

COMMUNICATION CONSOLE

RTP-333



- ★ 3 x VHF/UHF Transceivers
- ★ 3 x CB Telephone Lines
- ★ 3 x LB Telephone Lines
- ★ Enhanced Sel Call Features
- ★ Radio-to-Telephone Trunking
- ★ Remote Antenna Site
- ★ RS232 Interface

DESIGNATION and DESCRIPTION

Communication Console RTP-333 is designed and primary intended for an easier organization of communications in Military and Public safety PMR networks and their integration in telephone networks - PBX or PSTN. Unique solutions applied in RTP-333 provide organizing enhanced and effective use of radiotelephone communications.

This sophisticated equipment, covering the features of a true Communication Center, is realized by applying microprocessor controlled functional modules.

"System oriented" MRS-500e Family

transceivers are used for radio communications.

Radio communication part of the RTP-333 consists of three MRS-500e transceivers, integrated by multiprocessor Control Stand, which provides extended control-communication console functions for radiotelephone equipment with full SEL CALL features. Thereafter, all Base (Master) Station possibilities are achieved.

Cable Repeaters (KRP-500 series) are used to compensate longer distances (20 to 100m) between transceivers and antennas, avoiding remote control boxes.

CONNECTIONS

RTP-333 should be read as 3+3+3, i.e.:

- a)-Three PMR radiotelephone lines toward radiotelephone network participants;
- b)-Three Automatic Exchange PBX line;
- c)-Three LB lines, dedicated for remote controlling of the additional VHF transceivers
- d) RS 232 interface

Internal phone patch switching system enables commutation of any of three built-in radio transceivers to any of three telephone lines, for "Clear" voice communication. In case of "Encrypted" communication, such commutation is disabled. LB lines are not com-

mutable to other connections.

On sites where antennas are installed on longer distances from radio equipment (being near to Command Stand), Cable Repeaters, two-way amplifiers, family KRP-500, have to be used. This concept simplifies remote site problem and relaxes the possible leakage of information before encryption. The equipment also gives opportunity to separate antennas in order to achieve EMC, enabling the utilization of transceiver's full basic parameters - sensitivity and output power.

SELECTIVE CALL

Selective Call and Identity sub-system is of 'select-five' type and is realized according to CCIR rec. 257-1, with 70 or 100 ms tone duration and code capacity of 100.000 participants. The following possibilities are provided for all of connected radiotelephone units:

- a) *Transceiver's own SEL CALL/ID features:*

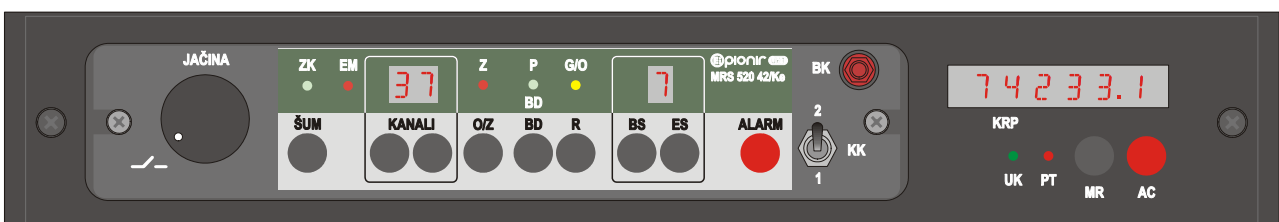
In reception: Personal Call and "Silent" Call followed by automatic acknowledgement, Group Calls (10; 100; 1000) and Circular Call (All Call). Except for "Silent" Call, all other calls are followed by different light and audio signalizations.

In transmission: Identity and Emergency Call (Alarm).

Status: When selected, Status is transmitted with Identity and call acknowledgement.

- b) *Base (Master) Station SEL CALL/ID features:*

Transmission and reception of Personal, Group (10,100,1000) and Circular (All) calls; "Silent Call" transmission; "Emergency Call" reception; Reception of the priority ID's, with special indication Reception of Annunciation to Center; Storing of the received IDs and transmitted SEL CALLs with recorded time, and forwarding data to the printer (an option).



SPECIAL FEATURES

a) "Silent call" is a special kind of the Personal call, which enables polling of the participants in the network without their warning. It gives Central Station (which is the role of RTP-333) opportunity to check very fast the presence of the participants in the network.

b) Annunciation to the Central Station provides fast establishing of radio contact, either the operator in the Center is busy or absent. Automatic reply represents acknowledgement that the radio contact is effectuated. On the other side, operator in the Center does not have to continuously monitor all the radio channel traffic. When the AF part of the receiver is blocked; an incoming call of this kind only, which is caustically signaled in same way as telephone call, unblocks the receiver. This function is very significant in the working conditions with three transceivers; it

provides relaxation of the operator, with simultaneous decreasing of possibility to miss the call.

c) Priority ID's providing classification of the participants in every local radiotelephone network.

d) Local programming (via keyboard) provides change of the radio network parameters: annunciation status, priority ID's, SEL CALL tone duration.

