Eddystone Communication and Radio Interference Measuring Receivers

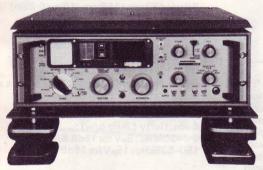
The name Eddystone Radio has been associated with radio receivers for fifty years, having started as a trade name for equipment produced in 1922 by an old-established Birmingham business family. During the succeeding years, a world-wide reputation was built up for solidly-built shortwave receivers and associated components.

Since the mid-sixties, and under Marconi ownership, the Company has substantially expanded its business and has maintained its reputation for high quality and economic prices. All equipment is built to exacting standards and special versions are produced in large numbers to satisfy the stringent demands of many organizations including the Ministry of Defence, Ministry of Posts and Telecommunications and broadcasting authorities in the U.K and overseas. Generally to DEF 133 Class L2

Only receivers with a general appeal are included here, but enquiries are invited for any specific requirements in the general range 10kHz to 1000MHz. Ancillary equipment manufactured by Eddystone Radio includes s.s.b adaptors and drive units, f.s.k adaptors and electronic keying units of advanced design.

Most of the equipment listed can be supplied for either bench or rack-mounting, and is also available with anti-vibration mounts. Matching plinth or cabinet speaker units, telephone headsets and aerial equipments (including special types for v.h.f/u.h.f) will be found in our standard range of accessories. Comprehensive data sheets on all receivers, etc. are freely available on request.

High-Stability Communication Receiver Model EC958/7E provides a higher order of MODEL EC958/7E stability and incorporates a number of detail



Shown with optional extras – Shock mounting and drip proof cowl

Model EC958/7E provides a higher order of stability and incorporates a number of detail improvements which extends its usefulness in many applications. A feature is the digital display of the received frequency reading to Hz. Utilization of some standard EC958 modules and sub-units in the EC958/7E simplifies spares holding for establishments using a number of receivers of each type.

Frequency coverage: 10kHz to 30MHz in ten overlapping ranges.

Reception modes: c.w-m.c.w-a.m-s.s.b. FSK capability with optional module fitted internally.

Sensitivity:

A.M: $3\mu V$ for 10dB S+N/N ratio (3kHz B/W) C.W/s.s.b: $1\mu V$ for 10dB S+N/N ratio (3kHz B/W) C.W (10-100kHz): $1\mu V$ for 20dB SINAD ($1\cdot 3kHz$ B/W)

Power supply:

A.C:105/130V or 210/260V (40–60Hz) D.C:12V or 24V with external d.c./a.c converter (Eddystone Type 979)

Dimensions (cabinet version excluding optional extras):

Width: 502mm (19·75in) Depth: 457mm (18in) Height: 165mm (6·5in) Weight: 22·7kg (50lb)

High-Stability ISB Communication Receiver MODELEC958/12



The EC958/12 design retains all the standard features of the EC958/7E. This receiver provides for ISB reception in a single receiver unit incorporating separate Upper and Lower sideband and carrier channels. The carrier channel provides a comprehensive a.f.c and a.g.c generating network. The upper and lower sideband channels have facilities for independent $600\,\Omega$ line outputs which can be continuously monitored by means of front panel meters, the meters being switchable to indicate a.g.c levels or all three channels. A separate meter displays the whole a.f.c range and an l.e.d indicates optimum a.f.c operation.

Frequency coverage: 10kHz to 30MHz in ten overlapping ranges

Reception modes: c.w-m.c.w-a.m-s.s.b-i.s.b. FSK capability with optional module fitted internally.

Sensitivity:

A.M: $3\mu V$ for 10dB S+N/N ratio (3kHz B/W) C.W s.s.b/i.s.b: $1\mu V$ for 10dB S+N/N ratio (3kHz B/W) C.W (10-100Hz): $1\mu V$ for 20dB SINAD ($1\cdot 3$ kHz B/W)

Power supply:

A.C:100/130V or 200/V (40–60Hz) D.C:12V or 24V with external d.c/a.c converter. (Eddystone Type 979)

Dimensions (cabinet version):

Width: 502mm (19·75in) Depth: 457mm (18in) Height: 210mm (8·25in) Weight: 32·65kg (72lb)

Eddystone Communication Receivers

General Purpose HS Communication Receiver

MODEL1837/2



British Patent No. 1526338

The 1837/2 is intended for general purpose applications in the frequency range 100kHz to 31 MHz. This model provides reception facilities for c.w, m.c.w, and a.m signals together with upper and lower sideband reception of A3A, A3H and A3J signals. Standard features include a six-digit electronic display of receiver tuned frequency together with search and high stability modes of operation. The 1837/2 has been designed generally to meet British Defence Specification DEF 133 Class L2. Other versions available please enquire.

