



### **OpenVox Communication Co Ltd**



# IX160(P) Series Quick Start Guide

Version 1.0





### **OpenVox Communication Co Ltd**

**Address**: Room 624, 6/F, Tsinghua Information Port, Book Building, Qingxiang Road, Longhua Street, Longhua District, Shenzhen, Guangdong, China 518109

Tel: +86-755-66630978, 82535461, 82535362

Business Contact: <a href="mailto:sales@openvox.cn">sales@openvox.cn</a>

Technical Support: <a href="mailto:support@openvox.cn">support@openvox.cn</a>

Business Hours: 09:00-18:00(GMT+8) from Monday to Friday

URL: www.openvox.cn

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### **Revise History**

Version	Release Date	Description
1.0	03/11/2020	First Version



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## 1. Appearance

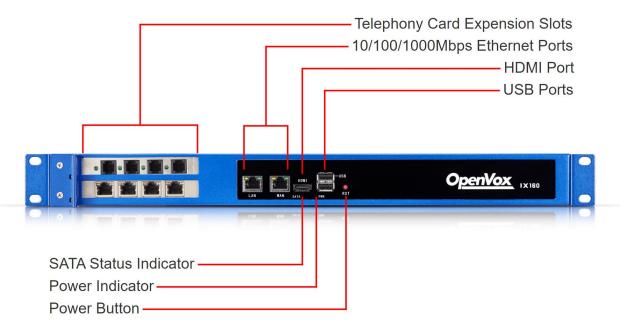


Figure 1-1 IX160(P) front panel



Figure 1-2 IX160(P) back panel

The IX160/IX160P has two PCIe expansion slots and supports a combination of any two of the following OpenVox telephony cards.

- A400E/A(E)810E/A(E)1610E/A(E)2410E
- B(E)200E/B(E)400E
- D(E)130E/D(E)230E/D(E)430E/D(E)830E/D(E)1630E

Except A400E, all compatible cards can be applied together with EC module.



The IX160/IX160P provides two Gigabit Ethernet ports, one HDMI display port, two USB ports, using 100-240V AC power supply, and can support optional RPS (Redundant Power Supply), UPS (Uninterruptible Power Supply) and RAID hardware.

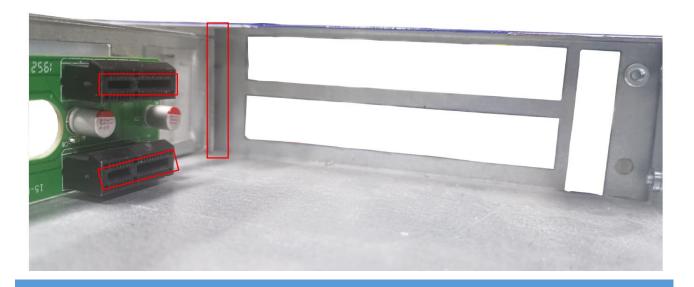
### 2. Hardware Installation

### 2.1 Telephony Card Installation

Remove the screws and open the top cover of the device, you can see the section of the slot that is reserved for inserting the telephony card.

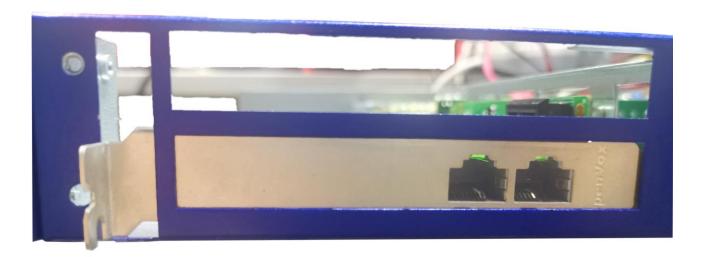


Note the PCIe slots and card slots as indicated in the following diagram.

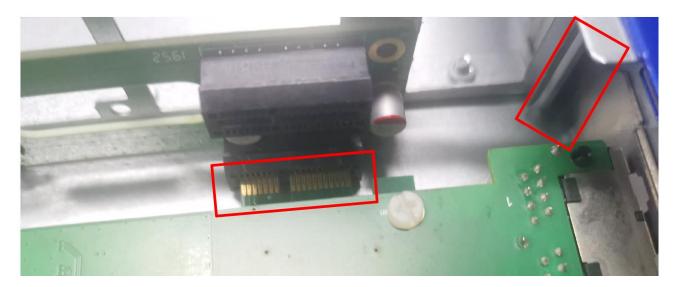


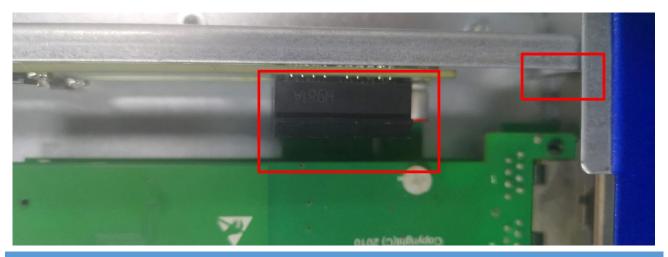


First put the telephony card in the slot:



Align the telephony card's PCIe interface and the edge of the baffle with the PCIe slot and gap shown in the figure and insert it to fit perfectly.



