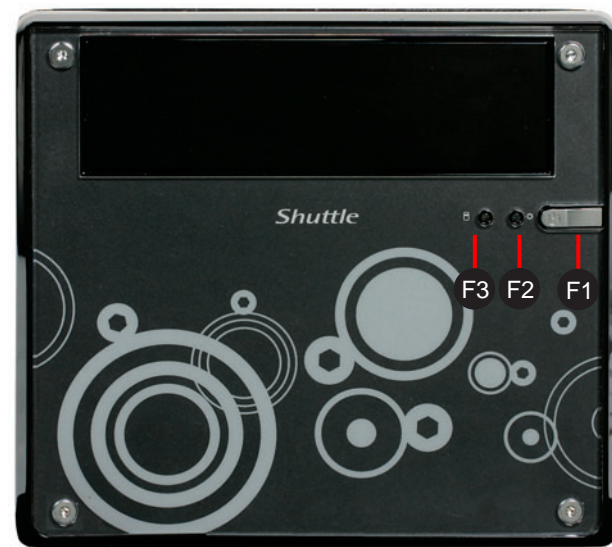


K48 Barebones Quick Guide 【English】

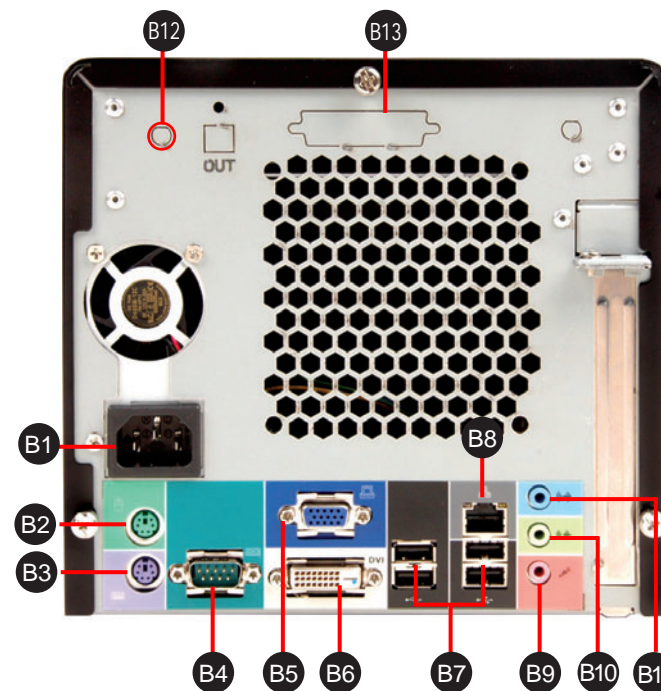
Front panel



Note: K48 Series products passed the certification of Energy Star version 4.0. Please visit www.shuttle.com web site for more detail system configuration.