Frequency coverage: 100kHz to 31MHz in nine ranges with fine-tune facility on Ranges 1–5.

Reception modes: c.w-m.c.w-a.m-s.s.b (selectable u.s.b/l.s.b).

Sensitivity:

15dB s/n ratio 3kHz bandwidth a.m -1.5μ V c.w/s.s.b -0.5μ V (75 Ω input all ranges).

Power supply:

A.C:100/130V or 200/260V (40–60Hz) D.C:12/24V with separate invertor.

Dimensions (rack mounting):

Panel: 483mm×159mm (19in×6·25in) Rack intrusion: 334mm (13·125in) Weight: 16·783kg (37lb)

Ships Main and Reserve Receivers

1837/1 and 1838



British Patent No. 1526338

The 1837/1 and 1838 communication receivers intended for maritime applications in the frequency range 100kHz to 31MHz. The 1837/1 provides reception facilities for c.w, m.c.w, and a.m signals, together with selectable upper and lower sideband reception of A3A, A3H, and A3J signals. The 1838/1 is specially intended for maritime and high stability radio telephone applications in the range 1.6MHz to 31MHz and provides reception facilities for m.c.w, and a.m signals with upper/sideband reception of A3A, A3H, and A3J signals. Other versions are available. Both receivers are in accordance with UK MPT requirements and CEPT draft recommendations for marine main and Radio Telephone Reserve Receivers. Standard features include a six-digit electronic display of receiver tuned frequencies together with high stability modes of operation. Generally designed to meet British Defence Specification DEF 133 Class L2.

Frequency coverage:

1837/1 100kHz to 31 MHz in nine ranges. Fine tune above 1·6MHz 1838 1·6MHz to 31 MHz in five ranges with fine tune facility

Reception modes:

1837/1 c.w-m.c.w-a.m-s.s.b (selectable u.s.b/l.s.b) 1838 m.c.w-a.m-s.s.b (upper sideband)

Sensitivity:

1837/1 (50/75 Ω input all ranges) 15dB S/N ratio, 3kHz B/W: a.m 30% mod= 3μ V emf; c.w= 1μ V emf. 1838 for 10dB S/N ratio. With 75 Ω input all ranges. AM 3μ V at 30% mod CW 1μ V (not on 1838/1)

Power supply:

A.C:100/130V or 200/260V (40–60Hz) D.C:12/24V with separate invertor

Dimensions (rack mounting):

Panel: 483mm×159mm (19in×6·25in) Rack intrusion: 334mm (13·125in) Weight: (approx.) 16·783kg (37lb)

Marine Reserve Receiver

MODEL1004



This is a special marine version of the '1000 Series' with full U.K, M.P.T approval for use as a ships' reserve receiver, providing reception facilities for c.w, m.c.w and a.m. It provides coverage of all usual marine frequencies and has provision for crystal-controlled working in the range $1\cdot 6$ to 30 MHz; an integral pre-tuned crystal-controlled converter allows rapid selection of 2182 kHz for emergency watchkeeping. All usual communications facilities are provided including aerial relay, desensitizing, independent $600\,\Omega$ line output and clarifier for s.s.b.

Frequency coverage: 150-535kHz and $1\cdot6-30$ MHz in seven ranges plus pre-tuned channel set to 2182kHz.

Up to ten spot frequencies can be crystal controlled using standard style 'D' crystals

Reception modes: c.w-m.c.w-a.m.-s.s.b (u.s.b/l.s.b)

Sensitivity (3kHz b/w): 1.6-30MHz: 5μ V for 15dB S/N.

150-535kHz: 15μ V for 15dB S/N.

2mm [18 /5m]

Power supply:
A.C:100/130V or 200/260V (40–60Hz)
D.C:12V or 24V battery direct (isolated earthing to accommodate all battery arrangements).

Dimensions:

Panel: 483mm×133mm (19in×5·25in) Rack intrusion: 222mm (8·75in)

Weight: 7.7kg (17lb)

VHF Receiver MODEL 990R



Civil Aviation Ref: 10D/CA/5967 NATO Number: 5820/99/199/2527

A single-conversion receiver of advanced circuit design ideally suited for laboratory or communications use. Frequency coverage extends from 27–240MHz with provision for crystal controlled working. Standard i.f bandwidths are 30kHz and 200kHz with alternative filters to order. Video and $600\,\Omega$ audio outputs are provided.

