



OpenVox Communication Co Ltd



IX160(P) Series Quick Start Guide

Version 1.0





OpenVox Communication Co Ltd

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Revise History

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



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1. Appearance

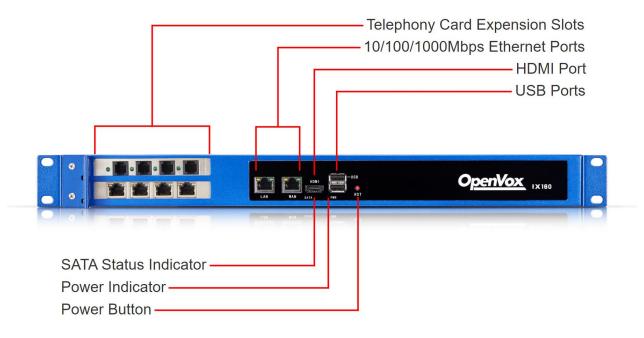


Figure 1-1 IX160(P) front panel





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.

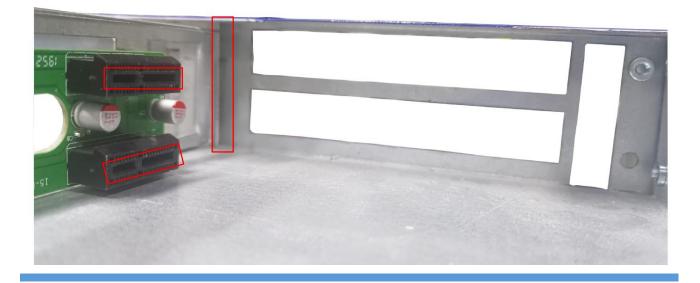
2. Hardware Installation

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.



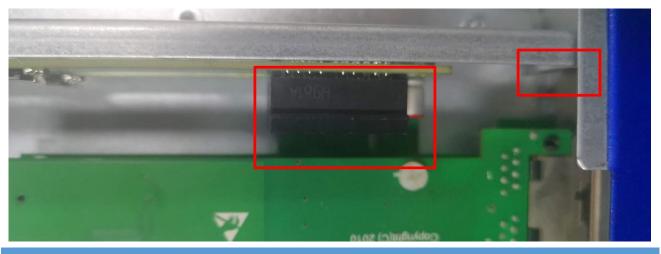


First put the telephony card in the slot:



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.



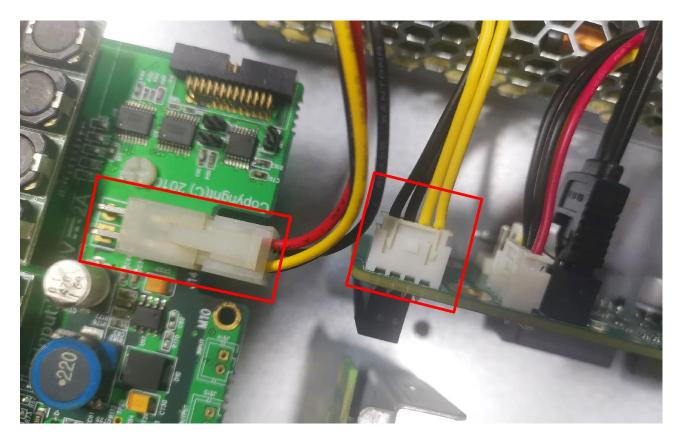




After the telephony card is installed, put the top cover back, install the baffle and tighten the screws.



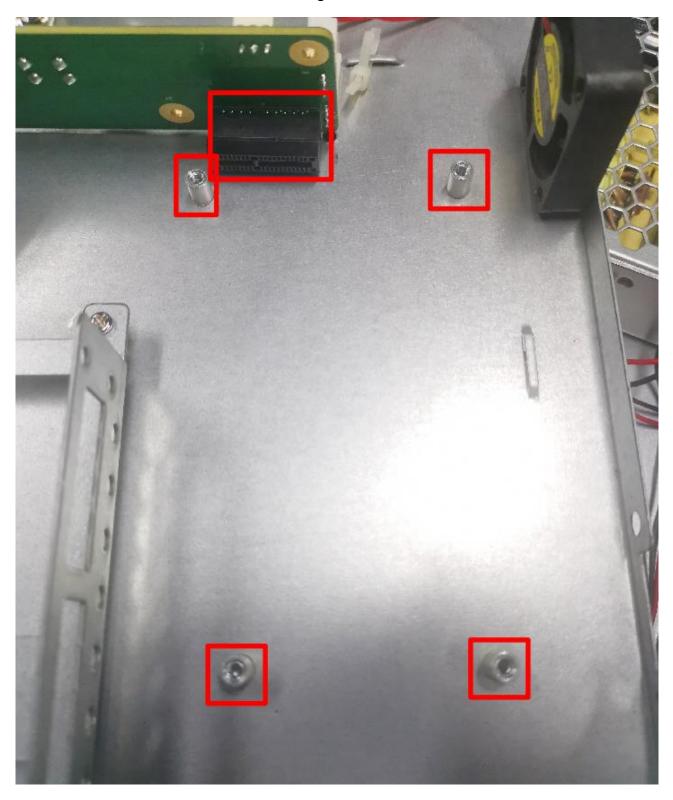
Note: Some telephony cards require an external power supply through the 12V 4-PIN connector, otherwise the module will not be recognized by the system. In this case, please connect the connector to the backplane power supply interface.





