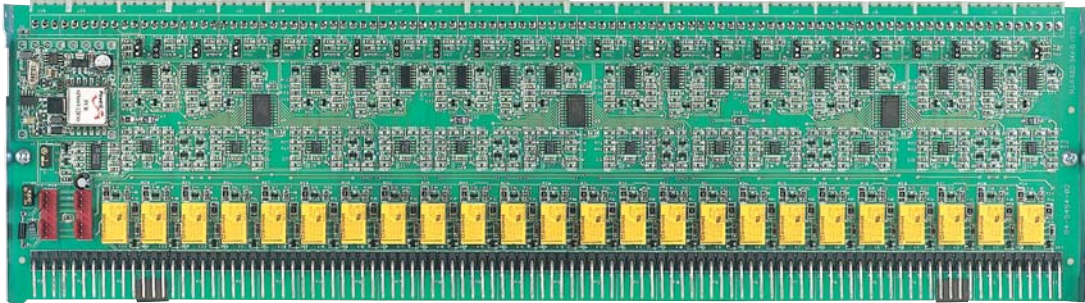


# MULTICOM 2000®

## Universal Ring Adapter Board

Model MCRNGM  
Model MCRNGS



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### Description

The Bogen MCRNGM and MCRNGS models are 24-station adapter boards that permit the MULTICOM 2000 system to work with devices that respond to industry standard ring levels. The MCRNGM is the master board, which contains the actual ring voltage generator, and the MCRNGS is a slave board.

One MCRNGM is required for the entire system with up to 9 Multicom ring slave boards capable of being installed to meet system capacity requirements for analog ring stations. The boards operate from the Multicom power supply. Each of the 24 stations may be independently selected for standard Multicom line operation or for industry standard ring levels depending upon need.

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### Features

- Converts Multicom ring to industry standard, 20 Hz ring
- Independently select standard Multicom line operation or industry standard ring level
- Designed to accommodate system expansion, up to 10 boards, for a full system of 240 stations
- Mounts as an extension to the rack-mounted relay module MCRM or MCRRP
- Draws power from Multicom system power supply (MC512A), no external power source required
- Mixes industry standard ring and standard Multicom station devices on same board
- Simple installation and configuration
- Uses Bogen standard .156 centerline 4-pin IDT connectors
- No reprogramming of Multicom required
- All mounting hardware and cables included
- Utilizes state of the art surface-mount technology

**ENGINEERED SYSTEMS**  
**BOGEN®**

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## MCRNGM/MCRNGS

### Technical Specifications

<b>Stations per Board:</b>	24
<b>Ring Voltage:</b>	60V AC (+/- 10V)
<b>Ring Frequency:</b>	20 Hz (nominal)
<b>Ring Cadence:</b>	Approx. 0.6 sec. on/1.5 sec. off
<b>Talk Battery:</b>	+12V DC nominal (supplied by Multicom)
<b>Power Requirements:</b>	12V @ 1.4A (MCRNGM only) 5V @ 400 mA (MCRNGM & MCRNGS)
<b>Operating Temperature:</b>	0-50° C
<b>Maximum Loop Length:</b>	4,000 feet using 18 AWG cable
<b>Max REN/station:</b>	1.0A or 1.0B
<b>H.V. Ring Enable:</b>	Jumper selectable per station
<b>Product Weight:</b>	2 lb.
<b>Shipping Weight:</b>	3 lb.
<b>Dimensions:</b>	16- <sup>3</sup> / <sub>4</sub> " W x 4- <sup>3</sup> / <sub>4</sub> " D

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### Architect and Engineer Specifications

The universal ring adapter board shall be a Bogen Model \_\_\_\_\_ (specify MCRNGM or MCRNGS). The board shall be a 24-station ring adapter board that will convert Multicom ring to industry standard ring level, 20 Hz ring. 12V DC talk battery shall be supplied by MULTICOM 2000.

The ring adapter board shall mount as an extension to the MCRM and provide a jumper to select station operation as either a standard Multicom station or as a high voltage analog ring station.

Industry standard ring device operation shall be compatible with A or B ringer types. The maximum REN per station shall be 1.0. One MCRNGM shall be installed per system where industry standard ring level is required. Up to 9 MCRNGS boards may be installed to meet system needs.

The ring adapter board shall allow mixing of industry standard ring, standard Multicom ring, or non-ring stations on the same adapter board.

The units shall each measure 16-<sup>3</sup>/<sub>4</sub>" W x 4-<sup>3</sup>/<sub>4</sub>" D. Ring adapter board shall weigh 2 lb.

**BOGEN<sup>®</sup>**  
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