Frequency coverage: 27–240MHz in four ranges

Reception modes: c.w-a.m-f.m

Sensitivity:

 $5\mu V$ for 10dB S/N (a.m mode 30kHz b/w)

Power supply:

A.C:100/130 or 200/260V (40–60Hz) D.C:12V from external battery (negative earth)

Dimensions (cabinet version)

Width: 426mm (16·75in) Height: 165mm (6·5in) Depth: 376mm (14·8in) Weight: 16kg (35·25lb)

Eddystone Communication Receivers

General-Purpose VHF/UHF Receiver A range of professional-grade v.h.f/u.h.f

MODEL 1990R Series



Civil Aviation Ref:10D/CA/32198

A range of professional-grade v.h.f/u.h.f receivers for communications and laboratory use in the band 25–500MHz. Provision for high-stability working is a standard feature. Receivers are supplied with either a 10-channel crystal facility or an integral synchroniser unit (as illustrated) allowing continuous tuning in increments of 100Hz. Three i.f bandwidth positions are available. As standard 30kHz and 250kHz filters are fitted. Enquire for alternative filters. Video and 600 Ω audio outputs are provided.

Frequency coverage:

Model 1990R/1: 25–235MHz in five ranges. Model 1990R/3: 25–500MHz in seven ranges

Reception modes: a.m-f.m-c.w-pulse

Sensitivity:

(10dB S+N/N with standard o/p) Mode b/w 25-140 140-235 235-500 MHz MHz MHz 30kHz 3μV $5\mu V$ 10µV *a m * *f.m 250kHz 3μV $5\mu V$ 5µV 30kHz 2µV 3µV 3µV (*) 30% mod at 1kHz (**) 22.5kHz deviation

Power supply:

A.C: 100/130V or 200/260V (40–60Hz)

D.C: 12V (negative earth)

Dimensions (cabinet version):

Width: 502mm (19·75in) Height: 165mm (6·5in) Depth: 457mm (18in) Weight: 25kg (56lb)

UHF Receiver

MODEL1990S



The Model 1990S is a professional grade u.h.f receiver intended for communications and laboratory use. The frequency range covered is 440 1000MHz and provision is made for high stability working. Operating voltage can be taken from any standard 40–60Hz a.c supply or 12V d.c with negative earth. The receiver employs single conversion with an intermediate frequency of 36·5MHz except f.m mode when there is a further conversion to 21·4MHz. Video and 600 Ω audio outputs are provided.

Frequency coverage: 440-1000MHz.

Reception modes: a.m-f.m-pulse

Sensitivity:

(10dB S+N/N with standard o/p)

Mode b/w 440–1000MHz *a.m 400kHz 5μV **f.m 400kHz 5μV

(*) 30% mod at 1kHz (**) 22:5kHz deviation

Power supply:

A.C: 100/130V or 200/260V (40-60Hz)

D.C: 12V with negative earth

Dimensions (cabinet version):

Width: 502mm (19·75in) Height: 164mm (6·5in) Depth: 457mm (18in) Weight: 25kg (56lb)

Solid-State Broadcast Receiver

MODELEB35 Mk III



The EB35 MkIII has a wide frequency range covering long, medium and three short wave bands, plus international f.m broadcast coverage. The a.m aerial input has a special Eddystone diode protection array, designed to minimise the damage likely to be caused by local high-power radiation or lightning. A telescopic aerial is fitted as standard. A 5in diameter speaker is fitted. Provision is made for an internal speaker and for personal listening via a standard Post Office headset socket. The audio stages can be used independently for microphone, tape or phonograph reproduction. Optional power packs for dry battery, a.c mains and external 12/24V d.c supplies are available.

Frequency coverage:

V.H.F/f.m: 88-108MHz

Range 1:8·5–22MHz (35–13·5m) Range 2:3·5–8·5MHz (85–35m) Range 3:1·5–3.5MHz (200–85mm) Range 4:550–1500kHz (545–200m) Range 5:150–350kHz (200–850m)

Sensitivity:

F.M: $5\mu V$ for 20dB S/N (22·5kHz deviation) A.M: $6\mu V$ for 15dB S/N (ranges 1–3) $10\mu V$ for 15dB S/N (ranges 4 and 5)

Power supplies:

D.C: 9V (6×U2 or HP2 cells) or 12V or 24V external source using optional converter unit Cat, No. 945A.

A.C:100/125V or 200/250V, 40–60Hz using optional mains power unit (Eddystone Type 924A)

Dimensions:

Height: 162mm (6·37in) Width: 317mm (12·5in) Depth: 208mm (8·18in)

Weight (inc. batteries): 5.0kg (11lb)

AM/FM General Purpose Receiver MODEL1570



The Eddystone Model 1570 is a low cost, fully solid state a.m/f.m general purpose receiver. Model variants cover the requirements of both professional and semi-professional users.

