

# Closed Circuit Television Facilities



# Closed Circuit Television Facilities

**CCTV provides instantaneous visual communication between customer's premises for conferencing, surveillance or educational use.**

Closed Circuit Television (CCTV) provides real-time visual communication between 2 or more points. Pictures are transmitted from an originating point over cable circuits or, in some cases, by microwave radio relay links, and are received on suitable TV monitors. CCTV links are generally equipped to 625 - line monochrome or colour standards (conforming to International Radio Consultative Committee (CCIR) standards) and may be provided on a permanent or temporary basis.

## Permanent Links

These may be used for many purposes. They can, for example, enable:

- face-to-face meetings to be held regularly without the inconvenience of arranging long-distance travel or accommodation
- security surveillance without the need for on-site staff
- simultaneous distribution of information to numerous reception points.

## Brief Technical Details

### Video Systems

These are recommended where single channel, or short distance multiple channel, operation is required and for single channel distribution networks.

Typical characteristics for a point-to-point circuit are as follows:

- Input level - one volt peak-to-peak
- Impedance - 75 ohms unbalanced
- Output level - one volt peak-to-peak
- Signal/rms weighted luminance random noise ratio - 50 dB
- K rating - 6%

### VHF Systems

These are provided for the simultaneous transmission of separate programmes over a coaxial cable network. Typical characteristics for a VHF distribution system are as follows:

- Input: Vision channel - one volt peak-to-peak
- Sound channel - one mW in 600 ohms
- Output: 50 millivolts measured at the terminal amplifiers. The VHF signal conforms to CCIR recommendations, i.e. the vision carrier is amplitude modulated and the sound carrier is

frequency modulated and spaced 6 MHz above.

Number of Channels - Up to a maximum of 9 within frequency band  
Frequency Band - 40 to 140 Mhz

Fault Localisation - The system incorporates monitoring and supervisory facilities to give rapid detection of faults. Thus in the event of a break in service a minimum amount of programme time is lost.

If required British Telecom can provide internal (VHF) wiring delivering between 1 and 3 millivolts at the socket outlet to which a receiver may be connected. Besides the VHF system outlined, British Telecom can also provide VHF distribution systems in conjunction with proprietary amplifying equipment. Such systems would provide scope for increased channel availability, operating in the frequency band 40 to 230 MHz and beyond.

## Temporary Links

These are often provided for special occasions, enabling:

- coverage of sporting and other events as they happen, even though the event may be taking place abroad.
- conferences or lectures to be relayed to overflow or distant audiences. (If the pictures of any event are for public showing, Home Office approval must be obtained.)

Temporary vision links can be provided at reasonably short notice throughout the country. Over short distances, links are usually set up directly between the required originating and reception points. For longer distances, temporary vision links may conveniently be provided from the required terminal points to the nearest British Telecom Television Network Switching Centres (TV NSCs) and then connected by standby channels on the British Telecom Radio Network. There is a network of these standby channels throughout the UK terminating at TV NSCs and the purpose of these is to provide protection for the main inter-city telephony and television links. TV NSCs are in Aberdeen, Belfast, Birmingham, Bristol, Cardiff, Carlisle, Dover, Glasgow, Leeds, London, Manchester, Newcastle-on-Tyne, Norwich, Plymouth and Southampton.

It should be noted that in the unlikely event of a failure on a main telephony or television channel, there is a risk of a loss of service on a temporary link routed over protection channels.

## Additional Services

Permanent associated music (programme), speech or control circuits can also be provided. These facilities can also be provided for temporary services as well as public address systems and temporary exchange lines.

## Terminal Equipment

All private equipment must be of a type that British Telecom has technically evaluated, found acceptable and given consent for connection to British Telecom circuits.

Technical Guides 25 and 26 set out our requirements and copies of these Guides are available to suppliers on written application to:

British Telecom Headquarters  
Residential and Customer Services  
Department RCSD1.2.1.4, Tenter House,  
45 Moorfields, London EC2Y 9TH.

## Charges

Charges for permanent CCTV are raised on an annual rental basis, which includes full maintenance. Temporary CCTV charges vary according to the number of venues served and duration of use. As each system is specially designed for each customer's requirements it is not possible to give examples of rentals or charges but we would be pleased to give a quotation for any system. For further information concerning all CCTV facilities please write to:

British Telecom Headquarters  
Business Systems,  
Department BS1.1.3.5,  
Seal House, 1 Swan Lane,  
LONDON, EC4R 3TH.

or telephone:

- 01-357 3420 permanent multichannel and educational TV.
- 01-357 3029 other permanent CCTV.
- 01-357 2628 temporary CCTV.

**DLF601**

Please note: We do our best to supply our customers with the service they ask for but we may have to provide service which does not accord exactly with the descriptions and illustrations in this leaflet.

Information on a wide range of our services and apparatus is contained in the Green Pages section of most Telephone Directories.