

ART Pro MPA-II

ART ProMPAII Two Channel Discrete Class A Microphone Preamp User Manual

Model: Pro MPA-II

1. INTRODUCTION

The ART ProMPAII is a two-channel discrete Class A microphone preamplifier designed to deliver high-performance audio. It features variable input impedance, selectable 48V phantom power, and can be configured for dual mono or stereo operation. The unit incorporates two hand-selected 12AX7 tubes, allowing for a wide variation of preamp tone and performance through selectable low or high plate voltage. Large backlit analog VU meters and multi-colored LED arrays provide visual feedback on input/output levels and tube gain. Housed in a durable 2-space rack-mountable steel chassis with an aluminum face panel, the ProMPAII is built for reliable operation in various professional audio environments.

2. KEY FEATURES

- **Variable Input Impedance:** Offers flexible microphone voicing from 150 Ohms to 2400 Ohms.
- **Selectable Plate Voltage:** Choose between low or high plate voltage for varied preamp tone.
- **Discrete Class-A Input Microphone Preamplifier:** Ensures high-quality audio amplification.
- **Low Noise:** Achieves low noise levels, especially at lower gain settings.
- **Extremely Low Total Harmonic Distortion (THD):** Maintains signal purity.
- **Wide Frequency Response:** Captures a broad range of audio frequencies.
- **Large Backlit VU Meters:** Provides clear visual monitoring of output levels.
- **Backlit Function Switches:** Enhances visibility and usability in various lighting conditions.
- **Additional Front Mounted Instrument Input Jack:** Supports direct connection of instruments (e.g., guitar, bass, keyboard).
- **Supports Mid/Side Miking Technique:** Allows for advanced stereo recording configurations.
- **Operates at +4dbm/-10dbv Output:** Compatible with professional and consumer-level equipment.
- **Selectable Stereo/Dual Operation:** Provides flexibility for two independent channels or linked stereo operation.
- **Automatic Instrument Input Selection:** Simplifies setup when connecting instruments.

3. SETUP GUIDE

Follow these steps to set up your ART ProMPAII:

1. **Unpacking:** Carefully remove the ProMPAII from its packaging. Inspect the unit for any signs of damage.
2. **Placement:** The ProMPAII is designed for rack-mounting and occupies two standard rack spaces. Ensure adequate ventilation around the unit.
3. **Power Connection:** Connect the provided power cord to the AC inlet on the rear panel of the ProMPAII and then to a suitable AC power outlet. Ensure the power switch on the front panel is in the OFF position before connecting.
4. **Microphone Connections:**
 - Connect your microphones to the XLR inputs on the rear panel. The ProMPAII supports two independent microphone inputs.
 - If using condenser microphones requiring phantom power, ensure the +48V phantom power switch is engaged for the respective channel on the front panel.
5. **Instrument Connections:** For direct instrument input, use the 6.35mm (1/4-inch) jack on the front panel. Connecting an instrument to this jack automatically bypasses the rear XLR input for that channel.
6. **Output Connections:** Connect the outputs of the ProMPAII to your audio interface, mixer, or recording device using appropriate cables (XLR or 1/4-inch TRS). The unit supports both +4dBu and -10dBV output levels.

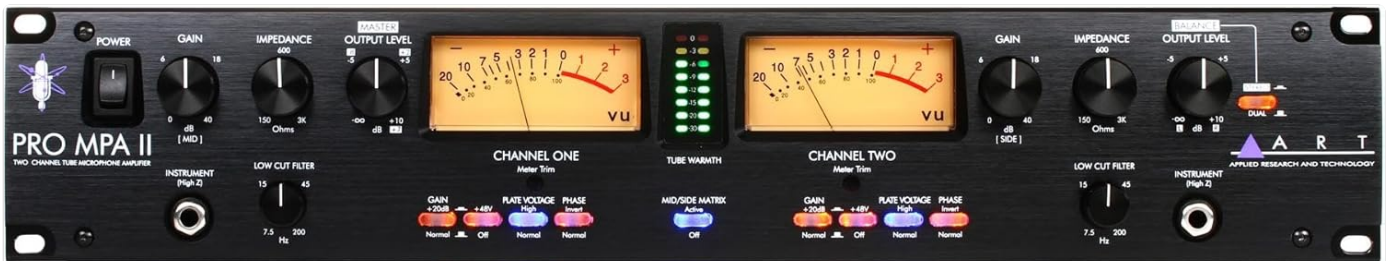


Figure 3.1: Front Panel Overview of the ART ProMPAII. This image displays the various controls and indicators on the front of the unit, including the power switch, gain knobs, impedance selectors, output level controls, low cut filter knobs, and the instrument input jack. The two large backlit VU meters for Channel One and Channel Two are prominent, along with their respective control switches for gain, phantom power, plate voltage, and phase. The central "Tube Warmth" and "Mid/Side Matrix" indicators are also visible.

