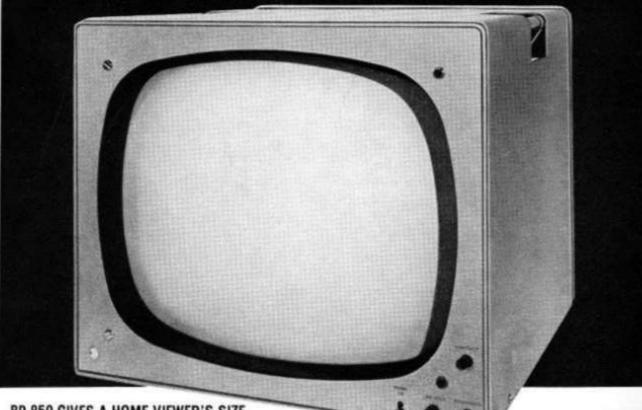
# THE NEW 21"

# PROFESSIONAL PICTURE MONITOR



BD 850 GIVES A HOME VIEWER'S SIZE PICTURE IN THE CONTROL ROOM AND ON THE STUDIO FLOOR

- · Plug-in printed wiring sub-assemblies
- · Long life valves
- · High grade components
- For operation on 405, 525 or 625 lines or switchable between standards
- Low cost
- Remote control of brightness and contrast available
- · Polarising screen available

as supplied to the B.B.C's new Television Centre, White City

# MARCONI

COMPLETE SOUND AND VISION SYSTEMS

MARCONI'S WIRELESS TELEGRAPH COMPANY LIMITED . CHELMSFORD . ESSEX . ENGLAND

17

Years advertised:

S and V

# MARCONI INSTRUMENTS

present ...

We should like to introduce you to three members of our large family of specialized test gear expressly designed for the installation, setting-up, and maintenance of television systems. Instruments are available to suit 625-, 525-, or 405-line television systems using either positive or negative modulation.

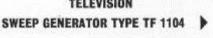
# TELEVISION TEST EQUIPMENT



#### TELEVISION MEASURING OSCILLOSCOPE TYPE TF 1277

Enables precise measurements to be made on the waveforms used in testing television broadcast equipment, transmitters and links, and is suitable for 405-, 525- and 625-line systems, colour or monochrome. It permits the inspection of sinesquared impulses, and the measurement of K factor and black-level stability; can also be used as a line strobe monitor or high-grade general-purpose oscilloscope.





Comprises a combined sweep generator and c.r.o. for v.h.f., i.f., and v.f. response analysis on television and f.m. receivers operating in either British or American v.h.f. bands I, II, and III. The instrument includes crystal-controlled frequency markers and has a sweep width variable up to 10 Mc/s.

TELEVISION



#### TELEVISION TRANSMITTER SIDEBAND ANALYSER **TYPE OA 1241**

Provides a fully composite television Provides a fully composite television waveform incorporating a video sweep signal, for dynamic alignment and frequency response measurements on complete television transmitters. Gives simultaneous display of both upper and lower sideband responses.

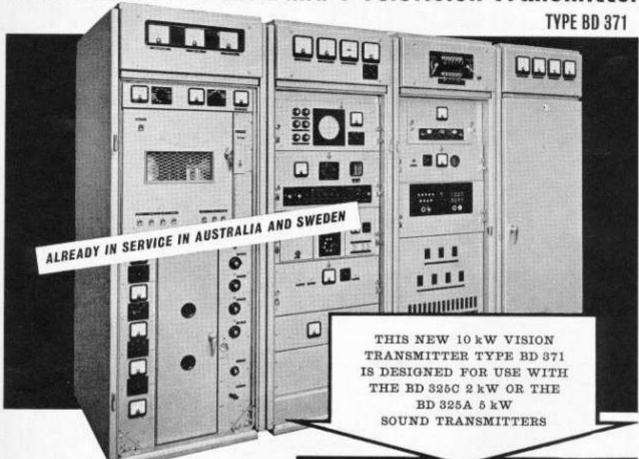
IARCONI

AM & FM SIGNAL GENERATORS - AUDIO & VIDEO OSCILLATORS FREQUENCY METERS - VOLTMETERS - POWER METERS DISTORTION METERS FIELD STRENGTH METERS TRANSMISSION MONITORS DEVIATION METERS OSCILLOSCOPES, SPECTRUM & RESPONSE ANALYSERS Q METERS & BRIDGES

