

**BBC Engineering
including Engineering Division Monographs**

These were published from January 1970 to September 1980.

The numbering started at No.81 so as to continue the sequence of the BBC Monographs.

BBC Engineering (numbers 81-115)

- 81** Editorial: Colour on Three Channels Jan-70
Experience in the Operation of Colour Studios, by C R Longman
BBC Television News - Alexandra Palace and the Television Centre Spur, by H C J Turner
Twelve Years of Video-tape, by J Nash
Progress in the Use of Pulse-code Modulation for High-quality Sound Links, by D E L Shorter
- 82** Editorial: From Iconoscope to Plumbicon Apr-70
New Teaching Techniques at the Engineering Training Centre, by
by H Henderson
The Design and Production of Prototype Thin-and Thick-Film Circuits, by D J Walker
A Receiver for Measuring the Radiated Harmonics of uhf Television Transmissions, by N H C Gilchrist
A Non-Synchronous Method of Demodulating Amplitude-Modulated Signals with
Asymmetrical Sidebands, by K Hacking
Satellite Broadcasting Service Areas, J W Head
- 83** Editorial: F M Broadcasting after Fifteen Years Jul-70
Tests of Mixed Polarisation for vhf Sound Broadcasting,
by J G Spencer
Modernisation of the BBC Telegraph System with an Automatic Data Exchange, by D V Lywood
Solid-state Video Switching Matrix, by W T Shelton
Permissible Bass Rise in Talks Studios, by N F Spring, K E Randall
- 84** Editorial: The External Services of the BBC Oct-70
The Use of Single-sideband Transmissions for Programme Links to Overseas Relay Stations, by D I Price
The BBC Central Computer Complex, by R C Evens
ANCHOR - a New Electronic Character Generator, by R J Taylor,
R H Spencer
A Printed Panel Aerial for u.h.f. Relay Stations, by G H Millard
Automatic Source and Aerial Selection at Skelton Short-wave Transmitting Station, by G Oxley
- 85** Editorial: The Unattended Operation of U.H.F. Broadcasting Transmitters Jan-71
Principal articles:
Multiplex System for Standby Operation of U.H.F. Television Transmitters, R W Leslie
Technical Monitoring of Transmitters and Programme Links,
by R W Holmes
The Choice of Primary Colours for Colour Television,
by C B B Wood and W N Sproson
- 86** Editorial: Digital Techniques in Broadcasting Apr-71
Principal Articles:
Service Area Planning by Computer, R W Lee, J H Causebrook and R S Sandell
A PCM. Sound-in-Syncs System for Outside Broadcasts, by
C J Dalton

87 Editorial: The Changing Pattern of Broadcasting in the United Kingdom Jul-71

Principal Articles:

A New Concept of Regional Broadcasting, by J D MacEwan

Regional Studio Centre, Birmingham

Part I: Architectural Aspects, by R A Sparks

Part II: Technical Facilities, by D R Kinally

Local Radio, by D H Cummings and R E Bliss

88 Editorial: Stereophonic Broadcasting in the United Kingdom Oct-71

Principal Articles:

U H F Relay Stations, by J C Gallagher

Equipment for the Parallel Operation of Two 250-kW High Frequency Transmitters,
by J B Gray and G D Lean

An Electronic Soft-focus Unit, by H A S Philippart

Averaging the Frequency Deviations of Two F M Signals,
by M J Mortimore and G M Le Couteur

89 Editorial: Prospects for the Improvement of Reception in the M.F. and L.F. Bands Jan-72

Principal Articles:

The Move into Broadcasting Centre, Birmingham, by A J Pilgrim

Synchronous Demodulation in L.F./M/F/ Receivers, K Hacking and
D E Susans

Reduction of Interference by Reduction of Modulation Bandwidth, by
C R G Reed

An Active Deflector for U.H.F. Television Broadcasting, S W Amos

90 Editorial: Broadcasting and the Radio Environment May-72

Principal Articles:

Television Reception over Sea Paths: the Effect of the Tide,
by P A Laven, D W Taplin and C P Bell

Simultaneous Subliminal Signalling in Conventional Sound Circuits,
by P C J Hill

U H F Relay Station Aerials: the Compensation of a 914 mm Diameter Aerial Cylinder by
Means of an Inductive Grating, by N H C Gilchrist and J H Moore

91 Editorial: Towards Television-Camera Quality from 16 mm Film Jul-72

Principal Articles:

