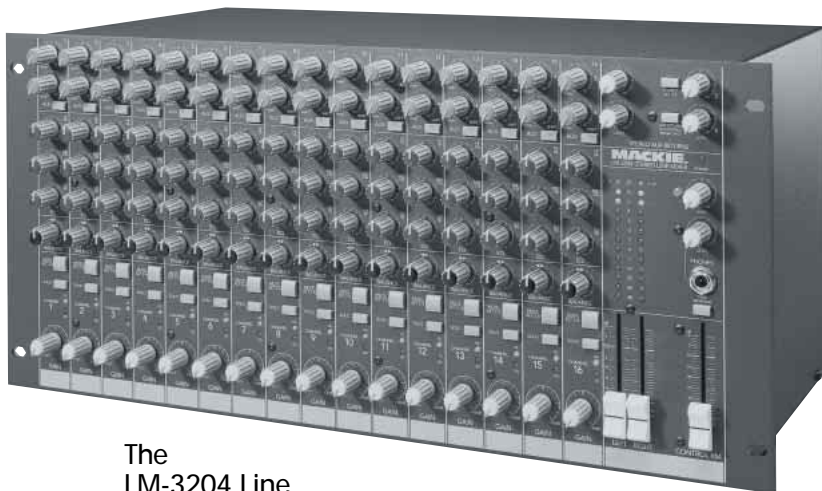


LM-3204 & LM-3204E EXPANDER

32x2x2 STEREO LINE MIXER



The LM-3204 Line Mixer combines exceptional sound quality with up to forty (mono) inputs in five rack spaces. It features sixteen stereo (16x2) inputs plus four stereo (4x2) AUX returns. Additional inputs can be added in multiples of 16 stereo channels with the LM-3204E Expander unit.

Proven Mackie features in a line mixer configuration.

Naturally, the LM-3204 has our CR-1604 and Micro Series 1202's best points: luxurious headroom, Unity gain structure, +4dBu internal operating levels, intuitive layout and in-depth metering. It has our 3-band equalization at musically useful points: 12kHz shelving treble for more sizzle, instead of the conventional 10kHz. 2.5Hz peaking midrange. And 80Hz bass instead of 100Hz.

It has our "four buses in a 2-bus board" ALT 3-4 feature. ALT 3-4 gives you an extra stereo output that each channel can be assigned to at the touch of a button.

The LM-3204 shares the same Mackie Mix Amp architecture as our proven CR-1604 and MicroSeries 1202. Like our other compact mixers, it is designed to handle hot inputs on all channels without exhausting headroom.

Two mic preamps.

Even though the LM-3204 is a line mixer, we wanted to increase its utility in live applications. So we added two of our proven mic preamplifiers, a design well known for its high headroom and ultra-low noise. Both mic preamps have trim controls, balanced XLR inputs and 1/4" outputs. The outputs can be patched into



RELATED PRODUCTS

LM-3204E Expander
MixerMixer Combiner

MORE INFORMATION

LM-3204 ARCHITECTS' AND ENGINEERS' SPECIFICATIONS
"IN YOUR FACE"
ALL-PRODUCT BROCHURE

FEATURES

- 40 inputs in 5 channels
- 16 stereo channels
- 2 Mackie mic preamps patchable to any chs.
- 45mm master faders
- 4 AUX sends per ch.
- 4 stereo (8 mono) AUX returns
- -20dB Signal Present LEDs on all channels
- 3-band EQ
- ALT 3/4 extra stereo bus
- Separate Control Room output with fader level control
- Tape Monitor section
- Headphone output with level control
- 4 stereo inserts
- Expandable with the LM-3204E

MACKIE®

LM-3204

any of the LM-3204's 16 channels.

Signal Present LEDs on every channel.

The LM-3204's -20dB LEDs light whenever there is a signal level of +20dBu at 1kHz or above at the inputs

of that channel strip. In practice, this LED will

flicker or light almost constantly when there is activity in that channel, and it basically serves as a convenient way of figuring out what's plugged into where.

