



OTE DRC100 • OTE AK100/S
Remote Control Units for
Multimode Digital Radio Systems

OTE DRC100
OTE AK100/S

The Remote Control Units 100 series cover all low cost / low capacity ATC systems for airport applications and airline companies.

OTE DRC100 and OTE AK100/S integrate the traditional audio kit capability for ATC operator positions with an easy-to-use monitoring, testing and control facilities of multiple connected radio equipment.

GENERAL FEATURES

The **OTE DRC100** is the complete remote control position for OTE D100 radio equipment series

It has been built to achieve high flexibility in order to control multiple radio system configurations. The following list shows the capabilities of the OTE DRC100 remote control unit:

- Controlling stand alone radio systems (*OTE D100 series*) with automatic filters as option;
- Controlling 1+1 redundancy radio systems (*OTE D100 series or in main/standby configuration*) with power amplifier as option;
- Guard systems (*OTE DTR100 + OTE DR100 guard receiver*);
- VHF and UHF radio systems control with sector merging functionality;
- Multiple OTE DRC100 connection to a single channel (Audio Manifold feature)

All these system configurations are available without the use of additional HW/SW devices between radio equipment and OTE DRC100, for very high reliability degree.



OTE DRC100 • OTE AK100/S Remote Control Units for Multimode Digital Radio Systems



OTE **AK100/S Audio Kit** allows operations with radio equipment D series with a complete and easy set of commands and operative signalling as follow:

- PTT and squelch clear indication;
- Automatic muting of the reception path with PTT active;
- Radio system general alarm indication;
- Separated volume control for loudspeaker and headset;
- Safety volume control (the volume never goes to zero);
- Loudspeaker and headset exclusion with visual indication;
- Separated inputs for microphone, headset and handset;
- SELCAL feature (on demand)
- High mechanical suitability. The OTE AK 100/S can be provided in the following configurations:
 - Console version
 - 1/2 19" rack;
 - 19" rack for one or two OTE AK 100/S.
 - 19" rack for one OTE AK 100/S with SELCAL



INTERFACE CAPABILITIES

Radio System Control Interfaces

- Standalone TRX
- Standalone separated TX / RX
- 1+1 redundancy TRX
- 1+1 redundancy separated TX / RX
- Automatic filter
- Power amplifier
- Guard Receiver
- Audio Manifold
- UHF/VHF sector Merging

OTE DRC100

OTE AK100/S

• Standalone TRX	●	●
• Standalone separated TX / RX	●	●
• 1+1 redundancy TRX	●	●
• 1+1 redundancy separated TX / RX	●	●
• Automatic filter	●	●
• Power amplifier	●	●
• Guard Receiver	●	●
• Audio Manifold	●	●
• UHF/VHF sector Merging	●	●

Analog Interfaces

- Standard ANSI 4WE&M audio port
- Busy bus for Audio Manifold
- In Band Tone for PTT and Squelch
- Double standard ANSI 4WE&M audio ports

• Standard ANSI 4WE&M audio port	●	●
• Busy bus for Audio Manifold	●	●
• In Band Tone for PTT and Squelch	●	●
• Double standard ANSI 4WE&M audio ports	●	●

Monitoring & Control Interfaces

- RS232 port for FW downloading
- RS485 port for monitoring and control
- FSK mode on audio lines for monitoring and control

• RS232 port for FW downloading	●	●
• RS485 port for monitoring and control	●	●
• FSK mode on audio lines for monitoring and control	●	●

Auxiliary Interfaces

- Headset with boom microphone and on line PTT input
- Handheld microphone input
- Handset with PTT and hook function input
- PTT footswitch input
- External loudspeaker input
- Tx/Rx balanced recorder output
- Service voltage output for external devices

• Headset with boom microphone and on line PTT input	●	●
• Handheld microphone input	●	●
• Handset with PTT and hook function input	●	●
• PTT footswitch input	●	●
• External loudspeaker input	●	●
• Tx/Rx balanced recorder output	●	●
• Service voltage output for external devices	●	●

TECHNICAL SPECIFICATIONS

General	OTE DRC100	OTE AK100/S
Operating temperature range:	-10°C to +50°C	+5°C to +40°C
Supply voltage:	AC: 88 to 265 VAC 50/60 Hz (full range) DC: 21 to 31 VDC (automatic changeover on AC source failure)	88 to 265 VAC 50/60 Hz (full range) 11 to 13 VDC (automatic changeover on AC source failure)
Preset channel:	Up to 100	n.a.
Speaker:	3W max. with volume and ON/OFF control	3W max. with volume and ON/OFF control
Recording audio level:	-10dBm (2 wires, 600 ohm)	-13dBm (2 wires, 600 ohm)
Dimensions:	½ 19" standard rack, 3 HU, 330mm depth	½ 19" standard rack, 3 HU, 300mm depth
Weight:	4 kg	2.5 kg

Transmission Line Features	OTE DRC100	OTE AK100/S
Line output impedance:	600 ohm	600 ohm
Audio frequency:	response: 300 to 3400 Hz output: -30 to +10 dBm noise: > 45dB	300 to 3400 Hz -10dBm ±3dB > 45dB

Reception Line Features	OTE DRC100	OTE AK100/S
Line output impedance:	600 ohm	600 ohm
Audio frequency:	response: 300 to 3400 Hz output: -30 to +10 dBm noise: > 45dB	300 to 3400 Hz -10dBm ±3dB > 45dB

ACCESSORIES