MARCONI INSTRUMENTS LTD., ST. ALBANS, HERTS., ENGLAND · Representation in 68 countries

TCISIR

# NEW Marconi 10 kW Band 1 Television Transmitter

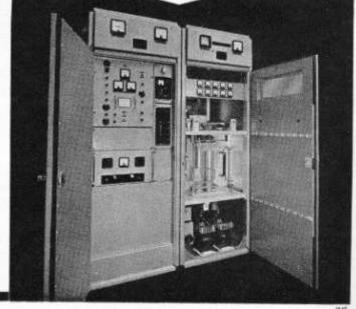


- Suitable for unattended operation.
- Adapted for parallel operation.
- Minimum floor space requirement.
- No underfloor ducts.
- Low cost installation.
- Minimum number of RF stages.

## MARCONI

COMPLETE SOUND
AND VISION SYSTEMS

MARCONI'S WIRELESS TELEGRAPH COMPANY LIMITED · CHELMSFORD · ESSEX · ENGLAND



40

Years advertised:

S and V

#### High quality picture and waveform monitoring

#### THE MARCONI BD 873 PICTURE AND WAVEFORM MONITOR

provides the following comprehensive facilities:

- · 14 inch Picture Tube with wrap-round mask.
- 405 or 525 or 625 line standards or it can be switched between all three.
- 5 inch waveform tube with edge lit graticule.
- 2 Bridging inputs with relay changeover and additional bridging inputs for calibration and waveform only signals, and R-G-B colour waveforms.
- · Line Strobe display over most of picture area.
- · Rapid servicing access with plug-in printed circuit boards.
- · Switched wideband or IRE roll off response.
- · Available for console, rack, mobile case or bench mounting.
- · Matching Picture Monitor also available.



MARCONI COMPLETE SOUND AND VISION SYSTEMS

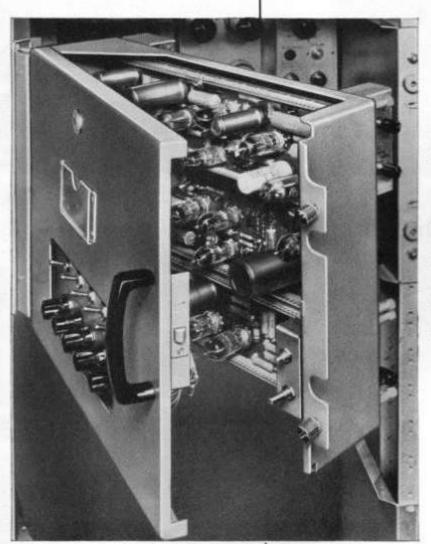
MARCONI'S WIRELESS TELEGRAPH COMPANY LIMITED, CHELMSFORD, ESSEX, ENGLAND

19

Designed to process signals which have become distorted during transmission, the BD921 can if necessary deal with severely mutilated signals and restore them to a usable condition.

# MARCONI Line Clamp Amplifier

**BD921** 



- Exclusive circuit for reestablishing synchronizing pulses, suitable for monochrome or colour.
- Exclusive clipping circuits of exceptional stability.
- Local or remote control of signal parameters.
- Four vision outputs with good isolation.
- Emergency by-pass facility.



Years advertised:

MARCONI'S WIRELESS TELEGRAPH CO., LTD., MARCONI HOUSE, CHELMSFORD, ESSEX, ENGLAND.