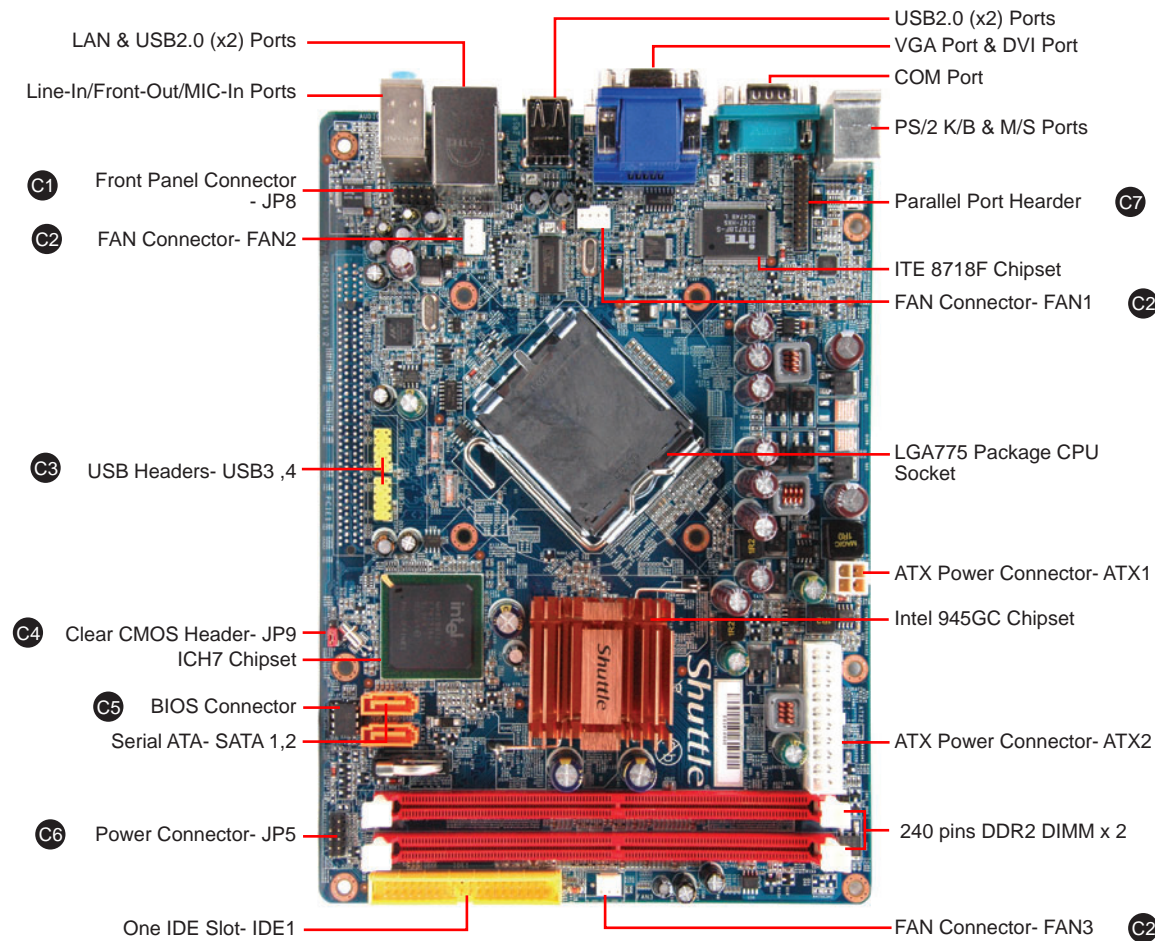
- F1. Power Switch
- F2. Power LED
- F3. HDD LED

Back panel



- B1. AC Power Socket
- B2. PS/2 Mouse Port
- B3. PS/2 Keyboard Port
- B4. COM Port
- B5. VGA Port
- B6. DVI Port
- B7. USB Ports
- B8. LAN Port
- B9. MIC-In Port
- B10. Front-Out (L/R) Port
- B11. Line-In Port
- B12. Wireless LAN Perforation
- B13. Parallel Port Perforation

Mainboard illustration

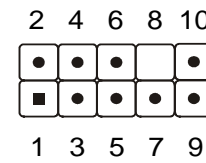


Jumper Settings

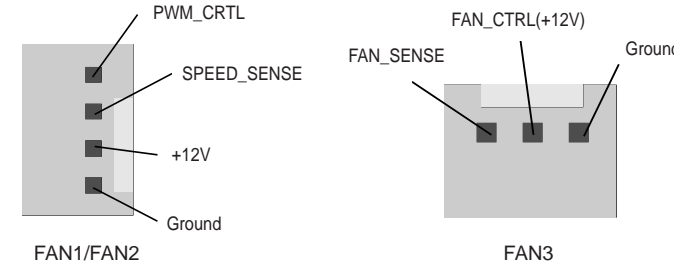
C1 Front Panel Connector

Pin Assignments (JP8):

- 1=MIC2_L
- 2=AGND
- 3=MIC2_R
- 4=FRONT CTL
- 5=LINE2-R
- 6=SENSE1_RETURN
- 7=FRONT_SENSE
- 8=KEY
- 9=LINE2-L
- 10=SENSE2_RETURN



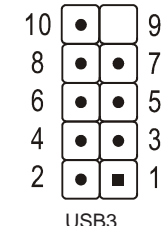
C2 Fan Connectors



C3 USB Connectors

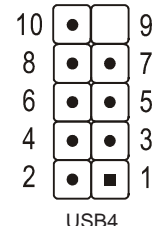
Pin Assignments (USB3):

