NXG-EDGE MAX KIT
QUICK SETUP AND CONFIGURATION

FLEXIBLE EDGE VIDEO DELIVERY PLATFORM

STOCK #	MODEL NAME	DESCRIPTION
6739	NXG-EDGE MAX Kit	1x Mainframe Chassis (3RU, 4 module slot, 15Gb Capacity IP Backplane), 1x Controller Module (Controls Entire NXG Platform), 2x Power Supplies (required for Redundancy; Hot-Swappable)

PRODUCT INTRODUCTION

The **NXG-EDGE MAX System Kit** is the 3 RU version of the Blonder Tongue NXG Platform, designed and priced for Edge video delivery. Each NXG-EDGE MAX System comes equipped with a mainframe chassis, controller module including IP input or output capability, and enterprise-class hot-swappable power supplies. Customers can purchase up to 4 existing NXG input, output, or processing modules to create individually customized solutions for each deployment.

NXG-EDGE MAX System Kit - Master Controller Module, Mainframe, and Power Supplies provides:

▸ IP routing and traffic management

▸ System configuration and management via a powerful Linux-based monitoring and control system

▸ Module interconnection via a 20 Gb high-speed backplane

▸ Distributes DC power to the various sections and modules via (2) fully-redundant, hot-swappable power supplies

The NXG is designed to be installed in a standard 19" rack. Up to 4 Modules, along with the required Master Controller and Power Supply Modules, can be installed into a single NXG Platform Mainframe.

BEFORE YOU BEGIN: UNPACKING THE PLATFORM

The following items are included in the kit:

▸ NXG-EDGE MAX Chassis (QTY=1)

▸ NXG-EDGE MAX Master Controller (QTY=1)

▸ NXG-PS Hot-Swappable Power Supplies (QTY=2)

▸ Blank Front Panels (QTY=1 bag of 5 each)

▸ Anti-static wrist strap (QTY=1)

> **!**
>
> ### A NOTE OF CAUTION! PLEASE READ
>
> Blank panels **MUST** be installed in all the unused slots in the chassis to ensure proper cooling and airflow.
>
> Modules are user-installed with circuit boards that have exposed parts and contacts. In order to prevent possible damage, **first** install the chassis into a grounded equipment rack, attaching the provided wrist strap to the chassis and your wrist. Once grounding is complete, you can safely remove the modules from their anti-static bags.

STEP 1: SETTING UP THE MAINFRAME

Adequate ventilation is very important in any NXG Chassis installations. The chassis airflow is from front and sides to back. Some air movement is advisable in enclosed rack cabinets as excessive heat will shorten the life of components and individual module(s). Power supply performance will also be degraded without proper ventilation.

1 Mount the 3 RU **NXG Chassis** into the 19 inch rack using rack screws (not provided).

STEP 1: SETTING UP THE MAINFRAME (CONTINUED)

MODULE SLOTS

MODULE SLOTS

2

3

1

4

MC

MASTER CONTROLLER

POWER SUPPLIES

NXG base platform and Numbered Module Slots.

PS 1   PS 2

Tab

LEDs
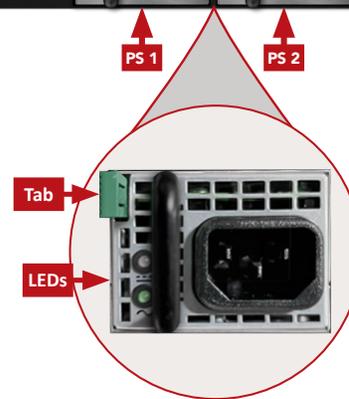
STEP 2: CONTROLLER & POWER SUPPLY INSTALLATION

!

A NOTE OF CAUTION! PLEASE READ

When inserting ANY modules into the chassis, the modules **MUST** be oriented the proper direction and then you may proceed to slowly push the module into place until you hear a click. If installed upside down and pushed in forcefully, the modular unit(s) **MAY** become damaged.

1 **Identify the Power Supply Slots**: Locate the **PS 1** and **PS 2** slots on the front of the unit, positioned on the lower left side (as shown in the diagram above).

2 **Orient the Power Supply Module**: Align each power supply module so that the LEDs and the green tab are on the left side. The green tab should be facing the vents and the master controller slot (refer to the diagram for proper orientation).

3 **Insert the Power Supply Module**: Once properly aligned, carefully insert the module into the corresponding PS 1 or PS 2 slot. Slowly pushing the module into place until you hear a click. Once done, proceed with the second power module the same way.

4 **Connect the Power**: Attach the AC power cord to each power supply, and connect the cords to an appropriate 120-240V, 50/60Hz AC power source.

