XBAY 256

programmable analog patchbay

USER MANUAL

Table of Contents

Safety Tips & Precautions

Always use the supplied PSU to power your XBay

All supplied accessoires have been chosen for providing you with the safest and best possible experience while using our XBay. As such, always use the PSU (Power Supply Unit) that was shipped with your XBay.

Always use the recommended parts and accessoiries

Using any unauthorized parts with your XBay may cause unintentional damage to the XBay and will void the warranty.

Content disclaimer for this manual

As research and development is a continual process, Anatal Electronics reserves the right to change the features and specifications described herein without notice or obligation. The latest version of this manual.

Keep liquids away from the XBay and power supply

To avoid any accidental damage to the XBay and the power supply, please keep liquids away from the XBay and the power supply. If either do come into contact with liquids, turn off the XBay and unplug.

What's in the box?

Congratulations on purchasing XBay, Anatal's innovation in routing management. In essence XBay is a programmable analog patchbay which is configured remotely using the XBay control software.

XBay allows each of its inputs to be routed to any of its outputs like a conventional (manual) patchbay. XBay software is able to store patching and recall configurations in one operation. MIDI control can be used to switch seamlessly between routing configurations, opening up a range of live performance and automated routing applications.

XBay is a device that does one thing very well - switching audio in the most clean possible manner. It is a very flexible base station that can be used in every imaginable context. It can be enhanced with our add on products or 3th party products to make it suite your needs perfectly.

The unit
XBay 256 19" rack mountable 4U high enclosure.

External PSU
The Power Supply Unit for the XBay

USB cable
HQ braided professional USB cable for connecting the unit to the pc.

AC mains cable
With neutrik locking connector on one end for connecting the PSU to a mains socket

DC cable
8 pin Neutrik locking connectors on both ends for connecting the unit to the PSU. The thick wires with low resistance offer a low resistance path for low noise DC power.
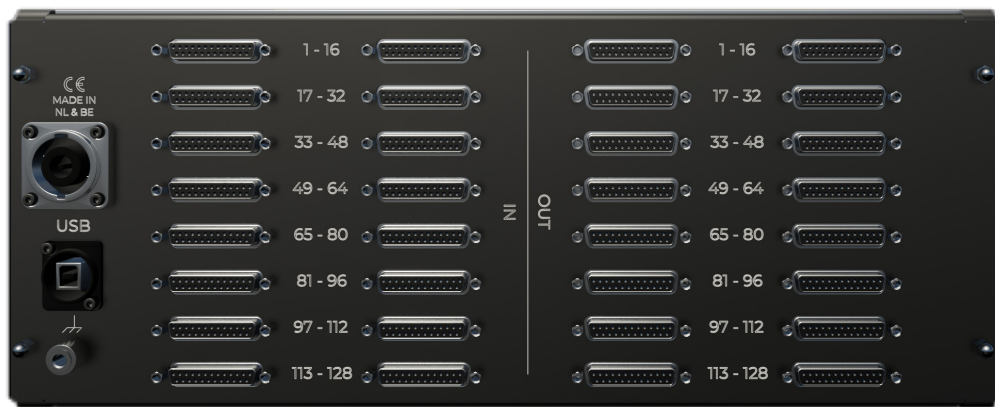
XBay Overview

The XBay Ports.

DB25/DSUB output ports*
Each DSUB port handles 16 output ports (max 8 balanced outputs for connecting your output devices to the XBay)

DC Power socket

USB-B Host Socket

Grounding Terminal

CE
MADE IN
NL & BE

USB

IN		OUT	
1 - 16		1 - 16	
17 - 32		17 - 32	
33 - 48		33 - 48	
49 - 64		49 - 64	
65 - 80		65 - 80	
81 - 96		81 - 96	
97 - 112		97 - 112	
113 - 128		113 - 128	

DB25/DSUB Input ports *
Each DSUB port handles 8 balanced outputs for connecting your input devices to the XBay.

The Power of XBay and AOS - Introduction

The XBay is a powerful piece of hardware but also comes with a powerful piece of software to match: the Anatal Operating System (AOS for short). The software enables to you to configure your XBay to your heart's content. It also allows you to save your devices and allows for remote access to your XBay!

The power of the XBay and AOS helps you spend less time setting things up, allowing you to spend more time on being an artist. The next pages detail several subjects regarding AOS: our quickstart guides for Windows, Mac OS and Linux -based systems and our guide for the AOS user interface.