- 1=USBPW3
- 2=USBPW3
- 3=USBP2N
- 4=USBP3N
- 5=USBP2P
- 6=USBP3P
- 7=GND
- 8=GND
- 9=KEY
- 10=GND



Pin Assignments (USB4):

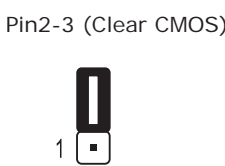
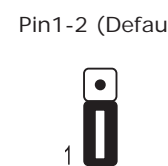
- 1=USBPW4
- 2=USBPW4
- 3=USBP6N
- 4=USBP7N
- 5=USBP6P
- 6=USBP7P
- 7=GND
- 8=GND
- 9=KEY
- 10=GND



C4 Clear CMOS Header

Pin Assignments (JP9):

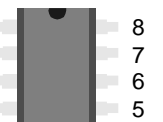
- 1=RTC_RST-
- 2=RTC_RST
- 3=RTC_BTN



C5 BIOS Connector

Pin Assignments:

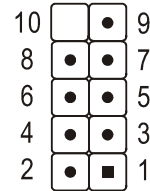
- 1=SPI_CS0-
- 2=SPI_MISO
- 3=SPI_WP-
- 4=GND
- 5=SPI_MOSI
- 6=SPI_CLK
- 7=SPI_HOLD-
- 8=SPI_VDD



C6 Power Connector

Pin Assignments (JP5):

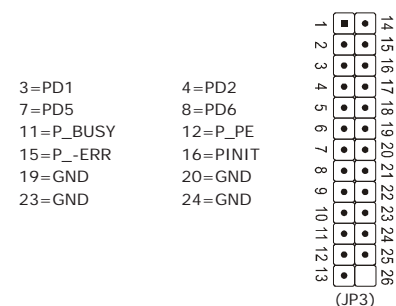
- 1=HDLED_PWR
- 2=GRN_LED_A
- 3=-HD_LED
- 4=GRN_LED_B
- 5=BT_SEL
- 6=-PWR_SW
- 7=GND
- 8=GND
- 9=NC
- 10=KEY



C7 Parallel Port Header

Pin Assignments:

- 1=PSB
- 2=PD0
- 3=PD1
- 4=PD2
- 5=PD3
- 6=PD4
- 7=PD5
- 8=PD6
- 9=PD7
- 10=P_ACK
- 11=P_BUSY
- 12=P_PE
- 13=P_SLCT
- 14=PAUTOFD
- 15=P_ERR
- 16=PINIT
- 17=PSLCTIN
- 18=GND
- 19=GND
- 20=GND
- 21=GND
- 22=GND
- 23=GND
- 24=GND
- 25=GND
- 26=KEY



Safety Information

Read the following precautions before setting up a Shuttle XPC.

CAUTION

Incorrectly replacing the battery may damage this computer. Replace only with the same or equivalent as recommended by Shuttle. Dispose of used batteries according to the manufacturer's instructions.

Laser compliance statement

The optical disc drive in this PC is a laser product. The drive's classification label is located on the drive.

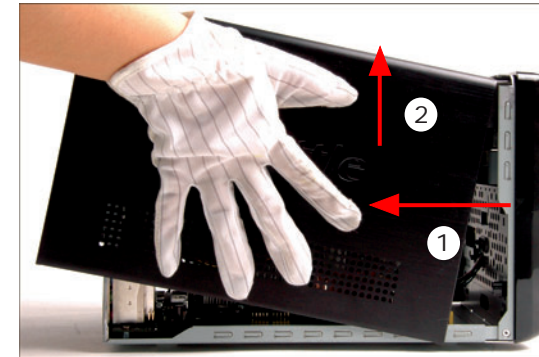
CLASS 1 LASER PRODUCT

CAUTION: INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM.

