Focusrite AMS-Focusrite OctoPre MkII Dyanamic

Focusrite OctoPre MkII Dynamic Microphone Pre Amp User Manual

Model: AMS-Focusrite OctoPre MkII Dyanamic

NTRODUCTION

The Focusrite OctoPre MkII Dynamic is an eight-channel microphone preamplifier with a built-in 24-bit / 96 kHz ADAT output. It serves as a powerful input expansion for Pro Tools systems, other digital audio workstations, analog or digital consoles, and hard disk recorders. This unit is designed to enhance your recording setup by providing high-quality preamplification and versatile digital connectivity.



Figure 1: Focusrite OctoPre MkII Dynamic Microphone Pre Amp - Angled Front View.

This image displays the overall design of the OctoPre MkII Dynamic, showcasing its rack-mountable form factor and the layout of its front panel controls and indicators.

KEY FEATURES

- Eight High-Quality Preamps: Features eight award-winning Focusrite microphone preamplifiers.
- Integrated Digital Output: Includes an eight-channel 24-bit / 96 kHz ADAT digital output for seamless integration with digital audio interfaces.
- Optimized for Drums: Microphone preamps are specifically optimized to handle high input levels, making them suitable for tracking drums.
- **Instrument Inputs:** Two channels offer high-impedance (Hi-Z) instrument inputs, conveniently located on the front panel for direct connection of guitars and basses.
- **Input Metering:** Each channel is equipped with fast-acting 5-LED input meters for clear visual reference of input levels, helping to prevent clipping.
- **Phantom Power:** 48V phantom power is available on every channel, switchable in two groups (1-4 and 5-8), for use with condenser microphones.

- **Built-in Compression:** Features VCA-based, feed-forward compressors on each channel, derived from the Focusrite Red 3, with a single dial for control and a 'More' button for aggressive compression.
- Direct Outputs: Provides direct outputs on every channel for routing flexibility, particularly useful in live sound environments.
- Internal Clock: Delivers a jitter performance of less than 10 PPM, with a BNC connector for external clock synchronization using JetPLL jitter elimination technology.

SETUP

Unpacking and Inspection

Carefully unpack the OctoPre MkII Dynamic and inspect it for any signs of damage that may have occurred during transit. Retain the packaging materials for future transport or storage.

Connecting the Unit

The OctoPre MkII Dynamic offers various input and output options for integration into your audio setup.



Figure 2: Focusrite OctoPre MkII Dynamic Rear Panel.

This image shows the rear panel of the OctoPre MkII Dynamic, detailing the power input, Word Clock I/O, Optical ADAT outputs, Line Outputs, and Mic/Line Inputs.

- **Power Connection:** Connect the supplied AC power cable to the IEC inlet on the rear panel and to a suitable mains power outlet. Ensure the unit is properly earthed.
- Microphone/Line Inputs: Use XLR cables for microphone connections to inputs 1-8. For line-level signals, use 1/4inch TRS or TS cables.
- Instrument Inputs (Channels 1 & 2): For instruments like guitars or basses, plug directly into the 1/4-inch DI inputs on the front panel. This bypasses the rear XLR input for these channels.
- **ADAT Output:** Connect the optical ADAT outputs (Lightpipe) to the ADAT input of your audio interface or digital mixer. The unit provides two mirrored ADAT outputs (44.1/48 kHz) for channels 1-8.
- Line Outputs: Use 1/4-inch TRS or TS cables to connect the individual line outputs (1-8) to an analog mixer or other analog recording equipment.
- Word Clock: For synchronization with external digital devices, connect a BNC cable from your master clock to the Word Clock input, or from the Word Clock output to slave devices.

Initial Power-Up

Once all connections are made, press the Power button on the front panel to turn on the unit. The power indicator LED will illuminate. Allow a few moments for the unit to initialize.

OPERATING INSTRUCTIONS

This section details the functions of the front panel controls and indicators.



Figure 3: Focusrite OctoPre MkII Dynamic Front Panel.

