



# CMP1R

Compressor Limiter Output Module

## **Features**

- Threshold control
- Compressor ratio
- Make-up gain
- Bypass switch
- Unbalanced input
- Gradual fade back from mute

Printed in Korea. 0112 © 2001 Bogen Communications, Inc. 54-2068-01R1 Specifications subject to change without notice.

# **Module Installation**

- 1. Turn off all power to the unit.
- 2. Make all necessary jumper selections.
- Position module in front of desired output module bay opening, making sure that the module is right-side up. Output modules will not fit in input module bays. Do not force an output module into an input module bay.
- 4. Slide module on to card guide rails. Make sure that both the top and bottom guides are engaged.
- 5. Push the module in to the bay until the faceplate contacts the unit's chassis.
- 6. Use the two screws included to secure the module to the unit.

#### WARNING:

Turn off power to unit and make all jumper selections before installing module in unit.

# **Jumper Selections**

#### **Priority Level**

Jumper placement only affects the unbalanced input signal. The jumper placement determines whether the module's input can be muted by other input modules. When enabled, the input is permanently set to the lowest priority level.

#### Hard / Soft Knee Jumpers

For "brick wall" limiting and hard knee compression, set the J32 jumper to 'Hard.' For soft knee compression, set the J32 jumper to 'Soft.'

## **Module Features**

When set to lower compression levels, the CMP1R can be used as a compressor to minimize the differences in level of all of the inputs on the mix bus, or, when set to maximum compression, it can be used as a limiter to keep overall output at a desired level.

All Bogen output modules include an unbalanced input that is controlled by the amplifier's input control so that the user is not penalized in number of inputs when using an output module.



## **Compression Ratio**

The compression ratio control is adjustable in order to alter the dynamics of the signal above the limiting threshold. In the minimum position, the action of the compressor is light (compression ratio 2:1, approximately), thereby resulting in mild compression. The maximum position provides "brick wall" limiting (infinite compression ratio), where no further increase above the threshold level will occur in the output signal.

#### Input

The RCA unbalanced input provides a 20k-ohm input impedance. The unbalanced input connects to the amplifier's front level control for the bay in which it is installed so that the input is not lost when using the output module.



## Threshold

Controls the minimum necessary mix bus signal level to trigger the module to begin compression. Clockwise rotation increases the necessary signal level required to trigger compression. The threshold is adjustable from -40dBV to +10dBV with the center of rotation being approximately -10dBV.

## Make-Up Gain

Provides additional gain after the signal has been compressed to reestablish the nominal system signal level. The make-up gain has a range of 0dB (unity gain) to +15dB. Care should be taken not to overdrive the amplifier's input when applying this additional gain.

## **Compressor Bypass Switch**

The Compressor Bypass Switch provides instant comparison between compression and no compression during the tuning of the system.

## **Block Diagram**





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