

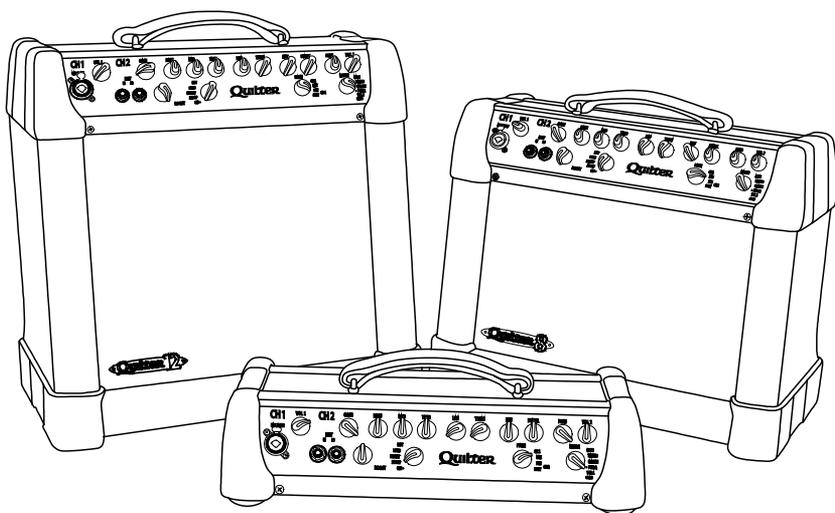
Quilter Laboratories, LLC
1700 Sunflower, Suite A
Costa Mesa, CA 92626
(714) 519-6114
www.quilterlabs.com

P/N 000019 Rev. E

Quilter™

MicroPro 200

Guitar Amplifier



MP200-8, MP200-10, MP200-12, MP200 HEAD

Owner's Manual

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IMPORTANT SAFETY INSTRUCTIONS

- 1 – Read and keep these instructions.
- 2 – Heed all warnings and follow all instructions.
- 3 – **WARNING:** To prevent fire or electric shock, do not expose this equipment to rain or moisture. Do not use this apparatus near water.
- 4 – Clean only with a dry cloth.
- 5 – Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 6 – Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding plug has two blades and a grounding prong. The wide blade or third prong are provided for your safety. If the provided plug does not fit your outlet, consult an electrician for the replacement of the obsolete outlet.
- 7 – Protect the power cord from being walked on or pinched, particularly plugs, convenience receptacles, and the point where they exit from the apparatus.
- 8 – Unplug the apparatus during lightning storms or when unused for long periods of time.
- 9 – The appliance coupler (or attachment plug) is the mains disconnect device and should remain readily accessible when amplifier is in use.
- 10 – Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Explanation of symbols



The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous" voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to humans.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in this manual.



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL.



WARNING: To prevent fire or electric shock, do not expose this equipment to rain or moisture.

The Quilter MicroPro 200 guitar amplifier stands in a class by itself.

Our goal: preserve and expand the classic tones that define the electric guitar while giving the professional musician a reliable, efficient, lightweight amplifier powerful enough to play any gig.

No shortcuts have been taken in the design and manufacturing. Every component and circuit is selected solely on the basis of superior results. Where advanced design or premium components significantly boost performance, we have made the investment. Costs are kept as low as possible using a well-managed high volume production process.

The result is a serious professional tool with performance that meets or beats handmade amps costing and weighing several times as much.

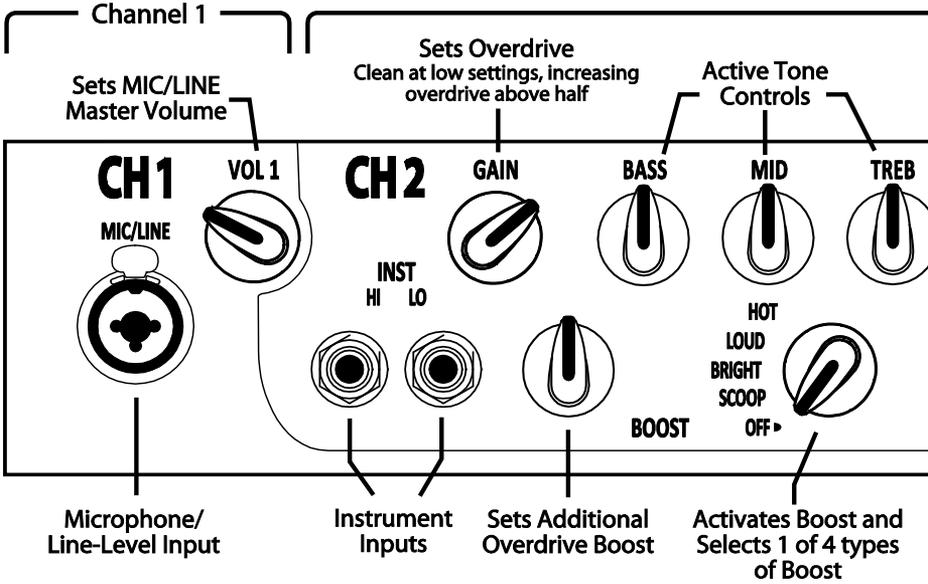
We hope you enjoy your new amplifier. May it give you many years of flawless service and provide a source of inspiration and creativity.

