



1. Unpacking the System

To prevent shipping damage the system is packed in multiple boxes.

Chassis

The chassis is shipped in one box by itself. The chassis is shipped assembled. Inside the chassis you will find the fan panel keys and a ground wire.

Blades

The blades are shipped in individual boxes. Depending upon your order the blades may be either the blade with no computer hardware or they may be completely assembled with system board, processor, memory and hard drive(s).

You will also find in the carton the blades are shipped in an accessory box that will contain the following:

- ⤴ Power Supplies (for the blades and the chassis fans)
- ⤴ System Board Manuals and CDs.
- ⤴ Thumbscrews (for locking the blades in the chassis).
- ⤴ Operating System Installation CDs (if ordered with the OS installed)
- ⤴ This manual
- ⤴ If ordered, the power supply tray(s) will also be in the blade carton.

2. Assembly

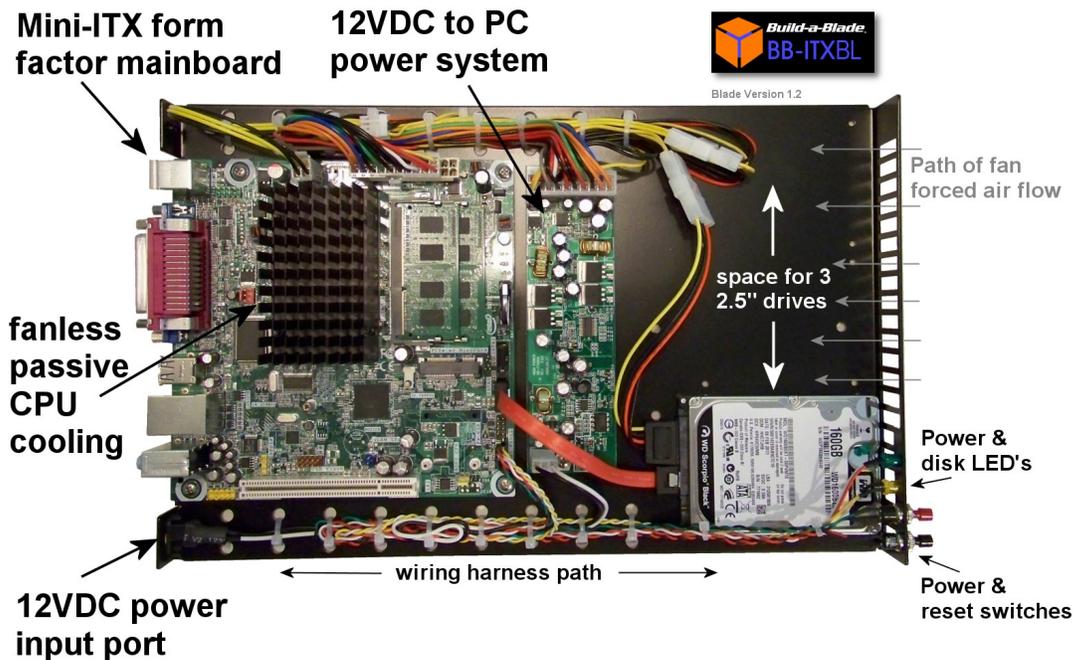


Chassis

The chassis is shipped assembled, but not populated with blades. Please attach the ground wire to a case screw as shown. Make sure all screws and nuts are tight and haven't loosened during shipping. The chassis is ready for installation.

The chassis is 9 rack units (RU) in height. Make certain you have enough space in your rack cabinet to mount it. It requires a minimum of four mounting screws to the front of the rack, and does not require slide rails, since servicing is done from the front of the chassis.

A fully populated chassis will need ten (10) 120/240 VAC electrical outlets. 9 for blades, 1 for the chassis cooling system and alarm system.



