

THE ROLAND 94 CHANNEL MIXING SYSTEM

The Roland VM-7200 system is an under appreciated, yet extremely powerful digital mixing system. The VM-7200 system that we provide at this time is a 54 channel monster! 50 analog and 4 digital live inputs, expandable to 94.

- [VMC-7200](#) Console
- (2) [VM-7200](#) Processors
- (2) [VM-24E](#) Digital IO modules
- (8) [VS8F-2](#) effects cards for a total of 9 stereo multi-effects processors per system
- [VE-7000](#) Edit Controller
- [MB-24](#) Meter Bridge
- (6) [DIF-AT](#) ADAT/Lightpipe & TDIF converters
- [VM-24C](#) Cascade kit (to combine both systems into one)
- (1) [ADA-7000](#) 8 channel remote controlled AD/DA convertor mic pre's
- 250' Digital 4 channel snake

Here's a short description of the system's general capabilities (contact us for more detailed info):

The basic system is comprised of two components - the 'processor' has almost all the IO, and actually does the mixing. The 'console' is the control surface, organized in 'pages' of 24+1 faders in the VMC-7200. The console has a pair of ins and a pair of outs as well. The console and processor are connected by what Roland terms VM-LINK. The VM-LINK is a 2-pair 110 ohm cable on XLR connectors (a la AES/EBU) that can be up to 650 feet long (goodbye snake!)

The processor (VM-7200) has 20 analog ins with mic preamps, line ins, and (unbalanced) inserts, as well as a stereo AES/EBU in and a stereo SPDIF in. Add the pair of (line) analog ins on the console, and you have 22 analog ins. You can have up to two processors in a system, for up to 40 mic pres, 2 line levels, and the two stereo digital ins. Mic pres have recallable gain settings.

Each of these inputs flows into a 24x24 switching matrix allowing you to assign each input to any of 24 input channels on the input fader page (per each VM-7200 processor - 48 with two). Each of these has an input attenuator, polarity, phase delay (for lining up the acoustic source with your speakers - really fattens up the kick drum), feedback delay (up to 300 ms, with regen and filters in the feedback path), HPF, 4 band eq (hi & lo shelf, 2 parametric - 1 of the parametrics can be set to resonant mode like a filter on an analog synth), dynamics (compress, limit, expand, or gate - one per channel, and dynamics require giving up 1 band of eq), pan & volume for Main and Cue, and send for 12 'flex buses'. Each flex bus can take a signal at pre-eq, post-eq, and post-fade locations in the channel signal flow. Internal effects can be inserted pre-eq or pre-fader.

Along with these inputs are 24 (per VM-7200) digital inputs on some Roland proprietary called R-BUS. They make converters, the DIF-AT to translate this into ADAT, TDIF, and MIDI. Each of these digital ins flows into another 24x24 routing matrix, and feeds another 24 input channels identical to the analog ones (on the

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'multi in' fader page). I typically use 'em as tape returns. If you've been counting along, this makes for a 94 channel system. Again with the addition of 6 ADA-7000's that would be a total of 94 physical live inputs.

Outs: We have a stereo Main out on the processor, on XLR, balanced 1/4" and RCA. We have a Stereo Monitor out on 1/4" balanced on the processor, and headphone, analog RCA and SPDIF RCA on the console. The monitor can take its send from about any point in the system, including Main, Cue, any Input channel (at several points in the signal chain), and any Flex Bus (again at several points in the chain).

There is another 42x24 output routing matrix (per processor) that feeds the send part of the 24 R-BUS digital outs. I typically use 'em as tape sends. Sources are all the 24 analog input channels, the 12 Flex Buses, stereo Main, Mon, and Cue. These can all be tapped at various points in the corresponding signal chain. As I use 'em as tape sends, I take 'em off the input channels, pre-eq. 8 of these 24 outs are replicated on analog connectors - 1/4" balanced. Four of these are also available as SPDIF or AES/EBU.

The 12 Flex Buses are general purpose buses that can be used as FX bus, Monitor bus (in addition to the stereo Cue bus), or groups. Note that the mixer also employs a 24-wide page of 'Fader Groups', which can be employed in a VCA-ish manner, thereby reducing the need for groups. Flex Buses have pans and sends to main, mon, and other flex buses. 8 of the 12 Flex buses are also available on XLR connectors.

The unit comes stock with 2 stereo general purpose effects and 1 stereo 'master effects'. The Master effects can be used only on the main or monitor bus. The two stereo general purpose processors can be inserted on any Flex Bus, or any input channel (analog or digital). These can also be split into 4 mono effects. You can add effects cards to the system, yielding up to 8 general purpose stereo effects per VM-7200. Note that this is in addition to the each channel's dynamics and delay.

Integrated talkback system, sine/white/pink generator, and RTA (many sources within the system).

When adding a second processor to the system, this is accomplished by an add-on board to each processor. This sums the stereo Main and Mon buses and each of the 12 Flex buses together between the two processors.

You can also employ two consoles in a single system (FOH and Monitor beach?)

All in all, a very powerful, yet very compact and lightweight system.

[By Joe Breher, q music inc.](#)

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