

TRANSMITTER SECTION

Input impedance	: 20kOhm +/-10%, balanced floating
Input CMRR at 3kHz	: >65dB
Input level, nominal	: +6dBu
Input level, overload	: +21dBu
Transmit bandwidth	: 3500 Hz (Fig. 1)
Telephone line output impedance	: 600 Ohm +/-10%, balanced floating
Telephone line output level, nominal	: -10dBm
Telephone line output level, max. (limited)	: -7dBm +/-1dB
Distortion at -6dBu input level	: <0.3% THD
Noise (unweighted, 23kHz bandwidth)	: -78dBu
Noise (weighted, CCIR 468-2)	: -68dBu

RECEIVER SECTION

Telephone line input impedance	: 20kOhm +/-10%, balanced floating
Telephone line input CMRR at 3kHz	: >65dB
Telephone line input level, nominal	: -10dBm
Telephone line input level, overload	: +10dBm
Receive bandwidth	: 3800Hz (Fig. 2)
Output impedance	: 165 Ohm +/-10%, balanced floating
Output level, nominal	: +6dBu
Output level, max. (limited)	: +9dBu +/-1dB
Distortion at 1kHz, -10dBm input level	: <0.3% THD
Noise (unweighted, 23kHz bandwidth)	: -66dBu
Noise (weighted, CCIR 468-2)	: -56dBu
Gain	: 0 to 30dB

LIMITERS

Attack time	: typ. 1 msec.
Release time	: typ. 250 msec.

VOICE CONTROL

Attack time	: typ. 3 msec.
Trigger level, transmit	: -20dBu
Trigger level, receive	: -36dBu

SIDETONE ATTENUATION (Note 1)

Measured on a regular non-compensated telephone line	: typ. 20dB
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LINE HOLD

DC current	: typ. 50mA
DC voltage across line	: typ. 5.5V

HIGH VOLTAGE PROTECTION

According to CCITT recommendation K17	: 1500V
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GENERAL SPECIFICATION

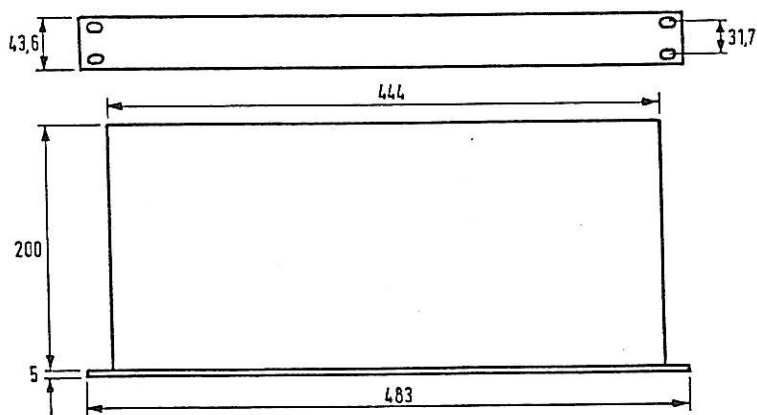
Supply voltage	: 220V AC +20/-15% (110V available on request)
Current consumption	: approx. 40mA
Fuse	: 63mA/250V slow blow
Temperature range	: 0 to +45°C ambient temperature

MECHANICAL DATA

Connectors:	
Audio input	: 3 pole XLR, female
Audio output	: 3 pole XLR, male
Telephone line and telephone set	: 9 pole D-connector, male
Remote control	: 15 pole D-connector, female
Mains	: 3 pole "EUROPA" type (with protective ground)

The instrument is housed in a 19 inch cabinet, 1 E high

MECHANICAL SIZE:



Note 1:

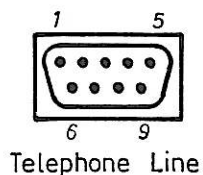
Definition of sidetone attenuation.

A -10dBm signal at the telephone line terminals can be achieved in two different ways:

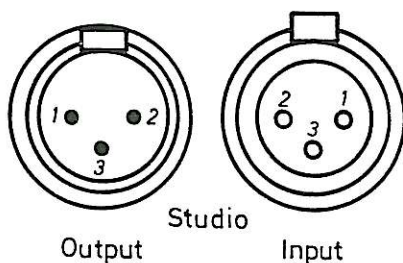
- As a result of a +6dBu signal from the studio input of the hybrid.
- As a result of a received signal from the telephone line.