Contents:

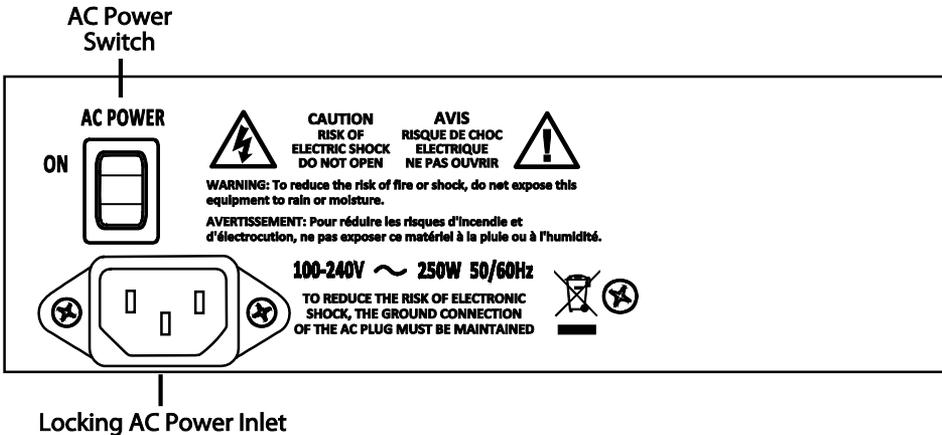
- 1 Quilter MicroPro 200 Amplifier
- 1 IEC AC Power Cord
- 1 Dust Cover
- 1 Owner's Manual