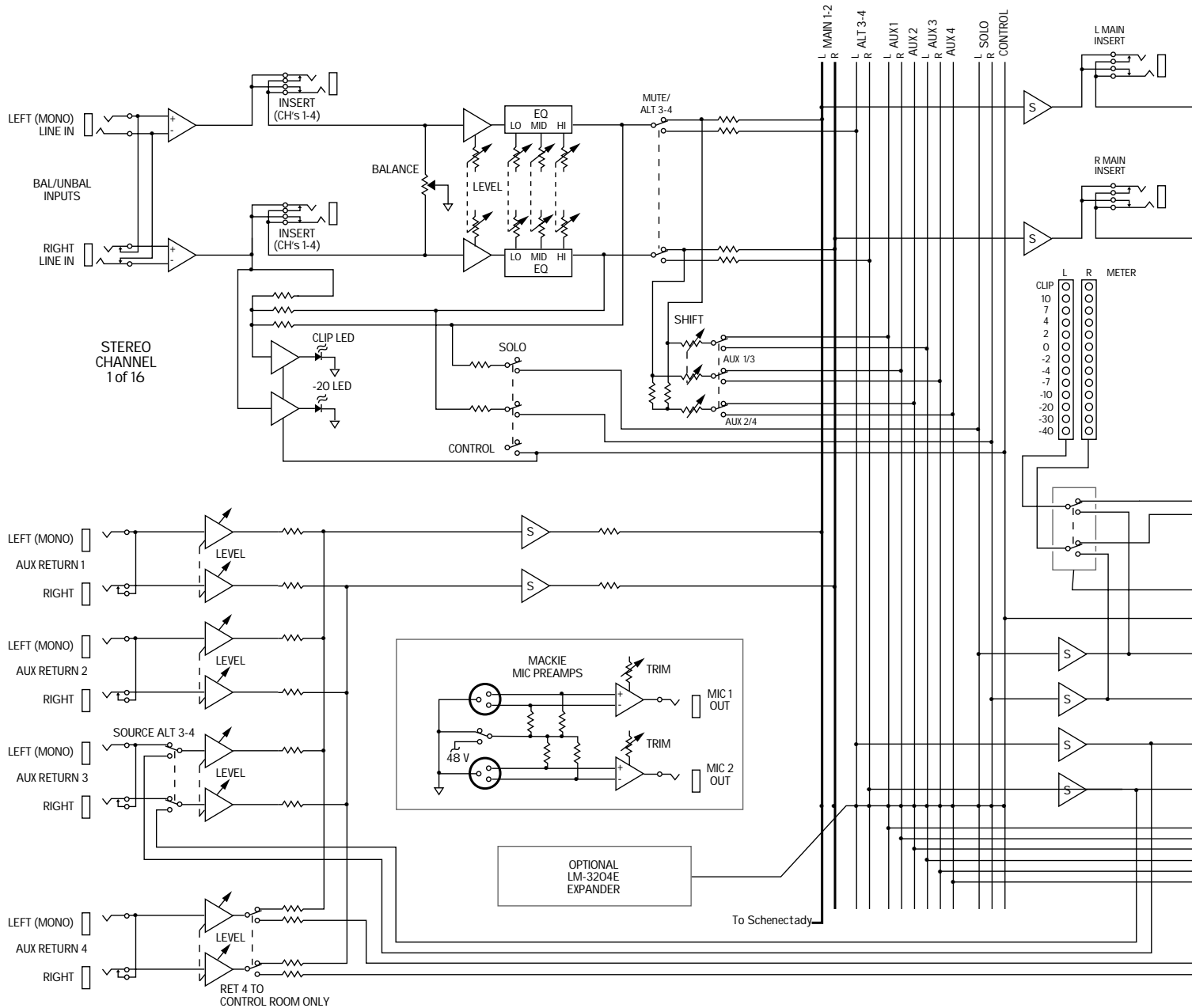
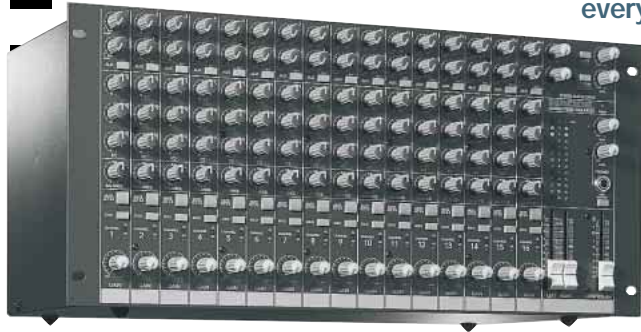
New monitor and tape features

The LM-3204 also introduces new features that provides real flexibility for both live and studio applications.

It has separate Control Room and Phone moni-

toring outputs, each with its own level control. Monitoring controls consist of a stereo Control Room fader, the Phones level control (with a handy Phones jack just below it), and the Tape Monitor switch. Control Room and Phone monitor outputs always share the same sources:

- The main Left and Right buses under normal conditions;
- The output of your tape recorder (or some other



source patched into the Tape In jacks) when the Tape Monitor switch is pushed, or;

- The stereo solo buses whenever any Solo switch is pressed. The solo circuits override the Tape Monitor switch.

