



RRC 7700

REMOTE RADIO CONTROLLER



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▶ Jotron RRC 7700

Remote Radio Controller

“Your cost efficient and flexible solution for small and medium size airports, emergency systems, last resort solutions, portable shelters and towers.”

The third generation Remote Radio Control system from Jotron is a Voice over IP (VoIP) based solution, which opens up a complete new world of possibilities with regards to flexibility of operation, system configuration and installation;

- Multiple combination of radios and operator control positions
- Fast and easy installation using LAN Ethernet

The unique features are as follows:

- Instant recording
- User-friendly, VoIP based remote system – touchscreen operated
- Operate several channels from a single remote position
- Multiple operators may utilize same radios from different positions
- Uses IP technology to transfer both Voice and control data
- Cost-effective alternative for operation of up to 6 radio transceivers
- Operates all types of radios in the Jotron TR7700 basestation family
- Screen clean mode



Remote operation of radios

The RRC 7700 is the latest generation of VoIP based remote radio control from Jotron. The unit will operate the components in the Jotron TR77xx family of basestations. RRC 7700 is a standard Windows application, and runs on a set of desktop computer with touchscreen. These computers are selected for the highest stability and operational life-time possible.

User-friendly operation

RRC 7700 makes no difference between using a single Tx or a group transmission: Select the channels you want to transmit on – press the PTT button and talk. The message

is streamed to the radios and transmitted on air. Listening to an incoming message is equally simple – just select the transceivers you want to listen to, and the audio is sent to the loudspeakers when the receiver detects an incoming transmission. The squelch of the individual receivers may be forced to open (e.g when receiving a very weak signal or just for test purposes).

Stand-alone system

RRC 7700 uses IP-technology as the underlying infrastructure to transport both voice and control data to/from the radios. Voice is streamed using the newly developed ED137 standard for Ground-Ground communications. Control and monitor data is transferred using a TCP/IP pro-

ocol interfacing the radios directly.

Provides real-time control and monitoring

RRC 7700 may provide system status in real time. Key variables like Output power, RSSI levels, Squelch state, PTT on/off are monitored in real time. The frequency of the transceiver may be changed easily (provided the user has the correct access level). A set of preset channels may be programmed for rapid change. The audio output level is adjustable, and levelbars indicate the actual audio level in real time. System status is given on a status bar showing the overall system status. RRC 7700 may be used in parallel

Operator A



Operator B



Operator C



with the RACSIII monitoring system manufactured by Jotron.

Instant recording for each channel.

Screen clean mode

Disables the touch screen when the screen is cleaned.

Restrictions and security issues

A single operator's position has access to a selected set of radio transceivers. Each user must log into the terminal before operation may begin, and each user may have different access levels. The basic access level only involves listening to a set of dedicated receivers.

The top access level includes priority keying of all selected transmitters and full access to system control (like frequency change, Main/standby switchover etc). The access levels for each user are set by the system administrator upon installation. The collection of transceivers may be different for each user, and is set up by the system administrator.

Mixed radio types

Some installations need to control mixed radio types – VHF and UHF air band and VHF marine band radios

Variety of mic/headsets

If external audio and/or PTT functionality is de-

sired, RRC 7700 has been designed for compatibility with the high quality microphones and headsets. Hence, a wide selection of microphones, loudspeakers, PTT buttons, footswitches, wireless headsets etc will work seamlessly with RRC 7700 and may be purchased together with the IPRC installation.

Separated audio channel for traffic and monitoring.

Monitored and traffic channels can be separated on different audio channels (Left/Right) with separate volume control.



TECHNICAL SPECIFICATIONS

GENERAL SPECIFICATIONS RRC 7700 FUNCTIONALITY

Maximum number of controlled transceivers pr operator	6 radio transceivers
Maximum number of RRC 7700 simultaneously connected to the same radio	Up to 3
Monitored radio variables	Network status / link active Radio operational state Radio frequency Received signal strength Transmitted output power
Indication of incoming radio calls	Visible Audio
Indication of occupied transmitter	Visible
Indication of output audio level	Yes (level bar)
Indication of microphone input level	Yes (level bar)

SPECIFICATIONS - HARDWARE

Audio output	External loud speaker (3.5mm) or USB connection
Audio input	External microphone jack (3.5mm) or USB connection
User input	Touch panel and/or external mouse and/or external keyboard
PTT controls	Buttons on touchpanel, footswitch, keyboard, handswitch or USB
Touch technologies available	Resistive touch
Screen type	Transreflective LCD
Screen sizes	Standard 8.4". Other sizes available on request
Housing	Standalone or flush-mounted console
PC hard drive	Flash
PC operating system	Windows 7
Power input	Universal

NETWORK INTERFACE

Number of network ports	2x RJ45
Physical interface	10/100MBit/1GBit/sec Ethernet (IEEE 802.3)
Required bandwidth of underlying network	>85kBit/sec pr radio
Response time	<100 ms
Maximum latency of network link	5 s
Operating standards / protocols	<ul style="list-style-type: none"> • ED137 for Voice Streaming • TCP/IP for control and monitoring
Voice codecs supported	G.711 A-law and G.711 μ -law
IP address range	No limitations
TCP/UDP ports used	1 TCP port (configurable) 1 UDP port for VoIP input 1 UDP port for VoIP output
Recovery in case of network failure	Automatic
Multicast support	Yes
Number of gateways supported	2



ACCESSORIES



Standard speakers



Standard mic



Optional arm for computer screen

Agent/Distributor:

v.E

Jotron AS reserves the right to change the design and/or specifications at any time without prior notice. Reservations are also taken towards any general errors that may occur.

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