

**ROWE**



**Advanced design... increased profits:  
your return on our investment.**

# **R-83**

## **phonograph**

### **Service Manual & Parts Catalog**

**Customer Services Tech Aid-800-631-8084**

PART NO. 2-18000-01

SIXTH EDITION

JUNE, 1979

# SPECIFICATIONS

## GENERAL

DEPTH . . . . .	26 inches (66cm)
WIDTH . . . . .	41-7/8 inches (106 cm)
HEIGHT . . . . .	56 inches (142 cm)
SHIPPING WEIGHT (DOMESTIC) . . . . .	360 lbs. (163 kg.)
SHIPPING WEIGHT (EXPORT) . . . . .	375 lbs. (170 kg.)
NET WEIGHT . . . . .	320 lbs. (145 kg.)
POWER REQUIREMENTS . . . . .	120 vac, 60 Hz., 300 watts, 3.4 Amps 220 vac, 50 Hz., 350 watts, 2.3 Amps

## RECORD CHANGER MECHANISM

CAPACITY . . . . .	100 records
RECORD SIZE . . . . .	7 inches
SPEED . . . . .	45 RPM 33 and 45 RPM (with optional Automix)

## CREDIT AND PRICING SYSTEM

ACCUMULATOR TYPE CREDIT COMPUTER – DOLLAR BILLS OPTIONAL	
COINS ACCEPTED . . . . .	Nickels Dimes Quarters Half-Dollars
TOTAL CREDIT ACCUMULATIONS . . . . .	255
PRICING . . . . .	See pricing chart, page 2-29

## SOUND SYSTEM

CARTRIDGE	
TYPE . . . . .	Shure Dynetic variable reluctance
FREQUENCY RESPONSE . . . . .	20 to 20,000 Hz.
CHANNEL SEPARATION . . . . .	25 db @ 1,000 Hz.
NOMINAL COMPLIANCE . . . . .	$7.5 \times 10^{-6}$ cm/dyne
TRACKING FORCE . . . . .	4 grams
OUTPUT . . . . .	7 mv.
STYLUS . . . . .	0.7 mil, diamond

POWER AMPLIFIER	
125 watt Stereo	
FTC Rating, 4 Ohm Loads @1% THD . . . . .	144 watts RMS
FTC Rating, 70V Lines @1% THD . . . . .	126 watts RMS

PREAMPLIFIER	
AVC CONTROL RANGE . . . . .	40 db
TREBLE CONTROL . . . . .	12 db/octave 10,000 Hz. full 6,000 Hz. moderate 3,000 Hz. low
BASS CONTROL . . . . .	Compensates for bass loss at low volume levels 12 db per octave.

Published September, 1978  
©1978, ROWE INTERNATIONAL, INC.  
Printed in U.S.A.

# R-83 phonograph



## SELECTION SYSTEM

Capacity . . . . . 200 selections

## TRANSFORMER PACKAGE

POWER LEVELS FOR PHONOGRAPH SPEAKERS . . . . . 1, 4, 16, 28, 64 watts  
 PROVIDES 70-VOLT LINE FOR EXTENSION SPEAKERS

## SPEAKER SYSTEM

	LOW FREQUENCY	MID/HIGH FREQUENCY (Stereo)	MID/HIGH FREQUENCY (Mono)
SPEAKER DIAMETER . . . . .	10 inches	6 inches	5-1/4 inches
NUMBER OF SPEAKERS . . . . .	2	2	1
CROSSOVER . . . . .		600 Hz.	
SYSTEM FREQUENCY RESPONSE . . . . .		50 to 15,000 Hz.	