In the up position, the Tape Monitor switch selects the main Left and Right bus outputs for the monitor circuits and the meters. In the down position, the Tape Monitor switch selects the Tape

Inputs for the monitor circuits and the meters. Control Room outputs are provided for connection to a power amplifier (without tying up your headphone output).

The LM-3204's four stereo Aux returns include two new features:

Source ALT 3-4 switch for AUX Return 3. With the switch up, AUX Return 3 is just what it's advertised to be: an AUX Return. When the Source ALT 3-4 switch is down,

AUX Return 3 inputs are disconnected. Instead, the outputs of the ALT 3-4 buses are routed into the AUX Return 3 control and circuitry. This allows you to use ALT 3-4 as a pair of submix buses and then remix them back into the main Left and Right buses.

AUX Return to Control Room Only for AUX Return 4. When this switch is up, AUX Return 4 functions normally. When the switch is down, the AUX Return 4 is disconnected from the main Left and Right buses and is reconnected to the control room monitor and headphone circuits (where it is mixed back in with Left and Right signal on its way to the Monitor section). This allows you to wet monitor or send performers a cue or click feed without having it go onto tape.

Main Outputs are electronically balanced and capable of driving recorders at either +10dBV or +4dBu. 1/4" TS Tape In jacks provide a monitor return for deck output. Tape In jacks are routed through the Tape Monitor switch in the Main Output section which can send the signal to the Control Room and Phones buses. The LM-



LM-3204E Expander

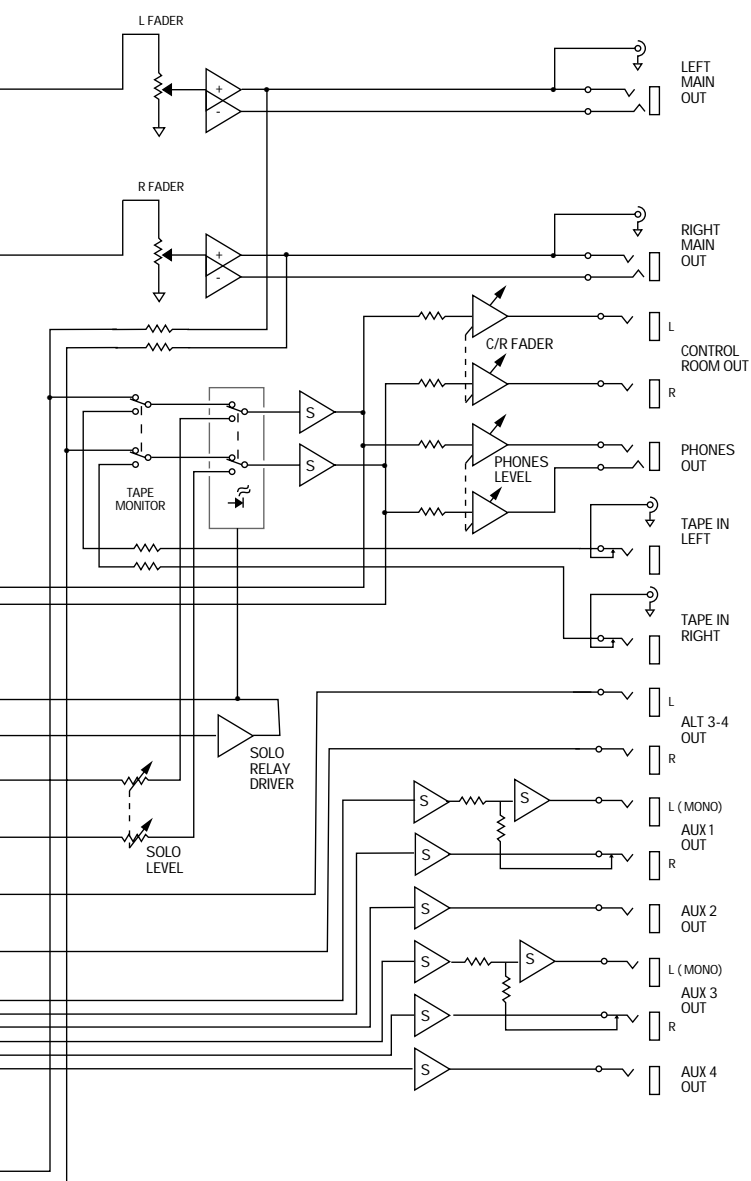
3204 also has four unbalanced RCA-type connectors with Out RCA jacks connected in parallel to the Main Output jacks.

Expandable with the LM-3204E.