4. OPERATING INSTRUCTIONS

This section details the operation of the ART ProMPAII's controls and features.

4.1. Front Panel Controls

- **POWER Switch:** Toggles the unit's power on and off.
- **GAIN Knob:** Adjusts the input gain for each channel. Rotate clockwise to increase gain.
- **IMPEDANCE Knob:** Varies the input impedance (150 Ohms to 2400 Ohms) to optimize performance with different microphones (e.g., dynamic, ribbon).
- **MASTER OUTPUT LEVEL Knob:** Controls the overall output level of the respective channel.
- **INSTRUMENT (High Z) Jack:** 1/4-inch input for connecting high-impedance instruments.
- **LOW CUT FILTER Knob:** Adjusts the high-pass filter frequency (7.5 Hz to 200 Hz) to remove unwanted low-end rumble.
- **VU Meters:** Large backlit analog meters display the output level for each channel.
- **TUBE WARMTH LEDs:** Multi-colored LED arrays indicate the level of tube gain/saturation.
- **GAIN +20dB Switch:** Engages an additional 20dB of gain for low-output microphones.
- **+48V Switch:** Activates phantom power for condenser microphones.
- **PLATE VOLTAGE (High/Normal) Switch:** Selects between high and normal plate voltage for the 12AX7 tubes,

affecting the tonal characteristics.

- **PHASE (Normal/Invert) Switch:** Inverts the phase of the input signal, useful for correcting phase issues in multi-microphone setups.
- **MID/SIDE MATRIX (Active) Switch:** Engages the Mid/Side decoding function, summing the adjacent channel for stereo processing.
- **DUAL/STEREO Switch:** Selects between independent dual-channel operation or linked stereo operation.

4.2. Basic Operation

1. **Power On:** Flip the POWER switch to the ON position. The VU meters and tube warmth LEDs will illuminate.
2. **Connect Source:** Connect your microphone or instrument as described in the Setup Guide.
3. **Set Gain:** Start with the GAIN knob at its minimum setting. Gradually increase the GAIN while monitoring the VU meters to achieve a healthy signal level without clipping. Adjust the +20dB switch if more gain is needed.
4. **Adjust Impedance:** Experiment with the IMPEDANCE knob to find the optimal setting for your microphone. This can significantly alter the microphone's tonal response.
5. **Apply Phantom Power (if needed):** If using a condenser microphone, activate the +48V switch for the corresponding channel.
6. **Select Plate Voltage:** Choose between HIGH or NORMAL plate voltage to achieve the desired tube warmth and character. HIGH voltage typically provides more headroom and a cleaner sound, while NORMAL can offer more saturation.
7. **Use Low Cut Filter:** Engage and adjust the LOW CUT FILTER knob to remove unwanted low-frequency noise (e.g., stage rumble, air conditioning hum).
8. **Monitor Output:** Use the MASTER OUTPUT LEVEL knob to fine-tune the signal sent to your recording device or mixer, ensuring it does not clip at the destination.
9. **Stereo/Dual Mode:** Use the DUAL/STEREO switch to select between independent channel operation or linked stereo control. For Mid/Side miking, activate the MID/SIDE MATRIX switch.

5. MAINTENANCE

Proper maintenance ensures the longevity and optimal performance of your ART ProMPAII.

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the unit. Avoid abrasive cleaners or solvents.
- **Ventilation:** Ensure that the ventilation slots are not obstructed to prevent overheating.
- **Tube Replacement:** The 12AX7 tubes are designed for long life, but may eventually require replacement if performance degrades (e.g., increased noise, reduced warmth). Tube replacement should be performed by qualified personnel or by following specific instructions from ART. Always disconnect power before attempting any internal maintenance.
- **Storage:** When not in use for extended periods, store the unit in a cool, dry place, protected from dust and extreme temperatures.

6. TROUBLESHOOTING

This section provides solutions to common issues you might encounter with your ProMPAII.

Problem	Possible Cause	Solution
No Power	Power cord disconnected; Power switch off; Faulty outlet.	Check power cord connection; Ensure power switch is ON; Test outlet with another device.