You can skip these steps if your XBay came with a Raspberry Pi: simply turn on the XBay, and head over to the "How To use AOS" chapter to learn more about the user interface. If you want to reinstall AOS on your Raspberry Pi, go to the "AOS Quickstart Guide - Linux" page.

AOS Quickstart - Windows

System requirements:
Any recent version of Windows, like 7, 8 / 8.1 or 10.
(The drivers come pre-installed on Windows 10)

Go to one of the following links and make sure to choose the correct version for your OS:
www.anatal.io/AOS-win32.zip (for 32-bit) www.anatal.io/AOS-win64.zip (for 64-bit)

Extract the .zip file to a location you can easily reach (like your desktop). Open the folder you just extracted. Inside the AOS folder are serveral files, including a "CH341SER". zip. Unzip this folder and open the "CH341SER" file to install the USB driver. After the installation is complete, run the "Start.- bat" file or the "AOS.exe" file.

If everything went well in the previous steps, AOS will be ready for use. The "How To Use AOS" chapter of this manual will explain more about AOS and its functions.

The Power of XBay and AOS - Introduction

AOS Quickstart - Mac

System requirements:
any recent Mac OS, like (High) Sierra. Mac OS Mojave and up are recommended, be-cause the drivers are pre-installed. If you have an older version of Mac OS, you need to install the CH341SER drivers using the "CH341SER_MAC.zip"

Go to www.anatal.io/AOS-mac64.zip . Extract the .zip file to a location you can easily reach and open the AOS application inside the folder.

AOS is now ready to use. Skip ahead to the "How To Use AOS" chapter of this manual to learn more about AOS and its functions.

Note: Some Mac OS versions might require you to allow the application + driver installer in the Security menu before you can actually open them.

To change these preferences on your Mac, choose Apple menu > System Preferences, click Security & Privacy, then click General.
At the bottom of this screen, click "Allow" .

How To Use AOS

The AOS enables you to connect your devices with your XBay and use them in your creative process. Each feature of AOS has been designed with one thing in mind: making it quick and easy for you to use powerful features.

How to Use AOS - UI Overview

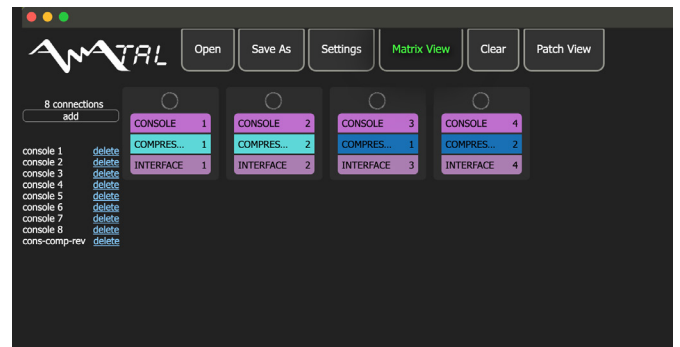The interace offers two methods of organising your connections; **Chain View** or **Matrix View.**

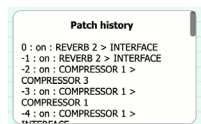### Matrix View
View your project in a visual layout.
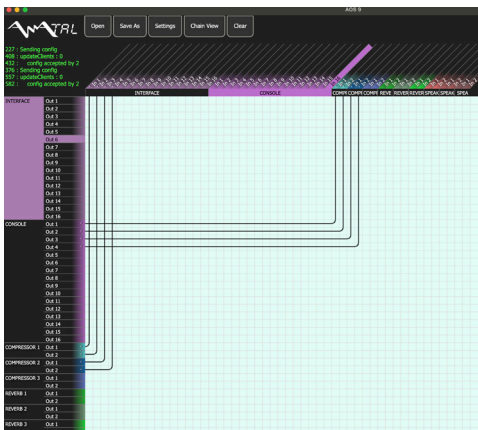
Chain View
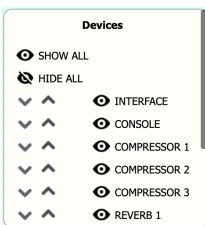View your project in a list layout.

Patch history
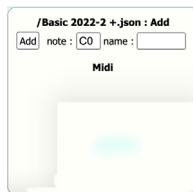Track your session and snapshot your project.

Devices
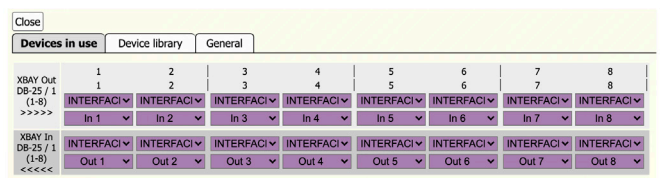Lists all the devices you have connected.