Need 32, 48 or even 64 stereo line inputs without adding significant noise or degrading overall headroom? The LM-3204E is essentially an LM-3204 without the master section. It includes 16 stereo channels and four Aux returns. Connection is via a proprietary ribbon cable. The LM-3204E also includes a ribbon cable input so that expanders can be daisy-chained.

All the "hidden" things Mackie is noted for.

Such as a built-in power supply with IEC cord, built-in RFI protection and sealed rotary potentiometers. The LM-3204's front panel circuit board is a horizontal, through-hole-plated fiberglass slab attached with solid brass standoffs that



absorb mechanical impact. Other circuitry is low-maintenance, surface-mount.

Besieged with line inputs? The LM-3204's a dependable solution.

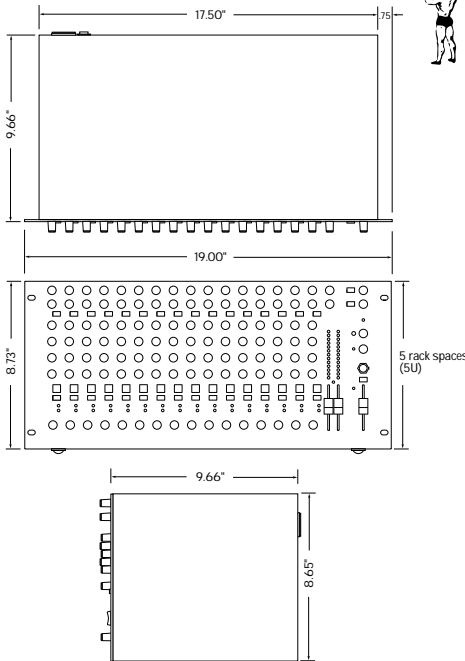
Whether you use it as a church or club sound reinforcement mixer, stage or studio instrument submixer, an effects submixer, a project or audio production studio mixer or for video applications, you can be assured of several things. First, the LM-3204's sound quality will be superb. Second, it's going provide a lifetime of trouble-free service.

SPECIFICATIONS

Total Harmonic Distortion (1kHz @+14dBu measured 20Hz+20kHz)
 Line in, one channel main L/R 0.0022%
 Control room L/R 0.0024%
 ALT L/R 0.0016%
 Aux return in main L/R 0.0022%
 Control room L/R, tape in 0.0024%
 ALT L/R 0.0012%
 Typical Frequency Response. 20Hz+60kHz
 Equalization
 Hi shelving @12kHz + 15dB
 Mid peaking @2.5kHz + 12dB
 Lo shelving @80Hz + 15dB
 E.I.N. (Mic 1 and 2) 150+ termination
 20Hz+20kHz +126.5dBu
 400Hz+20kHz +127.5dBu
 Input shorted 20Hz+20kHz, +138.7dBu
 C.M.R.R. Mic in max gain @1kHz 78.5dBu
 Minimum gain @1kHz 88dBu
 Line in @ Unity 55dBu
 Noise. (20Hz+20kHz referenced to 0dBu)
 Main L/R: main faders down, ch. gains down +104.2dBu; Main faders @ Unity, ch. gains down +86.6 dBu
 Main faders @ Unity,

ch. gains @ Unity +84dBu
 Control room same as main L/R
 Alt output: no channels assigned +105.5dBu
 All channels assigned, gains down +85.9dBu
 All channels assigned, gains @ Unity +83dBu
 Gain Structure Mic: gain down +10dBu gain up +50dBu
 Line channel: max gain +30dbu
 Aux return: max gain +20dBu
 Aux send: max gain +15dBu
 Main L/R: max gain +10dBu
 Solo: max gain +16dBu
 Max Input Levels Mic in +14dBu Line in +22dBu
 Tape in +23dBu Aux return in +22dBu
 Max Output Levels Main L/R tape out +22dBu
 Control room +22dBu Alt +22dBu Aux sends +22dBu
 Impedances. All outputs 60+-bal. 120+-unbal.
 Mic input ~5k+
 Line input 10k+ Tape input >10k+
 Aux return input >10k+
 Crosstalk. (20Hz+20kHz)
 Line in to adjacent ch.: @1kHz 0dBu +83dBu or better
 @10kHz 0dB +63dBu or better
 Main L/R output channel gain down +73dBu
 Channel muted +81dBu
 Panpot attenuation +70dBu or better
 Main faders down +74dBu
 Weight 14 lbs

MACKIE
 LM-3204 LINE MIXER
 Dimensions (see graph) 10.1M-270127 Expires 7/94 ©1994 MACKIE DESIGNS INC.



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