FEATURES OF THE AMPLIFIER

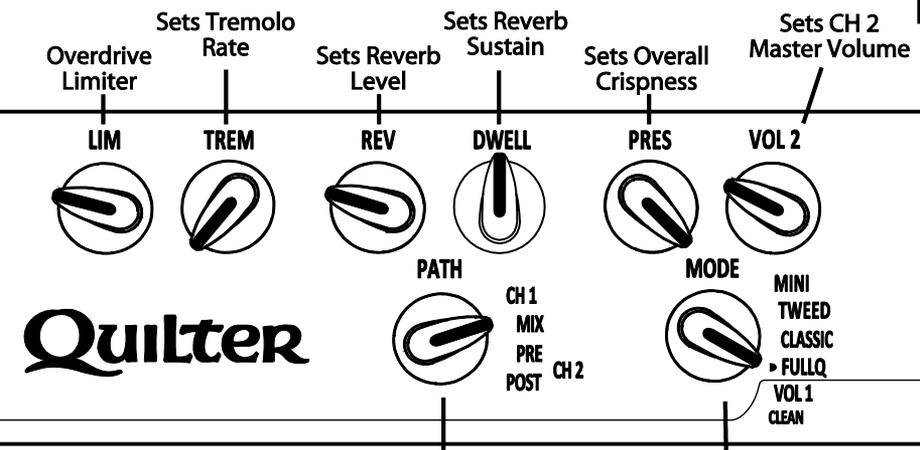
Front Panel



Rear Panel

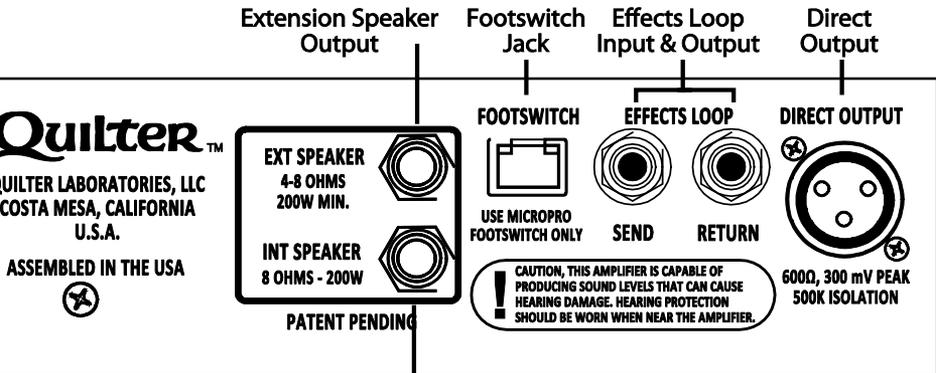


Channel 2



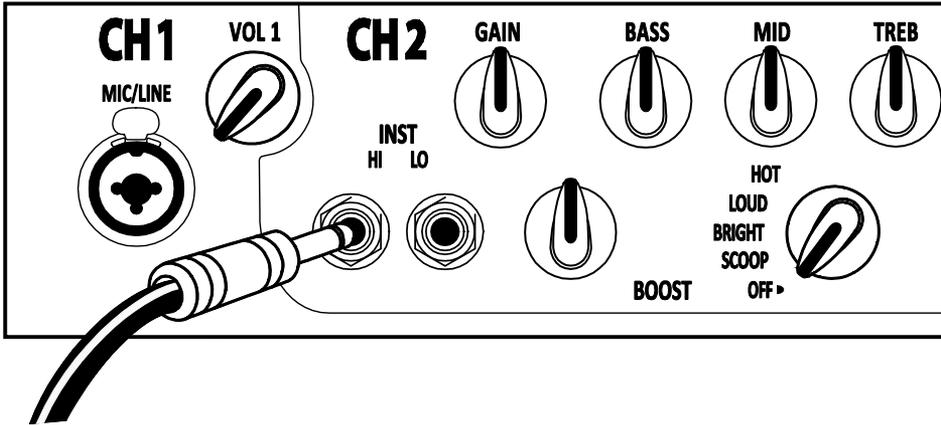
Reverb Path Assignment
Select Ch1 only, both, or two locations in CH2

Selects 1 of 4 overall voicings or CH1 as a clean preset



GETTING STARTED

The first time you use your amplifier, we recommend that you set up the front panel controls as shown in the illustration below:



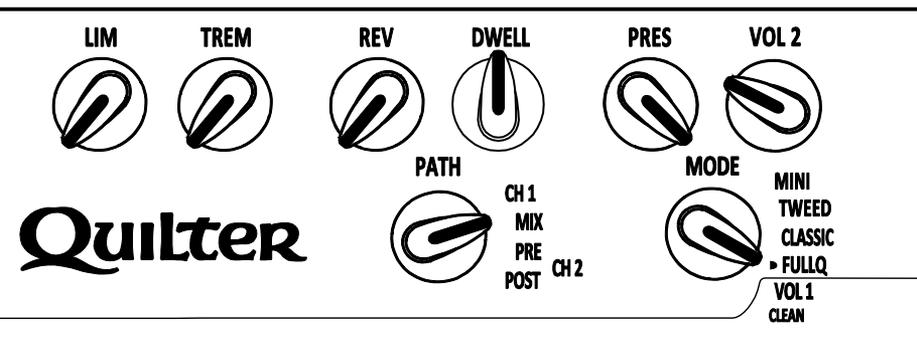
Initial Settings:

- Set **VOL 1** to its minimum position (we'll use CH 1 later).
- Set **GAIN**, **BASS**, **MID** and **TREB** to their middle positions.
- Set **LIM**, **TREM**, and **REV** to their minimum position.
- Set **PRES** to its maximum position.
- Set **VOL 2** to about $\frac{1}{4}$ level.
- Set the **MODE** switch to **FULLQ**.

Plug your guitar into the **INST HI** jack. As you play, use the **GAIN** and **VOL 2** controls to adjust the overdrive distortion and overall loudness of the amplifier.

The tone controls (**BASS**, **MID** and **TREB**) are neutral in the middle position. Turn them up and down to boost or cut their respective frequencies.

The **PRES** control produces a crisp aggressive sound on full, and a more mellow response when turned down.



For increased overdrive, move the **BOOST** selector to the **LOUD** position and set the amount of additional gain with the **BOOST** level control. The other boost settings change the voicing of the amplifier and are described later in this manual.

Turning up the overdrive limiter (**LIM**) progressively reduces overdrive distortion while maintaining lower-level sustain.

To add reverb, turn up the **REV** control. The **DWELL** control sets the decay time of the reverb tail. Use the **PATH** switch to select which channel or mix gets reverb. Use the **MIX**, **PRE** or **POST** settings when playing Channel 2.

The next section of the manual will describe in more detail each control and feature of the amplifier.

SWITCHABLE 2 CHANNEL OPERATION

The MicroPro 200 features two independent amplifier channels, combined into a single speaker, which can be used separately or simultaneously. Each channel has a maximum RMS output of 100 watts. CH 1, the MIC/LINE channel, may also be used as a “clean” channel, with access to minimal effects. CH 2, the Instrument channel, is typically used as the “overdrive” channel and which can use all the amp’s effects.

In normal 2-channel mode, **VOL 1** controls the loudness of the **MIC/LINE** input and **VOL 2** controls the loudness of the **INSTR** inputs.

“Clean-Dirty” Preset



To use VOL 1 as a clean-channel preset, set the **MODE** switch to VOL 1 (CLEAN). The INSTR input is now routed through Channel 1 and is controlled by its master volume (VOL 1).

By adjusting the VOL 1 and VOL 2 controls, you can achieve a balanced loudness level between the two channels.

(There is no special overdrive circuitry on Channel 1, but you may still hear some distortion if exceeding the 100 watt limit.)

When switched to Channel 1, the **MODE** backlight color changes from Blue (FULLQ) to Orange (VOL 1), to remind you to use the VOL 1 control.

Controls that are reserved for Channel 2 presets have their LEDs turned off. **BASS, MID, TREB** are still effective; reverb can be used when the **PATH** switch is set to the **CH 1** or **MIX** positions.

