SM Pro Audio

Installation Manual
- PR8MK2 ADAT Option -

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FOREWORD

Dear Recording Specialist, thank you and congratulations for choosing the PR8MK2 ADAT Option from SM Pro Audio.

The PR8MK2 ADAT Option is a digital-converter upgrade module intended to retrofit the PR8MK2 multi-channel microphone preamp with a digital output compatible with the ADAT digital format specification.

As with all SM Pro Audio products, in developing the PR8MK2 ADAT Option we paid special attention to achieving optimal audio quality and preserving natural musicality. To this end, the PR8MK2 ADAT Option uses high class 24-bit converters.

Regards,
SM ProAudio

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1. INSTALLATION
The PR8MK2 ADAT Option is very easy to install. Nonetheless we recommend that you have an authorized technician install the module. We are not responsible for any damages that occur due to improper installation.
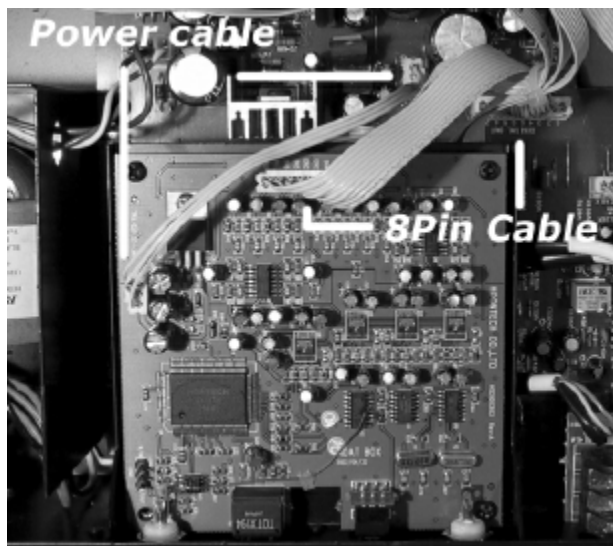
• Turn off power to the PR8MK2 and remove the mains power cable from its socket.
• Remove the back plate which covers the module installation slot on the rear panel of the unit.
• Remove the screws from the top of the unit and remove the metal cover so you have access to the unit.
• Insert the PR8MK2 ADAT Option into the installation slot and use the screws to secure it to the back wall of the PR8MK2 housing.
• You are required to connect two (2) ribbon cables from the newly installed module to the main board of the SM PR8MK2. One cable is to supply power to the PR8MK2 ADAT Option board, and the other is to provide the 8 x channels of audio to the ADAT stream.

1/ Connect the 8pin flat ribbon cable between the 8pin configuration marked "digital out" on the PR8MK2 main board to the 8pin configuration towards the rear of the PR8MK2 ADAT Option board. Ensure that pin 1 is connected to pin 1 by lining up the red indicator market on the cable to pin on at both ends of your connection.

2/ Connect the 3pin power source cable by connecting one end to the configuration marked "digital power" on the PR8MK2 main board, and the other end to the 3pin configuration on the new PR8MK2 ADAT Option board marked "+5v GND -5v". Ensure that the orientation of the cable is such that the +5v indicators match up.

• Replace the top cover and screw it back in place.

Please visit our website for more diagrams @ http://www.smproaudio.com

2. CONNECTIONS

2.1 Digital ADAT connector
The PR8MK2 ADAT Option has one 8CH ADAT optical output. Remove the black plastic plug to access the optical connector. This is where you connect your optical cable.

2.2 Sampling rate selector switch
There is a physical sample rate selector switch on the face of the PR8MK2 ADAT Option that allows selection of either 44.1kHz or 48kHz operation. Use this switch to toggle between your desired sample rate setting. The non-depressed state of the switch sets a 48kHz sample rate, whereas a depressed state selects 44.1kHz operation.

2.3 Word Clock Sync Connectors
The PR8MK2 ADAT Option is always the sync clock master unless you connect a word clock sync cable to the provided BNC sync connector. If you require the master clock to be set by another device, simply connect a sync cable to the word clock input. The ADAT option board will automatically detect sync and lock to the external clock source. There is also word clock output for sending master clock sync data from the unit.

3 Application & Operation

3.1 The purpose of the PR8MK2 ADAT Option
The ADAT module allows you to output the SMPR8MK2's 8 channels digitally via an optical cable to any ADAT compatible input device such as digital mixer, audio card, etc. This is perfect for adding additional inputs to many solutions. Simply connect your ADAT light pipe cable from the ADAT output on the ADAT option board module to the ADAT input on your desired destination device (mixer, audio card, etc). Select the appropriate sample rate setting with the switch provided. If you require external clock sync, simply connect your sync cable to the word clock input. If you would like the PR8MK2 ADAT Option to be the clock master for your digital system, simply connect a sync cable from the word clock output to you sync destination.

4. SPECIFICATIONS

Digital Output Connector type: Optical
Data format: ADAT
Sampling rate: 44.1 kHz or 48 kHz,selectable
Resolution A/D converter: 24 Bit
Dynamic range: 104 dB
Frequency response: 10 Hz - 20 kHz;±0.25 dB
Distortion (THD): 0.01%;10 Hz - 20 kHz at +10 dB
Crosstalk: > 80 dB

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