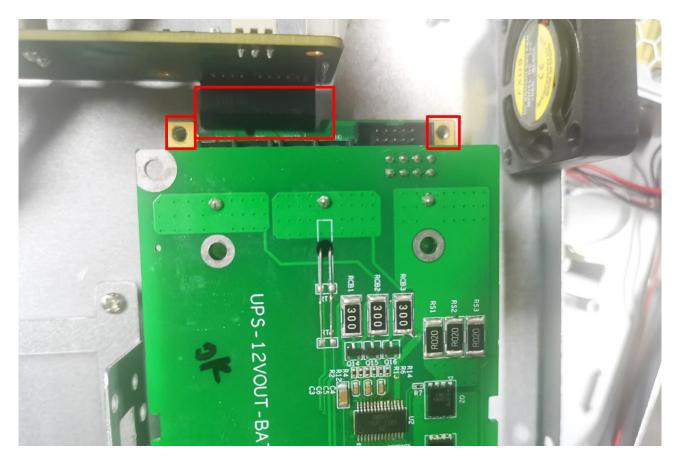
2.2 UPS Installation

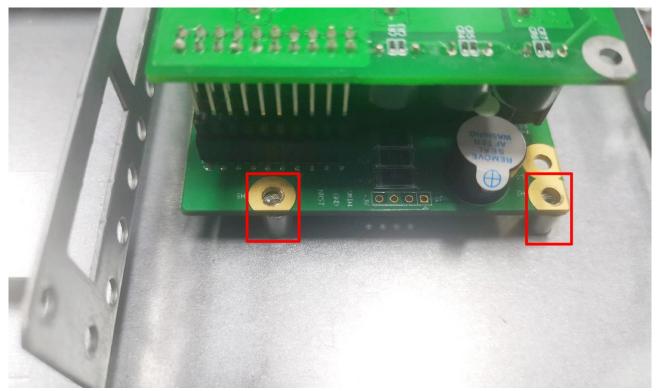
The following diagram shows the area where the UPS module will be installed, with the UPS interface and the four studs marked on the diagram.





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







3. RAID Installation and Configuration

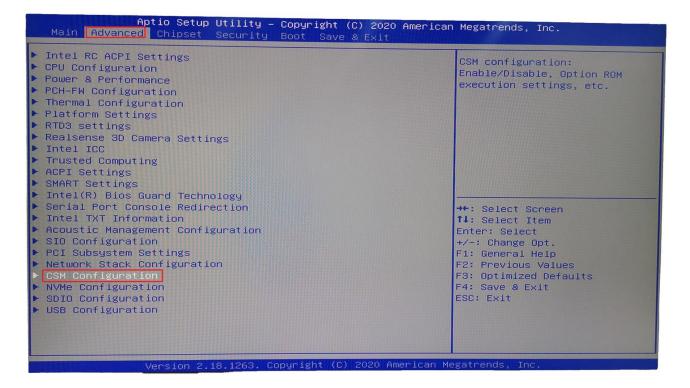
First, with the power supply disconnected, correctly install the RAID card and two hard drives.

3.1 CSM compatible module Configuration

Repeatedly press the BIOS shortcut key during the startup process to interrupt the computer's startup and enter the BIOS setup interface.

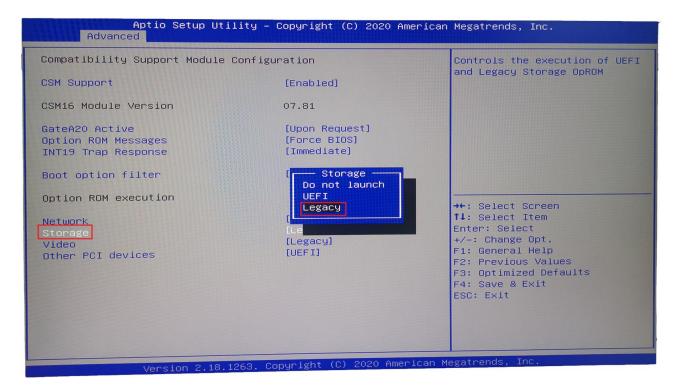
Note: Different computers have different shortcut keys to enter BIOS (usually DEL, ESC, F1, F2, etc.)

