Warner Media - XOS - Quick Start Guide

1. Unpacking and racking

1. Use this list to ensure that your order is complete.

Quantity	Description
1	XOS Server - 1U HPE DL360 G10
2	Power cable
8	Micro BNC to BNC cable
1	Front bezel
1	Rack mounting kit for 1U HPE DL360 G10
1	USB to Ethernet adapter
1	Quick Start Guide

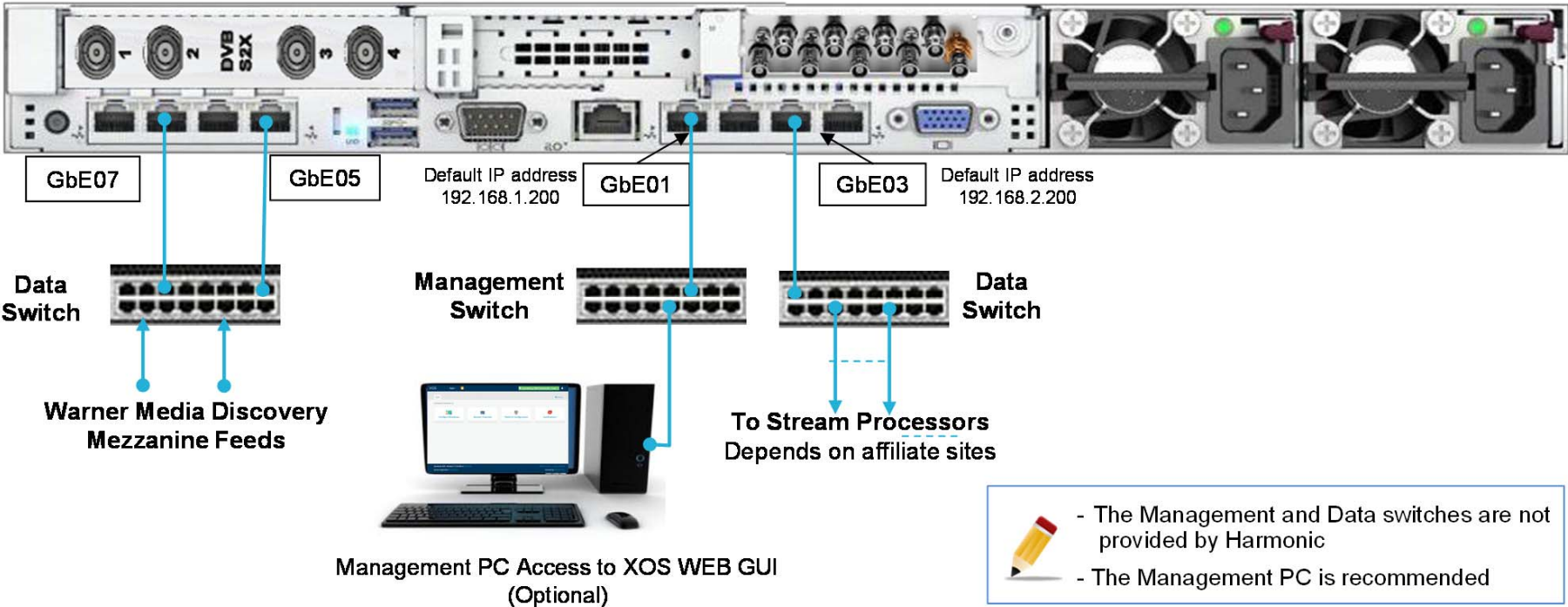2. Remove the XOS and associated accessories from the box.

3. Mount the XOS in the rack.

   The XOS can be mounted in a 19" rack.

   - Ensure that it is secured in the rack.
   - Maintain air flow around the XOS.
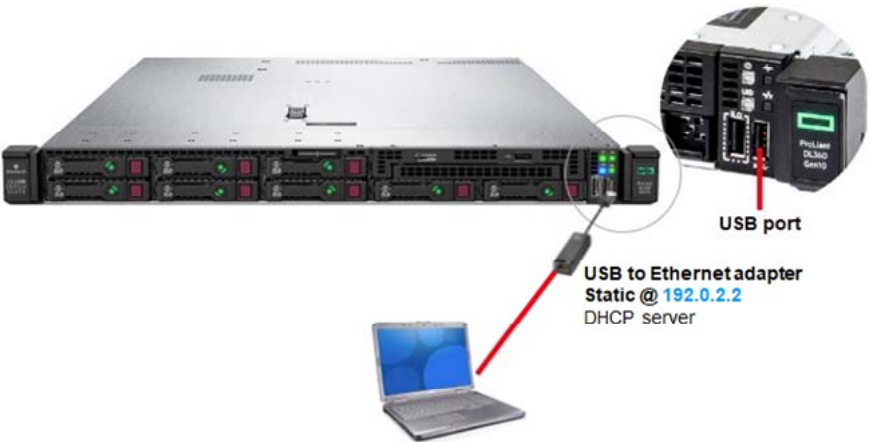   - Do not place another device directly on the top of the XOS.

