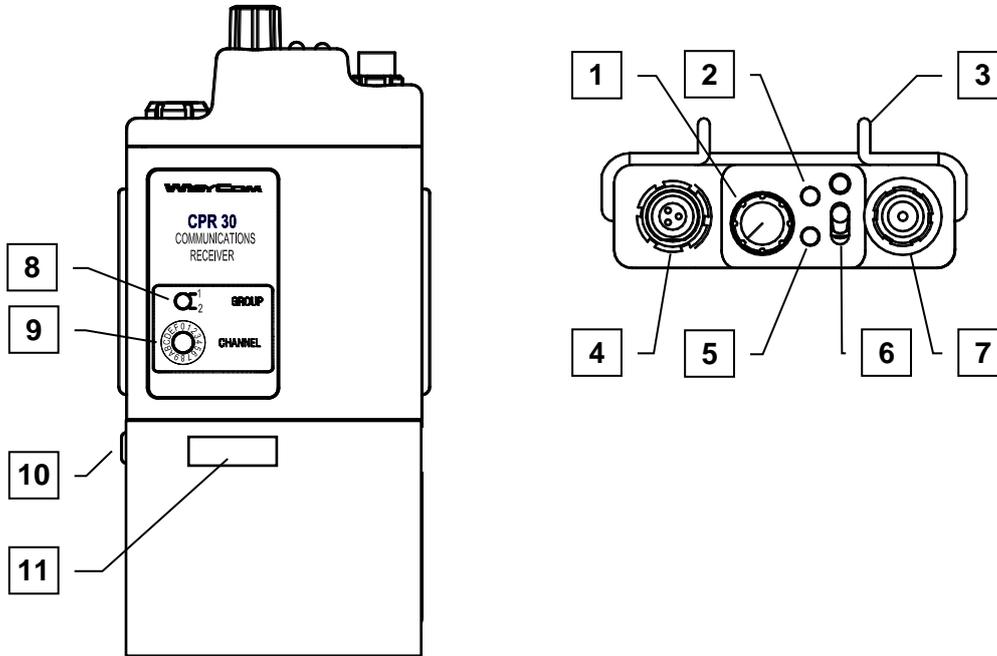


WIRELESS-COMMUNICATION SYSTEMS
CPR 30-A with Lithium battery pack - TALK-BACK RECEIVER



- 1) VOLUME CONTROL.
- 2) LED INDICATION: OPEN SQUELCH (yellow Led). The Led is on when the AF output is active.
- 3) DISMOUNTABLE BELT CLIP.
The clip can be removed from the apparatus by pulling aside the fastening pins.
It can be mounted on the transmitter also upside-down, to use the transmitter with downwards front-panel.
- 4) AF OUTPUT CONNECTOR (Fischer D102 type, 3-pin female, for CPR 30-F version).
The AF output is balanced and referred to ground: therefore both output wires must be hold insulated from ground.
• pin 1 = ground (it must be kept not-connected); • pin 2 = AF-a output; • pin 3 = AF-b output.
On request, the CPR 30 can be supplied with 3.5 mm jack-plug (CPR 30-J version).
- 5) LED INDICATION: APPARATUS-ON / LOW-BATTERY STATUS (green LED)
 - the Led lights when the apparatus is on,
 - the Led blinks *slow* when the residual battery capacity is less than 25% of the full charge,
 - the Led blinks *fast* when the residual battery capacity is less than 12% of the full charge.
- 6) ON/OFF SWITCH.
The apparatus is off when the switch is set on the "O" sign.
- 7) ANTENNA CONNECTOR (Lemo coax-00 type).
- 8) SELECTOR: CHANNEL GROUP (1 / 2).
- 9) SELECTOR: CHANNEL (0 ÷ F).
- 10) LED INDICATOR: led is on during charge. It turns off when charge process is completed.
- 11) LED INDICATOR: BATTERY-LIFETIME (4-step LED-bar-graph: 100%, 75%, 50%, 25%).

