



## **Luxul Ethernet Switch Quick Setup Guide**

**For MuxLab AV over IP Devices**



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## 1. Introduction

This document covers the basic setup requirements for a Luxul Ethernet Switch. The setup examples and screen shots shown are for the Luxul model AMS-1208P, but these instructions are similar and applicable to other Luxul Ethernet Switch models.

## 2. MuxLab Ethernet Switch Setup Requirements

All MuxLab AV over IP Transmitters and Receivers require IGMP support to be enabled on the Ethernet Switch, and a select number of MuxLab units also require Jumbo Frames to be enabled.

Also note that all models below work on a 1G Ethernet Switch, except for the 500760, which requires a 10G Ethernet Switch.

The below table specifies the IGMP and Jumbo Frames requirement per MuxLab AV over IP Transmitter / Receiver model.

<b>AV over IP Model</b>	<b>Ethernet Switch BW Required</b>	<b>IGMP Required</b>	<b>Jumbo Frame Required</b>
500752	<b>1G</b>	<b>X</b>	
500753	<b>1G</b>	<b>X</b>	
500754	<b>1G</b>	<b>X</b>	
500755	<b>1G</b>	<b>X</b>	
500755-AMP	<b>1G</b>	<b>X</b>	
500756	<b>1G</b>	<b>X</b>	
500757	<b>1G</b>	<b>X</b>	
500758	<b>1G</b>	<b>X</b>	<b>X</b>
500759	<b>1G</b>	<b>X</b>	<b>X</b>
500760	<b>10G</b>	<b>X</b>	
500762	<b>1G</b>	<b>X</b>	
500770	<b>1G</b>	<b>X</b>	<b>X</b>
500771	<b>1G</b>	<b>X</b>	<b>X</b>

## 3. Ethernet Switch Setup

### 3.1. Enabling IGMP


Follow the steps below to enable the IGMP feature on the Ethernet Switch. For further details on navigating through the Ethernet Switch web server menus, please refer to the Ethernet Switch manual.

Step 1: Access the Ethernet Switch web server

- Locate the Ethernet Switch default IP address
- Make sure your computer is on the same subnet as the Ethernet Switch (your network administration can assist you with this, if required)
- Enter the Ethernet Switch IP address into a browser

Step 2: IGMP Snooping Configuration

- Navigate to the menu:  
[Configuration → IPMC → IGMP Snooping → Basic Configuration]
- Set the configuration as shown below, and then click [Save]



Model: AMS-1208P  
Firmware: Revision: V1.0.0

- Configuration
- Quick Setup
- Green Ethernet
- Thermal Protection
- Ports
- DHCP
- Security
- Aggregation
- Loop Protection
- IPMC Profile
- M/R
- IPMC
- IGMP Snooping
- Basic Configuration
- VLAN Configuration
- Port Filtering Profile
- MLD Snooping
- LLDP
- MAC Table
- Voice VLAN
- QoS
- Mirroring
- UPnP
- QoS/P
- sFlow
- UDLD
- Monitor
- Tools
- Administration

### IGMP Snooping Configuration

Global Configuration	
Snooping Enabled	<input checked="" type="checkbox"/>
Unregistered IP/MCv4 Flooding Enabled	<input type="checkbox"/>
IGMP SSM Range	232.0.0.0 / 8
Leave Proxy Enabled	<input checked="" type="checkbox"/>
Proxy Enabled	<input type="checkbox"/>

### Port Related Configuration

Port	Router Port	Fast Leave	Throttling
+	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<>
1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	unlimited
2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	unlimited
3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	unlimited
4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	unlimited
5	<input type="checkbox"/>	<input checked="" type="checkbox"/>	unlimited
6	<input type="checkbox"/>	<input checked="" type="checkbox"/>	unlimited
7	<input type="checkbox"/>	<input checked="" type="checkbox"/>	unlimited
8	<input type="checkbox"/>	<input checked="" type="checkbox"/>	unlimited
9	<input type="checkbox"/>	<input checked="" type="checkbox"/>	unlimited
10	<input type="checkbox"/>	<input checked="" type="checkbox"/>	unlimited
11	<input type="checkbox"/>	<input checked="" type="checkbox"/>	unlimited
12	<input type="checkbox"/>	<input checked="" type="checkbox"/>	unlimited

Save
Reset

- Navigate to the menu:  
[Configuration → IPMC → IGMP Snooping → VLAN Configuration]
  - Click [Add New IGMP VLAN]
- Enter the settings shown below, and then click [Save]

The screenshot shows the Luxul web interface for 'IGMP Snooping VLAN Configuration'. The left sidebar contains a navigation menu with 'VLAN Configuration' selected. The main content area displays a table with the following data:

Delete	VLAN ID	Snooping Enabled	Querier Election	Querier Address	Compatibility	PRI	RV	QI (sec)	QRI (0.1 sec)	LLQI (0.1 sec)	URI (sec)
<input type="checkbox"/>	1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0.0.0.0	IGMP-Auto	0	2	125	100	10	1

Buttons: Add New IGMP VLAN, Save, Reset

Step 3: Save the above configuration changes

- Navigate to the menu:  
[Administration → Configuration → Save startup-config]
- Click on [Save Configuration]

### 3.2. Enabling Jumbo Frames

Follow the steps below to enable the Jumbo Frames feature on the Ethernet Switch. For further details on navigating through the Ethernet Switch web server menus, please refer to the Ethernet Switch manual.

Take note that by default, the jumbo frames feature may already be enabled.

### Step 1: Enable Jumbo Frames

- Navigate to the menu:  
*[Configuration → Ports → Ports]*
- For each port, set the “Maximum Frame Size” allowed, which in this case is the value “9600”, and then click *[SAVE]*

### Step 2: Save the above configuration changes

- Navigate to the menu:  
*[Administration → Configuration → Save startup-config]*
- Click on *[Save Configuration]*

## 4. Preparing for System Installation

The Ethernet Switch is now properly configured to support MuxLab AV over IP devices with respect to IGMP and Jumbo Frames.

Note that MuxLab AV over IP Transmitters and Receivers are set by default with DHCP enabled, and the MuxLab 500811 ProDigital Network Controller has DHCP disabled by default and is set to a Static IP address of 192.168.168.50. It is recommended that you operate your system with the Transmitters and Receivers with DHCP enable and the 500811 Network Controller with DHCP disabled.

If however you intend to disable the DHCP on the Transmitters and Receivers, then please take note that the default Static IP address for the Transmitters is 192.168.168.55, and for the Receivers is 192.168.168.56.

Note that in order for the entire system to operate correctly, the Ethernet Switch, MuxLab Transmitters and Receivers, and the MuxLab ProDigital Network Controller must all be on the same subnet. Devices with DHCP enabled will adjust automatically to the correct subnet, while devices with DHCP disabled, may need to be set by the user to the correct subnet, if not already set correctly. Your network administrator can assist with this configuration if you are not familiar with how to accomplish this task.

If you are having issues which require further assistance, please contact the respective device manufacturer for the device in question. For MuxLab device related questions, please contact MuxLab Customer Technical Support at 877-689-5228 (toll-free in North America) or (+1) 514-905-0588 (International).



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