Demo configuration
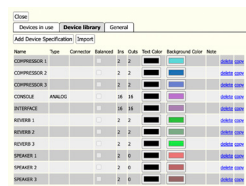Save your confiuration and node type.

Settings
From here you can view and edit your **Devices in use** and access the **Device library** and **General settings.**
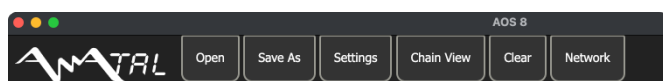

Device library

General settings

Menu
Open and save files.
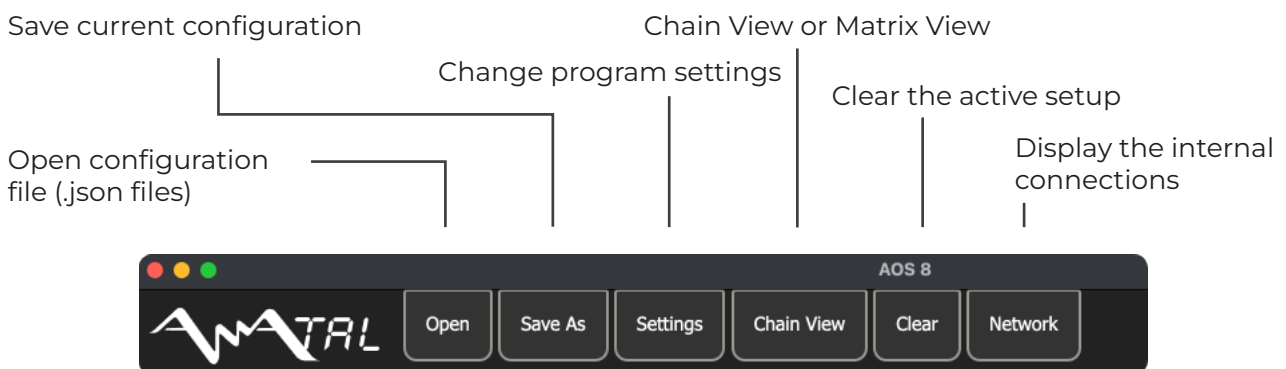Change the settings or switch between **Chain View** and **Matrix view.**

How To Use AOS

This chapter will highlight the features of the program such as; the Chain and Matrix View, how to add your devices to XBay and how to configure them to your liking. If you run into any issues, there's a trouble- shooting section in the back of the manual with a couple of common issues you could run into while using AOS.
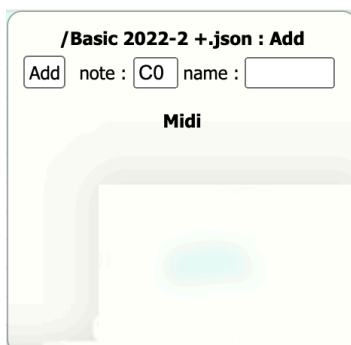
How to Use AOS - UI Overview

The Menu Bar

Save current configuration

Change program settings

Chain View or Matrix View

Clear the active setup

Open configuration file (.json files)

Display the internal connections
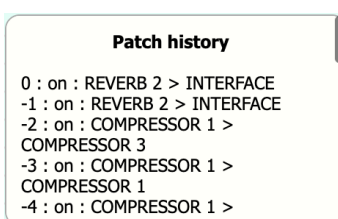

The Side bar panels

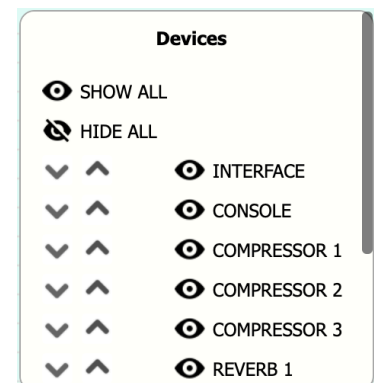**Demo configuration**
Save your configurations and add the node.

Patch history
Track your session and snapshot your project.

Devices
See all your devices. The devices are created in the settings section.

