# **M350** Embedded Mini-ITX Enclosure



Installation Guide Version 1.0

### Before you start...

Please take a moment and read this manual before you start assembling this enclosure. Often times, rushing into unit installation can result in damage to your enclosure, motherboard, and power supply.

## Introduction

Thank you for purchasing the M350 embedded mini-ITX enclosure!

The M350 is Industry's smallest universal enclosure capable of housing mini-ITX boards ranging from tiny Atoms to fully featured desktop or mobile CPUs. The M30 permits fan less operation (natural air convection via hundreds of tiny holes) for TDP < 10 watts and CPU-only fan for TDP <= 65watts.

#### **Required tools**

In order to install the M350 you will need a Phillips screwdriver.

#### Removing the top lid

Remove the screw (encircled in red) from the back, in the right corner, see figure 1.0. Push back the top lid  $\frac{1}{2}$  inches and after this, gently pull it up.



*Figure 1.0, removing the top lid* 1 - WiFi antenna hole, 2 - DC Power jack hole

#### Installation steps

1. Install I/O motherboard shield on the back of the M350 enclosure. **NOTE:** This shield is not part of the M350 enclosure; it is usually delivered by the motherboard manufacturer.

2. Install the motherboard on the base plate using four M3 screws (provided in M350 package) pictured below.



3. Connect the ON/OFF and Power LED cables (J3) to the motherboard using the cable harness provided with the M350 enclosure,

see picture 1.1. Also, you can connect the USB header (J2), if needed.



Figure 1.1, J2 and J3 pin header, view from the back of M350 Enclosure

Jumper description: J2: USB header and J3: 2x3 pin header

#### Installing USB devices under the front plate

Face plate is designed to conceal USB flash drives, Bluetooth, USB WIFI modules or other USB devices.

If you want to add an USB device under the front plate, remove it by carefully pressing outwards and gently pushing, one by one, the plastic lids from the sides (see figure 1.2).



Figure 1.2, removing the front plate by pressing the left and right plastic lids

Near the front USB connector there are 2 jumpers (pictured below) which are used to customize how the computer will start.

**JP1:** Disable On/Off power button (removing this jumper disables the power button).

JP2: Enable auto start (set power button on "ON" state always).





After installing the desired USB devices, snap back the front plate.

4. Install the 2.5" hard drive(s) if necessary using the provided screws. The hard drives (and optional coolers) will be fastened into *the Hard Drive Mounting Bracket* see figure 1.4. On each bracket you can install one 2.5" hard drive or two fans (40x40x10mm) pictured below.



Figure 1.4

**NOTE**: The M350 enclosure does not permit the installation of a 3.5" drive. With some motherboards, you cannot install the second hard drive bracket



You can install up to 5 fans inside the M350 enclosure: 2 on each *Hard Drive Mounting Bracket* and one on the front see figure 1.5.

Figure 1.5

5. Install the power supply (if needed). The recommended power supplies for this enclosure are the picoPSU series (for example, pictured below, picoPSU-120, 120W output, 12V input DC-DC power supply). We recommend using these types of power supplies due to their compact size.



Figure 1.6, picoPSU-120, 120W output, 12V input DC-DC power supply

7. Install the top lid and fasten it with a screw.



Figure 1.7, M350 enclosure with optional wireless antenna attached

# Support and warranty

Standard Hardware Warranty 1Year / US, 2 Year EU Installation support: 30days via email, support@mini-box.com. Additional accessories can be purchased on-line from <u>www.mini-box.com</u>.

Product website: http://www.mini-box.com/M350-universal-mini-itx-enclosure