

## General Description

The CP 62 Commercial Processor is a switching/paging controller aimed at commercial establishments. The CP 62 forms the heart of typical sound systems found in restaurants, bars, health clubs and offices. Ease of use, compact size, low cost and straightforward installation are our top design priorities.

Four stereo Line Inputs can be separately assigned to two Zones—one mono, and one stereo/dual mono switchable. Individual Zone Ducker circuits provide local or remote telephone or microphone paging over background music. The Phone/Line and Mic Inputs have separate Level, Ducker Sensitivity and Depth controls, and may be prioritized and assigned to either or both Zones.

Three levels of priority can be assigned to the Inputs. For instance, background music can be playing through one of input Lines 1-3. For example, a jukebox is connected to the Line 4/Priority Input and someone drops a quarter (dollar?) in it, the jukebox is automatically selected when the CP 62

receives the audio signal. If a signal is received from the paging microphone, the music ducks temporarily to accommodate the page. An internal jumper can prioritize Phone/Line over Mic or vice versa. When the Line 4/Priority Input signal ceases for 30 seconds, the CP 62 automatically switches back to the previously assigned Input, and volume is slowly faded back via automatic circuitry.

Additionally, each Zone has a  $\pm 12$  dB, 7-band graphic EQ. Levels and source selection are controlled by either the front panel or by wired remote control(s). Simple potentiometers and contact closures remotely control VCAs in the CP 62. No audio passes through the remote control units.

Rear panel Maximum Output controls can be set to prevent system overload, assuring employees a sense of decorum at all times in finer establishments. The front panel has a user-friendly layout in a single-space 19" rack-mount package.

## Features

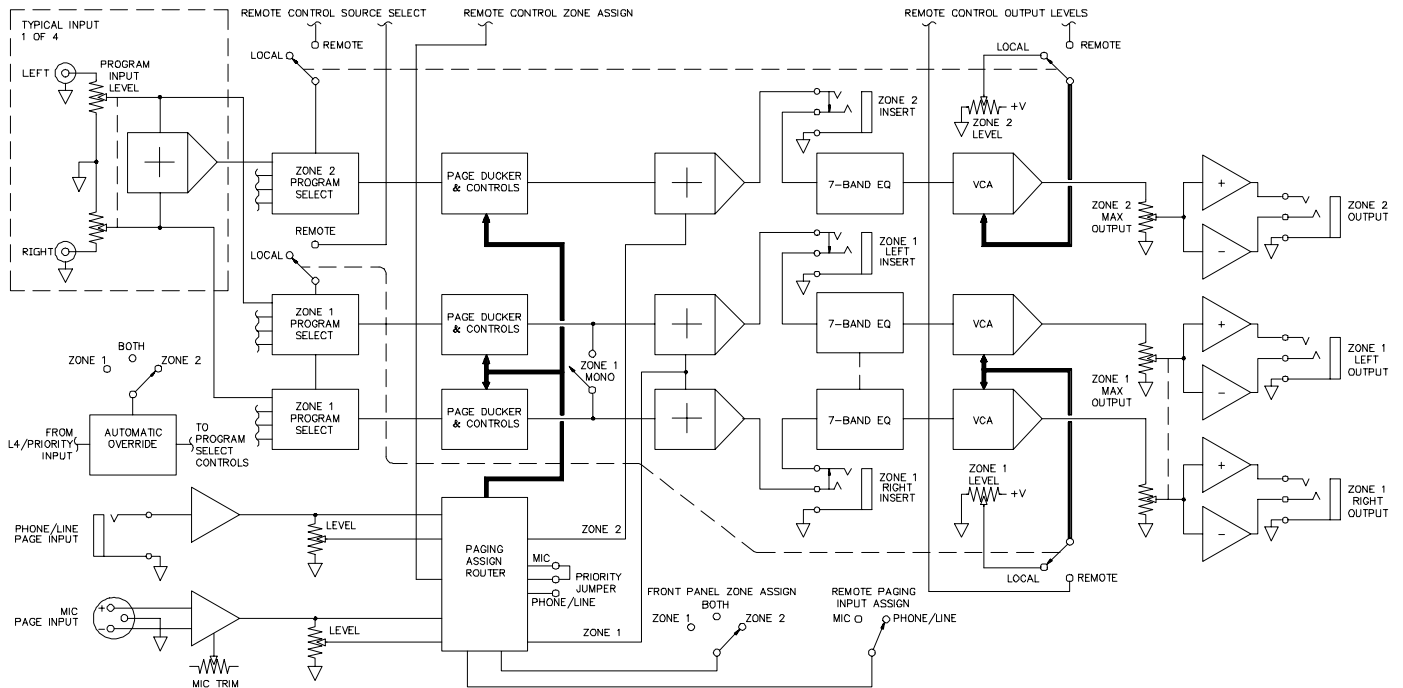
- FOUR STEREO LINE INPUTS
- TWO ZONE OUTPUTS
- AUTOMATIC PRIORITY INPUT
- MIC & LINE PAGING WITH DUCKING
- $\pm 12$  dB 7-BAND GRAPHIC EQ FOR EACH ZONE
- INSERTS FOR EACH ZONE
- MAXIMUM OUTPUT CONTROLS
- CPR 1 REMOTE PAGING ZONE ASSIGN SWITCH AVAILABLE
- CPR 2 REMOTE SOURCE SELECTION & VOLUME CONTROL AVAILABLE
- UL/GSA/TUV/CE EMC APPROVED POWER SUPPLY