Footswitch control:

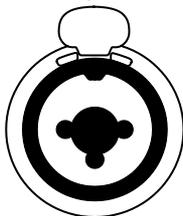
In this mode, the footswitch can route your sound from the clean channel to the overdrive channel by engaging the **MODE** switch.

Using the **BOOST** and **LIM** footswitches can give you even more switchable tonal presets when using Channel 2.

FRONT PANEL CONTROLS AND FEATURES

Channel 1 (CH 1) Combination Input

MIC/LINE



A microphone input plugs into the XLR portion of the **MIC/LINE** input jack. A mono, line-level input connects using the ¼" center portion of the jack.

This channel works well with dynamic microphones, acoustic guitars with built-in preamps, keyboards and playback of accompanying music.

Channel 1 is also a good choice if you use a preamp or modeling processor before the amplifier. The rich, open sound of the amplifier works as an ideal canvas for digital modeling and effects.

This channel is essentially free of distortion; however you may hear some distortion when exceeding the 100 watt rating.

Channel 1 Volume

VOL 1



VOL 1 controls the loudness of the MIC/LINE input. Except for certain reverb settings (see below), this is the only control that affects the MIC/LINE inputs.

Channel 1 Reverb

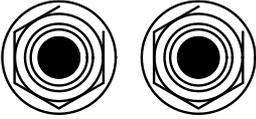
To use reverb on Channel 1, set the **PATH** switch to **CH 1** or **MIX** positions.

Channel 1-2 Switching

When the **MODE** selector is in the **VOL 1** (CLEAN) position, Channel 2's **INSTR** signal is routed through Channel 1 and responds to **VOL 1**, **BASS**, **MID**, and **TREB**.

Channel 2 (CH 2) Inputs

INST
HI LO



Channel 2 is tailored for electric guitars. **INST-HI** has a 2 meg input impedance that preserves the delicate overtones of standard pickups. **INST-LO** has a 100K impedance and 6 dB attenuation which may work well with active guitar pickups. Use the input that sounds best to you.

If two guitars are plugged in at once, they are blended together but each one reduces the output of the other somewhat.

Channel 2 has 14 highly active controls which are explained in detail below.

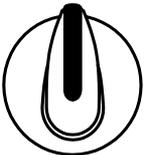
Channel 2 Preamp Gain (Overdrive Channel)

GAIN



The threshold of overdrive depends on playing style and type of guitar pickups. With no added Boost (see below), the sound should be clean below **GAIN** settings of "3" (as shown in the illustration to the left). Somewhere between "3" and "6", the amp should begin to overdrive on loud notes. Overdrive should increase greatly as GAIN is increased to "10".

Channel 2 BOOST Section



BOOST

HOT
LOUD
BRIGHT
SCOOP
OFF ▶



The **BOOST** control (on the left) sets the amount of additional boost from 3dB to 15dB. The **BOOST VOICE** selector (on the right) can be **OFF**, or set

to one of four boost voices, **SCOOP**, **BRIGHT**, **LOUD** and **HOT**, each of which provides a different kind of boost with its own musical value.

BOOST Voice Settings:

OFF – No additional gain is applied

SCOOP – This voice boosts gain with a slight midrange scoop, adding relatively clean volume with more bass and treble “chime.”

BRIGHT – This voice boosts upper midrange and treble for more penetration and “clang.”

LOUD – This voice boosts all frequencies equally for more overdrive.

HOT – This voice produces an aggressive type of overdrive, at a level similar to the maximum clean volume, as one type of “lead preset.”

- Note: the **PRES** control can be used to help tame the high end if the distortion sounds too bright and “fizzy.”

Footswitch control:

The footswitch bypasses BOOST when the LED is off, and activates the selected BOOST when the LED is on. When the boost voice selector is in the OFF position, the boost footswitch has no effect even if the LED is on.

Active Tone Controls



The **BASS**, **MID** and **TREB** controls adjust equalization or tone for the INSTR inputs, whether routed to CH 1 or CH 2. The controls are active boost/cut controls with a neutral response on their middle detent (“5”). Up to 12dB of boost or cut is available depending on frequency. The frequencies and control curves have been carefully designed to enhance the sound of the electric guitar.

Unlike the traditional “tone stack”, the MicroPro controls are totally neutral at their center position. This allows you to hear the natural sound of your guitar before you start making adjustments. Only slight adjustments may be needed depending on the type of guitar you are using.

Overdrive Limiter



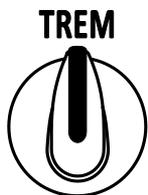
Intentional use of overdrive greatly expands the range of the electric guitar, adding sustain and exciting overtones to the basic plucked sound. The internal overdrive limiter adds more versatility by preserving overdrive sustain while controlling the amount of distortion.

Zero **LIM** permits full overdrive. Setting LIM at “2” or “3” keeps overdrive down to a “rolling boil.” Higher settings continue to replace overdrive distortion with a clean, singing sustain. In effect, LIM replaces overdrive’s “hard ceiling” with a softer cushioned ceiling that can be adjusted to taste. The trade-off is that the “feel” of limiting is more elastic or rubbery than normal overdrive.

