



Quick Installation Guide

GPS Mouse Receiver

Model: GM611/GM621





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Before You Start

Your new Navibe GPS mouse allows you to turn any PDAs (Pocket PC) or PCs into a GPS Navigation System.

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Introduction

The Navibe Systems GPS-mouse is a high performance GPS receiver, designed with SONY's CXD2951GA single chipset. By using SONY's CXD2951GA single chipset, GPS-mouse processes high sensitivity to satellite signals with low power consumption. It can track up to 12 satellites at a time and update data position every second.

Product Features

- 12 parallel channels for fast acquisition and reacquisition
- Full navigation accuracy provided by Standard Positioning Service (SPS)
- Dual serial communication channels and user selectable baud rates allow the design with maximum interface capability and flexibility
- Support standard NMEA 0183 protocol
- Support backup power to sustain internal clock
- Internal RTC (Real Time Clock)
- Water resistant

Product Applications

- Car navigation
- Marine navigation
- Fleet management
- AVL
- Personal navigation
- Tracking system
- Mapping device application



Technical Support

If you have any questions or problems installing the GPS mouse, please contact Technical Support.

Hours: Weekdays 9 a.m. ~ 6 p.m.

Taiwan

<http://www.navibe.com>

E-mail: service@cpss.com.tw



FOR GM611 PLEASE DO NOT USE PS2 CONVERTER TO DIRECT CONNECT TO PC. (The pin assignment is different from PC's PS2 pin, please refer to **Pin Assignment**.)

**GM611 OPTIONAL ACCESSORY : USB CONVERTIBLE CABLE.
(PLEASE DOWNLOAD USB CONVERTIBLE CABLE DRIVER
FROM <http://www.navibe.com>)**

Hardware Description



Performance (Base on SONY Chip)

Receiver 12 parallel channels
Frequency L1, 1.57542 GHz, C/A code

Acquisition time

Cold Approximately 50~60 seconds, typical TTFF(95%)
Warm Approximately 35~40 seconds, typical TTFF(95%)
Hot Approximately 02~06 seconds, typical TTFF(95%)
Update rate Once per second, continuous

GPS accuracy

Position 2D RMS: approx. 5m

Sensitivity

Acquisition -139 dBm (average) or less in Normal mode
Tracking -152 dBm (average) or less

Dynamics

Altitude Max. 18000 m
Velocity Max. 500 m/sec
Acceleration $\pm 4g$

Power

Power Supply +4.5VDC to +5.5VDC



Interface

GM611 Connector	PS-2 connector
GM621 Connector	USB 1.1 male connector
Baud rate	4.8K (default) to 115.2K bps software adjustable
I/O Protocol	NMEA 0183
GM611 I/O Connector	6-pin/PS-2
GM621 I/O Connector	4-pin/USB

Antenna Build-in patch antenna

Physical Characteristics

Dimensions	55mm x 37mm x 17.5mm
Cable length	2 meters

Environment Conditions

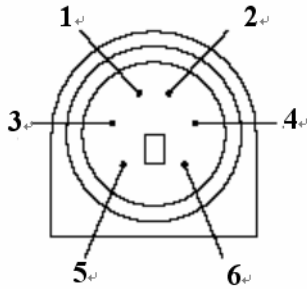
Operating Temperature	-10 to +60
Storage Temperature	-20 to +70
Operating Humidity	5% ~ 95% RH, non condensing

Hardware interface

GM611 includes the PS2 connector (The pin assignment is different from PC's PS2 pin, please refer to **Pin Assignment**.) with user selectable baud rate of 4800 (Default), 9600, 19200, 38400 or 115200 which allows you to link with your notebook PC, car phone, or other devices.

GM621 includes the USB 1.1 male connector with user selectable baud rate of 4800 (Default), 9600, 19200, 38400 or 115200 which allows you to link with your notebook PC, car phone, or other devices.

GM611 Pin Assignment

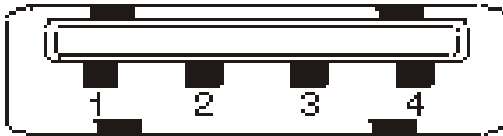


Pin	Signal Name
1	RX (TTL) – GPS input
2	RX (RS-232) – GPS input
3	Ground
4	TX (RS-232) – GPS output (NMEA)
5	TX (TTL) – GPS output (NMEA)
6	+5 VDC

Remark:

1. Cable length: 2 meters
2. connecting with 6-pin RS232 bridge

GM621 Pin Assignment



Pin	Signal Name
1	+5 VDC
2	-Data
3	+Data
4	Ground

Remark:

Cable length : 2 meters