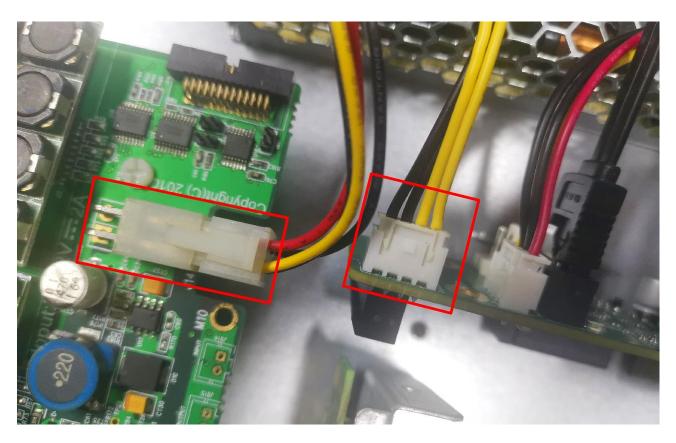




After the telephony card is installed, put the top cover back, install the baffle and tighten the screws.



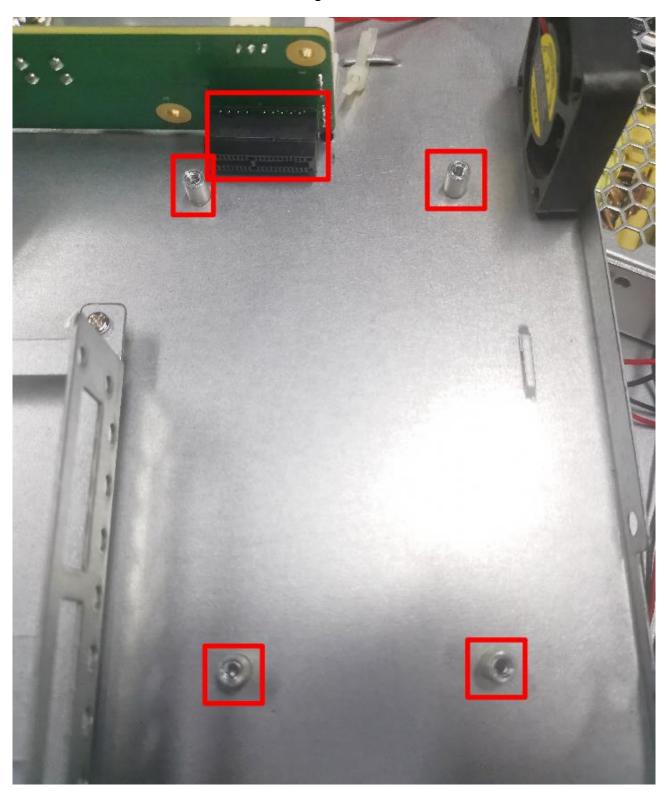
Note: Some telephony cards require an external power supply through the 12V 4-PIN connector, otherwise the module will not be recognized by the system. In this case, please connect the connector to the backplane power supply interface.





