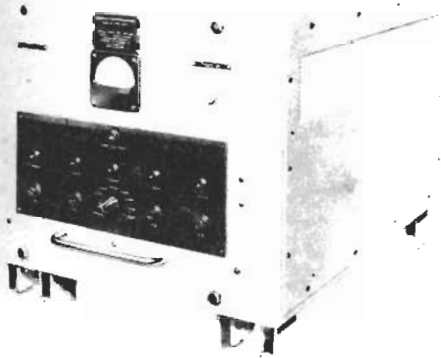


DISPLAY OUTFIT JUA

JUA

SUMMARY OF DATA



AP 103635 DISPLAY POWER UNIT ASSEMBLY



AP 103634 DISPLAY ASSEMBLY

PURPOSE

Display Outfit primarily for use with radar Type 978.

BRIEF DESCRIPTION

The Display Unit employs a 12 inch P.P.I. display having six range scales viz: 1, 2.5, 5, 10, 20 and 40 nautical miles. Timebase linearity is to within 5% of the range of an echo or 2½% of the maximum of the scale in use. Calibration rings or adjustable brilliance are provided at intervals of 0.2, 0.5, 1, 2, 4 and 8 miles for the above ranges respectively (ie five markers for each range scale). Accuracy of calibration rings is within 2% of the indicated range or 1% of the maximum range of the scale in use, or 50 yards. An adjustable range strobe having three range scales of 0.2 - 4 miles 400-18000 yards and 0.4-40 miles is switched independently of the timebase range. Remote indication of range scale is provided by switch contacts and of range marker by a magslip transmitter coupled to the range strobe control. The accuracy of the range strobe is the same as for the calibration rings. An illuminated cursor enables the bearing of an echo anywhere on the display to be read to an accuracy of 1°. Azimuthal stabilisation can be introduced into the magslip transmission from the aerial to the display and a magslip transmitter is coupled to the bearing cursor for remote bearing indication.

The signal circuits include facilities for variable differentiation and adjustable swept gain. A sensitivity control operates variable clipping for use with logarithmic receiver and a gain control for use with linear receiver. An additional control to provide swept clipping for log. receiver is also incorporated and this control can also be used to give swept video gain for linear receiver. A switch selects log. or linear inputs. The minimum range of detectable targets is 50 yards on short pulse and 200 yards on long pulse. On the one-mile range, the equipment is capable of discriminating between two small objects in line, 50 yards apart.

The Display Unit will accept sync. pulses of any amplitude between 2.5 and 30 V. positive polarity, at repetition frequencies between 400 and 3000 p.p.s. The Unit, with its associated power pack, will operate with any radar provided the correct signals, sync. pulse, bearing data, ship's head marker and power supplies are available.

MAJOR UNITS

- Patt. No.	Description	Physical Data			
		Height	Width	Depth	Weight
103634	Display Unit	1 ft 10 in	1 ft 5½ in	2 ft 2 in	160 lb
103635	Display Power Pack	1 ft 5 in	1 ft 5 in	1 ft 10 in	110 lb

POWER REQUIREMENTS AND CONSUMPTION

115/230 V, 50-60 Hz, 150 W (approx.), 115 V, 400 Hz, to Display Power Unit  
 100-125 V } a.c. (any frequency) 200 W (approx.) to Display and Power Unit anti-condensation heaters  
 or 200-250 V }

## RESTRICTED

BR 333(1)  
Original

### REMARKS

An AP 103637 Reflection Plotter, AP 103638 Light Excluding Unit and AP 102682 Visor Assembly can be fitted in the front of the Unit.

### HANDBOOK

BR 1156

### ESTABLISHMENT LIST

E 1201

### INSTALLATION SPECIFICATION

B 882