2. Cabling

Follow the diagram below to perform the XOS cabling.

GbE07   GbE05   Default IP address 192.168.1.200   GbE01   GbE03   Default IP address 192.168.2.200

Data Switch

Management Switch

Data Switch

Warner Media Discovery Mezzanine Feeds

To Stream Processors Depends on affiliate sites

Management PC Access to XOS WEB GUI (Optional)

- The Management and Data switches are not provided by Harmonic
- The Management PC is recommended

3. Configure IP addresses

1. Use the USB to Ethernet adapter to connect a laptop to the USB port on the front panel as shown below:

USB port

USB to Ethernet adapter
Static @ 192.0.2.2
DHCP server

2. Power on the XOS.
   - Connect the power cord to the power supply on the rear panel.
   - Connect the cable to the power source and turn on the power(Front Panel Button).
   - Wait for the XOS to complete the boot process(~6 min).

3. Power on the Laptop.
   - In a web browser (Google Chrome), type the IP address (https://192.0.2.2) and press **Enter**.

4. Enter the following credentials and click Log in:
   - Login: **xos**
   - Password: **xos-user**

5. Select the **Platform Configuration** tile and click **Launch**.

6. Select the **IP Settings** tab and then the **Ethernet Ports** tab.

7. Enable Ports 5 and 7.

8. Select the **IP Config** tab (see next panel).

9. You can change the IP parameters for the following ports based on your IP plan:
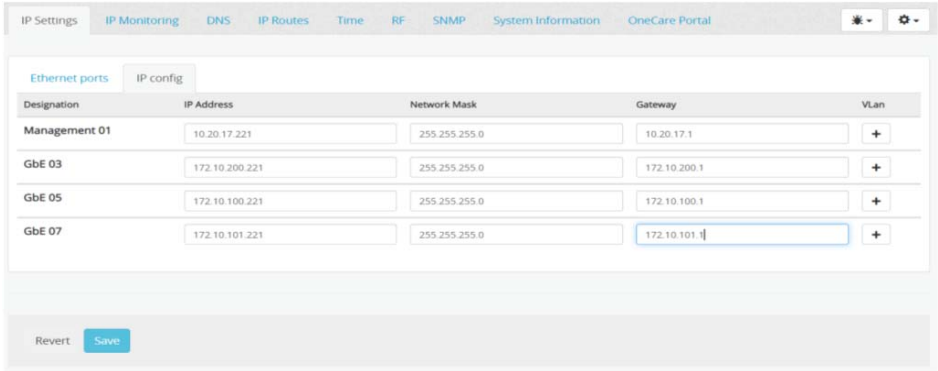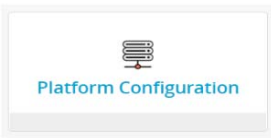   - Management 01 port (GbE01 – Default: 192.168.1.200)
   - Output - Data GbE03 port (Default: 192.168.2.200)
   - Input 1 - Data GbE05 port – (set IP address, subnet mask, Gateway)
   - Input 2 - Data GbE07 port - (set IP address, subnet mask, Gateway)

10. Click **Save**.

11. Remove the USB-Ethernet adapter from the front panel of the XOS.

12. Install the front bezel.

If you don't have a Management PC, keep the laptop connected until you complete the configuration (Step 8).

Under the **Platform Configurations** tile -> **IP Settings** tab, enable Ports 5 and 7 for the Source Multicast IP inputs. Set the port physical IP addresses according to your network switch IP assignments. Click **Save**.

Platform Configuration

Designation	IP Address	Network Mask	Gateway	VLan
Management 01	10.20.17.221	255.255.255.0	10.20.17.1	+
GbE 03	172.10.200.221	255.255.255.0	172.10.200.1	+
GbE 05	172.10.100.221	255.255.255.0	172.10.100.1	+
GbE 07	172.10.101.221	255.255.255.0	172.10.101.1	+

Revert   Save

harmonic

4. Setting the initial IP connection

1. In the **Platform Configuration** tile, select **RF Tab** > **Tuner 1**.

2. Click on the **Upstream Demod** button, and enter in the following IP details:

- Multicast IP Address – 239.16.64.199.
- SSM IP Address – 10.202.53.131.
- UDP Port – 10000.
- Interface – Set your interface for Gbe05.