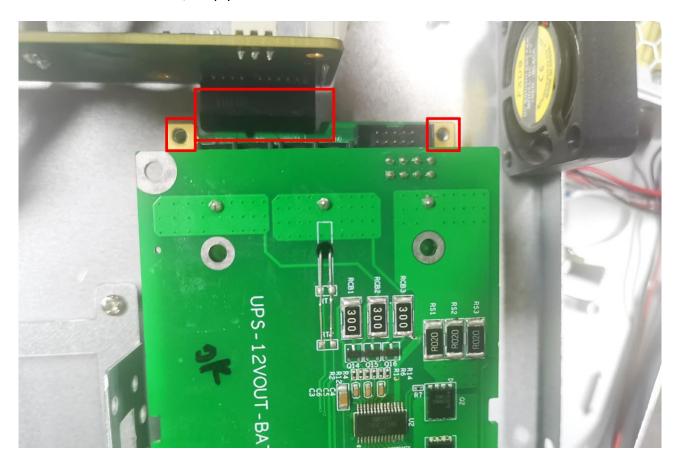
### 2.2 UPS Installation

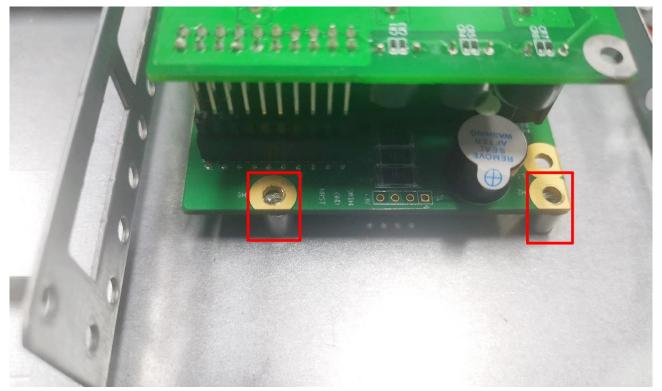
The following diagram shows the area where the UPS module will be installed, with the UPS interface and the four studs marked on the diagram.





To install the UPS module, simply insert it into the interface and fix the screws at the four corners.







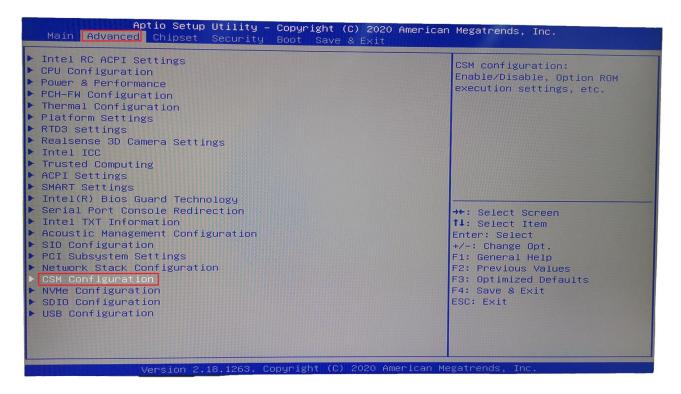
## 3. RAID Installation and Configuration

First, with the power supply disconnected, correctly install the RAID card and two hard drives.

### 3.1 CSM compatible module Configuration

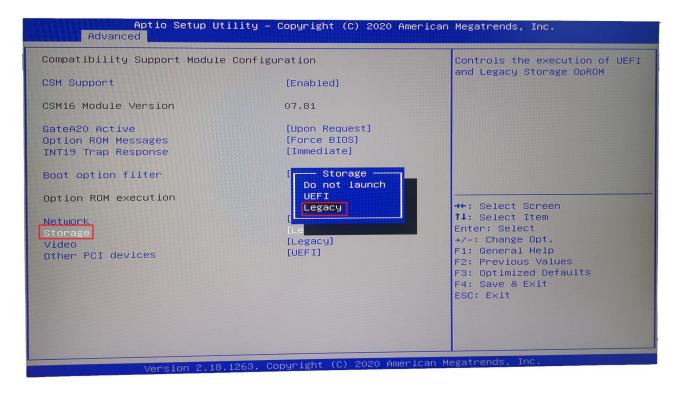
Repeatedly press the BIOS shortcut key (Esc or Delete) during the startup process to interrupt the device's startup and enter the BIOS setup interface.

Enter the BIOS settings, select Advanced→CSM configuration.





Set Storage parameter as *legacy*, save the settings and restart.



### 3.2 Configure RAID mode

After powering on, keep pressing Ctrl + M to enter the Raid card and start configuring Raid mode.

Enter the configuration interface, select HBA 0: Marvell 0 and press Enter. If the Configuration Wizard cannot be selected, you should see two hard drives under the New\_VD directory.

```
HBA 0: Marvell 0

| Virtual Disks
| L New_UD
| SSD 0: Netac SSD 12
| SSD 1: Netac SSD 12
| Free Physical Disks
```

Choose New\_VD to enter, choose delete, and press Y to confirm.



At this time, the two hard disks are transferred to Free Physical Disks.

Choose HBA 0: Marvell 0, enter. Select Configuration Wizard and enter.





Press the space to select two hard disks.

