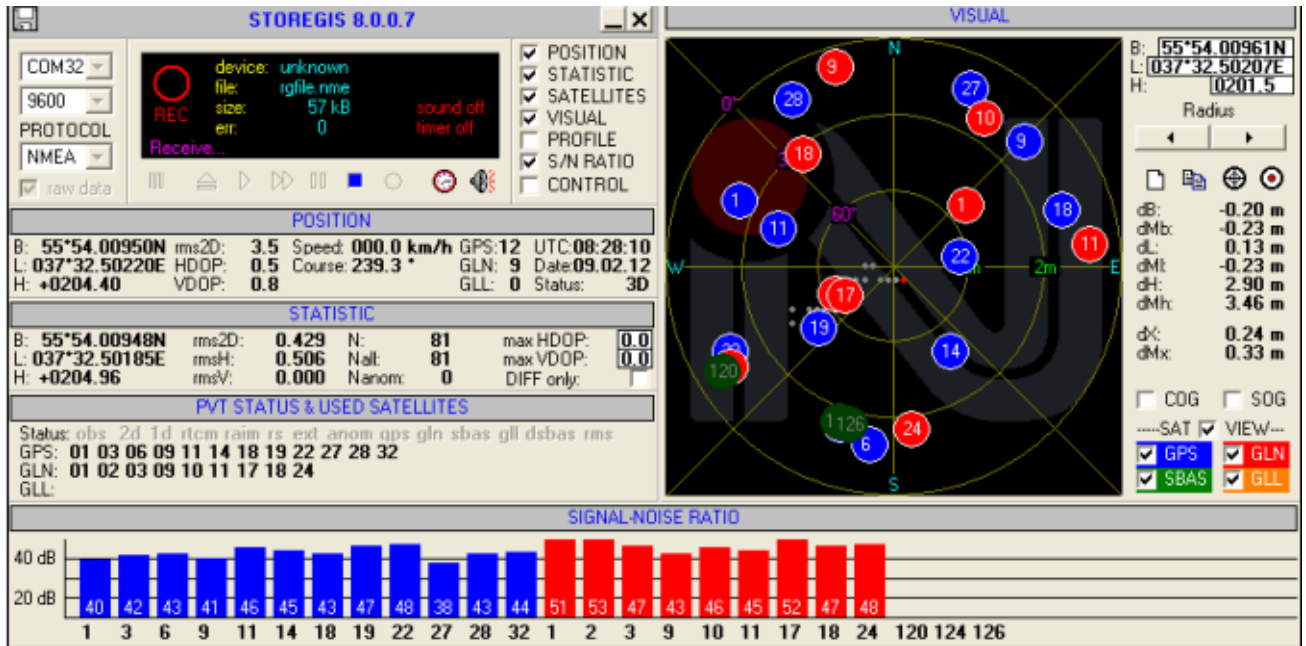
4. 勾选右侧 Position、Statistic、Satellites、Visual、Profile、S/N Ratio；



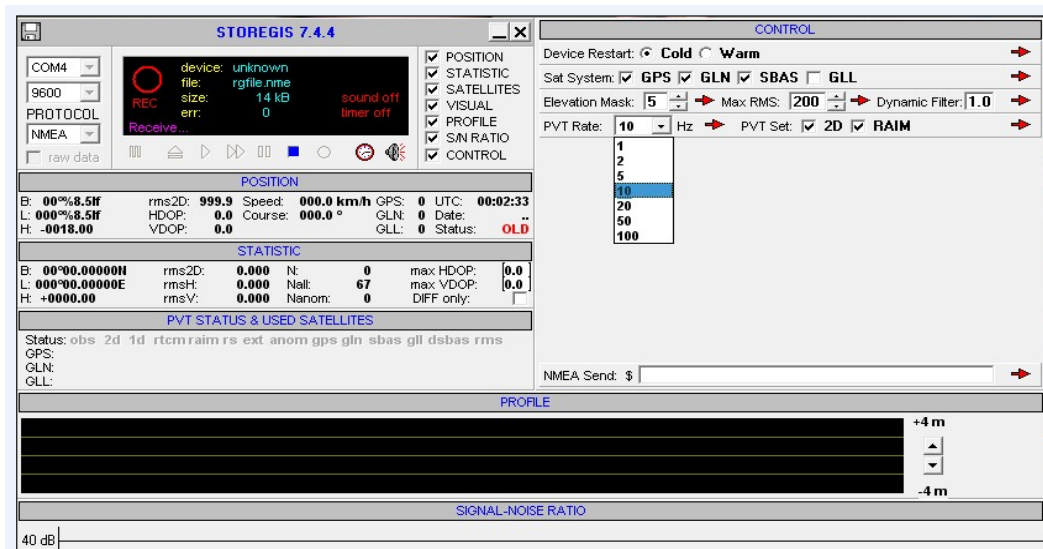
5. 点击 Synch 同步键连接，如果显示 Connection OK，点击红色 Record 键，即可输出经纬度、高程、速度等数据，以及搜到的 GPS 卫星（蓝色）、GLONASS 卫星（红色），并显示其信道编号、信噪比值；