Delta Modulation for Sound-Signal Distribution: A General Survey
by C J Dalton

Pre-programming of Telecine Controls, by D J M Kitson,
R H Spencer, A B Palmer, J R Sanders and M Weston

The Suppression of V H F Harmonic Interference from H F Broadcast Transmitters, by D I Price

- 92** Editorial: Broadcasting, Communication and Mobility Oct-72
- Principal Articles:
- The First Five Years, by P E F A West
- Acoustic Modelling of Studios and Concert Halls, by H D Harwood and A N Burd
- BBC Engineering 1922-1972, E L E Pawley
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- 93** Editorial: Ceefax: A New Instant Information Medium Mar-73
- Principal Articles:
- Colour Film Transmission in BBC Television, by L H Griffiths
- Interpolation in Digital Line-Store Standards Conversion: A Theoretical Study, by J O Drewery, J R Chew and G M LeCouteur
- The Calculation of Electronic Masking for use in Telecine, by F A Griffiths
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- 94** Editorial: Stereophony and Quadraphony May-73
- Principal Articles:
- Stereophony and the Musician, by E H Dougharty
- Systems of Quadraphony: a First Assessment, by D J Meares
- Operational Aspects of Quadraphony, by J W Bower
- LF and MF Propagation: a Study of Ionospheric Cross-modulation Measurements, by P Knight
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- 95** Editorial: The March of Video Tape Sep-73
- Principal Articles:
- From Manual Splicing to Time Code Editing by G R Higgs
- Saturday Sport on BBC Television by D M W Gregory and D J Fawcitt
- UHF Coverage in Remote and Mountainous Areas of the United Kingdom by W Wharton
- UHF Relay Stations: Distribution Transformers for Use with the Standard Horizontally-polarised RBL Aerial by G H Millard
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- 96** Editorial: Towards Digital Sound and Television Broadcasting Nov-73
- Principal Articles:
- Lightweight Colour Mobile Control Rooms, by G D Cook
- Reducing non-linear effects in klystrons for television broadcasting, by A G Lyner
- Digital Sound Signals: Further Investigation of Instantaneous and Other Rapid Companding Systems, by D W Osborne
- Pulse-code Modulation for High-quality Sound Signal Distribution: Subjective Effect of Digit Errors, by G R Mitchell and M E B Moffat

97 Editorial: A new plan for LF / MF Broadcasting Mar-74

Principal Articles:

Cable and Radio Programme Links in the BBC, by J Redmond

Quality Criteria, Protection Ratios, and Protected Field Strengths,
by G J Phillips

Some Applications of Coding Theory to Broadcasting, by
M E B Moffat

Artificial Reverberation, by N F Spring and C L S Gilford

Subjective Study of Two Large Music Studios, by W N Sproson

98 Editorial: Highways and Byways of Communication May-74

Principal Articles:

Maida Vale: A Radio Music Centre by A R Neale

Digital Television Recording: A Review of Current Developments by A H Jones

The Automatic Plotting of Aerial Radiation Patterns by G H Millard and N F Spring

An Automatic Shot-change Detector for Telecine by J R Sanders and M Weston

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Principal Articles:

Wenvoe - the BBC's Largest Television Station by A E Gallon

The BBC General Election Computer System by R G Kelly

A Computer Program for Calculating M F Sky-wave Interference by J L Eaton and Mrs A M Bunting

M F Network Planning: The Coverage under Daytime Conditions from a Network of Transmitters
(arranged in a uniform lattice) by R A Rowden

LF and MF Sky-wave Field-strength Prediction by P Knight

MF Aerials: The Determination of Ground-wave CMF and Mean Ground Conductivity
from Radial Field Measurements by an Optimisation Technique by J L Eaton

100 Editorial: Traffic Information for the Motorist Jun-75

Principal Articles:

A Traffic Information Service Employing Time Division Multiplex Transmission
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MF Propagation: a wave-hop method of ionospheric field-strength prediction by P Knight

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A Medium-power VHF FM solid-state Transmitter for Local Radio by A H B Bower

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Principal Articles:

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The Effect of Polarisation on Television Reception on Oversea Paths by P A Laven

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A Portable Television Lighting Control System by P E Tipple and J Froggatt

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Television Training at Woodstock Grove by K Angold-Stephens, R Burden, R Hammett and J Symons

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The engineering planning by M J Stickler, D W Grant and S M Edwardson

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Measurement of the Horizontal Resolution of Picture Monitors by
J E Noakes

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