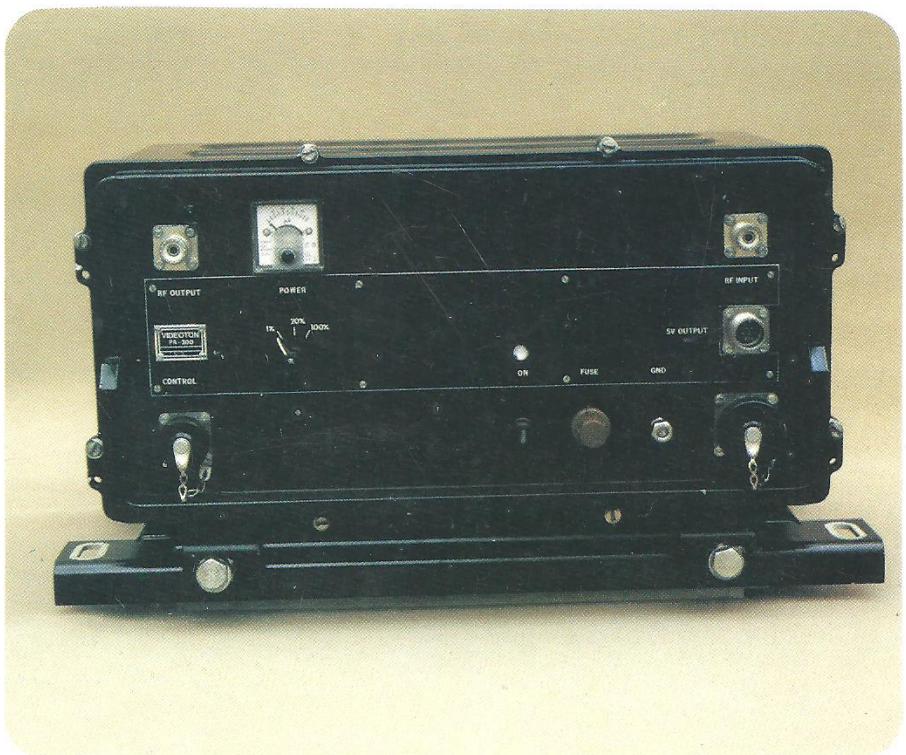
- 20–52 MHZ FREQUENCY RANGE
- 60 W OUTPUT POWER
- BUILT-IN MONITOR

PA-300

VHF AMPLIFIER



VIDEOTON ELECTRONICS

PA-300
VHF AMPLIFIER

GENERAL

The medium-power amplifier typ. CZ–103 works in the 20–52 MHz frequency range. It is intended to increase the output power of low-power VHF transceivers.
It can be operated as a medium-frequency transceiver with a low power VHF–FM transceiver e.g. typ. R107T/02 connected to it. An RF connection is required only to the low-power transceiver but the CZ–103 can provide the supply voltage for the R–107/02 as well.

WIDE APPLICABILITY

The power amplifier and its accessories can be mounted either into a vehicle or fixed place. Together with a low power Transceiver and AD–200 Power Supply the CZ–103 Amplifier forms an easy-to-handle complete medium power transceiver system. It can be connected to a broad-band whip antenna or discone antenna. It is constructed of state-of-the-art devices, up-to-date construction principles and technology. It can withstand heavy environmental, transporting, storing and operating conditions due to its high reliability.

MODULAR DESIGN– REDUCED REPAIR–TIME

The modular design of PA–300 makes components easily accessible for repair or replacement. This feature reduces the equipment repair time, both in the field and the maintenance depot.