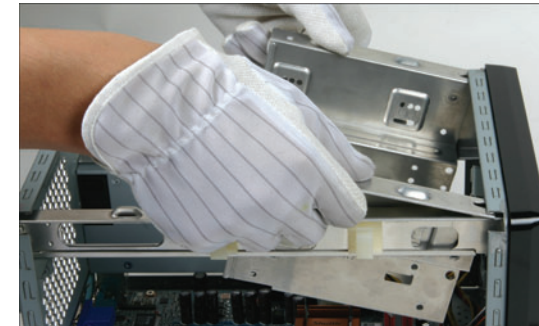
A. Begin Installation

Note: For safety reasons, please ensure that the power cord is disconnected before opening the case.

1. Unscrew 3 thumbscrews of the chassis cover.
2. Slide the cover backwards and upwards.



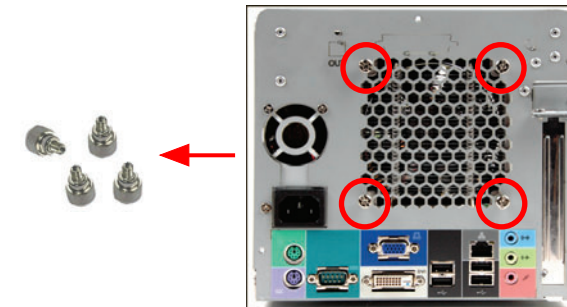
3. Unfasten the rack mount screws and remove the rack.



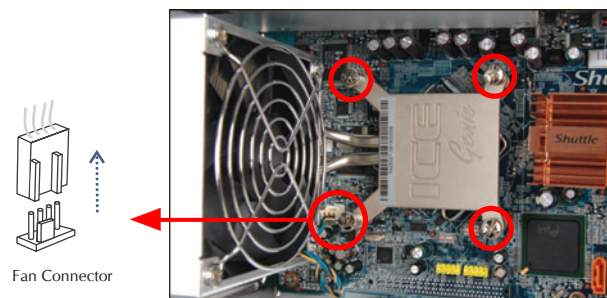
B. CPU Installation

Note: Proceed to step 1 ~ 3. Remove ICE Genie cooling module. * ICE Genie cooling module was optional and will include in K48 Series products in the future.

1. Unfasten the ICE™ Cooling Module thumbscrews on the back of the chassis.

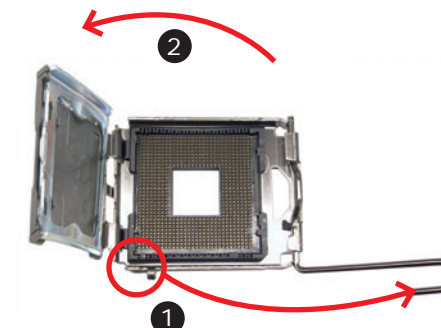


2. Unfasten the four ICE™ Cooling Module attachment screws and unplug the fan connector.

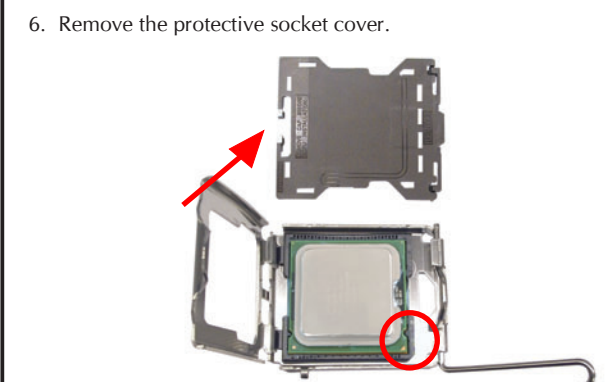


3. Remove the ICE™ Cooling Module from the chassis and put it aside.
4. First unlock and raise the socket lever, lift the metal load plate on the CPU socket.

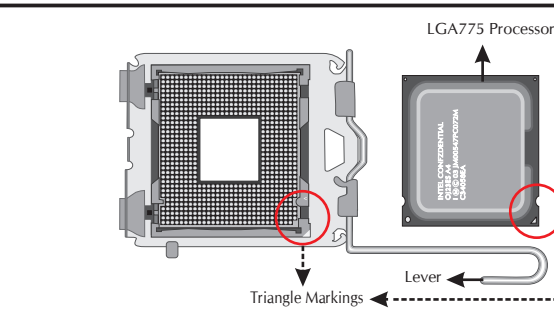
Note: This 775 pin socket is fragile and easily damaged. Always use extreme care when installing a CPU and limit the number of times that you remove or change the CPU.