CPR 30 - TALK-BACK POCKET RECEIVER WITH LITHIUM BATTERY PACK
for WIRELESS-COMMUNICATION SYSTEMS

TECHNICAL SPECIFICATIONS:

- Switchable channels : 32, preset in the 370 ÷ 530 MHz range (other on request).
- Frequency groups : 2, with external selector.
- Switching window : 10 MHz (others on request).
- Frequencies : microprocessor controlled frequency synthesizer circuit, with 5 and/or 6.25 KHz minimum step. They can be easily reprogrammed by PC and optional "UPK100 Programming kit".
- Channel spacing : 12.5 or 20 or 25 or 50 KHz [1].
- Frequency error : < ± 2 ppm, in the rated temperature range.
- Temperature range : -10 ÷ +55 °C.
- Spurious emissions : < 2 nW (50 pW typ.).
- Antenna : flexible wire antenna, connector-interchangeable. (Impedance = 50 ohm).
- Modulation - RX circuit : FM - Double frequency conversion (45 MHz - 455 KHz).
- Nominal deviation : ±1.7 or ±2.5 or ±3.3 or ±6.5 KHz, depending on the channel spacing.
- De-emphasis : 75 µS or 750 µS or none.
- NR-system : compander circuit, pre-set in NR mode (Wisycm-NR) or excludable.
- Sensitivity : < 0.5 µV, for SND/N = 20 dB (CCITT measured).
- Adjacent chan. selectivity : > 73 dB @ 25 KHz channel spacing (70 dB @ 12.5 KHz channel spacing).
- RX intermod. rejection : > 65 dB.
- Audio output : balanced, referred to ground.
- AF output level (balanced): 3.4 Vrms max., with volume control. • AF output impedance = 10 ohm.
- AF output connector : ⇒ CPR 30-F version = Fischer D102 type, 3-pin female
 ⇒ CPR 30-J version = 3.5 mm jack plug (can be internally pre-set for mono or stereo earphones).
- AF bandwidth : ⇒ 300 Hz ÷ 4.5 KHz (-3 dB), for 25 kHz channel spacing;
 ⇒ 300 Hz ÷ 8 KHz (-3 dB), for 50 kHz channel spacing.
- Distortion : < 2%, CCITT measured (< 1% @ 50 KHz channel spacing).
- SND/D ratio : ⇒ > 80 dB (86 dB typ.), with NR-system on (CCITT measured, @ 25 KHz channel spacing).
- Squelch : internally adjustable (or excludable).
- Led indications : ⇒ apparatus-on status (green Led is on)
 ⇒ battery-lifetime < 25% (green Led flashes)
 ⇒ squelch is open (yellow Led is on).
- Battery status indication : by means of 4-step Led bar-graph (battery-lifetime < 100%, 75%, 50%, 25%).
- Powering : ⇒ 1x 3.7v Li-Ion cell.
- Battery life : approx. 13 hours, continuous working.
- Dimensions - Weight : 57 x 18 x 133 mm - 180 g, including Li-Ion cell and antenna.

NOTE [1]: according to local regulations.

The standard version of CPR 30 complies with the following ETSI specifications:

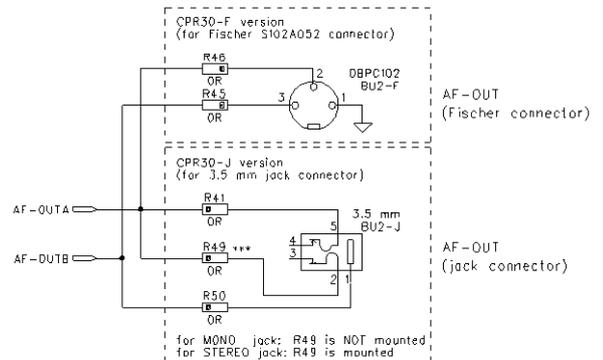
- ⇒ ETS 300 086: versions with 12.5, 20 or 25 KHz channel spacing;
- ⇒ ETS 300 422: version with 50 KHz channel spacing (for freq. > 470 MHz).

SUPPLIED ACCESSORIES:

- AWF 30 - UHF wire antenna.
- BCL 20 - Belt clip.

The CPR 30 Receiver can be supplied for one of the following AF-output male connectors:

- ⇒ Fischer S102A052 (CPR 30-F version) ⇒ Jack 3.5 mm (CPR 30-J version).



In CPR 30-J version, AF-output plug can be pre-set for stereo or mono headphone, mounting or not-mounting R49 resistor (value = 0Ω, can be replaced by a short circuit). Please see the drawing below:

For PCB 029111

- mono headphone: not-mount R49 resistor
- stereo headphone: mount R49 resistor (0Ω)

For PCB 029112

- mono headphone: not-mount R45 resistor, jumper J2 open
- stereo headphone: mount R45 resistor(10Ω,1/8W) as indicated in the below picture and close the Jumper J2