# MARCONI Experience for hire

- A complete range of television studio broadcast equipment.
- A fully equipped 4 camera 4½-inch Image Orthicon Outside Broadcast Unit.
- A full colour television service.
- A television studio with full technical facilities for training purposes.
- A team of thirty fully trained and experienced engineers.



Marconi's offer this hire service to assist television organizations to supplement existing services or equipment during periods of peak activity.

Marconi service is also available to meet demonstrations, installation, operational and maintenance needs.



#### MARCONI

COMPLETE SOUND AND TELEVISION SYSTEMS

For further details of this service write to:

TELEVISION DEMONSTRATION UNIT - MARCONES WIRELESS TELESRAPH CO LTD - MARCON HOUSE - CHELMSFORD - ESSEX - ENGLAND

828

THE BD887 consists of a drawout printed-wiring case, suitable for rack or mobile use, housing up to ten plug-in transistor amplifier units and power supplies.

- Provides intercommunication between all members of the studio crew and up to three outside locations (telecine, master control etc.)
- Routes air cues from mixer to cameras etc.
- Additional facilities available to special requirements.

# MARCONI Communications Unit

The Marconi BD887 Communication Unit provides the means for the rapid and accurate distribution of instructions which are essential to successful television production.



MARCON'S WIRELESS TELEGRAPH COMPANY LIMITED - MARCONI HOUSE - CHELMSFORD - ESSEX - ENGLAN

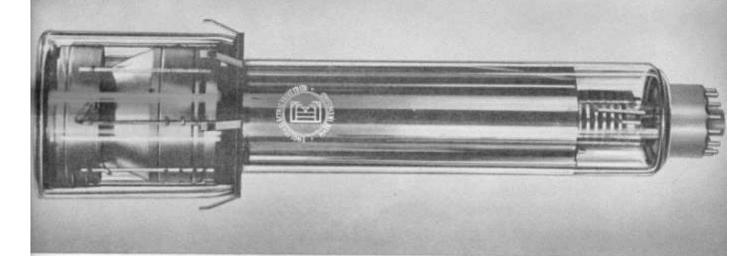
ISION SYSTEMS

42

# 'ENGLISH ELECTRIC'

# Image Orthicons and Vidicons for Television





Developed over the years by English Electric Valve Co. Ltd. and used in Television systems throughout the world to provide the finest picture quality, 3-inch and 4½ inch Image Orthicons and 1-inch Vidicons are supplied for studio, outside broadcast and medical applications. Full data and outline drawings of the complete range of English Electric camera tubes are available on request.

# ENGLISH ELECTRIC VALVE COMPANY LIMITED

AGENTS THROUGHOUT THE WORLD

Chelmsford, England. Telephone: Chelmsford 3491

Years advertised:

S and V

## **MARCONI**







The type TF 1417 is a compact and versatile instrument for laboratory, industrial or systems applications.

Modular printed circuits and unit construction techniques are employed, ensuring reduced weight and small size. Dimensions: 7 in. × 17 in. × 14 in. Weight: 30 lb. Can be readily converted for rack mounting.

up to

## 7 - decade in-line readout

circuitry

Measures 0 to 10 Mc/s and time intervals down to 0.2 µsec.