## LIGHTING

TITLE PANEL AND CREST . . . . . (2) T-8 Fluorescent, 19 watts, 26 inches, 7-00601-01  
 FRONT DOOR . . . . . T-8 Fluorescent, 30 watts, 36 inches, 7-00601-12  
 KEYBOARD . . . . . Incandescent, No. 755, 6.3V., (2) 2-50763-00

## FUSES AND CIRCUIT BREAKERS

### MAIN POWER SUPPLY, 120 V.

120 VAC Circuit . . . . . 10 Amp Circuit Breaker, 7-00734-25  
 120 VAC Circuit (Transformer Primary Only) . . . . . 2 Amp Circuit Breaker, 7-00733-15  
 28 VDC Circuit . . . . . 3 Amp Slo-Blo Fuse (2), 7-00721-22  
 -27 VDC Circuit . . . . . 1 Amp Slo-Blo Fuse, 7-00721-05  
 -7 VDC Circuit . . . . . 2-1/2 Amp Slo-Blo Fuse, 7-00721-25

### MAIN POWER SUPPLY, 220 V or 240V

120 VAC Circuit . . . . . 6 Amp Circuit Breaker, 7-00734-22  
 28 VAC Circuit . . . . . 5 Amp Circuit Breaker, 7-00734-21  
 Supply Voltage . . . . . 3 Amp Circuit Breaker, 7-00734-17  
 28 VDC Circuit . . . . . 3 Amp Slo-Blo Fuse, 7-00721-22  
 -27 VDC Circuit . . . . . 1 Amp Slo-Blo Fuse, 7-00721-05  
 -7 VDC Circuit . . . . . 2-1/2 Amp Slo-Blo Fuse, 7-00721-25

### STEREO AMPLIFIER 125W

120 VAC Circuit . . . . . 3 Amp Circuit Breaker, 7-00733-17  
 DC Circuit . . . . . 5 Amp Fuse, Type MPH-5 (4), 7-00720-10

IMPORTANT

THIS IS A MODULAR SERVICE MANUAL - PLEASE TAKE THE TIME TO READ THIS PAGE AND REVIEW THE TABLE OF CONTENTS ON THE FRONT OF THE DIVIDER PAGE FOR EACH PART TO OBTAIN MAXIMUM BENEFITS FROM THIS TEXT.

This publication is divided into three parts to fully utilize the serviceability which is engineered into each R-83 Phonograph.

**PART 1 – INSTALLATION AND MODULAR MAINTENANCE** - is intended primarily for location use to provide familiarization with phonograph components and accessories. Included are installation and routine service procedures plus sequential troubleshooting to isolate a malfunction to one of the plug-in circuit modules. The trouble isolation procedure, based entirely on visual observation, utilizes the LED indicator lamps on the main power supply and circuit modules.

**PART 2 – SYSTEM AND COMPONENT MAINTENANCE** - elaborates on PART 1 to provide information for the repair of major circuit modules and adjustment of the record changer mechanism. This part is intended for an advanced level of maintenance where test equipment is available and service personnel have had electronics training. PART 2 contains one overall system section and three modular sections corresponding to the major phonograph systems.

**PART 3 – PARTS CATALOG** - contains a complete listing of procurable replacement parts except for electronic components which are listed directly on the schematic diagrams in PART 2.

## warranty

Rowe extends to the original operator of this equipment the following warranty:

All parts are guaranteed to be free of defects in material and workmanship for the specific periods which follow. Rowe agrees to repair without charge during such period any part which proves defective upon examination by Rowe. All costs of shipping an allegedly defective part to or from Rowe's offices shall be borne by the original operator.

Mechanical Moving Parts	5 years
Electrical and Electronic Parts	2 years
Lamps and Styli	90 days

In the case of parts supplied to Rowe as components, Rowe extends the same warranty period as extended by the original manufacturer.

The above warranty applies provided that all parts of the machine have been serviced properly as directed in the service manual, and provided the alleged defective part, upon examination by Rowe, shall prove to be thus defective.

This warranty will not apply to any machine or any part which has been subjected to any accident, abuse, or misuse.

ROWE INTERNATIONAL, INC. EXTENDS NO WARRANTY, EXPRESSED OR IMPLIED, TO PURCHASERS OR USERS OF ITS PRODUCTS EXCEPT AS HEREIN SET FORTH, WHETHER BY OPERATION OF LAW OR OTHERWISE.

8-76