5. Orientate the CPU and socket, aligning the yellow triangle on the corner of the CPU with the triangle on the socket. Making sure the CPU is perfectly horizontal, insert the CPU into the socket. Close the load plate, lower the CPU socket lever and lock in place.



The product's color will depend upon the actually shipping product.



Note: Failure to correctly align the CPU and socket can result in damage to the CPU.

7. Spread an even layer of thermal compound on the CPU die.

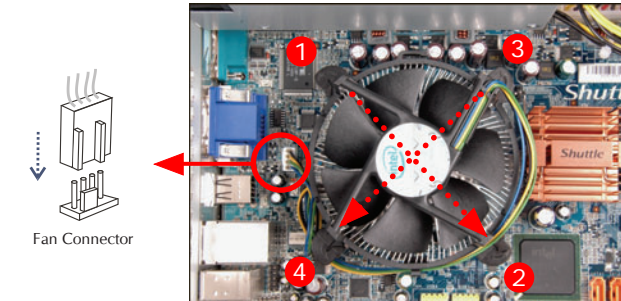


Note: Please do not use too much Heatsink compound.

C. FAN Installation

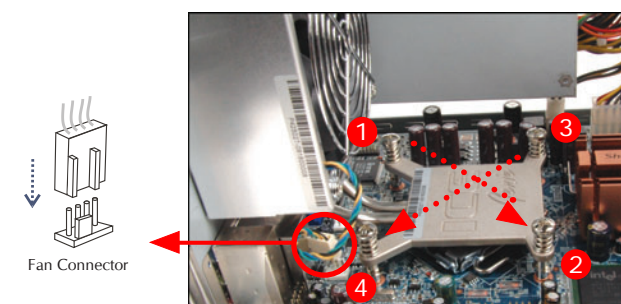
Note: If you are installing the Intel CPU Fan, proceed to step 1. If you are installing the ICE Genie cooling module, proceed to step 2 ~ 4. * ICE Genie cooling module was optional and will include in K48 Series products in the future.

1. Screw the Intel CPU FAN to the mainboard and connect the fan connector.



Note: Please refer to the user guide of the Intel CPU FAN you bought to install the fan.

2. Screw the ICE™ Cooling Module to the mainboard. Note to press down on the opposite diagonal corner while tightening each screw.
3. Connect the fan connector.

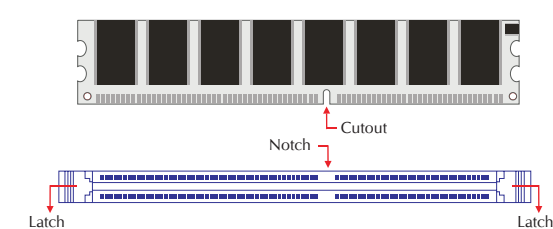


4. Fasten the ICE™ Cooling Module to the chassis with the 4 thumbscrews.



D. DDR2 Installation

1. Unlock the DIMM latch.
2. Align the DDR2 module's cutout with the DIMM slot notch. Slide the DDR2 module into the DIMM slot.

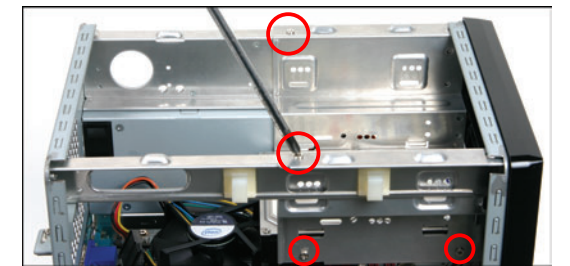


3. Check that the latches are closed, and the DDR2 modules are firmly installed.

Note: Repeat to install additional DDR2 modules if desired.