Sensitivity: 0.25 volt

DC gating techniques allow remote

function control

Time interval measurement against internal or external standards

Internal check of all decade dividers and counting units

Auxiliary output for operation of digital printer

#### London and the South: English Electric House, Strand, London, W.C.2. Tel: COVent Garden 1234

MARCONI

**INSTRUMENTS** 

A good name for good measure

Midlands: 24 The Parade, Leamington Spa. Tel: 25212

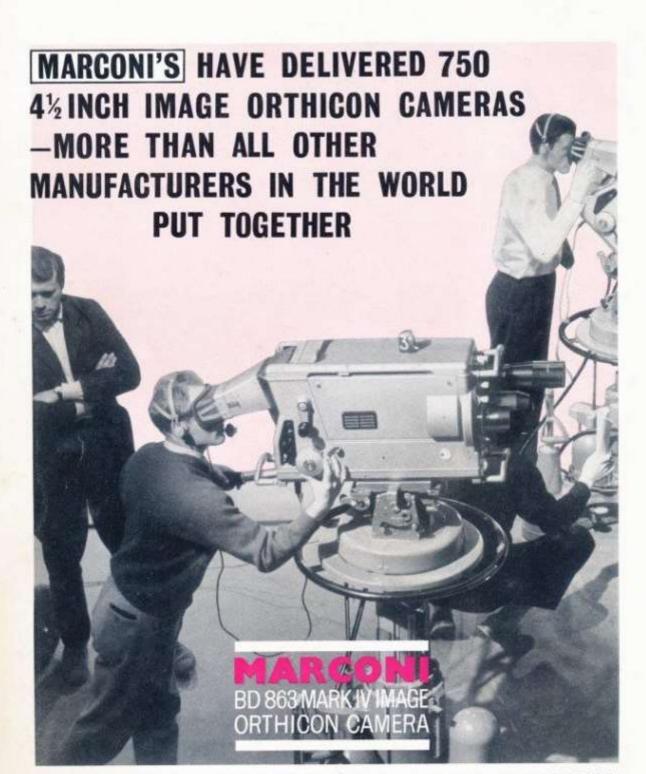
North: 23/25 Station Square, Harrogate. Tel: 67454

Export Dept. St. Albans, Herts., England. Tel: St. Albans 59292

44

Years advertised:

S and V



EXTREME STABILITY - FIRST CLASS PICTURE QUALITY - LIGHT AND COMPACT



MARCONI'S WIRELESS TELEGRAPH COMPANY LIMITED CHELMSFORD - ESSEX - ENGLAND ....



Marconi's have sold more than 1,000 4½ inch
Image Orthicon Television Cameras to half the
countries in the world currently operating
television services. The Marconi Mark IV Camera
has become the standard against which
all other television cameras are judged.

MARCONI

**TELEVISION SYSTEMS** 

BROADCASTING DIVISION THE MARCONI COMPANY LIMITED, CHELMSFORD, ESSEX, ENGLAND
BIZ

Years advertised:

S and V 1963

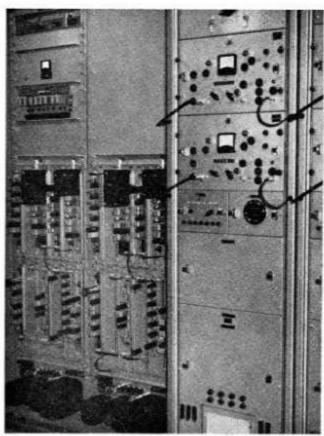


THE MARCONI COMPANY LIMITED . CHELMSFORD . ESSEX . ENGLAND



Years advertised:

S and V



3 watt peak vision

(the basic translator BD368A)

50 watt peak vision

(BD368A plus 50 watt amplifier)

500 watt peak vision

(BD368A plus 500 watt amplifier)

■ Can be used as a translator or a low power local transmitter or a combination of both. ■ Only one guard channel, and no "forbidden" channels.

3 Versions available (on Bands I and III)

- Automatic operation—no permanent staff required.
- Simple construction and economical running costs.

# Gap Filling

# MARCONI TRANSLATORS FOR TELEVISION

Marconi Television Translators furnish a simple and inexpensive means of providing a reliable television service in areas of poor reception.