Enter the BIOS settings, select Advanced \rightarrow CSM configuration.





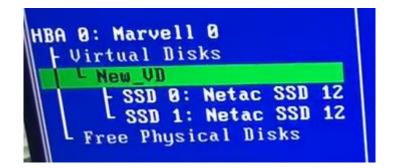
Set Storage parameter as *legacy*, save the settings and restart.



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.



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.

	<pre>(c) 2016 Marvell Technology Group Ltd. -Information Vendor ID : 1B4B Device ID : 9230 Revision ID : A1 BIOS Version : 1.0.0.1028 Firmware Version : 2.3.0.1078 PCIe Speed rate : 5.0Gbps x1 Configure SATA as: AHCI Mode Supported Mode : RAID0 RAID1 RAID10</pre>		
Marvell RAID on chip controller. ENTER: Operation F10: Exit/Save ESC: Return			

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

Marvell BIOS Setur	o (c) 2016 Marvell Technology Group Ltd.	
	-Information	
- SSD 0: Netac SSD 120G SSD 1: Netac SSD 120G	BIOS Version : 1.0.0.1028 Firmware Version : 2.3.0.1078 PCIe Speed rate : 5.0Gbps x1 Configure SATA as: AHCI Mode Supported Mode : RAIDO RAID1 RAID10	
Help Select free disks to create array and continue to create virtual disk on this array. ENTER: Operation F10: Exit/Save ESC: Return		



Press the space to select two hard disks.

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

Marvell BIOS Setur -Configure->Select free dis HBA 0: Marvell 0 - Virtual Disks Free Physical Disks *	Port ID : PD ID : Type : Status : Size : Feature Support: Current Sneed :	1 SATA SSD Unconfigured 111.8GB NCQ TRIM 6Gb/s 48Bits 6Gb/s Netac SSD 120GB AA000000234500003466 T0910A0 Solid state	
Help Use space bar to select the free disks to be used in the array. ENTER: Operation SPACE: Select F10: Exit/Save ESC: Return			



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.

-Configure->Select free dis) HBA 0: Marvell 0 Virtual Disks Free Physical Disks	RAID Level : RAID 0 Max Size : 223.40 Stripe Size <td: 64k<="" td=""></td:>
* <mark>- SSD 0: Netac SSD 120G</mark> * ⁻ SSD 1: Netac SSD 120G	Quick init : Yes Name : Defaul Threshold(%) : 188 Next
Help Virtual disk configurations ENTER: Select F10: Exit/S	

Name may be modified as appropriate.

Marvell BIOS Setup (c) 2016 Marvell Technology Group Ltd.			
-Configure->Select free disksCreate Virtual Disk			
HBA 0: Marvell 0 - Virtual Disks	RAID Level: RAID 1Max Size: 111.7GB		
- Virtual Disks Free Physical Disks * - SSD 0: Netac SSD 120G	Stripe Size : 64K		
* SSD 1: Netac SSD 1206	Quick init : Yes Name : Raid_1		
	Threshold(%) : 100 Next		
Help			
Virtual disk configurations. ENTER: Select F10: Exit/Save ESC: Return			

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.

Aptio Setup Main Advanced Chipset	Utility – Copyright (C) 2020 America Security Boot Save & Exit	n Megatrends, Inc.
Boot Configuration Setup Prompt Timeout Bootup NumLock State Quiet Boot	1 [On] [Disabled]	Sets the system boot order
Boot Option Priorities Boot Option #1		
Boot Option #2	[UEFI: Built-in EFI Shell]	
Fast Boot New Boot Option Policy	Boot Option #1 UEFI: Built-in EFI Shell MARVELL Raid VD	
Hard Drive BBS Priorities	Disabled	lect Screen lect Item Select
		+/-: Change Opt. F1: General Help F2: Previous Values
		F3: Optimized Defaults F4: Save & Exit ESC: Exit
Vanation 2	18.1263. Copyright (C) 2020 American	Megatrends, Inc.

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

3.5 Troubleshooting method

Hardware location description:

The light on the left of the RAID card is PWR;



The middle light is the SATA status of the right slot;

The right light is the SATA status of the left slot.

Description of equipment operating status:

In normal operation, except the PWR light, the rest are flashing;

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.