If a message appears in red, the connection is not yet established. Please check your System wiring, network switch setup and IP addressing.

7. Final steps for configuration

Update Output IP addresses

1. Each of the authorized programs appears on the output Multiplexer side of the Broadcast Output Page. Each program is assigned a default IP address and is muted.

2. Click on the edit button as shown below

3. Update Output multicast IP Address according to your IP plan.

4. Set the UDP port number according to your IP plan.

5. Select the IP Output data port (typically GbE03).

6. By default, the Primary IP output is muted. Clear the check box to unmute the ouput.

7. Click **Update** to commit your changes.
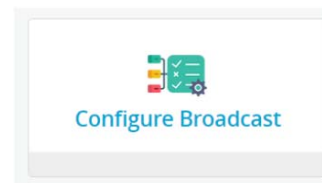
5. Waiting for upgrade and configuration

The XOS performs a software and configuration update after a successful connection to Control IP Multicast. This process is automatic and controlled by the DMS at Warner Media.

⚠️ This initialization step can take few hours. Make sure the XOS remains powered on and connected to the IP network.

Once the software and configuration updates complete, do the following:

1. Select the Configure Broadcast tile and click Launch.
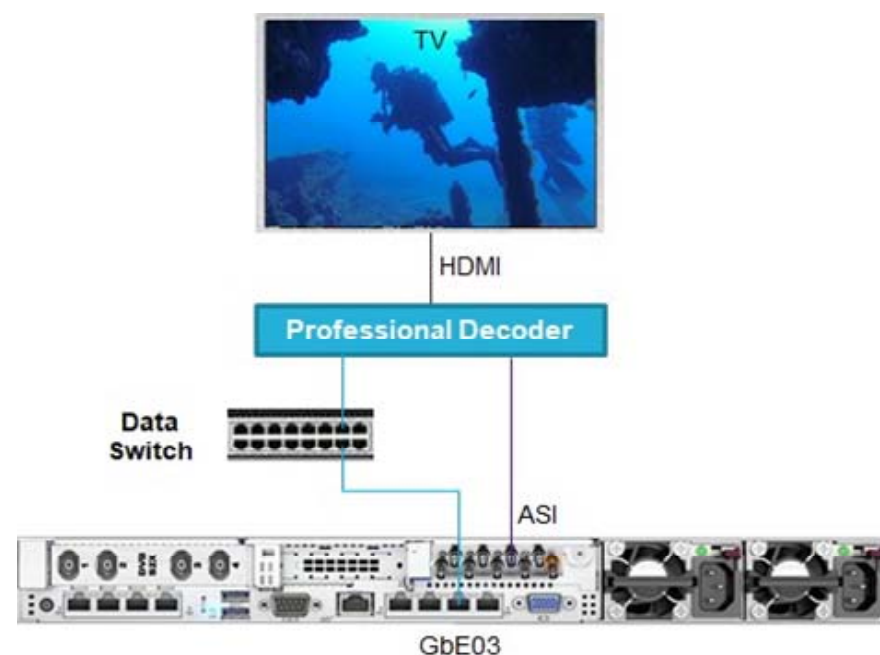

Configure Broadcast

The display will be similar to the picture on the right:

- The message at the top of the user interface (UI) specifies DMS is controlling the XOS.

- The left side of the UI shows the Input Programs and the number of associated programs.

- The right side of the UI shows the Output Multicast programs.

8. Checking XOS outputs

1. Connect a professional-grade decoder to the XOS.

2. Connect the decoder to the HDMI port on the TV.

3. Power on the decoder and the TV.

- The presence of a Multiplexer from the ASI input is automatically detected by the decoder.

- The first program appears.

- To receive a Multiplexer via the data switch, enter the same IP address you entered in the XOS. Refer to the decoder documentation for additional information.

6. Output configurations

Your Authorized programs appear as shown below

Note each Program is AVC HD @ ~35Mbps

9. Documentation

The full User Guide and other documentation is available at:
https://harmonicinc.com/documentation/warner-media/

10. Authorization support

WarnerMedia Hotline
Phone: (212) 512-5666 or (404) 827-2458
Email: hotline@warnermedia.com

11. Deployment support

Harmonic Professional Services
7 a.m. to 4 p.m. Pacific Time, Monday through Friday
Phone: (408) 490-6601
Email: WM-CBAND-HELP@harmonicinc.com

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