

## LAR Legacy Units Model Number Explanation

Revised 9/3/19 – Joe Siegmann

An example systems Model Number, **MV-1.34B**, can be broken up into sections and explained as follows;

**MV** - **1** . **3** **4** **BX**  
(SYSTEM) - (CHANNELS) . (CHASSIS) (POWER LEVEL) (MODE SUFFIX #1)(MODE SUFFIX #N...)

This means the unit is configured as a "Music Environment" (*MV*) system with a Music Volume Control, a Microphone Volume Control and a "1-of-4" Music Input Source Selector Switch (*SUFFIX #2*).

It's a monaural system, as indicated by "*CHANNEL*", that is built in a 3 rack unit chassis (*CHASSIS*), capable of running speaker loads of 2ohms per output channel (*POWER LEVEL*).

It's configured in BiAmp Mode (*SUFFIX #1*) with Channel 1 intended to operate High Frequency Mains Speakers and Channel 2 intended to operate Low Frequency Subwoofers.

### SYSTEM

**AE** - Audio Environment System – Only the Music Volume control is accessible to the user via the front panel.

**MV** - Music Voice System – Music Volume and Microphone Volume controls accessible via the front panel.

**P** - Power Amplifier – typically doesn't have front panel volume controls, but can be special ordered with them.

### CHANNELS

**1** - Monaural Operation in which the L+R stereo music input signals are summed to mono and equally distributed to both amplifier channels whose eventual output levels may be controlled independently.

**2** - Stereo Operation where channel 1 and channel 2 can have different material and whose output volumes are tracked together. We don't typically make these systems anymore, they are rare.

### CHASSIS

**2** - 2 rack unit chassis ( 3 1/2" Height ) NEW BLACK POWDERCOATED UNITS

**3** - 3 rack unit chassis ( 5 1/4" Height ) OLD GOLD CHASSIS UNITS WITH EXTERNAL HEATSINK

### POWER LEVEL

**2** - Darlington Output – Lowest voltage rails – 4ohm minimum per channel – Basic Low Volume Level Systems

**3** - Generic Single Die Output Devices – Highest voltage rails – 4ohm minimum per channel – 70v Systems

**4** - Semelab Brand "Double-Die" Output Devices – Medium voltage rails – 2ohm per Channel Low-Z Systems

### MODEL SUFFIX

**No Suffix** - Ex. "MV-1.34" – Amplifier is set to run in full range dual mono mode. The input signal is summed to mono, and distributed to both channels at the same volume, slaved to the front panel controls.

**B** - BiAmped Mode – Ex. "AE-1.34B" - Amplifier is set so Channel 1 outputs frequencies above 106Hz. And Channel 2 outputs frequencies below 106Hz. For "BiAmped" installations with mains speakers are installed on Channel 1 and Subwoofers on Channel 2. Channel 2's level is set internally to an optimal level and Channel 1's level can be fine tuned in the field via a back panel *GAIN* control dial.

**S** – Highs Only Dual Mono Mode – Ex. "MV-1.32S" Amplifier is set so the summed input signals are filtered above 106Hz. and both channel 1 and channel 2 output only high frequencies. On the back of these units there is a low frequency output signal jack outputting below 106Hz. information, which is typically connected to a larger power amplifier for running subwoofers that the single unit would not be suited to drive.

**Q** – Bridged Mono – Ex. "MV-1.32QX" Indicates the amplifier is setup to operate in Bridged Mono Mode. Used for 70v distributed systems where the input signals are summed to mono, then their phase is split. Channel 1 is run 0 degrees in phase with the input signal, while channel 2 is run 180 Degrees out of phase with the input signal. Speakers are then connected between Channel 1+ and Channel 2+ on the speaker connector to effectively quadruple apparent output power and run high voltage systems with lower I<sup>2</sup>R losses.

**X** – Indicates that a "1-of-4" Music Input Selector Switch is available on the front panel. This option can be incorporated into any production unit, regardless of selected mode.