**Features and Specifications**

Parameter	Specification	Limit	Units	Conditions/Comments
Frequency Response	10-45 kHz	+0/-3	dB	Program Inserts
THD+Noise			%	
.....Program Inserts	.005	.001	%	+4 dBu, 20-20 kHz
.....Zone Outputs	0.07	.001	%	+4 dBu, 20-20 kHz
Equivalent Input Noise (EIN)	120	2	dB	Mic In to Insert, 60 dB Gain
Signal-to-Noise Ratio	re +4 dBu, 20 kHz BW			
.....Program to Zone Out	92/84	2	dB	Unity/Max Gain
Crosstalk	greater than 70 at 1 kHz	Min	dB	40 dB at 20 kHz
Input Impedances				
.....Microphone	2k	1%	Ohms	
.....Inserts	10k	Min	Ohms	1 kHz
.....All Others	20k	1%	Ohms	Insert, Return & Expand
Maximum Input Levels	+22	1	dBu	(9.76Vrms)
7-Band EQ: Center Frequencies	40/100/250/630/1.6k/4k/10k	3%	Hz	
.....Bandwidth	2.0	3%	Oct	
.....Boost/Cut Range	±12	1	dB	
Maximum Available Gain				Input to Main Output (Line-level)
.....Microphone Trim Range	40-70	2	dB	
.....Inserts	7	2	dB	
Output Impedances				
.....Main Zones	50	1%	Ohms	Balanced
.....Inserts	300	1%	Ohms	Unbalanced
Maximum Output Levels				
.....Main Line-level	+22	1	dBu	Balanced into 600 Ohms
.....Inserts	+22	1	dBu	Unbalanced into 2k Ohms
Auto Priority Input Release Time	35	5	sec	Signal End to Program Fadeback
.....Fadeback Time	10	3	sec	Program Ramp to Adjusted Level
Pager Ducking Release Time	1.5	0.4	sec	Page End to Program Return
.....Ducker Depth	Off-3	1	dB	Rear Panel Control
Power Supply Input	18 VAC w/center tap	10%	Vrms	Rane RS 2, Included
Maximum Current	820		mA	RMS Current from Remote Supply
Safety Agency – Unit				
.....Classification	Class 2 Equipment			National Electrical Safety Code
.....Design	Safety Extra-Low Voltage			VDE SELV
.....U.L. Listing	U.L. 813 Exempt			Class 2
.....C.S.A. Certification	C22.2 No.1 Exempt			Class 2
.....European Union	LVD 73/23/EEC Exempt			Per Article 1 of LVD 73/23/EEC
Remote Power Supply	Model RS 2 (see data sheet)			Class 2 Equipment
.....120 VAC U.L. Listed	E88261			
.....120 VAC C.S.A. Cert.	LR58948			
.....230 VAC Export Model	Meets LVD 73/23/EEC			Meets EMCD 89/336/EEC (CE Cert.)
Unit: Construction	All Steel			19" 1U Rackmount
.....Size	1.75"H x 19"W x 5.3"D (1U)			(4.4 cm x 48.3 cm x 13.5 cm)
.....Weight	5 lb			(2.3 kg)
Shipping: Size	4.25" x 20.3" x 13.75"			(11 cm x 52 cm x 35 cm)
.....Weight	9 lb			(4.1 kg)
Note: 0 dBu=0.775 Vrms				