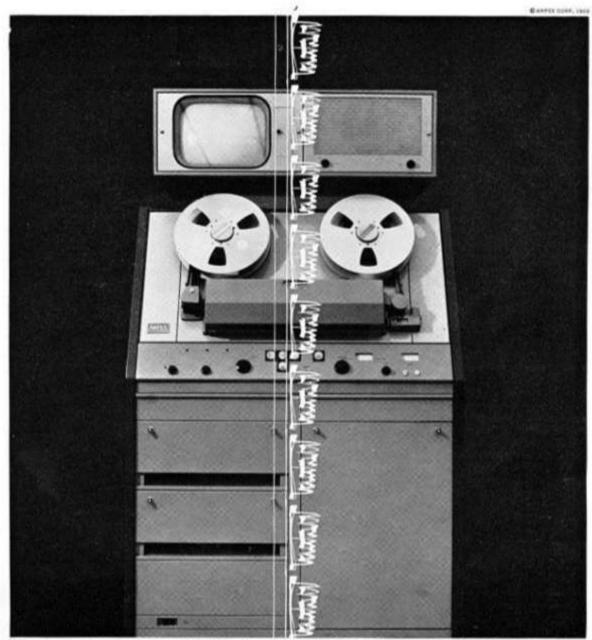


#### COMPLETE SOUND AND VISION SYSTEMS

THE MARCONI COMPANY LIMITED CHELMSFORD - ESSEX - ENGLAND

Years advertised:

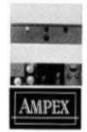
S and V



What's the state of the art in basic solid state VTRs?

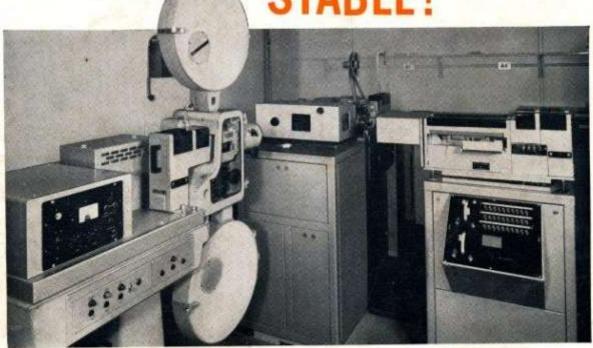
AMPEX VR-1100

There's only one way to improve the VR-1100, and that's to add Ampex accessories. We purposely made these optional in order to offer you a basic VTR that you can adapt to suit your own particular needs. With the VR-1100 you add only the accessories you need, when you need them. And as a basic tape machine, the VR-1100 has no equal. It is a value engineered Ampex product representing the state of the art in solid state broadcast Videotape\* Recorders today. In addi-



tion to a fully transistorized recorder, for less than \$35,000 you get superb Ampex picture quality; utter simplicity of operation; two speeds—71/6 and 15 ips; recording time up to three hours; and compatability with all four-head recorders. Call your Ampex representative or write the only company providing recorders, tape, core memory devices for every application—as well as Marconi cameras, accessories: Ampex Corp., Redwood City, Calif. Term leasing and financing.

# SIMPLE! COMPACT! STABLE!



MARCONI VIDICON TELECINE CHANNEL BD 922 The BD922 is based on the use of a large-size pellicle multiplexer and the new BD896 Vidicon Camera Channel which uses the same control equipment as the well known Mark IV Image Orthicon Camera.

■ Simple, highly efficient optical system with unique automatic light control ■ Control of several channels from one position, with full remote control if required ■ Easy servicing and standardization of units with Mark IV Image Orthicon cameras ■ Facilities for interlock of separate sound reproducer and automatic starting available ■ Specially designed sound channels with optical and magnetic inputs ■ Automatic sound level and light control makes for great operational simplicity.



THE MARCONI COMPANY LIMITED CHELMSFORD . ESSEX . ENGLAND

When your work is worthy of the world's finest instruments...







# Marconi Instruments WAVE ANALYSER type TF 2330

- # Frequency range: 20 c/s to 50 kc/s
- Measures harmonic and intermodulation distortion, noise and hum levels down to -75 dB
- # A.F.C. obviates the need for continual re-tuning
- Output at frequency of component under investigation is available for monitoring
- B.F.O. output frequency, coincident with voltmeter tuning, provides automatically-tracked signal for response or transmission measurement
- # External recorder may be connected
- Transistored. Low power consumption. Quick warm-up, Mains or battery operation
- Rack-mounting version available

Please write for full particulars of this new instrument. Address your enquiries to Marconi Instruments Limited at your nearest office.

