

Garmin Power Lead

Using a standard power connector with a Garmin GPS unit will switch it to Communication mode (to the PC) and will prevent it from operating as a GPS. This can be overcome by two methods

Method 1



MINI-B

N.B.



MINI-A

The Garmin uses the Mini B connector

Wiring diagram pin-out to place Garmin Nuvi, Oregon and GPSMAP 62 GPS in recharge mode.

Pin	Designation	Description
1	+5V	5 volts DC
2	data	not connected / float
3	data	not connected / float
X	GND	connected to pin 4 (GND) with 17.3K ohm resistor
4	GND	ground

Standard 5 pin mini-USB connector has pin X connect to ground (pin 4) through a 200K ohm resistor (Note: The normal USB connector has only 4 pins, the mini-USB has 5 pins). To place Nuvi into charging mode, the 200K ohm resistor must be changed to 17.3K ohm. (also successful with 18k and 22K ohm resistor from Maplin, also a cheap 0.6W, 5%, 15k ohm resistor will work just fine!)

Nuvi behaviour depends on mini-USB plug connection:

pin X not connected - data cable, Nuvi connects to PC as removable drive, navigation NOT possible.

pin X & 4 short-circuited - USB supply 500mA, possible navigation,

pin X & 4 connected through 18kOhm resistor - Garmin supply 1A, possible navigation.

pin X & 4 connected through 22kOhm resistor - Garmin supply 500mA, possible navigation.

I have read reports of people modifying a cable that connected pin X to pin 4 (shorted), and verifying the 500 mA charge behaviour as noted above.

Nuvi requires 1000mA for simultaneous charging + GPS operation [many 'generic' 12VDC-to-USB adapters output a maximum 500mA]

Garmin Oregon requires a resistor of at least 47K ohm for running in external power supply mode (100K ohm also works). Smaller values are working, too, but Oregon then first shows a message that an unsupported accessory was found. GPSMAP 62:

pin X not connected - data cable, GPSMAP 62 connects to PC as removable drive.

If it fails because it is connected to your car battery, it switches to external power supply mode after several seconds.

pin X & 4 connected through 47 k Ohm resistor - GPSMAP 62 switches to external power supply mode immediately without waiting.

Garmin Power Lead cont.

Method 2

Normally if you plug in a standard USB Power Cable to the Nuvi, your Nuvi does not operate as a GPS unit - it goes into PC connection mode. However, if you FIRST turn on the Nuvi in the battery mode then go into the test mode (press the battery icon for about 8-9 seconds) from the main screen, THEN PLUG in the USB cable, and finally exit the test screen, your Nuvi will restart (reboot) and it will operate just like it was plugged into a standard Garmin cable.

> This mode will charge the battery AND operate as a GPS.

Don't forget to turn off the Nuvi before unplugging."

It is understood that these instructions are applicable to:

Garmin Montana 600, 650, 650t

Garmin Nuvi 1240, 1245, 1340LT, 1340T CE, 1350T, 1370Tpro, 1390T pro, 1450T

Garmin Nuvi 1490lmt, 1490T, 1490tpro, 1490tv, 1690 nuLink, 200, 200w, 205T

Garmin Nuvi 2360LT, 2495LMT, 250, 250w, 255T, 255WT, 2595lmt, 265T, 265WT

Garmin Nuvi 350T, 360T, 500, 5000, 550 Allround, 550 Allround, 750TFM

Garmin Nuvi 760TFM, 765T pro, 765TFM, 770TFM, 775TFM, 860TFM, 865T pro

Garmin Zumo 400, 660

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