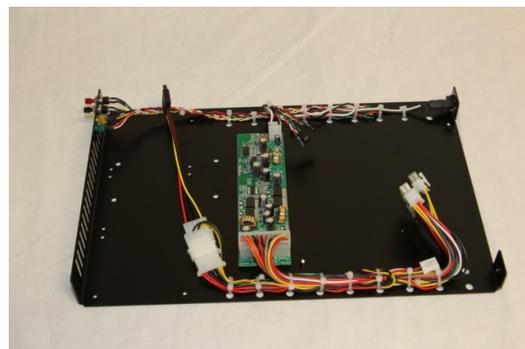
Blades

Pre-built (example shown)

If you ordered the blades complete with computer motherboard and drive hardware the hardware will be attached to the blade, wired, and tested. The system wiring will be dressed to the blade to keep it from snagging on other blades during installation into the chassis. If you also ordered the blades with an OS the OS will be installed. All that will be required is for you to insert the blades in the chassis, secure them with the thumbscrews, and connect cables.

Build your own (shown at right)

If you ordered the blades without hardware then you must attach the hardware to the blade as shown. Take care to dress the wiring to the blade to prevent snagging the wiring on adjacent blades during installation into the chassis.



Install motherboard, drives, memory, and cables like you would with any PC. Manufacturer manuals for motherboards contain connection details.

Front panel controls and indicators, with wiring and header connectors are supplied for

- ⤴ Power Switch
- ⤴ Reset Switch
- ⤴ Power on LED
- ⤴ Hard Disk activity LED

Power Supply Tray (optional accessory)

Using wire ties, attach the power supplies to the power supply tray as shown. Using wire ties, dress the DC power leads as shown. Label the power supplies as to which blade they are connected to. If you dressed the DC power leads as shown, note that the power supply on the far right (as viewed from the rack ears) will power the cooling fans.



The next power supply will power the blade to the far right of the chassis (as viewed from the fan box opening). There will be one additional power supply included in the shipment. This power supply is for the chassis to provide power to the cooling fans. Dressing the DC power leads as shown will keep the DC power wiring neat and out of the way.

You can also secure power supplies under the tray, so that you can have it hold all 10 power supplies for one system.

3. Installation

Chassis

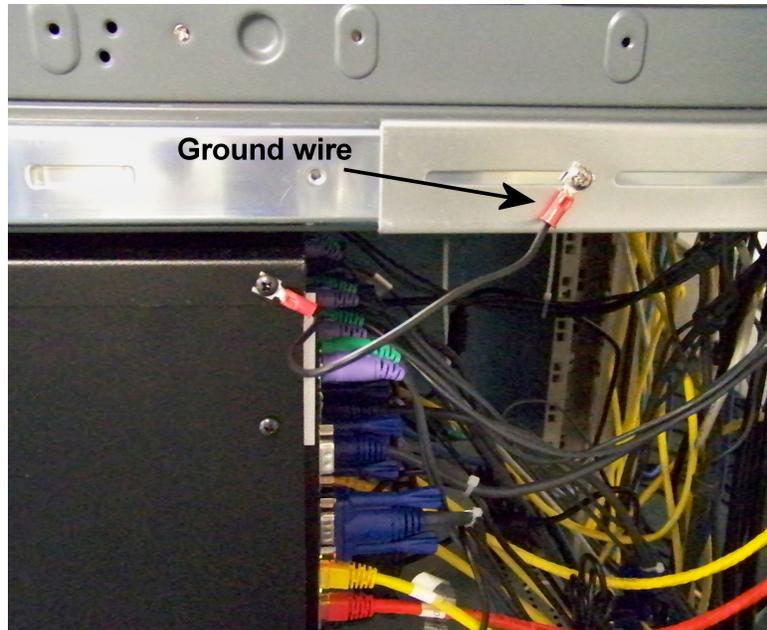
Slide the empty chassis into the rack and attach to the rack rails with screws. Use a minimum of four screws, but a total of eight holes are provided if needed.



Ground Strap

IMPORTANT: Connect the ground wire to any screw in the rack cabinet rails, and the other end to a screw on the BAB-ITX96 chassis.