/Basic 2022-2 +.json : Add

Add   note : C0   name :

Midi

Patch history

0 : on : REVERB 2 > INTERFACE
-1 : on : REVERB 2 > INTERFACE
-2 : on : COMPRESSOR 1 >
COMPRESSOR 3
-3 : on : COMPRESSOR 1 >
COMPRESSOR 1
-4 : on : COMPRESSOR 1 >
INTERFACE

Devices

SHOW ALL

HIDE ALL

INTERFACE
CONSOLE
COMPRESSOR 1
COMPRESSOR 2
COMPRESSOR 3
REVERB 1

How To Use AOS - Setting up your devices

Settings

Various devices can be used with your XBay but they need to be set up in AOS before you can actually use them. The Settings menu contains all of the features you will need to set up your device configuration. There are three sections in the Settings menu and each of these will be adressed in the next pages:

01 - "Device Library"

02 - "Devices in Use"

03 - "General"

01 - Device Library

The Device Library lets you manage of all the devices that are known to your AOS installation. It shows you a list of known devices along with their specifications; such as the connector type, amount of I/O ports and the color tag. You can also copy any existing device making it easy tp set up similar devices.

Import a device + list dvices

Add new device

Installed devices

Name	Type	Connector	Balanced	Ins	Outs	Text Color	Background Color	Note		
COMPRESSOR 1			☐	2	2				delete	copy
COMPRESSOR 2			☐	2	2				delete	copy
COMPRESSOR 3			☐	2	2				delete	copy
CONSOLE	ANALOG		☐	16	16				delete	copy
INTERFACE			☐	16	16				delete	copy
REVERB 1			☐	2	2				delete	copy
REVERB 2			☐	2	2				delete	copy
REVERB 3			☐	2	2				delete	copy
SPEAKER 1			☐	2	0				delete	copy
SPEAKER 2			☐	2	0				delete	copy
SPEAKER 3			☐	2	0				delete	copy

Close

Devices in use | **Device library** | General

Add Device Specification | Import

How To Use AOS - Setting up your devices

+ Add a Device

The Add Device Specification allows to to create a New Device. Here you can name and catagorize your device, add notes and assign input and out for that device.

Name device

Connector

Device type

Manage your Input and Output ports

Device Specification

Save | Close

Name

Type

Text Color

Background Color

Connector

Note

Inputs — Add Port Specification
No   Name   Balanced

Outputs — Add Port Specification
No   Name   Balanced

02 - Devices in Use

Opening the Settings menu and clicking on the first tab will take you to this section. This menu will allow you to set up your inputs and outputs to the each available port on your XBay. Each port has two blocks: the top block is used to select your device. The bottom block is for choosing a specific port of your device (or all of them with the * option).

The devices will have the color tags and other settings that you have chosen for them in the "Device Library" tab. The amount of rows here change depending on the "XBay Version" setting in the "General" tab. Make sure to set it to the model you're currently using.
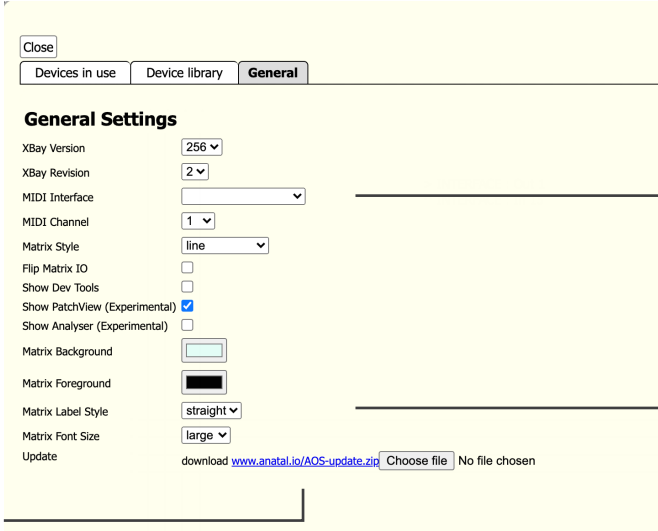
Current devices in use   Devices Library   General settings

Close								
Devices in use	Device library	General						

	1	2	3	4	5	6	7	8
XBAY Out DB-25 / 1 (1-8) >>>>>	1	2	3	4	5	6	7	8
	INTERFACI ⌄	INTERFACI ⌄	INTERFACI ⌄	INTERFACI ⌄	INTERFACI ⌄	INTERFACI ⌄	INTERFACI ⌄	INTERFACI ⌄
	In 1 ⌄	In 2 ⌄	In 3 ⌄	In 4 ⌄	In 5 ⌄	In 6 ⌄	In 7 ⌄	In 8 ⌄
XBAY In DB-25 / 1 (1-8) <<<<<	INTERFACI ⌄	INTERFACI ⌄	INTERFACI ⌄	INTERFACI ⌄	INTERFACI ⌄	INTERFACI ⌄	INTERFACI ⌄	INTERFACI ⌄
	Out 1 ⌄	Out 2 ⌄	Out 3 ⌄	Out 4 ⌄	Out 5 ⌄	Out 6 ⌄	Out 7 ⌄	Out 8 ⌄

03 - General setting

The General Settings menu allows you to change specific settings in AOS; such as the XBay model, model revision you use in your studio and the way the UI displays certain elements. You can also find some experimental settings in this section showing the PatchView and exposing developer tools for debugging / troubleshooting purposes.