E. HDD and Optical Drive Installation

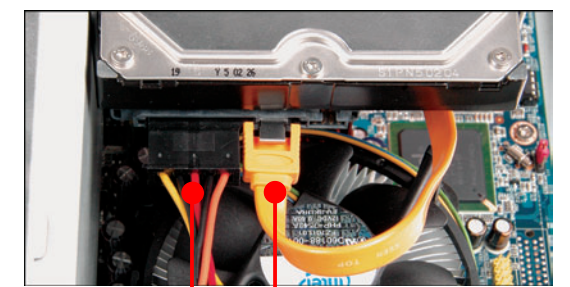
1. Place the HDD in the rack and secure with screws from the side.
2. Place the rack in the chassis and refasten the rack.



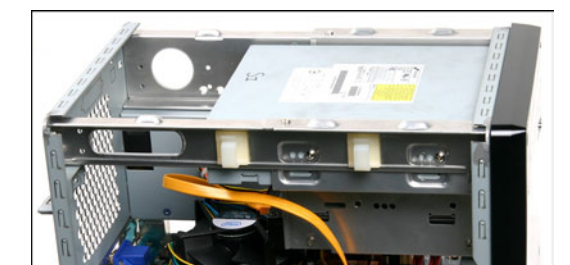
3. Plug the Serial ATA cable to the SATA1/SATA2 header.



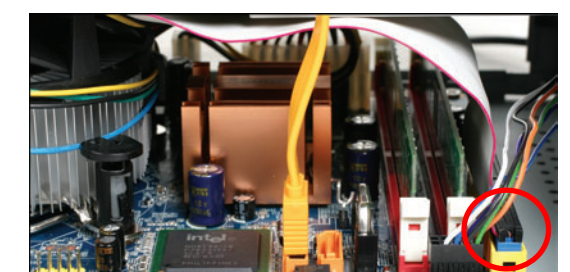
4. Connect the Serial ATA and power cables to the HDD.



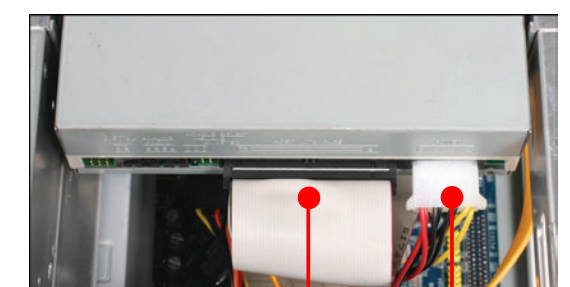
5. Remove the 5.25" Bay Cover.



6. Slide the Optical Drive into the chassis.

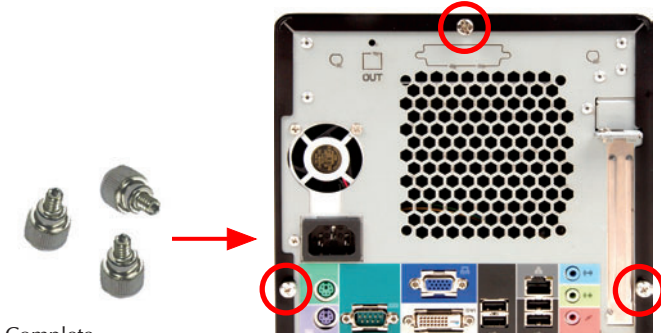


8. Connect the Optical Drive and Power Cables to the Optical Drive.



G. Complete

1. Replace the cover and refasten the thumbscrews.

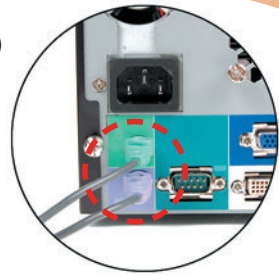


2. Complete.

Note: Please load the optimized BIOS values.

