1. INTRODUCTION

Type 271 I.D.F. set is designed to operate on surface targets and is not intended as a warning set for use against aircraft.

The wavelength is 30 cms. (3000 m/c./sec.) and the transmitter power about 5 kW. The beam radiated from the serial system is much sharper than that employed in longer wave sets. This means that searching for targets must be carried out methodically and facilitates operation in narrow waters and differentiates between targets at similar ranges on not widely different bearings.

There are two range scales; 5000 yards, and 25,000 yards, (These may be altered in the near future, in which case the calibration technique described on page 20 will be slightly different). (See Page 23).

The short range scale will give greater range accuracy, the sharper nature of the echoes on the long range scale makes their detection much easier when their amplitude is little more than noise level.

If accurate ranging is required special additional ranging equipment is necessary. The Type 271 indicator even when most carefully set up must not be expected to give an accuracy greater than ± 200 yards at ranges below 1,000 yards and ± 500 yards at ranges greater than 10,000 yards.
## TYPE 271

**INTER-UNIT CONNECTIONS - PLUGS & LEADS**

### SOCKET REFERENCE
- a: Power Input
- b: Signal Input
- c: Signal Output
- d: Power Supplies to Amplifier
- e: Sync. Input
- f: Monitor Input
- g: Supply to Indicator
- h: Oscillator Output
- i: 160° 500x
- j: Power Supplies
- k: Power Input
- l: W/M Supply
- m: Crystal Test
- n: Monitor

### PLUGS & LEADS

<table>
<thead>
<tr>
<th>REF.</th>
<th>No. STAMPED ON LEAD</th>
<th>CABLE</th>
<th>TERMINATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1</td>
<td>ABE 48C</td>
<td>HT. SOCKET</td>
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<tr>
<td>B</td>
<td>2</td>
<td>9MM KLS.</td>
<td>LOW CAPACITY PLUG &amp; PYE CONNECTOR</td>
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<tr>
<td>C</td>
<td>3</td>
<td>9MM KLS.</td>
<td>PYE SOCKETS</td>
</tr>
<tr>
<td>D</td>
<td>4</td>
<td>AP 758B</td>
<td>AP 3947 SOCKET 5 WAY</td>
</tr>
<tr>
<td>E</td>
<td>4</td>
<td>AP 758B</td>
<td>AP 3947 SOCKET 5 WAY</td>
</tr>
<tr>
<td>F</td>
<td>5</td>
<td>AS. 42</td>
<td>PYE CONNECTORS</td>
</tr>
<tr>
<td>G</td>
<td>6</td>
<td>AP 758B</td>
<td>AP 3947 SOCKET 5 WAY</td>
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<tr>
<td>H</td>
<td>7</td>
<td>SCREENED FLEX CONNECTOR</td>
<td>SOCKETS, 6 WAY MAPWIRE</td>
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<tr>
<td>J</td>
<td>8</td>
<td>AS. 42</td>
<td>PYE CONNECTORS</td>
</tr>
<tr>
<td>K</td>
<td>9</td>
<td>AS. 42</td>
<td>AP 651 PLUG, PO GAUGE A &amp; PYE SOCKET</td>
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<td>L</td>
<td>10</td>
<td>AP 758B</td>
<td>AP 4674 &amp; 3947 SOCKETS, 5 WAY</td>
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</table>
TYPE 271.
INDICATOR UNIT

SCHEMATIC DIAGRAM OF CONTROLS

1. POWER SUPPLIES
2. TO WAVE METER
3. SIGNAL INPUT
4. SYNC. INPUT
5. HORIZ. SHIFT
6. VERT. SHIFT
7. MONITOR INPUT JACK
8. CALIBRATION ON-OFF
9. BRILLIANCE
10. FOCUS
11. 100-25000 YARDS
12. 5000 YARDS
13. 25000 YARDS FOR RANGE
14. SCALE