Problem	Possible Cause	Solution
No Audio Output	Incorrect input/output connections; Gain too low; Phantom power off (for condenser mics); Instrument input engaged.	Verify all cable connections; Increase GAIN; Activate +48V phantom power; Disconnect instrument from front jack if using rear XLR.
Distorted Audio	Input gain too high; Output level too high; Faulty cable/microphone.	Reduce GAIN; Lower MASTER OUTPUT LEVEL; Test with different cables/microphones.
Excessive Noise/Hum	Ground loop; Improper cable shielding; Nearby electrical interference; Worn tubes.	Use a ground lift (if safe and necessary); Use balanced cables; Relocate unit away from interference; Consider tube replacement.
VU Meters Not Responding	No input signal; Meter trim setting incorrect; Internal fault.	Ensure signal is present; Check Meter Trim settings (if applicable); Contact ART support if issue persists.

7. TECHNICAL SPECIFICATIONS

- **Model:** Pro MPA-II
- **Type:** Two Channel Discrete Class A Microphone Preamplifier
- **Input Impedance:** Variable (150 Ohms to 2400 Ohms)
- **Phantom Power:** Selectable +48V
- **Tubes:** Two 12AX7 (hand-selected)
- **Plate Voltage:** Selectable Low/High
- **Output Levels:** +4dBu / -10dBV selectable
- **Connectors:** XLR (rear), 6.35mm (1/4-inch) Jack (front)
- **Chassis Material:** Steel (rack-mountable) with CNC routed black anodized aluminum face panel
- **Dimensions (H x W x D):** Approximately 3.46 x 18.98 x 8.74 inches (8.79 x 48.21 x 22.20 cm)
- **Weight:** Approximately 12.1 pounds (5.49 kg)
- **Power Source:** Corded Electric
- **Date First Available:** October 2, 2001












8. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the official ART website or contact their customer service directly. Keep your purchase receipt as proof of purchase for warranty claims.

Online Resources: Visit the ART website for product registration, FAQs, and additional support documentation.

Contact Support: Refer to the contact information provided in your product packaging or on the official ART website for direct assistance.



 <p>PRO MPA II TWO CHANNEL TUBE MICROPHONE AMPLIFIER</p> <p>USER'S MANUAL</p> 	<p>ART PRO MPA II Two Channel Tube Microphone Amplifier User's Manual</p> <p>Comprehensive user's manual for the ART PRO MPA II, a professional two-channel tube microphone preamplifier. Details safety instructions, front panel controls, operating procedures, warranty, service information, and technical specifications.</p>
 <p>SOLO MPA MULTIVOICE TUBE PREAMPLIFIER</p> <p>User's Manual Manuel de l'utilisateur</p>	<p>ART Solo MPA Multivoice Tube Preamplifier User Manual</p> <p>Comprehensive user manual for the ART Solo MPA Multivoice Tube Preamplifier, detailing its features, installation, operation, specifications, and warranty information for professional audio applications.</p>
 <p>DIGITAL MPA II TWO CHANNEL TUBE MIC AMPLIFIER WITH DIGITAL OUTPUTS</p> <p>USER'S MANUAL</p> 	<p>ART DIGITAL MPA II User Manual: Two Channel Tube Microphone Preamplifier</p> <p>Comprehensive user manual for the ART DIGITAL MPA II, a two-channel tube microphone preamplifier with digital outputs. Learn about its features, operation, connections, safety instructions, and specifications.</p>
 <p>PRO MPA Professional Two Channel Tube Microphone Preamplifier</p> <p>USER'S GUIDE</p> 	<p>ART PRO MPA User's Guide: Professional Two Channel Tube Microphone Preamplifier</p> <p>Comprehensive user's guide for the ART PRO MPA, a professional two-channel tube microphone preamplifier. Covers features, setup, operation, applications, safety, warranty, and specifications.</p>
 <p>Pro Channel II™ Tube Preamp - Opto compressor - EQ</p> <p>USER'S GUIDE</p> 	<p>ART Pro Channel II User's Guide: Tube Preamp, Compressor, EQ</p> <p>Comprehensive user's guide for the ART Pro Channel II, detailing its features as a discrete Class-A tube microphone preamp, optical compressor/limiter, and four-band semi-parametric equalizer. Includes front panel controls, rear panel connections, applications, warranty information, service procedures, and detailed specifications.</p>
 <p>MPA Gold™ MICROPHONE PREAMPLIFIER</p> <p>USER'S MANUAL</p> 	<p>ART MPA Gold™ Microphone Preamplifier User Manual and Specifications</p> <p>Comprehensive user manual for the ART MPA Gold™ Microphone Preamplifier, detailing its features, front and rear panel controls, signal path, operating instructions, warranty, service information, and technical specifications. Designed for professional audio applications.</p>

