

L MULTIPLEX TERMINALS
COMMON EQUIPMENT
A5 CHANNEL BANK CARRIER SUPPLY
DISTRIBUTING BUS OUTPUT TEST

The J68857A channel carrier distribution unit (Fig. 1) receives, from the J68857B carrier generator and filter unit, 12 channel carrier frequencies at 4-kHz intervals in the range of 64 to 108 kHz. The channel carrier distribution unit contains distributing buses for distribution of the 12 channel carrier frequencies to a maximum of 30 channel banks. Each distributing bus has a test jack (TST CH 1, 2, 3 ... or 12) for measuring the output power of each channel carrier frequency. The channel carrier supply unit and the channel carrier distribution unit are mounted in the same bays as the A5 channel banks.

The purpose of this test is to measure and, if necessary, adjust (by strapping resistors R1, R2, R3 ... and R6) the output power of each of the 12 channel carrier distributing buses.

The information in this section was previously in Section 356-250-501. It is renumbered in the process of reorganizing the 356 Division of practices. *Equipment Test Lists are affected.*

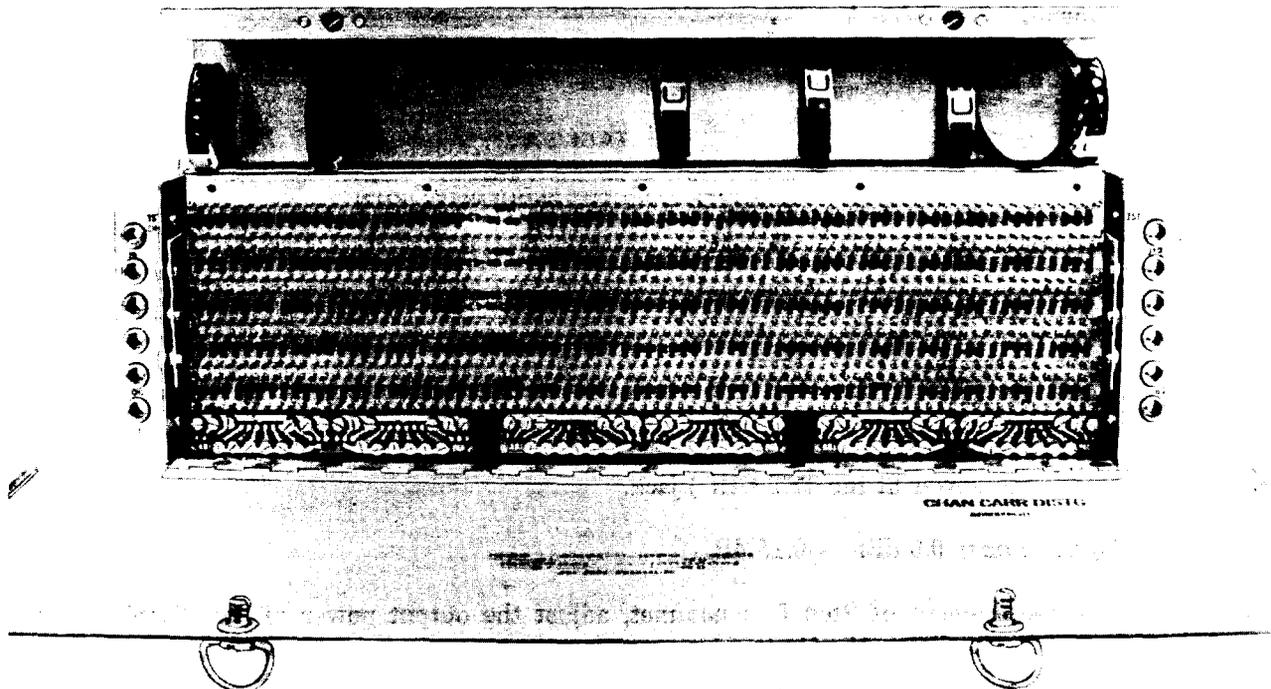


Fig. 1—J68857A Channel Carrier Distribution Unit—Front Cover Lowered

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APPARATUS

Receiving Test Equipment (RTE) (Section 356-010-500):

