

VoomPC – Car Computer enclosure

Installation Guide

Version 1.1
P/N VOOM-01

Before you start...

Please take a moment and read this manual before you install the VoomPC™ in your vehicle. Often times, rushing into unit installation can result in serious damage to your motherboard, power supply and probably your car's electrical system. The VoomPC has a wire harness that need to be connected to the car's electrical system. During installation, **always double check the polarity** of your wires with a voltmeter.

1.0 Introduction

Thank you for purchasing the VoomPC mini-ITX vehicle enclosure. The VoomPC was designed to work with a wide variety of main boards such as the VIA mini-ITX boards as well as low power Pentium-M OR Celeron-M. Please note that powering full power P4 or AMD systems is not recommended due to excessive heat dissipation. If using processors with TPD of 40 watts or more, please use two 40mm fans for increased air circulation.

2.0 Required tools

In order to install the VoomPC in your vehicle you will need the following tools / materials:

- Phillips screwdriver and Wire cutter / stripper
- Few feet of wire (AWG 12-16), preferably color coded, used for power.
- Voltmeter (optional).

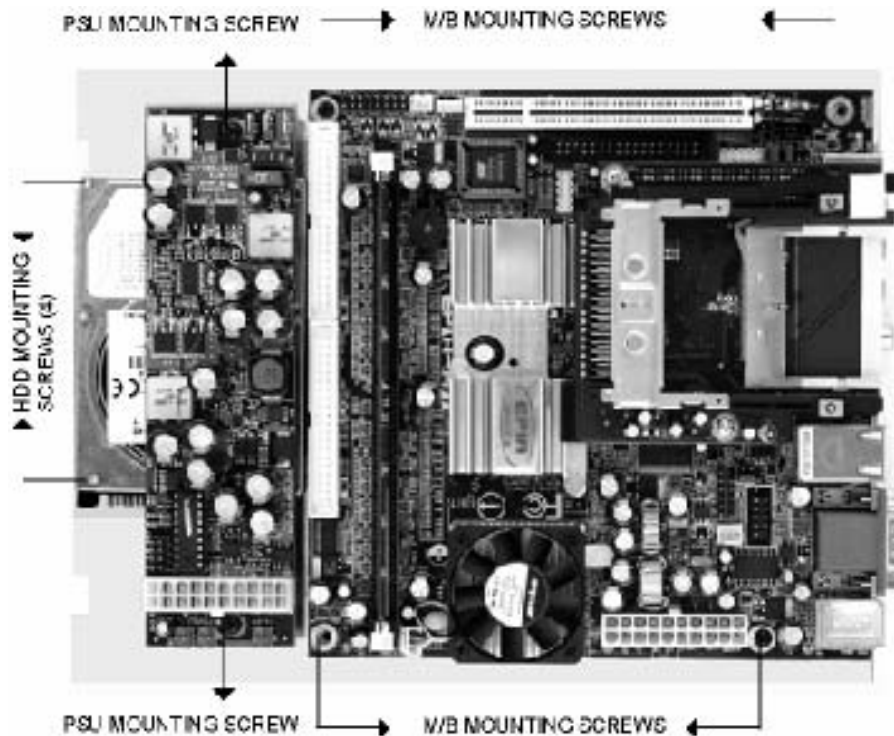


Figure 1.0

3.0 VoomPC installation steps

- 1) Install the motherboard on the base plate using four screws. (See figure 1.0)
- 2) Install the 2.5" hard drive (see area B). Place the 4 silicone rubber shock absorbent pads over the hard drive mounting holes. Fasten the hard drive using 4 undercut M3 screws attached from the bottom. (See figure 1.1)

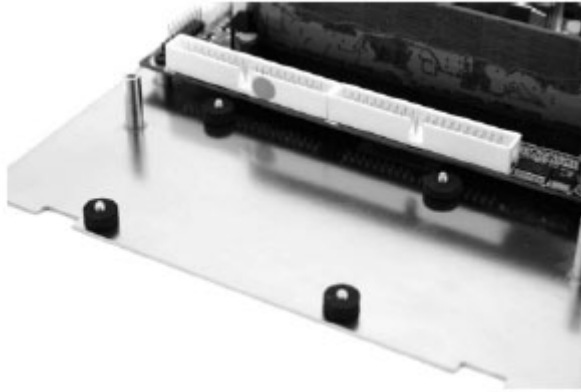
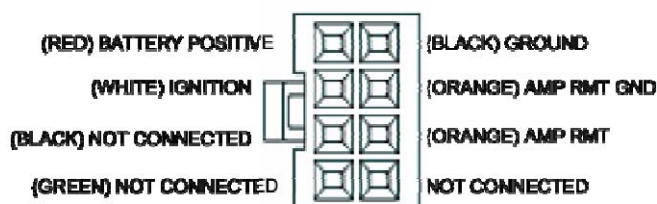


Figure 1.1

- 3) Attach a 44-40 pin IDE cable to the hard drive and motherboard.
- 4) Attach the M1-ATX or M2 ATX power supply over the hard drive, using the remaining standoffs. (See figure 1.0)
- 5) Connect the ATX cable harness provided with your power supply to the motherboard. Use small tie-wraps to manage the ATX cable harness in order to improve the air flow.
- 6) Connect the Red / Black / White (terminated in fastons connectors) to the power supply. Red is un-switched battery, white is switched battery (ignition) and Black is GND. TIP: Usually the switched battery (ignition) is present on your cigarette lighter or most of your 12V power wires. Un-switched battery, harder to find, is present on your alarm system or other 'always on' electronics. Use a volt-meter to detect switched vs un-switched wires. If hard to find, connect directly to the battery. Make sure you have firm and sturdy contacts to the car's power system. NOTE: If you purchased the M1-ATX separately, you will not need the extra Faston wire assemblies provided with the unit.
- 7) Connect the LED wire to the LED output of your M1-ATX / M2-ATX (consult PSU manual) for LED pins.
- 8) Connect the ON/OFF wire harness (provided in the PSU package) to the M1-ATX ON/OFF controller and to the ON/OFF motherboard switch. (consult your PSU manual).
- 9) (Optional) Connect the Amp enable wire harness to your Amp. Please pay special attention to the polarity of the wires. NOTE: Your Amplifier remote control unit actually needs only one wire (RMT), GND is optional.
- 10) Hook up Monitor, Keyboard, etc and test your system by turning ignition ON.
- 11) Secure the VoomPC using the 4 front/back mounting screws. If you don't want to drill holes into your car chassis, stick large Velcro pads to the bottom plate of the VoomPC (the hook side) and attach to your car's carpet – a strong adhesion will be formed.

4.0 Power Connector Wiring Diagram



(NOTE: Versions sold after 01/01/2006 will have the AMP RMT GND wire black)

Connector type is Molex “mini-fit JR” series, 2 x 4 configuration. Consult www.molex.com for additional information on housings and mating pins (male/female). All “mini-fit JR” parts can be purchased on-line from www.digi-key.com.

NOTE: The Black and Green wire harness labeled “not connected” is intended to special projects use. For example , should you need additional 5V or 12V output, you could take advantage of this pre-installed wires.

5.0 Mechanical

- Dimensions: 210(W)x254(L)x56(H)mm
- Weight, including packaging: 2.85Kg

6.0 Support and warranty

Standard Hardware support : 2 years
Installation support: support@cartft.com
Additional accessories can be purchased on-line from www.cartft.com.

Author: B. Lambert – CarTFT.com
Latest revision: 14.3.2006