Automatic colour television camera

Marconi Mark VIII

The camera that lines itself up

Functional

Lightweight

Compact

Marconi the innovators

Marconi have been innovators in television camera techniques for two decades

Marconi pioneered the $4\frac{1}{2}$ inch I.O. camera

Marconi produced the first 'hands-off' camera

Marconi demonstrated the first separate luminance colour camera

Marconi introduced the tilting viewfinder

Marconi introduced the first all solid-state studio camera

Marconi introduced the first 4-tube colour camera using lead oxide tubes

Marconi now introduces the world's first automatic colour television camera

The Mark VIII will transform operating techniques, lightening the load on staff and enabling them to concentrate on picture quality and artistic effects.

Automatic Mark VIII
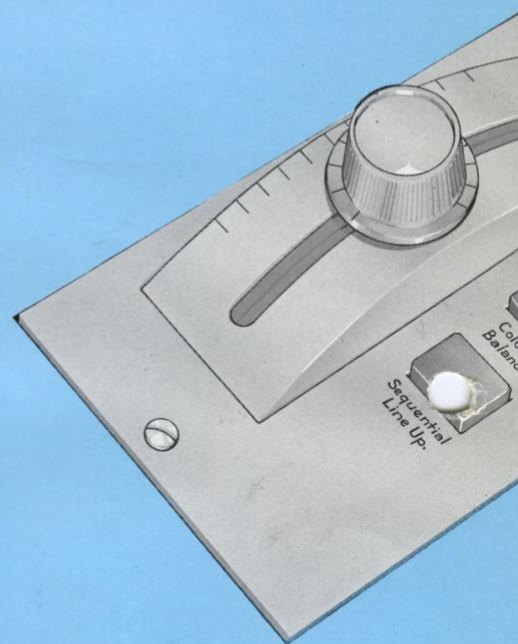
Push SEQUENTIAL LINE UP button and the Mark VIII is lined up

AUTOMATICALLY

Using an internal diascope, an entirely automatic lining-up sequence of operations occur, taking normally about 30 seconds but in the worst case no longer than 3 minutes. Colour is balanced to the test illuminant, the three tubes are aligned in sequence and raster adjustments made, covering scan amplitude, linearity, centring, skew and rotation on red and blue

Sensitive

High performance Mark VIII

Ultra Sensitivity
The Mark VIII gives pictures down to 50 lux (5 foot candles) and works normally at 500 lux (50 foot candles).

Sharpest Pictures
A built-in 2-D aperture corrector, complete with comb filter, gives crisp, noise-free pictures.

Printed Scanning Coils
The Mark VIII is the only camera to have scanning coils printed in cylindrical form, eliminating those registration problems stemming from imperfect yokes, and giving accuracies greater than one part in a thousand.

True Colour Fidelity
The superb colour fidelity that characterized the Mark VII has been improved in the Mark VIII. All optical systems are factory matched to a standard reference before dispatch.

30mm Lead Oxide Tubes
The Mark VIII is designed to use the readily obtainable 30mm tube. Tubes incorporating lag reducing light bias and highlight overload protection are available.

Two-way matrices
A switch selects the right colour correction matrix for indoor or outdoor operation, and ensures correct colour fidelity without the use of colour filters.

Handy Mark VIII

Small and lightweight
The Mark VIII camera is 600mm (2ft) from front of lens to viewfinder screen, 360mm (14in) wide, and under 34kg (75lb) in weight without lens.

Compact CCU
The camera control unit, power supply unit and encoder take up only 533mm (21in) of rack height.

Slim Cable
The Mark VIII can use up to 900m (3,000ft) of a new 12mm ($\frac{1}{2}$in) cable, weighing 22kg per 100m (16lb per 100ft). Other cable types such as T1854 (Mk IV) and TV81 may be used.

100° Tilting Viewfinder
Marconi introduced the tilting viewfinder in 1953 and to match the handiness of the Mark VIII, have given it a viewfinder that tilts over 100°.

Lens Choice
A comprehensive range of zoom lenses, both servo and manual — together with range extenders — is available.

Direct Focus Control
New 2-speed focus control is easy to use and eliminates backlash and sticking of cable controls.

