



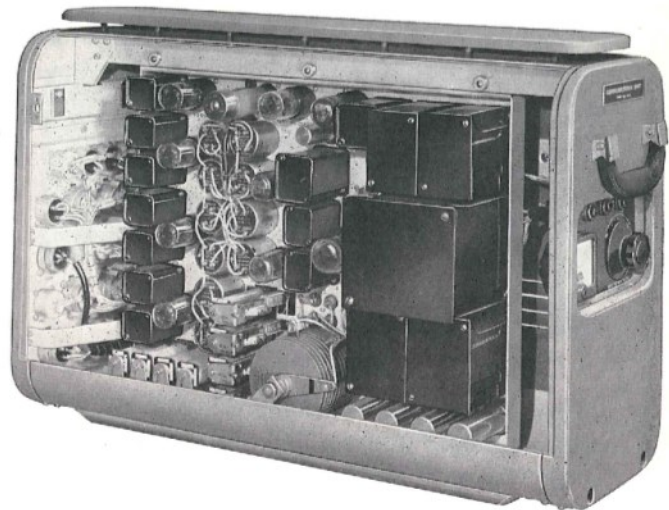
Communication Equipment

Communication Units Types BD 649 and BD 671

The Types BD 649 and BD 671 are identical in electrical design, the former being suitable for mounting in a mobile case, the latter for rack mounting.

Each unit provides an exchange point for all the cue lights and communication channels of the system, but contains no operating controls. It incorporates an LT power supply for operating the sundry carbon microphones and amplifiers for the producer's talk-back microphone and the various intercommunication circuits. It is thus possible to use the facilities available even though the units of a camera channel, etc., are not in use. The following inputs are utilised:

- (1) Mains Power.
Type BD 671, 206–254 V 50 c/s or 101–121 V 60 c/s.
Type BD 649, 193–254 V 50 c/s or 91–121 V 60 c/s.
- (2) Up to three high quality microphone inputs from the producer, the technical director, etc., designated talk-back (TB).
- (3) Talk-back from camera control operators, *i.e.*, control room talk-back (CRTB).
- (4) Camera talk-back (CTB) from camera operators and studio assistants stationed at cameras.
- (5) Programme sound (PS) from the sound mixer.
- (6) Calling circuit (buzzer and lamp) from camera to camera control.



*The Type BD 649 unit.
The side of the mobile case is removed
showing the component layout.*

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- (7) 'Available' cues from camera controls.
- (8) 'On Air' cues from the vision mixer.

The various inputs are mixed and re-routed to give the following basic outputs:

- (1) To cameras—TB, PS and CRTB plus 'on air' cues.
- (2) To camera controls—TB, PS and CTB plus 'on air' cues and call circuit from camera.
- (3) To vision mixer—TB and PS plus 'available' cues from camera controls.
- (4) To production console—TB, PS, MCTB (mixed camera talk-back, *i.e.*, mixed output of all camera operators' microphones) plus 'on air' and 'available' cues if required.
- (5) Spare outputs—TB, PS, MCTB and –24 V.

The general scheme is that each camera control, vision mixer and producer's console connects into

the communication unit. On the producer's console is a high grade microphone over which the producer can talk to all personnel, the output of this microphone being referred to as talk-back. Provision is also made for the technical director and one other person, such as the sound mixer, to bring similar microphones in parallel by means of non-locking keys.

A switch is incorporated controlling the operation of a set of relays which give the facility of 'Omnibus' talk-back. In this condition MCTB is fed to all camera control positions and CRTB is fed to all camera operators. This enables one camera control operator to be in two-way communication with all the camera operators.

One communication unit provides facilities for a total of four cameras. If more than four cameras are involved, then a second unit is added in parallel.

Communication Unit Type BD 632

The mobile single channel unit is used to provide communication and cue light facilities when a single camera channel is used. It is built into a small case fitted with a carrying handle.

Studio Production Unit Type BD 662

This is a small desk-mounting unit designed to enable the producer to speak to all operating personnel. It incorporates a high-quality microphone and a strip of keys which enable the producer to talk to studio personnel over the rehearsal loudspeaker and to telecine operators or other technicians over another loudspeaker circuit.

Jacks are provided for headphones which enable the producer to hear mixed camera talk-back in one earpiece and programme sound in the other. Alternatively a standard telephone headset may be used, its microphone would then replace the high-quality microphone normally used.

Talk-back Amplifier Type BD 698

The Talk-back Amplifier Type BD 698 provides facilities for talk-back over a loudspeaker where no suitable communication unit may exist, as in telecine work. It comprises a straightforward four-stage amplifier with one high quality low-level speech input (talk-back) and provision for mixing-in one or two other inputs at line level. The amplifier, which is in the form of a panel suitable for rack mounting, incorporates rectifier and smoothing equipment. It is available in two editions to work on 206-254 V or 101-121 V, 50 or 60 c/s, AC mains supplies.

Communication Patching Panel Type BD 657

This panel provides six-way patching facilities for communication or cueing circuits. It consists of two rows of six 10-way sockets mounted on a standard panel, suitable for rack mounting.

DIMENSIONS

	Height	Width	Depth	Weight
<i>Type BD 649</i>	16 in. (40.6 cm)	8½ in. (21.6 cm)	26 in. (66 cm)	68 lb (30.9 kg)
<i>Type BD 671</i>	21 in. (53.3 cm)	19 in. (48.3 cm)	8½ in. (21.6 cm)	29 lb (26.8 kg)
<i>Type BD 662</i>	5½ in.* (14 cm)	10 in. (25.4 cm)	6¼ in. (15.9 cm)	9¾ lb (4.4 kg)
<i>Type BD 698</i>	7 in. (18 cm)	19 in. (48.3 cm)	8½ in. (21.6 cm)	19 lb (8.6 kg)
<i>Type BD 657</i>	7 in. (18 cm)	19 in. (48 cm)	5¾ in. (14.5 cm)	

*Plus 18 in. (45.7 cm) flexible microphone stalk.

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