## SALES SERVICE BULLETIN NUMBER 124C









**REMOTE CONTROL SYSTEM, MODEL RCR-5** 

The TMC Model RCR, Remote Control System is a VFC system arranged to provide control of the HFO, BFO On/Off, RF Gain Remote/Local and Audio Gain of up to five communications receivers from a remote site. The system may be operated over any radio or voice circuit providing a 300-3000 CPS channel. The system is frequency sensitive and therefore virtually unaffected by amplitude variations and noise interference.

The RCR system permits the placement of receivers in a favorable receiving location with individual operator control located at a convenient operational site. As a result, users of this equipment have more than doubled the usual receiving range of a particular location. This system is used in conjunction with the TMC Model FFR, Communication Receiver to provide:

- 1. Remote Controlled Air/Ground, Ship/Shore, CW, AM, SSB Communications.
- 2. Remote Controlled point to point CW, AM, SSB and FS operation.
- 3. Remote Controlled diversity operation.
- 4. Remote Controlled reception of facsimile and photo.

In addition to the above the RCR system may be used to control any device requiring vernier and on/off control in a telemetering automation or guidance system.

| MODEL | RECEIVER<br>CHANNELS | CONTROL<br>VERNIERS | FUNCTION<br>ON/OFF |
|-------|----------------------|---------------------|--------------------|
| RCR-1 | 1                    | 3                   | 2                  |
| 2     | 2                    | 6                   | 4                  |
| 3     | 3                    | 9                   | 6                  |
| 4     | 4                    | 12                  | 8                  |
| 5     | 5                    | 15                  | 10                 |

## TECHNICAL SPECIFICATIONS:

|                                | for vernier function. Interrupted tones for $ON/OFF$ function. |  |  |
|--------------------------------|--|--|--|
| TONE FREQUENCY:                | 425-2805 CPS spaced 170 CPS apart.                             |  |  |
| VOICE CIRCUIT<br>REQUIREMENTS: | 375-2900 CPS $\pm 3$ db with max. attenuation of 20 db.        |  |  |

## REMOTE FUNCTIONS WHEN USED WITH MODEL FFR RECEIVER

| HFO TUNING: | Will vary HFO not less than $\pm 2$ KC per MC, 50 KC to 8 MC and $\pm 1.5$ KC per MC 8 to 32 MC. |  |
|-------------|--|--|
| BFO TUNING: | Will vary receiver BFO not less than $\pm 2~\text{KC}$ from center.                              |  |
| RF GAIN:    | Will vary RFG from zero to full sensitivity.   |  |
| BFO ON/OFF: | Will switch receiver BFO ON/OFF.   |  |
| AVC ON/OFF: | Will switch receiver AVC ON/OFF.   |  |

**RETURN SIGNAL MONITORING:** 

Audio amplifier with built-in loudspeaker and headphone monitoring.

RETURN SIGNAL FILTER:

POWER REQUIREMENT:

COMPONENTS AND CONSTRUCTION: 110/220 volt, 50/60 cycle, single phase; 400 watts control site, 800 watts remote site.

Equipment is manufactured in accordance with JAN MIL specifications wherever practicable.

LOGISTIC DATA:

EQUIPMENT, RECEIVER CONTROL GROUP, \* AN/FRA-501 \*\* AN/FRA-19(V)

Adjustable audio filter.

| NOMENCLATURE    | DESCRIPTION              | TMC<br>MODEL NO. | FSN W/SPARES   |
|-----------------|--------------------------|------------------|----------------|
| AN/FRA-501      | Receiver, Control Group  | RCR-5            | F5820-665-2574 |
| C-5027/FRA-501  | Control, Remote          | RSC-2 (A)        | F5820-669-6972 |
| C-5028/FRA-501  | Control, Remote          | RSC -2 (B)       | F5820~669-6971 |
| C-5029/FRA-501  | Control, Remote          | RSC-2 (C)        | F5820-669-6973 |
| C-5030/FRA-501  | Control, Remote          | RSC-2 (D)        | F5820-669-6975 |
| C-5031/FRA-501  | Control, Remote          | RSC-2 (E)        | F5820-669-6976 |
| F-5006/FRA-501  | Filter, Assembly         | RSF-2 (A)        | F5820-501-1223 |
| F-5007/FRA-501  | Filter Assembly          | RSF-2 (B)        | F5820-501-1225 |
| F-5008/FRA-501  | Filter Assembly          | RSF-2 (C)        | F5820-501-1224 |
| F-5009/FRA-501  | Filter Assembly          | RSF-2 (D)        | F5820-501-1222 |
| F-5010/FRA-501  | Filter Assembly          | RSF-2 (E)        | F5820-501-1226 |
| AM-5027/FRA-501 | Amplifier, A.F. (Mixer)  | RSM-2            | F5820-695-5014 |
| AM-5028/FRA-501 | Amplifier, A.F. (Ampfr)  | RSA-2            | F5820-669-6992 |
| CV-5013/FRA-501 | Detector, A.F. (Discrim) | RSD-2 (A)        | F5820-669-6970 |
| CV-5014/FRA-501 | Detector, A.F. (Discrim) | RSD-2 (B)        | F5820-501-4578 |
| CV-5015/FRA-501 | Detector, A.F. (Discrim) | RSD-2 (C)        | F5820-501-4580 |
| CV-5016/FRA-501 | Detector, A.F. (Discrim) | RSD-2 (D)        | F5820-501-4577 |
| CV-5017/FRA-501 | Detector, A.F. (Discrim) | RSD-2 (E)        | F5820-501-4579 |
| PP-5030/FR()    | Power Supply             | RSP-2            | F5820-669-6537 |

- \*NOTE: Receiver Control Group AN/ FRA-501 is a specific system consisting of 1 each of the above listed units but 11 each of PP-5030/FR ().
- \*\*NOTE: Receiver Control Group AN/ FRA-19 (V) is a variable sys-

tem and may consist of from 1 to 4 receiver channels.

Applicable Handbooks and Technical Manuals

NAVSHIPS 92600 RCAF EO 35 BG-5 FRA501-2

## THE TECHNICAL MATERIEL CORPORATION

700 FENIMORE ROAD

CABLE TEPEI MAMARONECK, N.Y.



MAMARONECK, NEW YORK

IN CANADA: TMC (CANADA) LTD. OTTAWA, ONTARIO