Added features include 'S' Meter for peakingin on weak signals, B.F.O and Product detector for c.w and s.s.b reception, telescopic aerial, tape record output and f.m mute.

Frequency coverage:

F.M:88–108MHz Range 1:18–30MHz Range 2:8·5–18MHz Range 3:3·5–8·5MHz Range 4:1·5–3·5MHz Range 5:580–1500kHz

Range 6: 150-350kHz

Sensitivity:

F.M 5μ V for 20dB S/N with 22·5kHz deviation A.M 3μ V for 12dB S/N C.W 2μ V for 12dB S/N

Intermediate frequencies

F.M: 10.7MHz; a.m: 455kHz

Power supplies:

A.C: supply 100–120V and 200–250V (40–60Hz). Optional internal rechargeable sealed lead-acid battery. External 12V d.c supply (negative earth).

Dimensions:

Height: 135mm (5·25in) Width: 410mm (16·25in) Depth: 320mm (12·5in) Weight: 9kg (20lb)

Eddystone Communication Receivers

Single-channel Crystal-controlled Communication Receiver

MODELEC964/7 Series



A family of compact low-cost receivers intended for fixed frequency terminals where high performance and reliability with provision for local and/or remote operation are essential installation requirements. Six versions are currently available, together with associated ancillary equipment. The basic receiver provides reception facilities for A3J telephony. Other variants can accommodate A1, A3, A3A, A3H and F1. A clarifier facility is provided and stability is better than 10Hz over the range -10° to +55°C. Facilities for remote operation can be provided.

Frequency coverage: Crystal-controlled on any specified channel in the band 1.6-27.5MHz with clarifier facility of ±300Hz. Also available for any spot frequency 400-535kHz.

Sensitivity:

 $1\mu V$ for 15dB SINAD (s.s.b mode).

Power supply: D.C: 12V or 12/24V versions to order. A.C: either version can be fitted with optional power unit to provide 100/130V or 200/250V (40-60Hz)

Dimensions:

Panel: 483mm × 88mm (19in × 3·5in) Rack intrusion: 266mm (10-5in) overall.

Weight: 7.7kg (17lb).

MF/HF Multi-channel Receiver MODEL EC1964



The Eddystone Model 1964 is a multi-channel receiver which can be tuned to a number of pre-determined fixed frequencies over the range 1.6-27.5MHz. Versions permit reception of u.s.b and l.s.b (A3A, A3H and A3J) and also d.s.b and F1 telegraphy. A compact low cost highly versatile receiver which can satisfy a wide range of diverse requirements including extended or remote control

Frequency coverage:

1964/1:10 channels arranged in 5 pairs. Each pair of channels to be in any one of the following bands:

1.6- 3.0MHz

5.7-10.8MHz 10.8-20MHz 20·0-27·5MHz

3.0- 5.7MHz Pre-tuned r.f circuits are provided on each channel. Alternatively, reception can can be arranged below 1.6MHz

Power supplies:

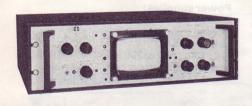
100/130V and 200/260V 40-60Hz

Dimensions:

Panel 483mm × 88mm (19in × 3.5in). Intrusion into rack 420mm (16.5in) (including allowance for cabling). Weight: 10kg (22lb)

Panoramic Display Units

MODEL EP1061 Series



Designed as ancillaries for use with standard receivers these units provide for highresolution linear or logarithmic display of signals on a screen size 10×6cm. In the logarithmic mode the range is 40dB. The sweep frequency is variable from 1.5kHz to 15kHz (1061A/1); 20kHz to 10MHz (106B/1) and a calibrator is incorporated. An input attenuator enables the strength of signals to be compared. Other features include four selectivity ranges and provision for scan reversal.

Input frequencies:

1061A/1 switch 100kHz or 1.4MHz 1061B/121·4MHz

Sensitivity:

(For 1cm trace deflection) 1061A/1 1µV; 1061B/1 25µV

Resolution (maximum):

1061A/1 60HZ; 1061B/1 2kHz

Power supply:

A.C: 110/240V (40-60Hz)

Dimensions (cabinet version):

Width: 502mm (19.75in) Height: 165mm (6.5in) Depth: 457mm (18in) Weight: 16.78kg (37lb)

This document gives only a general description of the product(s) and shall not form part of any contract. From time to time changes may be made in the products or in the conditions of supply.

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Equipments to CISPR1 & CISPR2 available. Details upon request.