STEP 2: CONTROLLER & POWER SUPPLY INSTALLATION (CONTINUED)

5 **Install the Master Controller**: Slide the master controller module (packed separately) into the card slot on the bottom left slot within the chassis. The module should be installed 90 degrees clockwise so that "Blonder Tongue" on the bottom is pointed to the left.

> **!** **IMPORTANT**
>
> The Master Controller (MC) module **MUST** be installed in the empty slot as directed in #5. The system will **NOT** work if the MC module is installed into any other slot.

6 **Install Additional Modules**: Install the appropriate input, output, or processing modules for your NXG application into any of the 4 module slots. All modules should be installed 90 degrees clockwise so that "Blonder Tongue" on the bottom is pointed to the left.

When possible, space the modules apart to maximize airflow.

STEP 3: CONNECTING TO A PC/LAPTOP

ETHERNET ACCESS:

Local or remote communication with the unit is only possible through a GUI-based menu via any standard web browser. Before you can communicate with the unit, you must configure your computer's IP address to be in the same subnet as the units default IP address. To do so, follow these steps:

1 Plug one end of the Ethernet cable into **Port 1** (typical) front-panel interface of the Master Controller module. Plug the other end of the Ethernet cable to your computer.

2 The factory default IP address of the Master Controller management port is **172.16.70.1**. To be able to communicate with the management port, you must first change your computer's IP address.

The following steps explain how to do this for a computer within the **Windows** operating software:

(a) On your computer, navigate to the "Network and Sharing Center".
(Note: Can be found using the search box in the Start Menu or for Windows 8.x, the Start Screen)

(b) Once open, click on "Change Adapter Settings" on left hand side of the window.

(c) Right-click on the "Local Area Connection", and then click on the "Properties".

(d) A dialog box entitled "Local Area Connection Properties" will appear. In this box, double-click on the "Internet Protocol Version 4 (TCP/IPv4)".

(e) A dialog box entitled "Internet Protocol Version 4 (TCP/IPv4) Properties" will appear. Select the "Use the following IP address" option and enter the following addresses:

- ▶ IP address: **172.16.70.2**
- ▶ Subnet mask: **255.255.255.0**
- ▶ No need to enter a value for the Default Gateway.

Click **OK** to close the dialog box. Your computer is now ready to communicate with the unit.

STEP 4: LOGIN TO THE CONTROLLER

An ethernet cable should be connected between your PC and "**Port 1**" on the Master Controller. Open a Web browser (Chrome or Firefox recommended) and type in **http://172.16.70.1** to your web browser.

You can now view and configure your NXG platform. Enter the default username and password and click **[LOG IN]**. The factory default values for the unit login are:

▸ **IP Address**: **172.16.70.1**

▸ **Subnet Mask**: **255.255.255.0**

▸ **Username**: **Admin** *(case-sensitive)*

▸ **Password**: **pass** *(case-sensitive)*

Username
Admin

Password
●●●●

LOG IN

!

PLEASE NOTE

Additional information about the unit IP and login credentials setup can be found in the user manual.

STEP 5: BASIC CONFIGURATION

Once logged into the NXG, you will be presented with the "**System Status**" page ("**Status**" tab):

| Status | Streams | System | Front Panel | Time | Notification | SNMP | IP I/O | Log | Firmware Update |

Modules: IP MPTS In (1) | Slot 2 | EAS Proc (3) | 32 QAM Out (4)

System Status

			Modules	
Slot	**Description**	**Temperature**		**Status**
MC	Mast. Cont. Edge Max	87.3°F / 30.7°C 75.8°F / 24.3°C		OK
Eth	Front Panel Ethernet	-	GbE 1 GbE 2 GbE 3 GbE 4 SFP+	
1	IP MPTS In	119.9°F / 48.8°C		OK
2	-			-
3	EAS Processor	114.5°F / 45.8°C		OK
4	32Ch QAM Modulator	137.9°F / 58.8°C		OK
PS 1	Power Supply	105.8°F / 41.0°C 105.8°F / 41.0°C 82.4°F / 28.0°C 96.8°F / 36.0°C		Input Voltage: 107.5 V, Input Current: 1.2 A Output Voltage: 12.1 V, Output Current: 9.9 A Output Power: 116 W, Input Power: 128 W Fan Speed: 10880 RPM
PS 2	Power Supply	109.4°F / 43.0°C 109.4°F / 43.0°C 84.2°F / 29.0°C 96.8°F / 36.0°C		Input Voltage: 108.0 V, Input Current: 1.1 A Output Voltage: 12.1 V, Output Current: 9.4 A Output Power: 115 W, Input Power: 118 W Fan Speed: 10720 RPM
Fans	System Fans			Fan Speed: 3111 RPM, PWM Duty Cycle: 100% Fan Speed: 2934 RPM, PWM Duty Cycle: 100%

STEP 5: BASIC CONFIGURATION (CONTINUED)

Go to the "**System**" tab to change the System Settings. Some settings that can be configured here are Command/Control Ethernet Settings, User Interface IP Access Restriction List, SSL Key/Certificate, and IP I/O settings for the Master Controller front-panel ports.