Footswitch control:

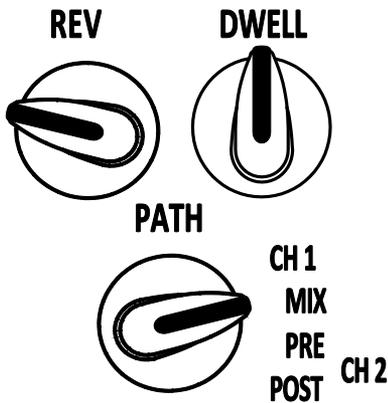
When the footswitch is engaged (LED on), LIM is active and overdrive will be reduced in accordance with the control setting. When the footswitch is off, the limiter is bypassed. Enabling and bypassing the limiter offers yet another preset to transition from clean to overdrive.

Tremolo



Tremolo was one of the first effects offered on vintage amplifiers. To avoid panel clutter, the MicroPro 200 uses a single **TREM** knob, with a fixed depth and unusually wide frequency range, adjustable from a very slow breathing to a fast staccato. To support exact matching of the pulse rate, this knob has smooth, non-detented operation, and of course, a footswitch bypass.

Reverb Section



The MicroPro 200 uses a premium digital reverb chip with a smoother decay and a lower noise floor than a classic spring tank. The reverb is voiced to “float” nicely in the mix.

The **REV** control sets the amount of reverb added to the signal.

The **DWELL** control adjusts the decay time from a short “klonk” to a lush “heavenly choir.”

The **PATH** switch controls whether reverb is applied to CH 1, CH 2 or both, as well as offering some additional variations on the reverb sound and how it interacts with Tremolo.

- **CH 1** – Applies reverb only to CH 1 (MIC/LINE).
- **MIX** – Applies reverb to CH 1 and CH 2 after the overdrive stage. This produces cleaner overdrive, with reverb applied afterwards, as in a studio or recording session.
- **PRE** (CH 2 only) – Reverb is applied before the gain, tremolo and clipping stages. The tremolo applies to the reverb as well as the direct signal, and the reverb will get very “large” at high gains.
- **POST** (CH 2 only) – Reverb is applied after the gain and tremolo stages but before clipping. The reverb is post-tremolo, which reduces tremolo depth somewhat, and produces more controlled reverb levels at high gains.

Footswitch control:

The footswitch LED is on when reverb is active, and off when bypassed. The footswitch controls the signal at the input of the reverb stage. When turned off, the remaining reverb tail decays naturally. This means you can “deposit” a burst of music and let it taper off while you continue to play dry.

Presence

PRES



The **PRES** control adjusts the overall sound of Channel 2, including any overdrive, from a mellow “singing” quality to a crisp full-range attack, to suit the style of music.

Maximum Presence delivers the amplifier’s full frequency range for a crisp, aggressive sound. Turning down the control produces a mellower, singing quality that may enhance a blues or jazz style, and tames a harsh or overly bright tone.

Channel 2 Master Volume

VOL 2



VOL 2 is the master volume control for Channel 2. It regulates the overall loudness of the channel without altering the amplifier’s tone or overdrive. Lower settings are suitable for practice or quiet venues. High settings enable the amp to compete on stage with drums or much larger amplifiers.

TIP: For a loud, clean tone, set VOL 2 full up, and adjust the GAIN control to the desired volume. LIM can also be increased to prevent unexpected overdrive.

Mode Selector

MODE



MINI
TWEED
CLASSIC
▶ FULLQ
VOL 1
CLEAN

MINI, **TWEED** and **CLASSIC** are analog emulations that capture the tone and dynamics of several classic amplifier types. **FULLQ** is the natural, full-bodied sound of the MicroPro, and the default position that the MODE footswitch returns to.

VOL 1 (CLEAN) shifts the signal to CH 1, allowing for a clean preset.

MINI MODE

Represents a small battery-powered or practice amp with rather abrupt overdrive and very limited bass response. Often useful as a “novelty” or “toy” alternative to the normal FullQ sound of the amplifier.

TWEED MODE

Represents a 1950’s era amplifier, with a mellow tone, chesty open-back bass response, and rich, chewy overdrive similar to “cathode-bias” circuits.

CLASSIC MODE

Similar to larger ‘60s era amplifiers, with fairly full-range bass, a slight mid scoop, and crisper “fixed-bias” overdrive. The result is slightly glassier sounding compared to FullQ.

FULLQ MODE

This sound represents the full development of the Quilter tone. It combines the open airy quality and fast attack of modern direct-coupled circuitry with the rich chewy overdrive normally found only in hand-tuned, open-loop amplifiers. Each of the vintage sounds has its charms, but FullQ represents “high definition” guitar amplification at its finest.

VOL 1 (CLEAN) MODE

This is a special mode designed to allow two-channel switching. When in this mode, the **VOL 1** control sets the clean gain. Certain CH 2 controls, **GAIN, LIM, PRES, BOOST** and **VOL 2** are reserved as presets for the FullQ mode. Note that the LEDs above these controls go out in VOL 1 mode.