XBay Version

MIDI Inputs

Adjust the Matrix visual style.

Adjust the Matrix visual style.

XBay Software update

AOS Overview - The Matrix

The Matrix View allows you to link up your I/O devices by drawing lines between the connections. The available devices correspond with the ones you set up in the "Devices in Use" section of the "Settings"menu.

Simply click on the grid to link the specific inputs and outputs together. Tooltips will show up as you move around the grid, giving you handy advice as you're setting up your devices - for example warning you about a potential feedback loop.

Any connections you create in the Matrix View are automatically set in the Chain View as well, allowing you to modify your device connections no matter which view you use.

AOS Overview - Chain View

The Chain View allows you to link up your I/O devices by chaining them together. The available devices correspond with the ones you set up in the "Devices in Use" section of the "Settings" menu.

Simply click on the circle at the top to add the input or output of a device. Tooltips will show up as you move around the grid, giving you handy advice as you're setting up your devices - for example warning you about a potential feedback loop.

Any connections you create in the Chain View are automatically set in the Matrix View as well, allowing you to modify your device connections no matter which view you use.
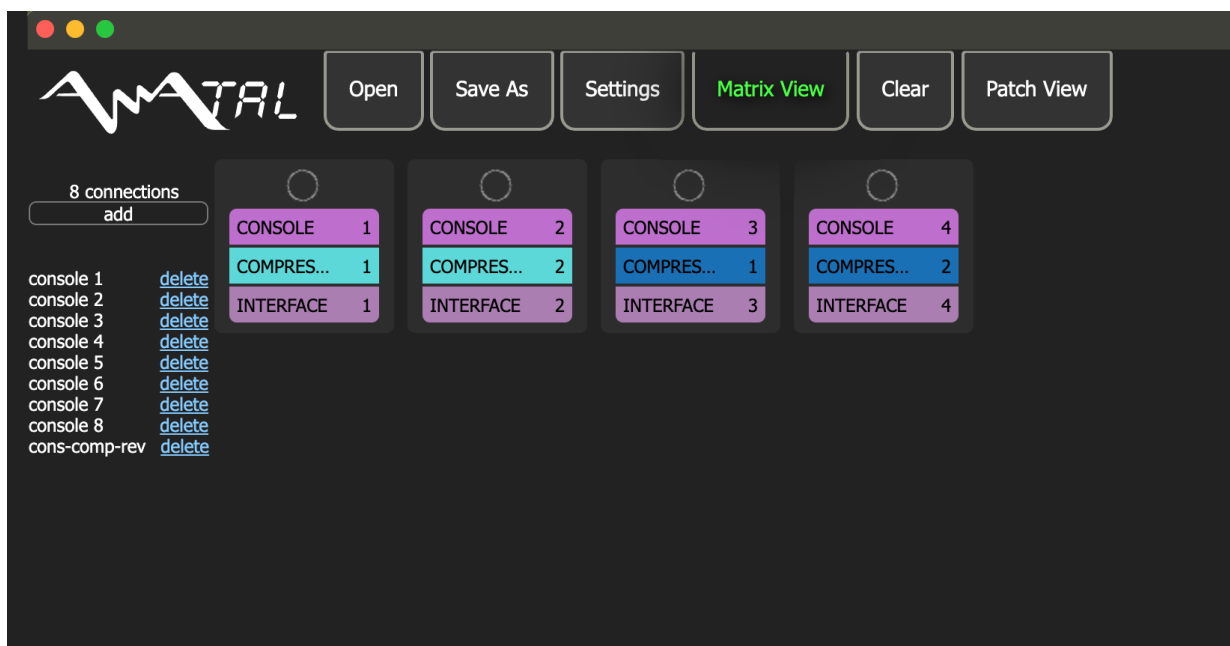
Troubleshooting

My XBay is not turning on / the power light is off?

Check if your XBay and the power supply are receiving power. Check if the power supply is plugged in.

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