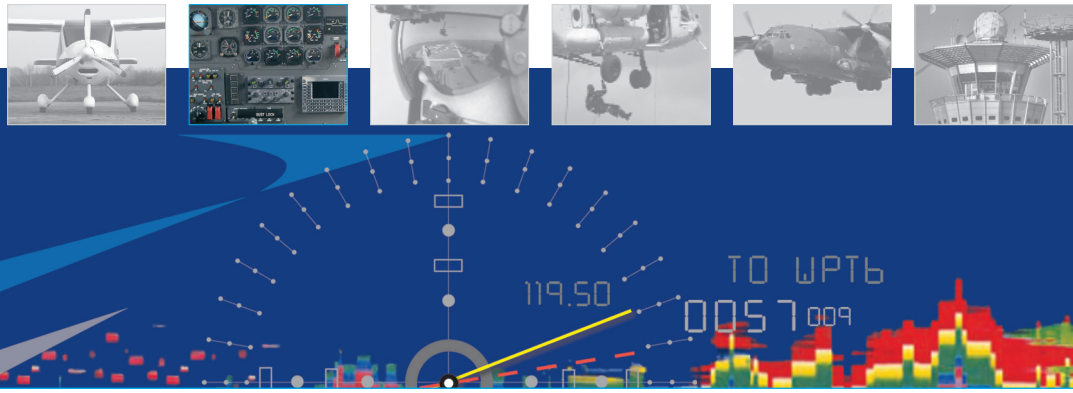

Remote ADF Receiver

RA 3502-(01) / CU 5502-(1)-(101)

Prime Line/Navigation

The ADF 3502-() Receiver is designed for professional operation in the frequency range 190.0 kHz to 1799.5 kHz.

The system is ideally suited for installations where minimum space is available. The small, lightweight control unit CU 5502 fits into a standard 2 ¼" (57mm) round instrument cutout and is only 2 ½" deep.

The ADF Receiver can be installed at any convenient place in the aircraft. The RS 422 interface between CU and Rx do not limit the interviring. The control unit CU 5502 offers a clear, high contrast, double line display, which is readable under all lighting conditions, even in bright sunlight.

The frequency can be selected in 0.5 kHz/1kHz, 10 kHz/100 kHz steps by using variable speed frequency control. The pre-selection in the channel memory of the preset display allows instant switchover by pushing a "Flip-Flop" key to a new NDB enroute for indication of the cross bearing for a position fix relatively to a second NDB. The output of the receiver is compatible with indicator ID 3502 and the converter AC 5303/04 for RMI.

The ADF 3500 system features an extensive automatic self-test function. After switch-on the receiver, the microprocessor and the frequency synthesizer are thoroughly checked by a test subroutine, as well as the liquid crystal LCD display.

All system will be JTSO certified for either VFR or IFR use in all types of fixed wing and rotary wing aircraft.

For truly compact installations, the ADF receiver can be combined with other Becker Prime Line equipment, such as VHF-COM, NAV-VOR/ILS navigation and ATC transponder which have similar control units, providing a pleasant presentation in the panel.

The remote receiver RA 3502-() unit can be controlled by other CDU of FMS devices and is ideally suited for use as essential sensor in flight management systems.

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Remote ADF Receiver

RA 3502-(01) / CU 5502-(1)-(101)

Prime Line/Navigation

Technical data Remote ADF Receiver RA 3502-(01):

- Supply voltage: +27.5 V DC
- Current consumption: ≤ 0.65 A
- Operating temp. range: -40°C to +70°C
- Storage temp. range: -55°C to +85°C
- Altitude max.: 50.000 ft.
- Control interface: RS 422, serial line
- Frequency range: 190.0 to 1799.5 kHz
- Channel spacing: 500 Hz
- Sensitivity: ≤ 70 µV/m for 6 db
- Bearing accuracy: ≤ 3° at 70 µV/m
  f = 190-850 µV/m
  ≤ 8° at 70 µV/m
  f ≥ 850 kHz
- Audio output: ≥ 5.5 V across 300 Ω sym.
- Dimensions (H x W x D)
  incl. mounting: 139 x 50 x 253 mm
  Weight: approx. 1 kg

Technical data Antenna AN 3500:

- Current consumption: ≤ 50 mA
- Operating temp. range: -55°C to +70°C
- Storage temp. range: -55°C to +85°C
- Maximum altitude: 50.000 ft.
- Dimensions (H x W x D): 54 x 190 x 330 mm
- Weight: approx. 1.7 kg

Technical data Control Unit CU 5502-(1)-01:

- Supply voltage: +10 V DC to +32 V DC
- Current consumption
  without panel lighting: ≤ 60 mA
- Panel lighting: ≤ 160 mA at 13.75 V DC
  ≤ 80 mA at 27.5 V DC
- Operating temp. range: -20°C to +55°C
- Storage temp. range: -55°C to +85°C
- Altitude max.: 50.000 ft.
- Interface: RS 422, serial line
- Dimensions (H x W x D): 61.3 x 61.3 x 62 mm
- Weight: 0.26 kg

Recommended ADF components:

- Standard indication
  ID 3502-(1)-01
- For RMI with standard synchro input AC 3503-(1) converter
- For RMI with standard 2-5 V DC sin/cos input
  AC 3504-(1) converter
- For RMI with standard 5-10 V DC sin/cos input AC 3504-(2) converter

Recommended connector kits:

- CK 3501-S for RA 3502-(X)
- CK 3502-S for ID 3502-(X)
- CK 3503-S for AC 350X-(X)
- CK 3504-S for AN 3500

Applicable documents:

- ADF RTCA DO-179
  JTSO-2C41d
- Environmental DO-160C/ED-14C
- Software DO-178B/ED-12B
- BAPT 17TR 2010,
  A 132 880J,
  A107 418 DLB

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