6. 十字圆周右侧，下方勾选蓝色 GPS、红色 GLL 等，。上方点击 红点 Set Statistic、

小十字 Set Current 归原点，观察到定位精度、漂移情况。Radius 键 可以左右调节适当的精度刻度，如 2M；



7. 勾 Control, 可以测试热启动、温启动、冷启动, 以及更换输出 1、5、10Hz PPS 等。
8. SBAS 测试设定: \$PONA NMEA 语句, DGNSS mode settings = 1。
9. RTCM 测试: 自动默认设定。DGNSS mode settings = 3 RTCM 比 SBAS 优先。
10. 正常的 RTCM 流解码, UART 接口协议必须置于 DIFF (2-RTCM-104 差分修正, 详情参考\$PORZA NMEA 语句)
11. NV08C 接收器在上电、开始连通后, 可以简单透过下部的 CONTROL 窗口控制(任何 NMEA 语句都可以 CONTROL 窗口底部 NMEA Send: \$ [] 实现, \$开头的字符和控制总量自动附加在 NMEA 语句里)。





更改波特率指令\$PORZA : $\$ \text{PORZA}, x, x, x, x * \text{hh} < \text{CR} > < \text{LF} >$

1 2 3 4 5 6 7

| | | |
|---|---|--|
| 3 | x | COM port number to be set: 0 – current port 1 – COM1 (UART A) 2 – COM2 (UART B) |
| 4 | x | Port baud rate, in bauds from 4,800 to 230,400 |

更改更新频率\$PONA V $\$ \text{PONA V}, x, \text{xx}, \text{xx}, \text{xx}, \text{xxx} * \text{hh} < \text{CR} > < \text{LF} >$

1 2 3 4 5 6 7 8 9

| | | |
|---|----|--|
| 3 | x | DGNSS mode settings: 0 – RTCM SC-104 differential corrections only 1 – SBAS differential corrections only 2 – No differential corrections allowed 3 – Both RTCM SC-104 and SBAS differential corrections allowed |
| 4 | xx | Min elevation angle of satellites to be used in navigation calculations, degrees (in range from 00 to 90) |
| 5 | xx | PVT update rate, Hz. Permitted values: 1, 2, 5, and 10. Note: This parameter doesn't set the data output rate of the messages. Refer to message 4.14 (PORZB – Extended Query Message, parameter 4) . |

定位

- B – current latitude;当前纬度
- L – current longitude;当前经度
- H – current altitude;当前海拔（高程）
- rms2D – expected planar RMS,m;平面 RMS（平方根误差）
- HDOP – current Horizontal Delusion of Precision;当前水平精度因子
- VDOP – current Vertical Delusion of Precision;当前垂直(高程)精度因子
- GPS – a number of GPSs atellites used in calculating position solution;
- GLN – a number of GLONASS satellites used in calculating position solution;
- UTC – current UTC time;
- Date – current date;
- Status – solution status (OLD– no solution, 2D – 2D solution, 3D – 3D solution,
- DIFF – differential augmentations were used, CORR – forming differential augmentations)

统计

- B – averaged latitude;平均纬度;
- L – averaged longitude;平均经度



- H – averaged altitude;平均高程
- rms2D – planar RMS, calculated over position statistics, m 平面 RMS (平方根误差)
- rmsH – altitude RMS,calculated over position statistics;高程 RMS (平方根误差)
- rmsV – speed RMS, calculated over position statistics, m;速度 RMS (平方根误差)
- Nall – a number of solutionsin statistics;解算计数
- N – a number of solution over which the average coordinates are averaged 平均坐标求平均解算次数
(always less or equal than Nall);
- MaxHDOP (user defined) – a maximal possible HDOP for a solution to be included in statistics;纳入统计的最大水平精度因子
- MaxVDOP (user defined) – a maximal possible VDOP for a solution to be included in statistics;纳入统计的最大垂直精度因子
- DIFF only – only the solutionthat used differential augmentations are included in statistics.只统计差分增强系统

可视窗

- Bfix (user defined) – chart’s centre’s reference latitude; 基准纬度
- Lfix (user defined) – chart’s centre’s reference longitude;基准经度
- Hfix (user defined in the PROFILE window)– reference altitude;参考高程
- Rs – chart’s inner ring radius;图表的内圈半径
- dX – current coordinates planar deviation from the reference coordinates;相对于基准坐标当前坐标平面偏差
- dMx – planar averaged coordinates deviation from the reference coordinates;相对于基准坐标平均平面偏差
- dH – current altitude deviation from the reference altitude;相对于基准高程当前高程面偏差
- dHx – averaged altitude deviation from the reference altitude;相对于基准高程当前高程偏差平均
- Set Statistic – set Bfix and Lfix to the averaged coordinates;设置平均坐标
- Set Current – set Bfix and Lfix to the current coordinates.设置当前坐标