Footswitch control:

When the footswitch is engaged (LED on), the FULLQ mode is active, as indicated by a blue color. When the footswitch is off, the mode selected with the knob becomes active, as indicated by orange and amber colors. When set to VOL 1 (clean), the MODE switch allows you to go from clean to an overdrive tone.

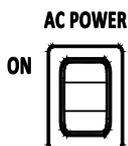
Back-lit Control Panel

The glowing blue Quilter logo lets you know the power is on while the control legends make the front panel of the amp easily readable in a dark room.

Footswitch control:

When the footswitch is used to bypass various controls, their panel LEDs are turned off, helping you see which features are bypassed.

Rear Mounted AC Power Switch

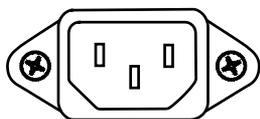


Simply reach over the right side of the amp to flip the power switch on and off.

International Power Supply

The MicroPro 200 can be used on all known domestic AC voltages (100-250V) which allows you to play just about anywhere on the planet.

Locking IEC Power Cord



The power cord that comes with your amplifier is designed to lock into the AC inlet to reduce the chance it will come unplugged during use. Press the yellow button on the cord to release it.

Any normal 3-prong IEC cord can still be used with the amplifier as well. Always ensure that the ground contact is intact on both the cord and receptacle.

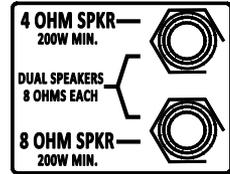
Speaker Outputs

The MicroPro combo amplifier models (MP200-8, MP200-10 and MP200-12) come with the internal speaker plugged into the **INT SPEAKER** output. An external 8 ohm speaker may be used in place of the internal speaker by unplugging this cable and connecting the external speaker. An external 4 ohm speaker cabinet should be connected to the **EXT SPEAKER** output.

To use two speaker cabinets simultaneously, connect a 4-8 ohm extension speaker with a minimum of 200 watts continuous power handling to the **EXT SPEAKER** output and an 8 ohm cabinet (or the internal speaker) to the **INT SPEAKER** output. Circuitry adjusts the output impedance to split

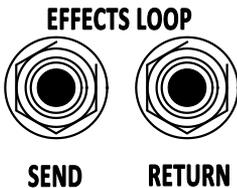
the power between the two outputs.

MicroPro 200 Head: Connect a single 4 ohm speaker cabinet, to the **4 OHM SPKR** output or an 8 ohm cabinet to the **8 OHM SPKR** output. When using two cabinets, a 4-8 ohm cabinet can be used in the **4 OHM SPKR** output and only an 8 ohm cabinet should be connected to the **8 OHM SPKR** output.



CAUTION: the amplifier can deliver up to 300 watts peak, well beyond the capacity of most single speakers. We recommend Quilter extension cabinets with power tested speakers. Quilter Labs will not be liable for damage to other speakers.

Effects Loop



The **SEND** jack combines both channels at -10dB which matches consumer and pro effects. The **RETURN** jack interrupts the internal signal, and returns the effects output directly to the power amplifier.

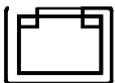
Impedance is low which preserves tone, and the SEND jack remains active which keeps effects synchronized. Effects are therefore applied to the overall sound of both channels with outstanding headroom and clarity.

Footswitch control:

Without the footswitch attached, the effects loop is activated when using the RETURN jack. The effects loop is enabled when the footswitch LED is on, and bypassed when the LED is off.

Footswitch Jack.

FOOTSWITCH



**USE MICROPRO
FOOTSWITCH ONLY**

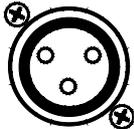
The foot controller connects with the supplied cable. Both jacks on the foot controller are wired identically, so you can plug into either one. A standard network cable with RJ-45 connectors may be used as an emergency replacement or if you need a longer cable.

Direct Output

The isolated direct output allows you to route the output sound of the amp to a mixing board or external powered loudspeakers without using a microphone. The signal level is compatible with mic inputs, and is padded down from the actual signal across the speaker, to preserve as much of the tone quality as possible.

A high frequency rolloff is included to prevent high frequency system instability, and produces the same tone quality through full-range

DIRECT OUTPUT speakers as the internal single-cone driver.



**600Ω, 300 mV PEAK
500K ISOLATION**

Caring For Your Amplifier

Clean the outer surfaces with a clean, damp cloth or vacuum with a soft brush. Never use any abrasives, harsh cleaners or solvents.

The MicroPro 200 amplifier is manufactured with high quality components using modern industrial processes that greatly reduce production defects. Each amplifier goes through an intensive testing process before it leaves the factory ensuring that your amplifiers will give you years of flawless service. There are no user-serviceable parts inside the amplifier. Any repairs should be performed by a trained service professional.

Always use the amplifier in a well-ventilated environment and protect from external heat sources such as furnaces or direct sunlight.

Prolonged high-volume playing causes heat buildup in the speaker which reduces its working lifetime. If you find it necessary to consistently use the amp at full volume, we recommend using an extension speaker to prolong speaker life and improve sound coverage.