This image provides a detailed view of the OctoPre MkII Dynamic's front panel, highlighting the gain knobs, pad buttons, phantom power switches, compressor controls, and metering section.

Front Panel Controls

- Gain Knobs (1-8): Adjust the input gain for each microphone/line channel. Rotate clockwise to increase gain.
- Pad Buttons (1-8): Engages a 10dB pad for the corresponding channel, useful for very hot signals like close-miked drums.
- Phantom Power (48V) Switches: Two switches control 48V phantom power for channels 1-4 and 5-8. Press to engage for condenser microphones.
- Instrument Inputs (1 & 2): 1/4-inch jacks for direct connection of high-impedance instruments.
- Compressor Controls (1-8):
 - Compress Knob: A single dial that simultaneously decreases the threshold and increases makeup gain for the VCA-based compressor.
 - **More Button:** Engages a more aggressive compression mode, doubling the ratio from 2:1 to 4:1 and shifting the threshold range.
 - Compress LED: Illuminates when compression is active.
- Input Meters (1-8): 5-LED ladders display the input level for each channel, indicating signal presence, nominal level, and potential clipping (O/L).
- Sample Rate Select: Buttons to select the desired sample rate (44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz) for the ADAT output.
- Sync Source Select: Buttons to choose the clock source: Internal, ADAT, or Word Clock.
- Power Button: Turns the unit on or off.

Using the Compressors

The OctoPre MkII Dynamic features a unique single-dial compressor on each channel. Turning the 'Compress' knob clockwise increases the amount of compression. For a more pronounced and aggressive compression effect, engage the 'More' button. The 'Compress' LED will light up when the compressor is actively reducing the signal's dynamic range.

Synchronization

For stable digital audio, it is crucial to properly synchronize the OctoPre MkII Dynamic with your other digital devices. Select the desired sample rate using the 'Sample Rate' buttons. Then, choose your sync source: 'Internal' for the OctoPre's own clock, 'ADAT' if receiving clock from an ADAT input, or 'Word Clock' if synchronizing via the BNC Word Clock input.

MAINTENANCE

- Cleaning: Use a soft, dry cloth to clean the exterior of the unit. Do not use abrasive cleaners, solvents, or waxes.
- Ventilation: Ensure that the ventilation slots are not obstructed to prevent overheating.
- Storage: When not in use for extended periods, store the unit in a cool, dry place, ideally in its original packaging.
- Power Cord: Regularly check the power cord for any damage. Do not use a damaged power cord.

TROUBLESHOOTING

Problem	Possible Cause	Solution
No power	Power cable not connected; power outlet faulty.	Ensure power cable is securely connected. Try a different power outlet.
No audio output via ADAT	Incorrect sample rate or sync source; ADAT cable faulty or disconnected.	Verify sample rates match on both devices. Check sync source setting. Ensure ADAT cable is correctly connected and not damaged.
Input signal clipping (O/L LED)	Input gain too high; signal source too hot.	Reduce the input gain. Engage the 10dB pad for very loud sources.
Phantom power not working	Phantom power switch not engaged for the correct channel group.	Ensure the 48V switch for the relevant channel group (1-4 or 5-8) is pressed.

SPECIFICATIONS

• Product Dimensions: 24 x 14.2 x 5.2 inches

• Item Weight: 11.3 pounds

• Item Model Number: AMS-Focusrite OctoPre MkII Dyanamic

• Number of Channels: 8

• Connectivity Technology: XLR, 1/4-inch TRS/TS, Optical ADAT, BNC Word Clock

• Supported Software: Windows (general compatibility for DAW integration)

• Compatible Devices: Keyboards, Microphones, Guitars, Basses, Digital Audio Workstations, Analog/Digital Consoles

• First Available Date: September 15, 2009

• Manufacturer: Focusrite

WARRANTY AND SUPPORT

For detailed warranty information and technical support, please refer to the official Focusrite website or the comprehensive User Guide provided with your product. A digital version of the User Guide is available for download:

Download User Guide (PDF)

You can also visit the Focusrite Store on Amazon for additional product information and resources.