Frequency: 64 to 108 kHz

Power: 0 dBm

Impedance: 135 ohms balanced

Example: 34A TMS

3P17C Cord

| STEP | PROCEDURE | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|-------------|-----|----|----|----|----|----|----|----|----|----|----|----|-----------|-----|-----|-----|----|----|----|----|----|----|----|----|----|
| 1 | <p>Unfasten the two twist-lock screws and lower the hinged front-panel cover of the J68857A channel carrier distribution unit to gain access to the distributing buses and test jacks.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | <p>Verify that all unused bus taps are terminated with 130-ohm load resistors.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | <p>Adjust the receiving test equipment as follows:</p> <p>Impedance: 135 ohms balanced</p> <p>Frequency: See Table A</p> <p>Power: 0 dBm</p> | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>TABLE A</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>CHANNEL CARRIER FREQUENCIES (KHZ)</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Channel No.</th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> <th>6</th> <th>7</th> <th>8</th> <th>9</th> <th>10</th> <th>11</th> <th>12</th> </tr> </thead> <tbody> <tr> <td>Frequency</td> <td>108</td> <td>104</td> <td>100</td> <td>96</td> <td>92</td> <td>88</td> <td>84</td> <td>80</td> <td>76</td> <td>72</td> <td>68</td> <td>64</td> </tr> </tbody> </table> | Channel No. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | Frequency | 108 | 104 | 100 | 96 | 92 | 88 | 84 | 80 | 76 | 72 | 68 | 64 |
| Channel No. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | | | | | | | | | | | | | | | |
| Frequency | 108 | 104 | 100 | 96 | 92 | 88 | 84 | 80 | 76 | 72 | 68 | 64 | | | | | | | | | | | | | | | |
| 4 | <p>Connect the RTE to the TST CH() jack of the distributing bus to be tested [patch (1), Fig. 2].</p> | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | <p>Measure the power at the TST CH() jack.</p> <p>Requirement: 0.0 dBm \pm0.25 dB</p> | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | <p>If the requirement of Step 5 is not met, adjust the output power of the distributing bus to meet the requirement. Do this by operating the screw switches indicated in Table B.</p> <p>Note: The screw switches are identified on the inside of the front cover of the J68857A panel.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | <p>Remove patch (1), Fig. 2.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | |

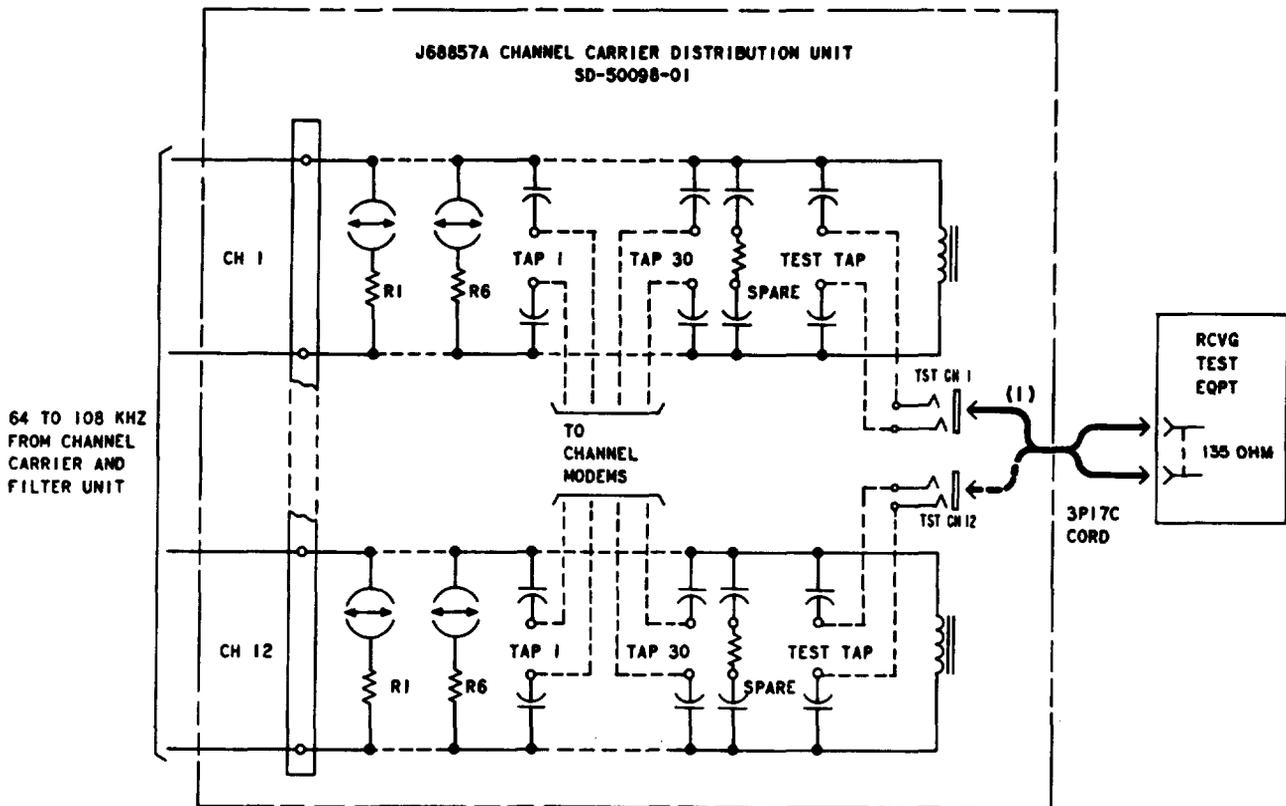


Fig. 2—J68857A Channel Carrier Distribution Unit—Measurement of Output Power

| STEP | PROCEDURE | | | | | | | | | | | | | | |
|--|--|--------------|---------------------------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|
| ◆ TABLE B ◆ | | | | | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th data-bbox="488 1357 737 1421">SCREW CLOSED</th> <th data-bbox="737 1357 1133 1421">OUTPUT POWER DECREASED DB</th> </tr> </thead> <tbody> <tr> <td data-bbox="488 1421 737 1474">No. 1 only</td> <td data-bbox="737 1421 1133 1474">0.5 ± 0.1</td> </tr> <tr> <td data-bbox="488 1474 737 1527">No. 2 only</td> <td data-bbox="737 1474 1133 1527">1.0 ± 0.1</td> </tr> <tr> <td data-bbox="488 1527 737 1581">No. 3 only</td> <td data-bbox="737 1527 1133 1581">1.5 ± 0.2</td> </tr> <tr> <td data-bbox="488 1581 737 1634">No. 4 only</td> <td data-bbox="737 1581 1133 1634">2.0 ± 0.2</td> </tr> <tr> <td data-bbox="488 1634 737 1687">No. 5 only</td> <td data-bbox="737 1634 1133 1687">2.5 ± 0.2</td> </tr> <tr> <td data-bbox="488 1687 737 1725">No. 6 only</td> <td data-bbox="737 1687 1133 1725">3.0 ± 0.3</td> </tr> </tbody> </table> | | SCREW CLOSED | OUTPUT POWER DECREASED DB | No. 1 only | 0.5 ± 0.1 | No. 2 only | 1.0 ± 0.1 | No. 3 only | 1.5 ± 0.2 | No. 4 only | 2.0 ± 0.2 | No. 5 only | 2.5 ± 0.2 | No. 6 only | 3.0 ± 0.3 |
| SCREW CLOSED | OUTPUT POWER DECREASED DB | | | | | | | | | | | | | | |
| No. 1 only | 0.5 ± 0.1 | | | | | | | | | | | | | | |
| No. 2 only | 1.0 ± 0.1 | | | | | | | | | | | | | | |
| No. 3 only | 1.5 ± 0.2 | | | | | | | | | | | | | | |
| No. 4 only | 2.0 ± 0.2 | | | | | | | | | | | | | | |
| No. 5 only | 2.5 ± 0.2 | | | | | | | | | | | | | | |
| No. 6 only | 3.0 ± 0.3 | | | | | | | | | | | | | | |
| 8 | Repeat Steps 3 through 7 for each channel carrier frequency to be tested. | | | | | | | | | | | | | | |
| 9 | If it was necessary to adjust a distributing bus, remeasure and, if necessary, readjust each distributing bus to ensure that the requirement of Step 5 is still met. | | | | | | | | | | | | | | |
| 10 | Raise and fasten the hinged front-panel cover. | | | | | | | | | | | | | | |