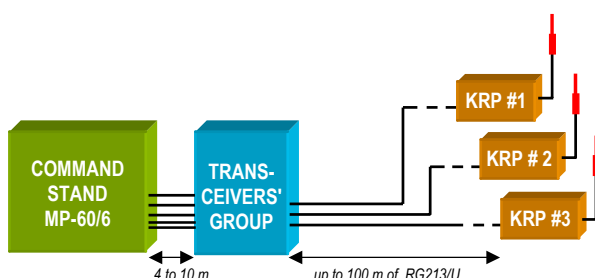
e) Monitoring (on PC screen) of all activities on working radio channels: operating mode (Clear/Encrypted), usage of the radio equipment, telephone line trunking, transceivers' working channels, switching on/off of the transceiver. Real time monitoring is provided, as well as storage of data on memory disk. Data can be printed for further analysis.

EQUIPMENT CONFIGURATION

RTP-333 consists of the following three main parts:

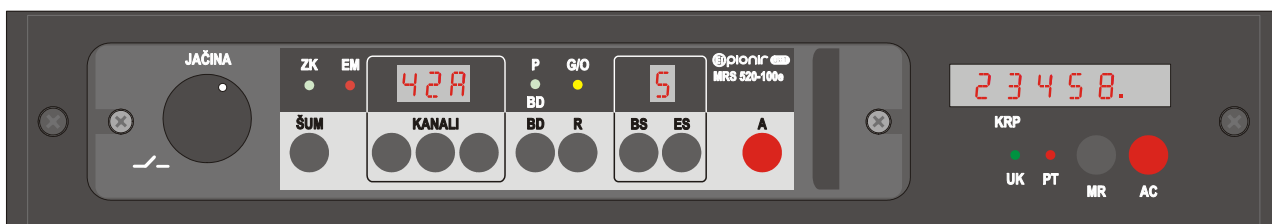
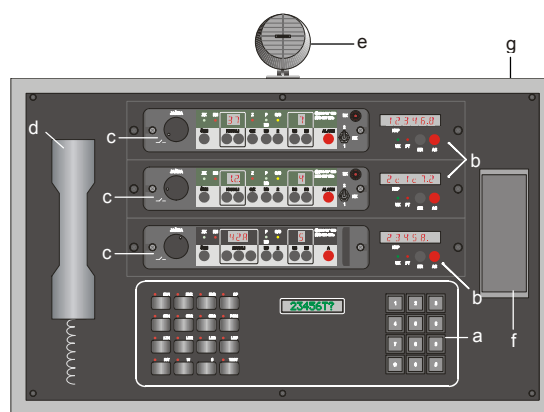
- a)- Command Stand
- b)- Transceivers' group
- c)- Equipment on remote site (antennas' equipment).

Parts are mutually linked by special and coaxial cables



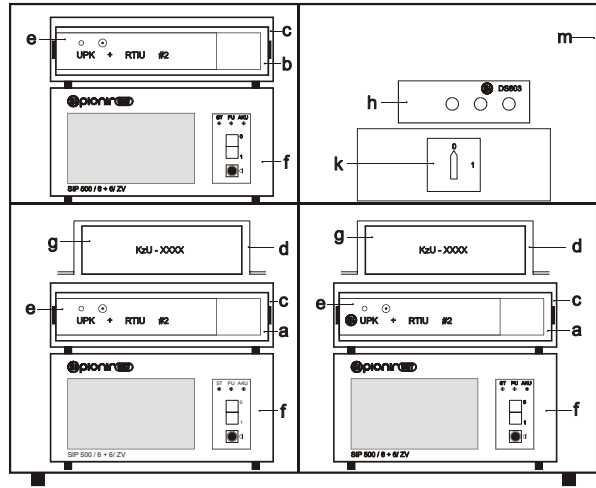
Command Stand MP-60/6 consists of:

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|--|-------|
| a - Control board with keyboards and display | 1 pc |
| b - Control panel adapter, ACP-502 | 3 pcs |
| c - Control panel CP 500e series | 3 pcs |
| d - Handset with PTT key, MTK-01 | 1 pc |
| e - External loudspeaker ZV-K20 | 1 pc |
| f - Internal loudspeaker (signalization) | 1 pc |
| g - Housing with printed circuit boards | 1 pc |



Transceiver group - one of possible configurations

- a - Transceiver MRS 520-42/Ke 2 pcs
- b - Transceiver MRS 520-100e 1 pc
- c - Transceiver's holder NP-1V 3 pcs
- d - DVP device holder, NKZ-02 2 pcs
- e - Universal junction box UPK-501 3 pcs
- f - Regulated Power Supply SIP-500/6+6/ZV 3 pcs
- g - DVP device 2 pcs
- h - Signaling decoder DS-603 1 pcs
- j - Signaling cable SK-1/45 1 pc
- k - Power supply switch 1 pc
- m - Equipment holder (frame) NKS-60 1 pc



Equipment on remote sites consists of:

- Cable repeater KRP 520 3 pcs
- Fixed antenna WD-20L 2 pcs
- Fixed antenna WD-20H 1 pc
- Battery cable BK-3/28 3 pcs
- Mains cable MK-1/S 3 pcs