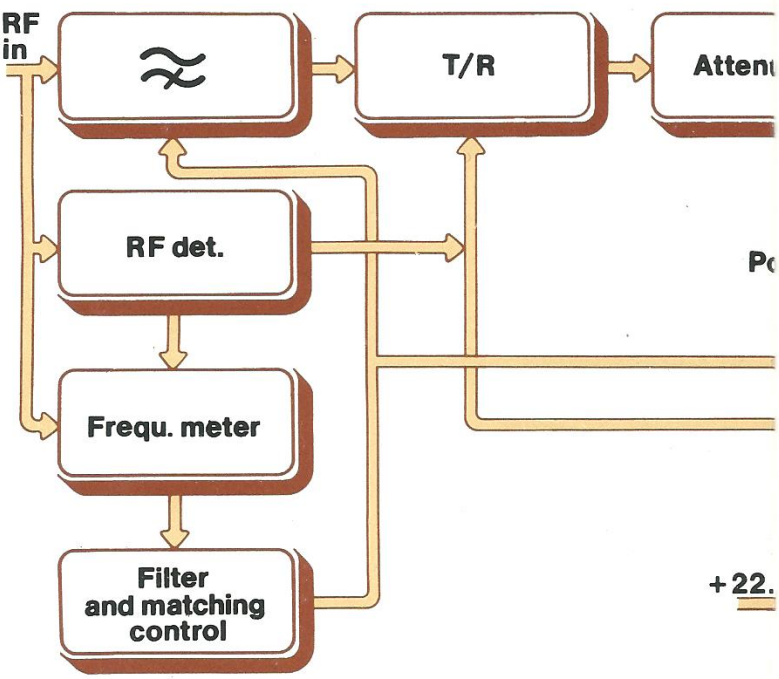
CHECKABLE OPERATION

The output RF power can be set in three steps by a front panel switch and can be checked on a front panel instrument. In the first step the amplifier will be turned off, and the input signal appears sligthy attenuated at the output.

AUTOMATIC SWITCH OVER TO TRANSMIT MODE

In receive mode the transceiver typ. R–107T/02 delivers no signal to the input of the power amplifier. The received signal is passed through the matching network and the high-pass filter to the receiver stages of the R–107T/02. Switching the transceiver into transmit mode the driving RF power switches on the power amplifier and the low-pass filter according to the frequency range.
The output power can be monitored with an indicator.