#### Area Offices :

English Electric House, Strand, London, W.C.2. Telephone: COVent Garden 1234 48 Whiteladies Road, Bristol 8. Telephone: Bristol 39639 .3:25 Station Square, Harrogate. Telephone: Harrogate 67454

#### Head Office - Home and Export Sales:

St. Albans, Herts., England. Telephone: St. Albans 59292

A GOOD NAME FOR GOOD MEASURE



TCHR

4

#### Years advertised:

S and V



Marconi's have sold more than 1,000 4½ inch
Image Orthicon Television Cameras to half the
countries in the world currently operating
television services. The Marconi Mark IV Camera
has become the standard against which
all other television cameras are judged.

## Marconi television systems

The Marconi Company Limited, Broadcasting Division, Chelmsford, Essex, England

CTD BO

#### Years advertised:

S and V

1964

# Marconi vidicon telecine channel

#### **BD 922**

#### simple compact stable

The BD 922 is based on the use of a large-size pellicle multiplexer and the new BD 896 Vidicon Camera Channel, which uses the same control equipment as the well-known Mark IV Image Orthicon Camera.

Simple, highly efficient optical system with optional unique automatic light control.

Control of several channels from one position, with full remote control if required.

Easy servicing and standardization of units with Mark IV Image Orthicon cameras.

Facilities for interlock of separate sound reproducer and automatic starting available.

Specially designed sound channels with optical and magnetic inputs.

Automatic sound level and light control makes for great operational simplicity,



## Marconi television systems

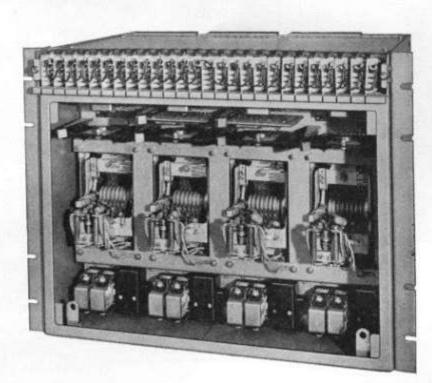
The Marconi Company Limited, Broadcasting Division, Chelmstord, Essex, England LYDJ869

# Marconi uniselector switching panel

#### **BD932**

Uniselectors have for many years given trusty service in telephone systems throughout the world. Marconi's have now adapted these well-tried devices to the needs of television switching to give an extremely reliable and economic equipment—the Uniselector Switching Panel BD932.

Extreme reliability with high
performance characteristics
Basic panel has 25 inputs and 4 outputs
Combined vision, sound and control
switching
Completely dustproofed
System Control panels built to
customers' requirements



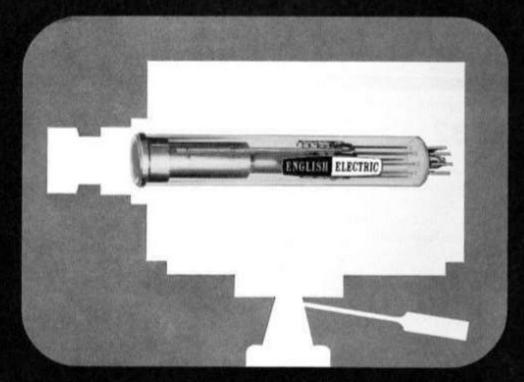
The BD 932 Switching Panel with dust covers removed

## Marconi television systems

The Marconi Company Limited, Broadcasting Division, Chelmsford, Essex, England LTD/862

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# 'ENGLISH ELECTRIC'



# **VIDICONS**

The basis of Compact Low Cost TV Systems

# EEV separate mesh 1-inch high resolution vidicons for studio, CCTV and OB applications.

Separate mesh construction gives resolutions up to 1000 T.V. lines for these NEW Tubes.