Specifications

Amplifier Module Specifications: (All Models)	
Power Output:	Channel 1: 100 W RMS Channel 2: 100 W RMS Total: 200 W RMS
AC Power Req.:	100–240V, 50–60 Hz, 250 W
Input Connections:	MIC/LINE: Balanced XLR and ¼" TRS INST: ¼" mono

Input Impedance:	MIC: 4K ohms LINE: 70K ohms INSTR HI: 2M ohms INST LO: 100K ohms
Effects Loop:	Output: ¼" mono, -10dB, 1K ohms Input: ¼" mono, 50K ohms
Speaker 1 Output:	8 ohms, 200 W minimum rating
Speaker 2 Output:	4-8 ohms, 200 W minimum rating

MP200-8	
Speaker:	Celestion TF0818 - 8" cone, 1.75" voice coil, 8 ohms
Dimensions: (H x W x D)	14.5 in. x 17.5 in. x 9.75 in. 36.8 cm x 44.5 cm x 24.8 cm Conforms to U.S. airline carry-on limits
Weight:	19 lbs. (8.5 Kg)
MP200-10	
Speaker:	Celestion G10 Vintage - 10" cone, 1.75" voice coil, 8 ohms
Dimensions: (H x W x D)	19 in. x 17.5 in. x 10 in. 48.3 cm x 44.5 cm x 25.4 cm
Weight:	21 lbs. (9.6 Kg)
MP200-12	
Speaker:	Celestion Classic Lead 80 - 12" cone, 1.75" voice coil, 8 ohms
Dimensions: (H x W x D)	19 in. x 17.5 in. x 10 in. 48.3 cm x 44.5 cm x 25.4 cm
Weight:	26 lbs. (11.8 Kg)
MP200 Head	
Dimensions: (H x W x D)	4.5 in. x 17.5 in. x 7.63 in. 11.4 cm x 44.5 cm x 19.4 cm
Weight:	7 lbs. (3 Kg)

Note: Power ratings are provided by the loudspeaker manufacturer and are only a guideline when selecting a suitable speaker. Quilter Labs qualifies our speaker selections using a lengthy full power test that ensures that the speaker can stand up to the power output of our amplifiers.

Troubleshooting

Symptom	Action
No power, no lights	<ul style="list-style-type: none"> • Ensure that the AC cord is fully seated and connected to a live source. • Check the AC source by trying another device such as a lamp.
Amp turns off then after a short time, turns back on	<ul style="list-style-type: none"> • Automatic thermal protection is activating. Reduce the volume at least 30% and keep the amplifier out of direct sunlight or tightly enclosed spaces.
No audio (using a guitar)	<ul style="list-style-type: none"> • Ensure the guitar plug is inserted fully into the INST-HI or INST-LO inputs. • Try using a different guitar cable. • Check that the pickup selector switch and volume on the guitar are set correctly. • Remove any cables from the RETURN jack of the Effects Loop. If this corrects the problem, ensure that the signal from the SEND jack passes through all effects in the chain. • Ensure that the rear panel speaker plug is fully inserted into the INT SPEAKER jack. <p>If the MODE switch is set to VOL 1:</p> <ul style="list-style-type: none"> • Check that the VOL 1 control is not on its minimum setting. <p>If the MODE switch is NOT set to VOL 1:</p> <ul style="list-style-type: none"> • Check that the GAIN control is not on its minimum setting. • Check that the VOL 2 control is not on its minimum setting.
No audio (using the MIC/LINE input)	<ul style="list-style-type: none"> • Ensure that the XLR or ¼" plug is fully inserted. • Try using a different cable. • Check that the VOL 1 control is not on its minimum setting. • Ensure that the rear panel speaker plug is fully inserted into the INT SPEAKER jack. • Remove any cables from the RETURN jack of the Effects Loop.
Distorted audio on Channel1	<ul style="list-style-type: none"> • Lower the source level. • Lower the VOL 1 control.
No reverb is heard	<ul style="list-style-type: none"> • Check that the PATH switch is set to CH 1 or MIX when using the MIC/LINE input or the VOL 1 mode. • Check that the PATH switch is set to MIX, PRE or POST when using the CH 2 inputs.
Reverb sound has too much "echo"	<ul style="list-style-type: none"> • Adjust the DWELL control

