



Underwater Television Equipment Type V 0020

A LARGE number of applications for underwater television are to be found in shallow water of up to 300 ft (91 m) in depth, in connection with normal diving operations. The Type V 0020 system, together with its incorporated lighting, is easy for divers to handle underwater. The associated control and display equipment is robust and suitable for use by unskilled personnel.

This equipment normally uses the Industrial Television Camera Channel Type V 3020 (see page 178) which comprises two units, Camera Type V 3021 and Camera Control Unit Type V 3022. The most suitable display is the 14 in. Picture Monitor Type V 6112 (see page 190). A waveform monitor is recommended where scene conditions are likely to vary.

The underwater camera housing and the two 150-watt directional lights have been designed by Messrs. Siebe Gorman & Co. Ltd. Two versions are available, one slightly buoyant to aid manoeuvrability by a diver and the other non-buoyant for operation from the surface. Both are finished in bright yellow to assist location underwater. Camera and lighting cables are de-

tachable for transport purposes, the connectors being protected by specially designed muffs for underwater use. A Pierre Angenieux 25 mm $f/0.95$ lens is normally supplied.

Various ancillaries are available including a clear water cone, a motor-driven alternator, a photographic camera with frame for fitting on to a 14 in. monitor, a mounting frame for camera control unit, monitor and oscilloscope, and alternative sizes of monitor (see pages 190 and 191).

Features

Compact and rugged construction, designed to withstand rigorous conditions.

Specially designed lights with Perspex windows, mounted on an adjustable crossbar which also serves as a handlebar underwater.

Operation of camera may be at distances of up to 1000 ft (300 m) from the control unit, further flexibility being provided by extending the control panel from the control unit to a distance of up to 500 ft (150 m).

Advanced electronic construction techniques include the use of printed-wiring boards and special-quality valves.

Data Summary

Scanning standards: 405, 525 or 625-line operation as required.

Video output: 1.5 V p-p composite into 75 Ω positive polarity.

Modulated r.f. output: 100 mV with 60% modulation; standard frequency 20 Mc/s.

Ambient conditions: The camera control unit may be operated in ambient temperatures up to 50°C. Camera casing and lights are tested to 200 lb/in². Maximum depth of operation: 300 ft (91 m).

Power supply: 100-125, 200-250 V a.c., 50/60 c/s.

Power consumption: Camera channel, 220 VA; lighting, 300 W.

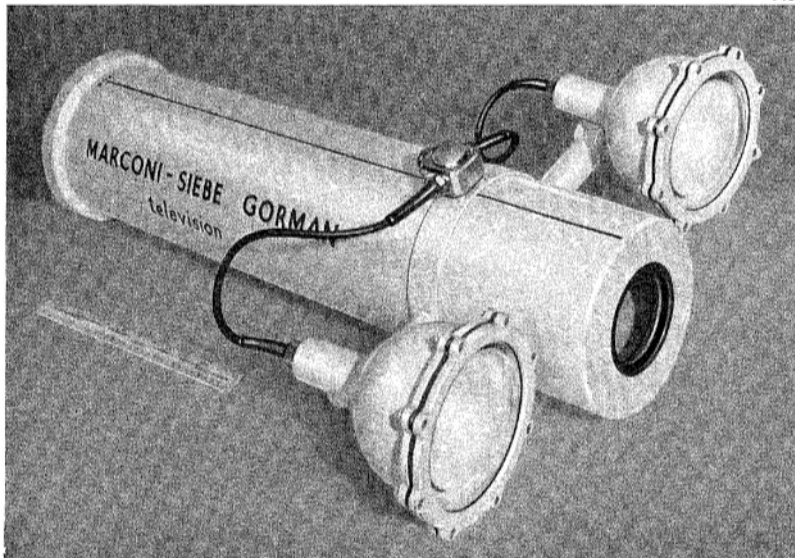
Dimensions:

Camera assembly (overall)

Width 2 ft 2 in. (66 cm)

Length 3 ft (91 cm)

Weight (in air) 73 lb. (33 kg)



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Marconi

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