K48 System Quick Guide 【English】

1 Connecting Keyboard and Mouse (PS/2 Mouse, PS/2 Keyboard Port)



2 Connecting Monitor (VGA Port or DVI Port)

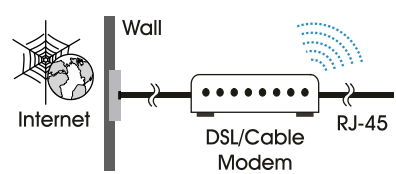


VGA Port or DVI Port

3 Connecting USB device (USB Ports)



4 Connecting the Network (LAN Port)



5 Connecting Speaker (Front-Out Port)



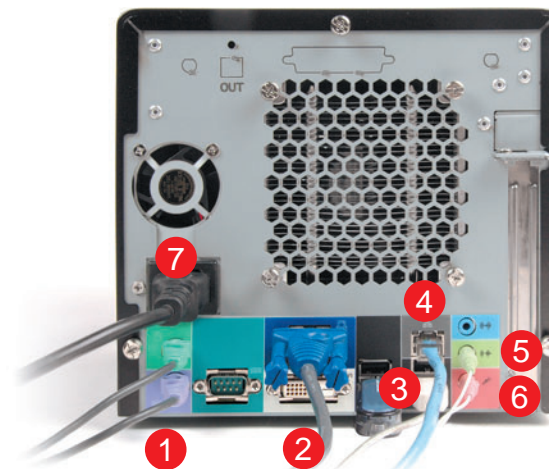
Support 5.1 channels



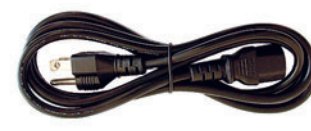
8 Powering on the system (Power Switch)



8



7 Connecting Power (AC Power Socket)



6 Connecting Headphone & Microphone (Front-Out & MIC-In Port)



Customize Your Front Panel 【English】

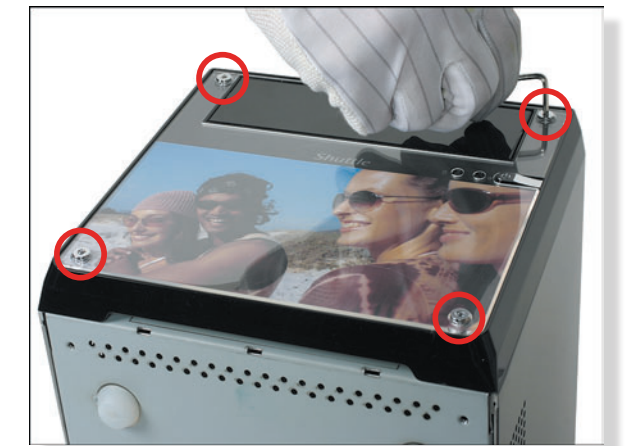
1 Unfasten the front panel by removing the four screws. Remove both the transparent glass and the image.



2 Insert the new image and cover back the transparent glass on top.



3 Align and correspond the transparent glass and new image to screw holes on the front of the machine. Carefully screw back the four screws.



4 Congraduation, you have your customized image now.



The Good Design Product Mark aims to enhance the image of Taiwanese manufacturing. This mark is registered as a Service Mark under the Trademark Law of the National Bureau of Standards, Ministry of Economic Affairs. It is awarded to products deemed innovative by the Good Design Product Committee. This committee is composed of business, government and academic leaders, all invited by Taiwan's external Chinese trade council development council (CETRA) to carefully evaluate all entries. Primary judgment criteria are function, aesthetics and design. Of course, products that bear this mark represent good design.



優良設計產品
GOOD DESIGN PRODUCT



K48: A fan at the front panel



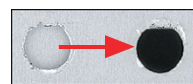
K48: A digital clock at the front panel

PN20 Quick Guide for K48 series (Optional) 【English】

Follow the installation instructions listed below

Note: For safety reasons, please ensure that the power cord is disconnected before opening the case.

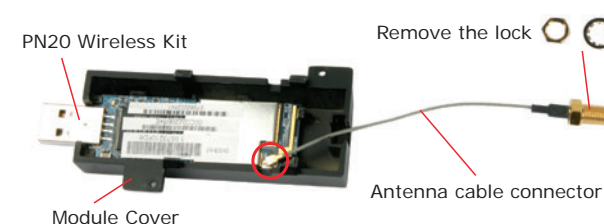
1. Unfasten the screws on the back panel and remove the case.
2. Use a 6mm screwdriver to puncture the perforated hole on the back panel from the outside in. Once the screwdriver can passthrough the hole, carefullysnap the metal tag off.