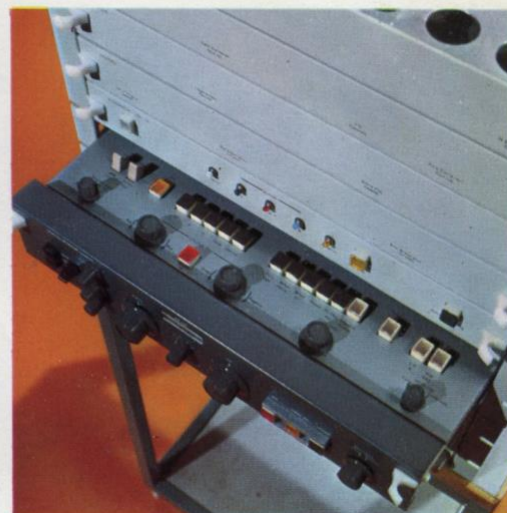**Remote Controlled Filter Wheel**
The Mark VIII filters are controlled by the video operator — freeing the cameraman to concentrate on framing the picture.

Dynamic Centring gives crispest pictures
AUTOMATICALLY

Dynamic Centring, functioning from normal picture information, eliminates the possibility of registration errors occurring during operation.

Push COLOUR BALANCE button and the Mark VIII is colour balanced on the scene illuminant
AUTOMATICALLY

Switch to AUTOTEST for a complete diagnostic check of the Mark VIII (with 31–point visual read-out on the picture monitor)
AUTOMATICALLY

Serviceable

Presentable

Adjustable

Brief Specification

A.C. Input: 100-125V and 200-250V, 48-60Hz 650VA.

Pulse Inputs: Sync and Blanking (1.5-6V) bridging, BNC.

Systems: 625/50 or 525/60 fields not switchable.

Outputs: G, R and B Video 0.7V into 75Ω. In addition colour step, picture and waveform monitor feeds.

Sensitivity: Scene illumination 750 lux (75 foot candles). Scene reflection 60%, lens aperture f/4. Full output at 50 lux (5 foot candles).

Signal/noise ratio: 45dB.

Camera Cable: 12mm (.47in), BICC type T1887. Maximum length 900m (3,000ft). Standard Mark IV cable may also be used.

Registration Accuracy: 0.1% Zone A, 0.25% Zone B.

Lenses: Varotal XXII or Varotal IX, 10:1 manual or servo. 16:1 Varotal XVI servo. Angenieux 10 × 18 L51 manual or servo.

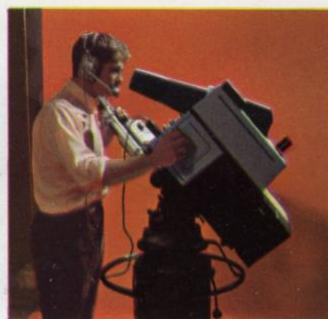**Environment:** Operational Range −10 to +40°C.

Dimensions:
Camera Length 600mm (23.6in). Height 400mm (15.4in). Width 360mm (14.2in). Weight 44 kg (97lb) with manual Varotal XXII. Carrying Weight 28kg (63lb).
C.C.U. Height 640mm (14in), 483mm (19in) rack mounting. Power Unit Height 133mm (5.25in), 483mm (19in) rack mounting.
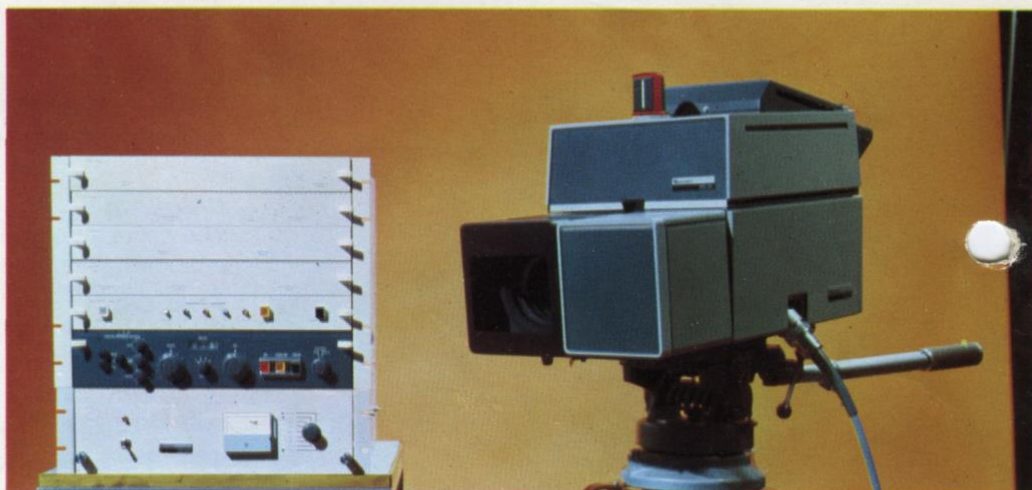

Accessible

Manoeuvrable

Adaptable

Marconi Communication Systems Limited

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A GEC-Marconi Electronics Company

For further information see TD B3215.

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