BLOCK DIAGRAM OF THE VHF POWER AMPLIFIER TYP. CZ–103



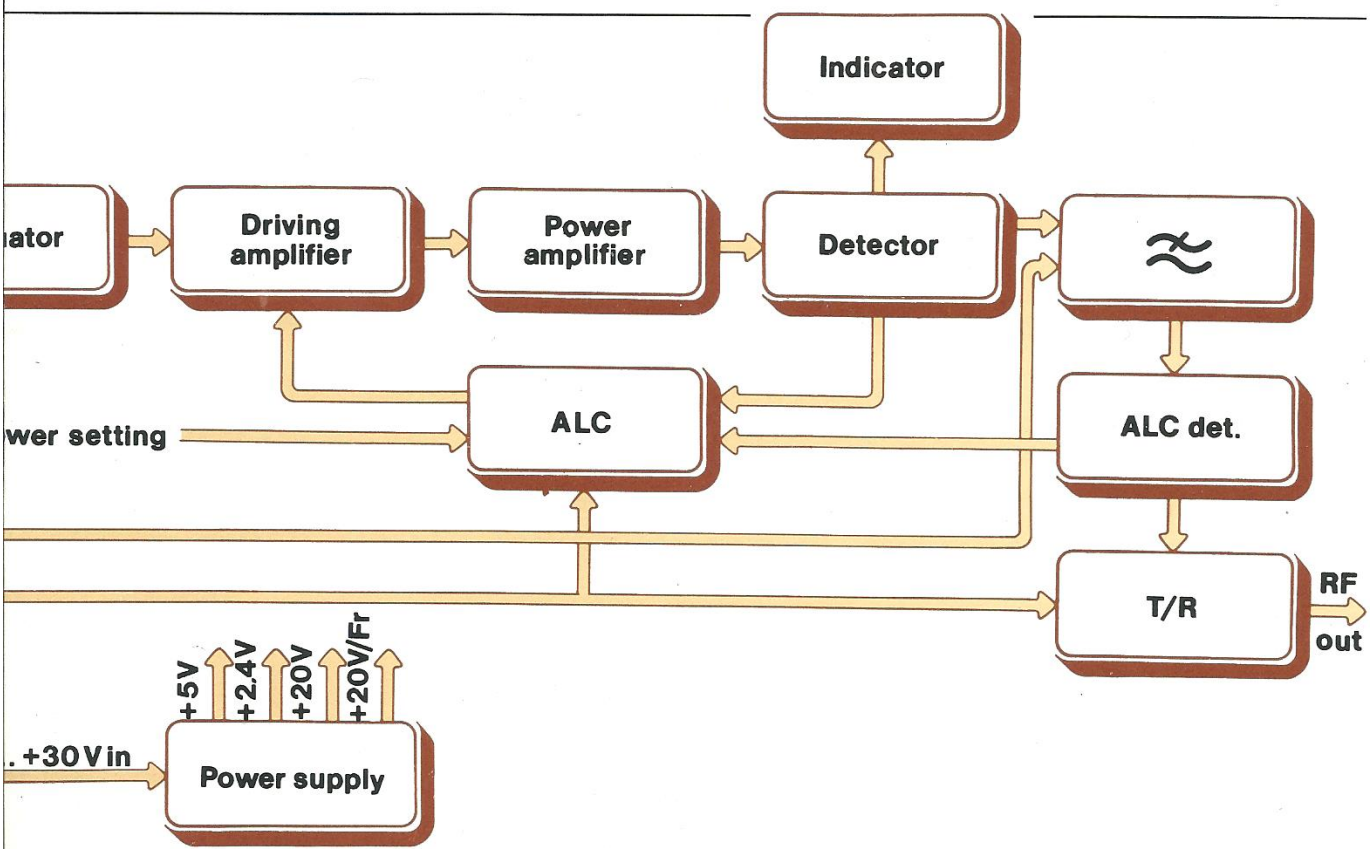
TECHNICAL DATA

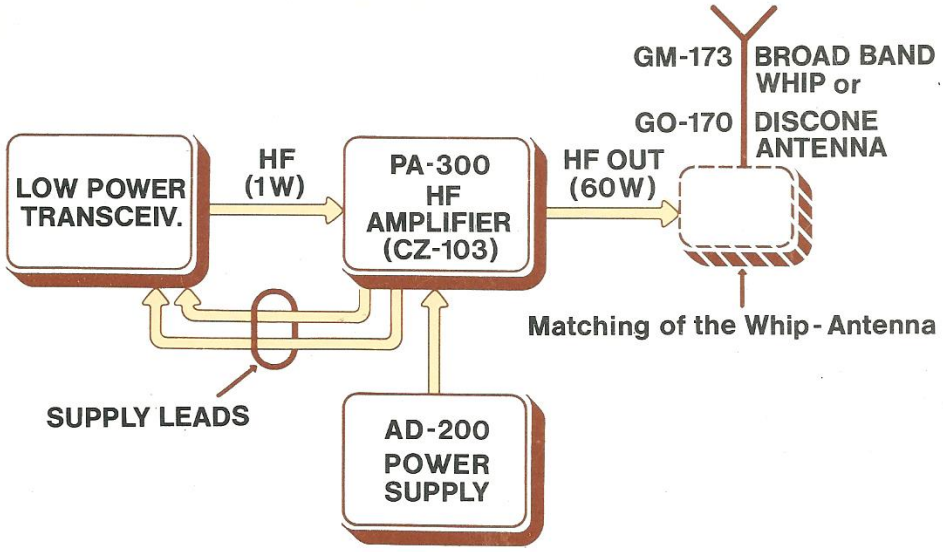
OF THE POWER AMPLIFIER TYP. CZ–103

Purpose:	increasing the output power of the VHF transceiver typ. R–107T/02
Frequency range:	20...52 MHz
Mode:	F3
HF power:	60 W
HF power tolerance in the full operating temperature and supply voltage range:	+3...–2 dB
Driving power:	05....2 W at 50 Ohms
Input/output impedance:	50 Ohm asymmetrical
Operating temperature range:	–40...+60 °C
Supply voltage:	+22...+30 V
Current consumption:	9 A max.
Harmonic suppression:	typ. –50 dB min. –40 dB
Protection:	— extreme loads — reversed supply voltage — excess supply voltage
Cooling:	air (unforced)
Mass with shock absorber:	max. 21 kg
Dimensions:	450x330x270 mm

FEATURES

- Failsafe operation: it is protectep against
  - — reverse polarity of the power supply
  - — extreme loads at the output
- Manual selection of the output power in three steps by a front panel switch.
- It provides particular supply voltages for the R 107T–02 Transceiver.
- Automatic drive level control.
- Modular design—easy repair.
- Quick and simple check of the operation by means of indicator LED.
- It can operate near to an HF transmitter because of its built-in high-pass filter at the input.





60 W
POWER TRANSCEIVER SYSTEM
WITH
PA–300 VHF AMPLIFIER

VIDEOTON
ELEKTRONIKAI VÁLLALAT

H–8001 SZÉKESFEHÉRVÁR
BERÉNYI ÚT Pf. 110