A “warbling” or pulsing sound is heard	<ul style="list-style-type: none"> You may be hearing the tremolo effect. Check that the TREM control is set to its minimum position if this sound is undesired.
Background hum	<ul style="list-style-type: none"> Ensure the guitar plug is fully inserted. Try using a different guitar cable. Any AC powered sources or effects should be plugged into the same receptacle as the amplifier to help avoid ground loops. <p>If the hum goes away when you turn down the guitar:</p> <ul style="list-style-type: none"> Single coil pickups can be a source of hum, especially if near RF sources like light dimmers or neon lights. Some guitars have a mode where two pickups are in reverse polarity to each other. This mode can often reduce hum. Check that the guitar’s cavities are well shielded.
Excessive noise	<ul style="list-style-type: none"> At high gain settings, some audible hiss or whoosh is normal. Check your cables, guitar and other effects in the signal chain.
Amp sounds garbled at all volumes	<ul style="list-style-type: none"> Check speaker by temporarily trying an external speaker. Caution: reduce volume until sound level has been confirmed.
Desire clean tone, getting too much overdrive	<ul style="list-style-type: none"> Turn down the GAIN control and turn up VOL 2. Set the Boost Voice Select to OFF. Turn up LIM. Use the INST-LO input. Try using the VOL 1 (CLEAN) Mode
Desire overdrive tone, not getting enough overdrive	<ul style="list-style-type: none"> Use the INST-HI input Turn up guitar volume. Turn up GAIN. Set LIM to its minimum setting. Set the MODE switch to FULLQ Set the Boost Voice Select to LOUD or HOT and turn up the Boost Level. Try higher output pickups.
Tone sounds “dull” with no high frequencies	<ul style="list-style-type: none"> Set the PRES control to its maximum setting Check your guitar’s tone controls.

Amplifier Requires Service

If any of the below occur, immediately unplug the amplifier and refer to a service technician.

- Amplifier emits smoke
- Amplifier is dropped or chassis is dented or bent
- Liquid has been spilled into the amplifier
- Loose parts inside the amplifier are heard
- AC breaker trips

LIMITED TRANSFERABLE WARRANTY

IMPORTANT: PLEASE READ THIS DOCUMENT COMPLETELY. IT CONTAINS IMPORTANT INFORMATION ABOUT YOUR RIGHTS AND OBLIGATIONS, AS WELL AS LIMITATIONS AND EXCLUSIONS THAT MAY OR MAY NOT APPLY TO YOU. BY ACCEPTING DELIVERY OF THE PRODUCT(S), YOU AGREE TO BE BOUND BY AND ACCEPT THESE TERMS AND CONDITIONS.

Quilter Laboratories, LLC (Quilter Labs) guarantees its products to be free from defective material and/or workmanship and will replace defective parts and repair malfunctioning products under this warranty when the defect occurs under normal installation and use—provided the unit is returned to our factory via pre-paid transportation with a copy of proof of purchase. (i.e. sales receipt). This warranty provides that the examination of the return product must indicate, in our judgment, a manufacturing defect. This warranty does not extend to any product which has been subjected to misuse, neglect, accident, or where the date code or serial number has been defaced or removed. Quilter Labs shall not be liable for incidental and/or consequential damages. This warranty gives you specific legal rights.

This limited warranty is freely transferable during the term of the warranty period. The warranty on Quilter products is NOT VALID if the products have been purchased from an unauthorized dealer/online e-tailer, or if the factory serial number has been removed, defaced, or replaced in any way.

Customers may have additional rights, which vary from state to state or from country to country. In the event that a provision of this limited warranty is void, prohibited or superseded by local laws, the remaining provisions shall remain in effect. The Quilter Labs limited warranty in the United States is valid for a period of three (3) years from date of purchase except that footswitches, covers, cabinets, handles, and cabinet hardware are warranted for a period of one (1) year and speakers, and all other included accessory products for a period of ninety (90) days from date of purchase.

IMPORTANT: PLEASE RETAIN YOUR SALES RECEIPT OR ONLINE ORDER RECORD, AS IT IS YOUR PROOF OF PURCHASE COVERING YOUR LIMITED

WARRANTY. TO TRANSFER THE WARRANTY TO A SUBSEQUENT PURCHASER, YOU MUST ENDORSE THE SALE OF THE PRODUCT TO THE SUBSEQUENT PURCHASER ON THE FRONT OF THE SALES RECEIPT. THIS LIMITED WARRANTY IS VOID WITHOUT SUCH ENDORSED SALES RECEIPT.

Defective products that qualify for coverage under this warranty will be repaired or replaced, (at Quilter Labs' discretion) with a like or comparable product, without charge. To receive warranty service, return the complete product to Quilter Labs, LLC, with proof of purchase, during the applicable warranty period. The Quilter Labs Dealer from whom you purchased your product may also be authorized for warranty service and should be the first point of contact when service is required. TRANSPORTATION COSTS ARE NOT INCLUDED IN THIS LIMITED WARRANTY. Any repair or service performed by any person or entity other than an Authorized Quilter Labs Electronics Service Center is not covered by this limited warranty.

Other questions regarding this warranty can be answered by calling (714) 519-6114 or by contacting your authorized Quilter distributor. Email: info@quilterlabs.com

Factory Service

To return an amplifier to Quilter Labs for service under the warranty policy, please visit www.quilterlabs.com and fill out the Return Request Form. If you do not have access to the website, you may send a request by letter to Quilter Labs at 1700 Sunflower, Suite A, Costa Mesa, CA 92626. Please include the serial number of the amplifier and a copy of your sales receipt. Instructions on how to send your amplifier will be provided.

Do not attempt to open the amplifier and service it yourself. Any attempt to service the amplifier by a non-authorized service technician may void your warranty.