PROGRAMMED RECEIVER CONTROL SYSTEM

The Model COPB-2 is a complete control system for the remote programming and monitoring of radio receiving sets using teletype signal streams. The remote tuning of the receiver is accomplished using a pushbutton keyboard located at the control console (shown at right). Five-level binary codes generated from the keyboard reach the receiver memory for storage. On command from the console, the pulses are converted by the receiver decoder for use in positioning the receiver function controls. A readback indicator on the console receives the function control readback codes and displays the settings by digital projection on a special front panel screen. The bank of ten lamps across the console top indicates the equipment selected for control.

Up to 50 receivers may be monitored and programmed by one keyboard. In this fashion, five banks of ten single receivers or five banks of five dual diversity receivers may be accomodated.

The COPB-2 is an interconnect of five basic modules:

Model RTPH-3	Pushbutton Keyboard
Model RTIH-3	Readback Indicator
Model RSSA-10	Receiver Select Display
*Model RTMU-41	Receiver Memory Unit
*Model RTMU-42	Receiver Memory Unit for diversity systems.
Model RTTD-4	Receiver Decoder Unit

*Only one RTMU is used for each bank of ten receivers whether dual or single units.

All circuitry is solid state with encapsulated binary logic modules on all printed circuit plug-in cards. The basic modules may be equipped with tilt-lock track slides for servicing and are provided with front panels suitable for rack mounting. The console is nomenclatured AN/URA-63 for use with the AN/URR-63(v)1 and AN/URR-63(v)2 Radio Receiving Sets.





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THE TECHNICAL MATERIEL CORPORATION

AND SUBSIDIARIES

Tuning Code Output

Five-bit codes in serial teletype wet (mercury) contact keying from polar relay. 5-level codes adaptable in 6-, 7- or 8-level patterns with code in first five bits. 74.2-baud transmission speed.

Readback Code Input

From teletype loop, 60 ma or 20 ma, nuetral or polar

5-level codes, adaptable to 8-level, with 74.2-baud transmission speed Power Supply Requirements

115/230 VAC, 50/60 Hz, single phase; 168 watts maximum consumption Environmental

0 to +50°C; up to 90% relative humidity

Module Size and Weight

Model RTPH-3	7" high X 19" wide X 18" deep	26 lbs
Model RTIH-3	5¼" high X 19" wide X 20" deep	37 lbs
Model RTMU-41/42	5¼" high X 19" wide X 17" deep	25 lbs
Model RTTD-4	5¼" high X 19" wide X 17" deep	41 lbs
Model RSSA-10	1¾" high X 19" wide X 3" deep	2 lbs

Control Console Cabinets Available (Optional)

CAB-40	Four foot equipment rack	
CAB-50	Five foot equipment rack	
CAB-60	Six foot equipment rack	
CON-1	Four foot operating consoles; sloped front panel	
RAK-131	Six foot control cabinet; sloped front panel	
	(Shown on front page)	

Equipment Configuration

CONTROL CONSOLE

Model RTPH-3	Programs up to 50 single receivers.
Model RTIH-3	Gives readback status of up to 50 single receivers
Model RSSA-10	Indicates which one of 10 receivers is selected.
	Five RSSA-10 units are required for 50 receivers.

NOTE: Above units may be any distance from receiver site(s). Communications link may be hardwire, radio or microwave. Up to 50 receivers at several different sites may be programmed from one console.

RECEIVER SITE

Model	RTMU-41
or	RTMU-42

Memory unit used as code storage for 10 single receivers Memory unit used as code storage for 5 dual diversity receivers.

NOTE: The memory units should be located within 200 feet of the receivers each is associated with.

RECEIVER CABINET

Model RTTD-4

Decoder unit used to translate stored data for positioning receiver function controls. One is required for each single receiver, whether or not used in diversity.

Model COPC-2

Technical Bulletin 6010–2

Programmed Control System used for remote control and monitoring of TMC transmitters.



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