CANFORD ISDN BROADCAST CONTRIBUTION UNIT

Technical Set-up Instructions

General

Designed specifically for use by totally non-technical staff, this compact unit permits studio quality contributions from remote locations. It uses ISDN dial-up lines as these offer the proven reliability required for live interviews, often at prime time and for critical events.

UK broadcast practice is normally for the studio to originate the ISDN call, so there is no dial pad and only incoming calls are accepted (on either B-channel). Visible and audible indication of an incoming call is provided. This is manually accepted by the user.

The unit supports MPEG Layer 2 in mono at either 24 or 48KHz sampling and G.722 at 64kbits/s (no auxiliary data channels). It automatically senses what data type is being sent and sets itself accordingly.

The unit is designed to operate primarily with the Beyer DT297PV broadcast headset. Other headset types, or separate headphones and microphones can be used, but the AGC circuitry on the mic input is optimised for the DT297PV so use of this type is strongly recommended for best results.

User controls are provided for power on/off, line connect/disconnect and headphone level. A ‘cough’ button is provided that mutes the mic input. LED indicators show line connection status, mic level and cue level. The unit is housed in an extruded aluminium case, with indicators and user controls on the front panel, and headset, ISDN line and mains power connections at the rear.

An internal jumper selects the headphone feed between studio feed to left earpiece and mic input (sidetone) to right (default setting), or a mix of both to both earpieces. Phantom power can be enabled (default) or disabled.

Power inlet is by IEC connector.

Operation

The unit accepts incoming calls only. When this happens the Line Hold button on the front flashes and the piezo sounder rings with a typical UK call tone pattern.

If the Line Hold button is pressed, the call is accepted and routed to the headset. Both B channels are available. Once the call is completed, the Line Hold button is pressed again to drop the line.

AGC operates to pre-defined levels on the mic input. There is output AGC and a noise gate.

For the best results from the AGC the user should minimize popping by positioning the microphone above the mouth and out of direct line of breathing from mouth and nose.

Whilst the call is active, the Cough button can be muted to stop the mic signal being sent to the studio. The side-tone is not muted when the cough button is active. Also side-tone is present without a call having been established.

Jumper Access

To allow jumper setting, the unit needs to be removed from its case.

Warning: removal should be undertaken only by personnel familiar with electronic circuitry.

Proceed as follows:

Remove the four fixing screws from each end.

The front panel can then be removed.

Extract the pc board from the rear, allowing the front panel to slide through the extrusion.

Adjust jumpers as outlined below, as necessary.

Re-assemble the unit by reversing the above procedure.

Jumper Setting

Internal jumper J1:

When fitted:	allows the headphone feeds to be the studio in the left ear and mic input (side-tone) in the right ear.
When removed:	allows a mix of studio and mic input on both left and right earpieces.

Internal jumper J3: provides 48v phantom power for the mic input

Link in position 1:	48V phantom power
Link in position 2:	No phantom power

Internal jumpers J2 & J4: Jumpers 2 & 4 are used for test purposes during manufacture.

Factory setting of the jumpers is as follows:

Jumper 1:	Not Fitted
Jumper 3:	Fitted in position 1