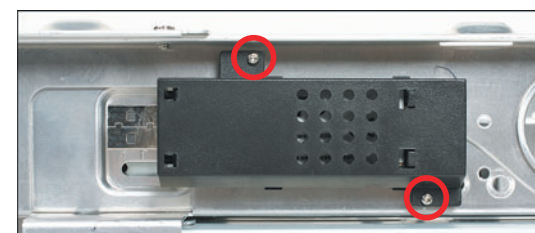
Note: If the cover still does not detach, carefully bend it by pushing down from the inside of the chassis.

3. Take out the Antenna cable connector and remove the lock, then install it to the PN20 Wireless Kit.

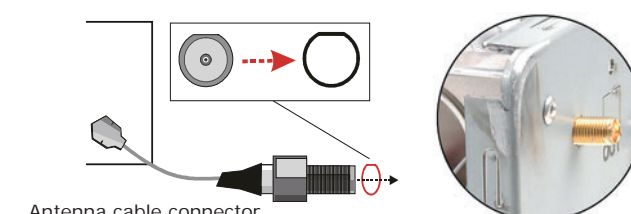
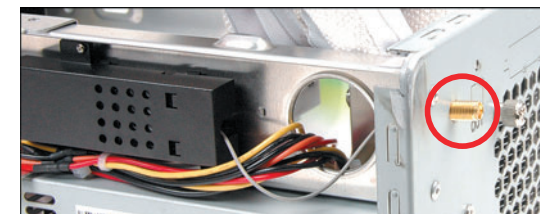
4. Install the PN20 into the module cover as shown below.



5. Screw the PN20 to the two holes on the upside of the chassis arm, near the rear of the XPC.



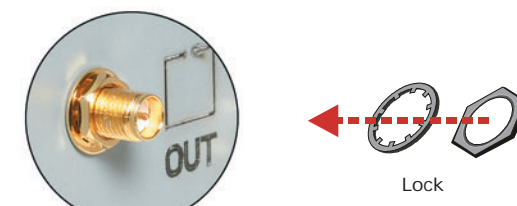
6. Install the antenna cable connector through the side reserve hole into the back chassis.



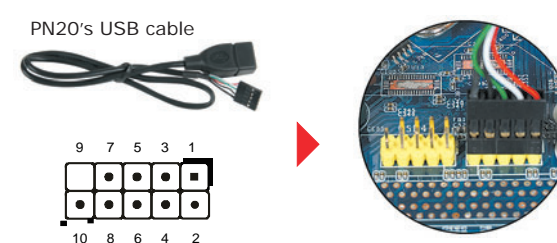
Caution: When inserting the cable connector, check the socket alignment and only push horizontally. Do not turn or twist the cable.

Note: If some difficulty is found while inserting the antenna socket into the reserve hole, make sure the surface is clean. Finally, check the alignment and then use some more force.

7. Use a lock to secure the antenna from the outside.

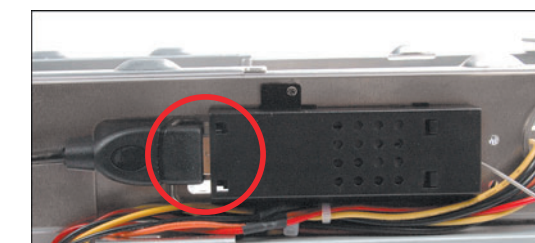


8. Take out the PN20's USB cable and plug to the USB header located on the motherboard. Double check all connections before continuing.

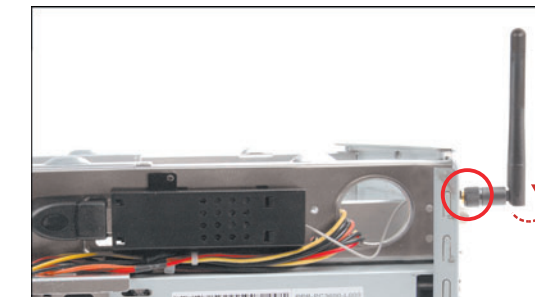


Note: Please make sure the red cable is on Pin 1 or Pin 2.

9. Connect PN20 to the USB port as shown below.



10. Screw the antenna onto the exposed thread. Set the antenna to vertical for good reception.



Note: Make sure all the connectors are aligned in the correct direction.

11. Attach the case and fasten the thumbscrews to complete the hardware installation.



This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.