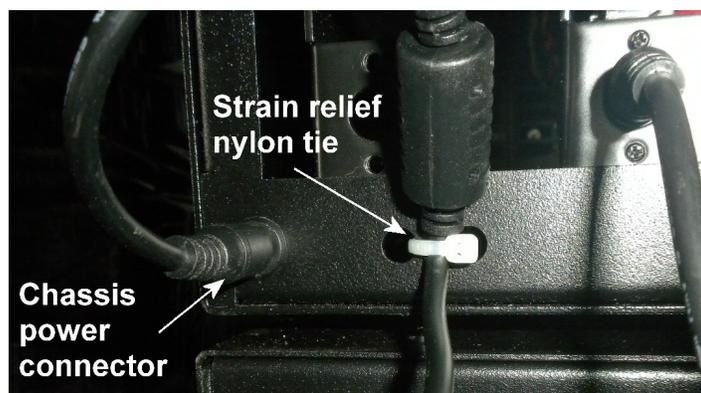
Failure to connect the ground wire may result in erratic behavior of the blades due to the chassis not being grounded and not shunting stray static and radio energy to ground.



Chassis power cable and strain relief

Connect the chassis fans power supply to the connector at the rear of the chassis in the lower left corner.

Using a nylon wire tie attach the power cord to the chassis using the two holes just to the right of the power connector.



This ensures the fan power cord will not be accidentally pulled out while the blades remain powered.

Power Supply Tray (optional accessory)

Mount the power supply tray to the rear rails of the rack. Mount the tray at the same level as the bottom of the chassis. If you have two power supply trays mount the second tray immediately above the bottom tray.

Connect the provided AC power cords to a power outlet strip in your rack cabinet and then to the receptacles in each power supply.

Do **NOT** connect the DC power connectors from each power supply to the blades yet.

System Blades

Open the front cover to the chassis.

Slide the first blade into the chassis at the far right of the opening.

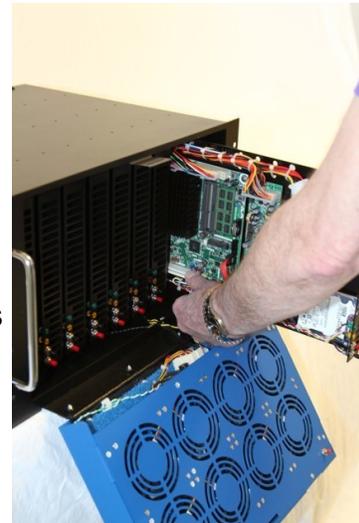
Make sure the blade is in the card guides at the top and bottom of the chassis. Once the blade is fully inserted thread a thumbscrew into the blade through the corresponding hole at the top rear of the chassis.

Do not plug in the DC power cord first.

Attach the cables for your KVM switch. Attach the network cable. Once all cables are connected you may plug in the DC power cable at the bottom rear of the tray.

You may either power up the blade system you just installed and proceed to install the next blade system or you may install all of the blades first and then power them up.

After installing all blade systems and powering them up close and lock the front door. Do not leave the front door open for extended periods of time as blade system overheating and damage may occur due to lack of cooling airflow from the fans in the front door.



Operation

Power up the chassis by connecting the AC power supply to 120/240VAC.

Power up individual blades using the black pushbutton power switch on the front of each blade.

The Blade System Chassis is equipped with a fan alarm system.

During normal operation the fan alarm will be silent and the green LED on the front panel will be on steady as shown at right.



Alarm system

If a fan fails or the system temperature exceeds 50C then the green LED will flash and an alarm will sound. The alarm can be silenced by opening the chassis front door and pressing the red button on the rear of the door. The green LED will continue to flash until the failed fan is replaced or the system chassis cools to below 50C.

Warranty:

Warranty for the BAB-ITX96 blade system is one year for parts and labor, with exceptions being abuse, damage, improper electrical power, lightning, and static damage. ItWorks makes no warranty for computer components that have been self installed, such as memory, motherboards, or disk drives

Service:

For Service call or write:

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Service is also available via the website:

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