P031 This tube features a low power 0.6 watt heater. It is ruggedised for industrial and military applications and has a short overall length. P842 (JEDEC 8541) The P842 also features a low power beater and is intended for the majority of broadcast, educational and industrial applications. A graded version is available for colour and special broadcast purposes. P841 (JEDEC 8507) This tube is a standard 4 watt heater version of the P842 and is designed for use in existing equipment.

Information on the complete range of telestion camero tubes, including 45 and 3 inch Issage Orthicone is available on request or by telephoning extension 262.

#### ENGLISH ELECTRIC VALVE COMPANY LIMITED

AGENTS THROUGHOUT THE WORLD | Chelmsford, England. Tel: Chelmsford 3491 Ext. 262

Years advertised:

S and V

# Marconi sound distribution amplifier



## Marconi television systems

The Marconi Company Limited, Broadcasting Division, Chelmsford, Essex, England LYDISSP

43

### **Marconi Instruments**

# WHITE NOISE

Test Set Type OA 2090



- Measures intermodulation distortion in multi-channel telephone
- and television link equipment, Quick-change filters give high flexibility to suit traffic capacities up to 2,700 channels. The total bandwidth is 12 kc/s to 12,388 kc/s.
- Performance meets C.C.I.R. recommendations.
- \* Filters at out-of-band frequencies allow maintenance measurements in actual traffic.
- All transistor circuitry in two bench- or rack-mounting units.

Designed to provide rapid measurement of Intermodulation pro-ducts and noise in multi-channel telephone and television link equipment, the instrument consists of two units: a noise generator

Please write for full technical information about this new instrument, Address your enquiries to Marconi Instruments Limited at your nearest office.

English Electric House, Strand, London, W.C.2. Tel: COVent Garden 1234. 40 Whiteladies Road, Bristol 8, Tel: Bristol 39639. 23-25 Station Square, Harrogate. Tel: Harrogate 67454.

Head Office: Home and Export Sales: St. Albans, Herts., England. Tel: St. Albans 69292.

type TF 2091 capable of simulating full traffic conditions in any number of channels up to 2,700, and a noise receiver type TF 2092.

The generator incorporates a selection of high-pass and low-pass filters to restrict noise to the required bandwidth, and band-stop filters to create a slot within the band. The noise signal is applied to the baseband circuit of the equipment under test, and the noise in a narrow slot is compared in the loaded and unloaded states. The constant bandwidth receiver has a selection of narrow band-pass filters corresponding to the generator slots, and a meter and attenuator to measure the relative noise level as the generator slot is

A good name for good measure

MARCONI **INSTRUMENTS** 

TC 164

44

# Marconi Band IV/V television transmitters

A universal drive transmitter and a range of amplifiers up to 50 kW power rating

#### drive

Designed for colour with highly accurate independent adjustment of differential gain and phase.

Unique linear diode modulator operating on the absorption principle.

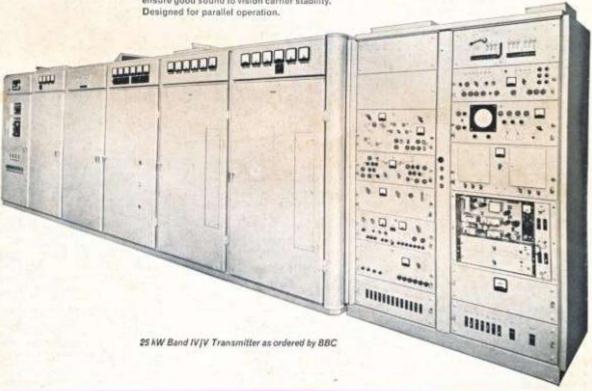
Sound and vision equipment integrated to ensure good sound to vision carrier stability. Designed for parallel operation.

#### amplifier

Similar klystrons used for vision and sound amplifiers.

Air cooling employed up to 10 kW. Water cooled klystrons used for higher powers. No back access required.

Specially designed for parallel operation.



## Marconi television systems

The Marconi Company Limited, Broadcasting Division, Chelmsford, Essex, England

LTD/850

#### Years advertised:

S and V