## Block Diagram

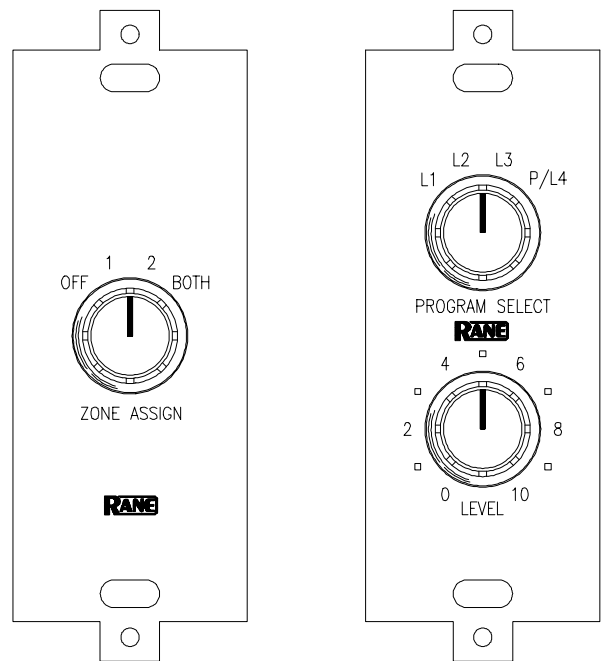


## Remote Controlling the CP 62

The only controls that need to be accessed on a regular basis are the Source and Level controls, and in some installations, a Zone Paging switch. The optional CPR 1 and CPR 2 remotes may be installed in any standard electrical box, and connect to the rear of the CP 62 via standard modular (phone type) connectors. These remotes allow the CP 62 to be locked under a security cover or out of sight, protecting Level and EQ settings.

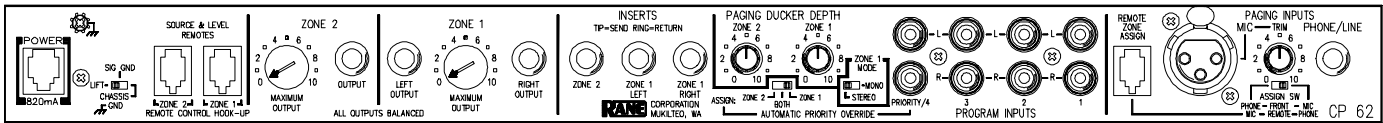
The CPR 2 allows remote source and volume selection. Activating the REMOTE CONTROL button on the front of the CP 62 enables the CPR 2. A separate CPR 2 unit may be installed for individual remote Source and Level selection within each Zone.

The CPR 1 Zone Assign remote directs the Paging Inputs to ZONE 1, ZONE 2, BOTH, or OFF. The CPR 1 is operationally identical to the front panel ZONE ASSIGN switch with an additional OFF option. A CP 62 rear panel ASSIGN switch determines whether the PHONE/LINE or MIC Input is controlled by the CPR 1 remote. The other Input is assigned by the CP 62 front panel ZONE ASSIGN switch.



**CPR 1 Zone Paging and CPR 2 Source/Volume Remotes**

**Rear Panel**



**Architectural Specifications**

The processor shall provide automatic and remote control functions to allow mounting the unit behind security covers. The listening volume shall have an adjustable maximum output control on the rear panel.

The outputs shall accommodate two zones, one with stereo sound and another with monaural sound. Each of the two zones shall have its own source selector, level control, 7 band graphic equalizer and remote control input. The remote control shall change both the program source and level for each zone. The unit shall have 1/4" TRS balanced cross coupled outputs.

It shall contain provision for two sources of page: a microphone and a phone/line level signal, and each shall be assignable to either or both zones. The microphone input shall be a balanced XLR connector and employ a preamplifier with trim. The phone/line input shall be 1/4" unbalanced. The paging function shall have adjustable level and ducking

sensitivity for both sources. The amount of ducking depth for each zone shall be adjustable from an equal mix to program source off.

The program source inputs shall be line level RCA type connectors. Each program input shall have its own level control to allow level matching.

Provisions for automatically switching a source upon receiving signal shall be included at a priority input. When the signal at the priority input ceases, the preamp shall automatically switch back to the previous source and the level will fade back gradually.

The unit shall be exempt from agency safety requirements and powered from a UL listed, CSA certified remote power supply (120 VAC) or meets CE-EMC requirements (230 VAC) via a rear panel input modular plug. The unit shall be constructed entirely from cold-rolled steel, and mount into a standard EIA relay rack occupying one rack-space.

*The unit shall be a Rane Corporation CP 62 Commercial Processor.*

**Available Accessories**

- SC 1.7 Security Cover
- CPR 1 Zone Paging Remote Control
- CPR 2 Source/Volume Remote Control