After selecting, there will be an \* mark in front of the corresponding hard disk.

```
— Marvell BIOS Setup (c) 2016 Marvell Technology Group Ltd.=
-Configure->Select free disks-
                             Port ID
                                               1
Virtual Disks
                             PD ID
                                               1
  Free Physical Disks
                             Type
                                               SATA SSD
  SSD 0: Netac SSD 120G
                                               Unconfigured
                             Status
    SSD 1: Netac SSD 120G
                             Size
                                               111.8GB
                             Feature Support:
                                               NCQ TRIM 6Gb/s 48Bits
                             Current Speed
                                               6Gb/s
                             Model
                                               Netac SSD 120GB
                             Serial
                                               AA000000234500003466
                             FW Version
                                               T0910A0
                             Rotation Rate :
                                               Solid state
                             S.M.A.R.T
                                            : Enable
Use space bar to select the free disks to be used in the array.
                                    F10: Exit/Save
                                                     ESC: Return
                    SPACE: Select
ENTER: Operation
```

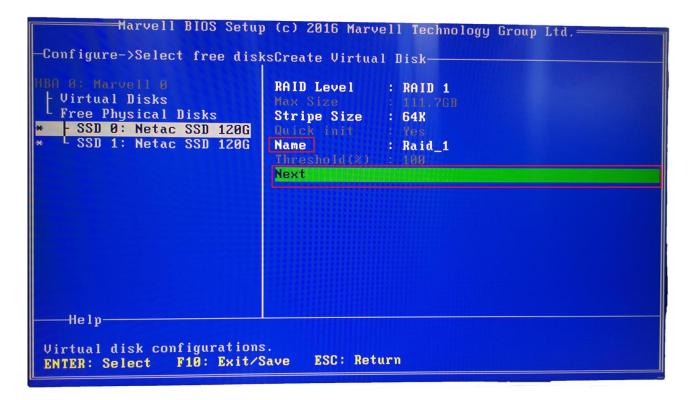


Move the cursor to the hard disk numbered 0 and press Enter.

Press Enter at the RAID Level on the right column and select RAID 1.

```
Marvell BIOS Setup (c) 2016 Marvell Technology Group Ltd.
Configure->Select free disksCreate Virtual Disk-
                             RAID Level : RAID 0
 Virtual Disks
  Free Physical Disks
                             Stripe Size
                                           : 64K
                                                   RAID Ø
  - SSD 0: Netac SSD 120G
                                                    RAID 10
    SSD 1: Netac SSD 120G
                             Name
                                           : Defaul
                             Next
  Help-
Virtual disk configurations.
ENTER: Select
                F10: Exit/Save
                                 ESC: Return
```

Name may be modified as appropriate.



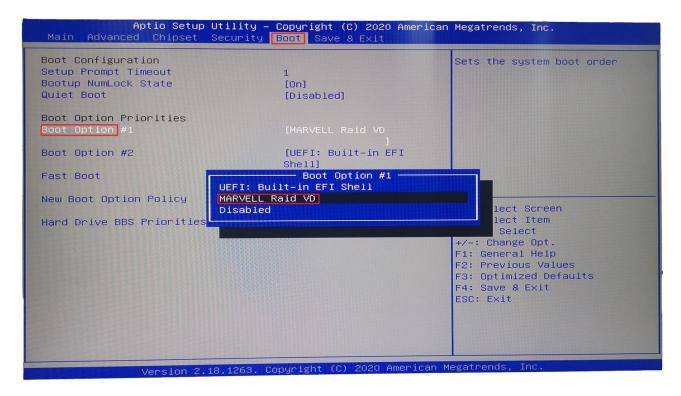
Choose Next and press Y to confirm.



F10 to save and exit, press Y to confirm.

After power on, press Esc or Delete to enter the BIOS settings.

In Boot -> Boot Option, you can see the MARCELL Raid VD option, indicating that the setting is successful, just set this item as the preference.



#### 3.3 Install System

Install the MSU management software on the system interface, see the attachment Marvell\_MSU\_Linux\_v4.1.0.2032.zip, after decompression, use the command *rpm -ivh MSU-4.1.0.2032-1.x86\_64.rpm* to install.

#### 3.4 View Info

Visit <a href="http://172.XXX.XXX.XXX:8845/MSU/JumpPage.php?Target=StoragePage">http://172.XXX.XXX.XXX:8845/MSU/JumpPage.php?Target=StoragePage</a> and you can view the RAID info on this equipment.



### 3.5 Troubleshooting method

Description of equipment operating status:

Remove the upper cover and check the SATA port LCD light on the back panel. When the hard disk is operating normally, it is blinking;

When the hard disk is broken, the corresponding status light will always be on.

How to turn on the buzzer switch:

After installing the MSU management software, log in to the software interface and enable the corresponding parameters.

### 3.6 Notes for troubleshooting

After the device fails, you need to replace it with a new hard disk. First, determine the location of the bad hard drive, and then shut down the device.

After plugging in the new hard disk, turn on the device and the device will synchronize data normally.

Although the device is modular design, but does not support hot-plugging, it is strictly prohibited to insert or remove the module while the device is in operation.



# 4. Install System

The IX160/IX160P will be pre-installed with the IPPBX system independently developed by OpenVox. If you need to pre-install other systems (FreePBX/Issabel), please contact sales for confirmation.