Unit Operations	
Unit Reboot	Reboot
Settings Configuration	
	Default Unit Settings
Command/Control Ethernet Settings	
Unit Name	NexGen Main #2
Unit Location	Center
Account	
Contact Information	
MAC Address	00:14:39:00:AE:73
IP	IP Address: 172.16.77.46 Subnet Mask: 255.255.255.0 Default Gateway: 172.16.77.254
DNS	Primary: 172.16.1.248 Secondary: 172.16.1.253
SSH Access	Enable Disable
User Interface IP Access Restriction List	
Configuration File	Browse... No file selected. Upload & Apply Download Current
Access Restrictions	Disabled
IP Address Range 1	Beginning: 0.0.0.0 End: 0.0.0.0
IP Address Range 2	Beginning: 0.0.0.0 End: 0.0.0.0
IP Address Range 3	Beginning: 0.0.0.0 End: 0.0.0.0
IP Address Range 4	Beginning: 0.0.0.0 End: 0.0.0.0
IP Address Range 5	Beginning: 0.0.0.0 End: 0.0.0.0
IP Address Range 6	Beginning: 0.0.0.0 End: 0.0.0.0
IP Address Range 7	Beginning: 0.0.0.0 End: 0.0.0.0
IP Address Range 8	Beginning: 0.0.0.0 End: 0.0.0.0
IP Address Range 9	Beginning: 0.0.0.0 End: 0.0.0.0
IP Address Range 10	Beginning: 0.0.0.0 End: 0.0.0.0
HTTPS SSL Key/Certificate Upload	
User-supplied SSL Key	Browse... No file selected. Upload
User-supplied SSL Certificate	Browse... No file selected. Upload
SSL Key/Certificate Operations	Delete User-supplied SSL Data *Rebooting is required for any/all SSL changes to take effect
IP I/O Ethernet Settings	
IP I/O Feature	Enabled
MAC Address	00:14:39:F0:AE:73
Front Port Allocations	Dedicate SFP+ Port
General Purpose	IP Address: 192.168.4.2 Subnet Mask: 255.255.255.0 Default Gateway: 192.168.4.254 IGMP Version: IGMPv2
Dedicated Front Port	IP Address: 192.168.10.46 Subnet Mask: 255.255.255.0 Default Gateway: 192.168.10.254 IGMP Version: IGMPv2
	Apply Settings

Click "**Apply**" in order to save the new settings.

REMINDER

If the IP Address is changed, the procedure in **Step 4** must be repeated using the new IP address in place of the default IP address in order to reaccess the control panel.

STEP 6: MODULE CONFIGURATION

After the hardware installation of any additional modules, go through the control panel and set up each module slot to configure your NXG application. Please refer to the user manuals of each module for in-depth configuration.

MODULE SLOT TABS ACCESSED HERE

Status	Streams	System	Front Panel	Time	Notification	SNMP	IP I/O		Log	Firmware Update

Modules: IP MPTS In (1) | Slot 2 | EAS Proc (3) | 32 QAM Out (4)

TROUBLESHOOTING

For any additional technical support issues, please send more information to us about your issue via our website at www.blondertongue.com/support/ or call us toll-free at 1-800-523-6049 between the hours of 8:00 AM and 5:00 PM (EST, UTC -5).Please refer to the operation manuals of each module for additional information.

CROSS-REFERENCE & HYPERLINKING USAGE

This guide may make use of hyperlinks for cross-reference linking between sections, and external hyperlinking to web addresses. This has been done to assist the reader in finding the information they are seeking in a much quicker way. In addition to hyperlinking, a Table of Contents may also make use of the bookmarking feature present in the Adobe Reader application.

PRODUCT AND DOCUMENTATION UPDATES

The latest user documentation (PDF) and Firmware Updates can be obtained by visiting our website. Navigate to the product page by entering the full Model Name in the search field. **Firmware Updates** can also be directly accessed under the "**Support**" section of the website. If you cannot find your product model on the website, please reach out to Tech Support through our support request form.

RETURNING PRODUCT FOR REPAIR (OR CREDIT)

A Return Material Authorization (RMA) Number is required on all products returned to Blonder Tongue, regardless if the product is being returned for repair or credit. Before returning product, please review our return policies or contact our service department for further information.

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