The sidetone attenuation is then defined as the difference between the received signal and the error signal from the studio input, measured on the studio output.

Channel A



- Pin
- 1 } Telephone set
 - 2 }
 - 3 No connection
 - 4 } Telephone line, Subscriber
 - 5 }
 - 6 }
 - 7 } No connection
 - 8 }
 - 9 }



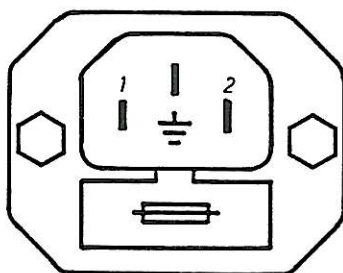
- Pin
- 1 Common
 - 2 Signal 0°
 - 3 Signal 180°

Channel B

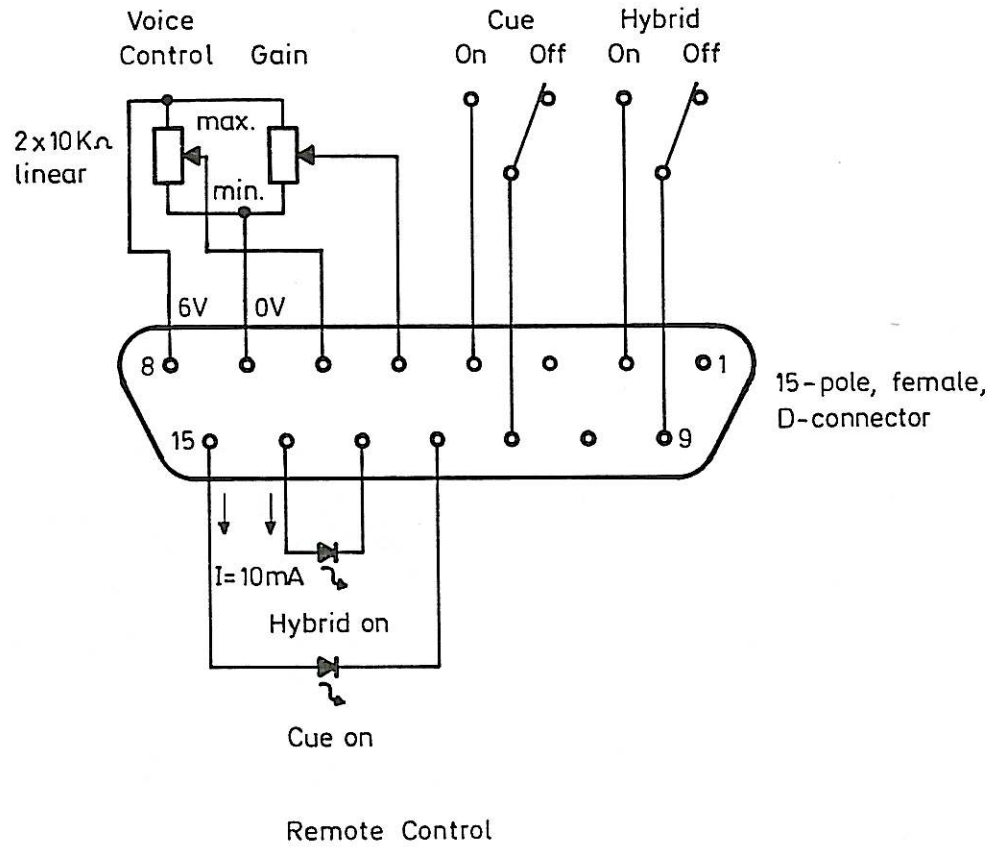
The connections of channel B is equal to channel A

Mains

3 pole EURO mains chassis plug with fuse.



- 1 Phase (Line via fuse to power unit)
- 2 Neutral
- ⏏ Screen, Chassis



The Automatic Telephone Hybrids 535-400 and 535-310 are approved by British Telecom on the following conditions:

1. Connection being by means of an approved plug compatible with a BT Line Jack Unit 610A.
2. Connection of the Automatic Telephone Hybrid to telecommunication services must be via an approved fuse disconnection barrier device.

