#### About this manual:

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It is the policy of ST Audio to improve products as new technology and newer components become available. ST Audio, therefore reserves the right to change specifications without prior notice.

#### A/S Centre

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**Caution:** To reduce the risk of electrical shock, do not remove the cover or rear panel of this unit. No user serviceable parts inside. Please refer servicing to qualified personnel only.

**Warning:** To reduce the risk of fire or electrical shock do not expose this appliance to rain or moisture.

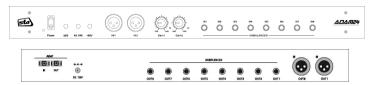
**Servicing:** The user should not attempt to service the appliance beyond that is described in the Operating Instructions. All other servicing should be referred to qualified service personnel.

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## I. Features

Thank you very much for expressing your confidence in ST Audio products by purchasing the ADAM24 unit. With much experience in the audio industry over a long period of time and along with valuable suggestions from our customers, our engineers have developed a product we know you will be satisfied with. We guarantee you uncompromising quality as well as excellent technical and audio properties at an extremely affordable price.



The ADAM24 unit provides 8 input and 8 output channels with one digital ADAT input and one digital ADAT output. This allows you to use it as a high-quality 24bit AD/DA converter for devices with optical ADAT interface such as digital mixers, professional soundcards or multichannel HD-recorders. The main functions include:

- 8 analog input channels, 24bit ADC
- 8 analog output channels, 24bit DAC
- input channel 1/2 with integrated microphone preamp (balanced and unbalanced inputs, -24dB  $\sim$  +50dB gain) on front panel
- input channel 3~8: unbalanced line level 1/4" connectors on front panel
- output channel 1/2 balanced (XLR) and unbalanced (1/4") on back panel
- output channel 3~8 unbalanced (1/4") on back panel
- optical ADAT input and output on back panel

# II. Installation

Your ST Audio ADAM24 was carefully packed to protect the unit from rough handling. Nevertheless, we recommend that you carefully examine the packaging and its contents for any signs of physical damage, which may have occurred in transit.

If the unit is damaged, notify your dealer and the shipping company immediately, otherwise claims for damage or replacement may not be granted. Shipping claims must be made by the consignee.

### **Rack Mounting**

The unit fits into one standard 19" rack unit of space (1 3/4"). Be sure that there is enough air space around the unit for cooling to avoid overheating. Please do not place the ADAM24 on high temperature devices such as power amplifiers.

### Power Supply

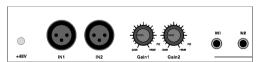
The ADAM24 comes with an external power supply that is used to supply the 12V DC operating voltage. Please connect the power adaptor to the 12V DC input on the left side of the back panel. Please do not use a different power adaptor.



#### Analog Audio Connections

The ADAM24 provides 2 input channels with adjustable gain level (-24dB  $\sim$  +50dB). You can use these inputs to directly connect microphones, guitars and any other input which requires gain control.

For each of the two channels (1/2) you can either use the balanced XLR or the unbalanced 1/4" in-



put. Please note that you cannot use both the XLR and 1/4" inputs for each channel simultanously.

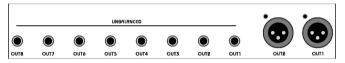
Some high-quality microphones require the use of Phantom Power, to enable Phantom power push the +48V power switch. This will supply your microphones on **In1** and **In2** with +48V phantom power. Please check the manual of your microphone to make sure you need phantom power supplied to it.



The unbalanced inputs 3 to 8 on the front work with normal line level. You can connect other audio equipment to these inputs using cables with 1/4" connectors. You should use balanced connections (TRS,

3-pin) to avoid grounding problems in connection with other audio devices. This is even recommended when an you use the ADAM24 together with other unbalanced equipment.

The back panel of the ADAM24 provides the analog outputs. Channel 1/2 is available in balanced XLR format and in unbalanced 1/4" format. Output 3 to 8 are available in unbalanced 1/4" format only.



### **Digital ADAT Connection**



The optical ADAT in- and output are accessable on the left side of the backpanel of your ADAM24.

All 8 analog input channels (inputs on the front panel) are converted into digital signals and then transferred to the optical

ADAT output. The digital signal from the ADAT input is converted into analog signals and then transferred to the 8 analog outputs (on the back panel).

If you use the ADAM24 both as an AD- and DA- converter simultanously, you would connect the ADAT input of ADAM24 to the ADAT output of your device. You would then connect the ADAT output of ADAM24 into the ADAT input of your device. If you use ADAM24 just as AD- converter or just as DA- converter, you will just need one optical ADAT cable. We strongly recommend the use of only high quality optical leads to connect other ADAT devices.

# III. Controls

The controls of the unit are placed on the front panel for easy access.

#### Power

To switch on the unit, you use the power switch which is placed on the left side of the front panel. The current power status is displayed by a LED just left to the switch.



### Sync / Samplerate Selection

If you use the ADAM24 as AD-converter only, it will usually supply the master clock for your other digital audio signals. In that case, you can select the samplerate which the unit operates at (44.1 or 48kHz) with the **44.1/48** switch on the front panel. If this switch is enabled (pushed), the samplerate will be 48kHz, in the other case it will be 44.1kHz.



The **M/S** switch controls if the unit supplies the master clock or if it syncs itself to the digital clock from the ADAT input. If **M/S** is not pushed, ADAM24 will supply the master clock (44.1 or 48kHz). Please note that the setting of the **44.1/48** switch will be ignored when you use ADAM24 as DA-converter when the **M/S** switch is enabled/pushed at the same time. In that case the unit works with the clock from the device connected to the ADAT digital input of the ADAM24.

Please also refer to the manual of your digital devices that you want to use together with the ADAM24 to learn more about master/slave clock settings. When several units are connected via ADAT (or via other digital protocols), it is extremly important that all devices are using exactly the same samplerate.

# **IV.** Specifications

samplerate	48kHz, 44.1kHz, Slave
input channels	8 (2 balanced+unbalanced, 6 unbalanced)
output channels	8 (2 balanced+unbalanced, 6 unbalanced)
balanced inputs	XLR connector (front panel)
unbalanced inputs	6.3mm / 1/4" connector (front panel)
microphone inputs	-24dB ~ +50dB gain on channel 1/2 +48v phantom power switchable
balanced outputs	XLR connector (back panel)
unbalanced outputs	6.3mm / 1/4" connector (back panel)
power supply	12V DC
AD/DA converter	AKM 24bit AD/DA converter 100dB[A] dynamic range