Instruction Book

For

Catalog Number: 497-1

Frequency: 136-174 MHz

Document Part Number: TP1003

Word Perfect File:497-1

Dist: Production Supervisor, Marlboro
QC Supervisor, Marlboro
Marketing Distribution Manager, Marlboro

Note: Production Supervisor is responsible for maintaining document control for sub distribution to test stations.

Note: Distribution Manager is responsible for updating distributor and Tennessee warehouse locations with latest revisions.

Note: Only the most current revision level of this document should be retained. The second page contains the revision level history. Discard documents without revision level identification.

Celwave R.F. Inc.

Marlboro, NJ Phoenix, AZ

Instructions authorized and controlled by Engineering Manager Filter Products.

```
/* $Log:    D:/document/497-1  $

      Rev 3.0   10 Jun 1993 10:59:34   MIKE
   ECN No: 93-441-TAV.
   Updated TP # on cover sheet.

      Rev 2.0   21 Apr 1993 11:42:26   MIKE
   ECN No: 93-273-SF
   Updated Cover sheet to include TP#.

      Rev 1.0   21 Jan 1992 10:58:58   MIKE
   Initial revision.
*/
```

PASS REJECT BASE DUPLEXER: 497-1

Reference: Duplexer Mechanical (attached)

Instruction Book ~~500-1~~ 505-1 Cavity

Description: The 497-1 duplexer consists of 6, 505-1 dual notch cavity resonators arranged with 3 resonators in each of the two duplexer channels.

Tuning: The duplexer will normally be supplied factory tuned to frequencies specified by customer and printed on the label.

Each cavity should be tuned as described in the tuning procedure for the 505-1 dual notch cavity resonator. Therefore, when retuning remove all cabling being careful to mark each cable for correct reassembly.

Specifications:

Frequency Separation	Insertion Loss	Isolation
.500 MHz	1.0 dB	100 dB
2.00 MHz	1.0 dB	120 dB

Instruction Book

For

Catalog Number: 505-1

Frequency: 136-174 MHz

Document Part Number: TP1015

Word Perfect File: 505-1

Dist: Production Supervisor, Marlboro
QC Supervisor, Marlboro
Marketing Distribution Manager, Marlboro

Note: Production Supervisor is responsible for maintaining document control for sub distribution to test stations.

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/* $Log:   D:/document/505-1  $

      Rev 2.0   26 Apr 1993 08:30:20   MIKE
   ECN No: 93-273-SF
   Update Cover sheet to include TP#.

      Rev 1.0   21 Jan 1992 10:46:08   MIKE
   Initial revision.
*/
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DESCRIPTION:

The 505-1 cavity is a dual notch resonator designed to pass one frequency and reject another. The reject frequency may be above or below the pass frequency.

TUNING:

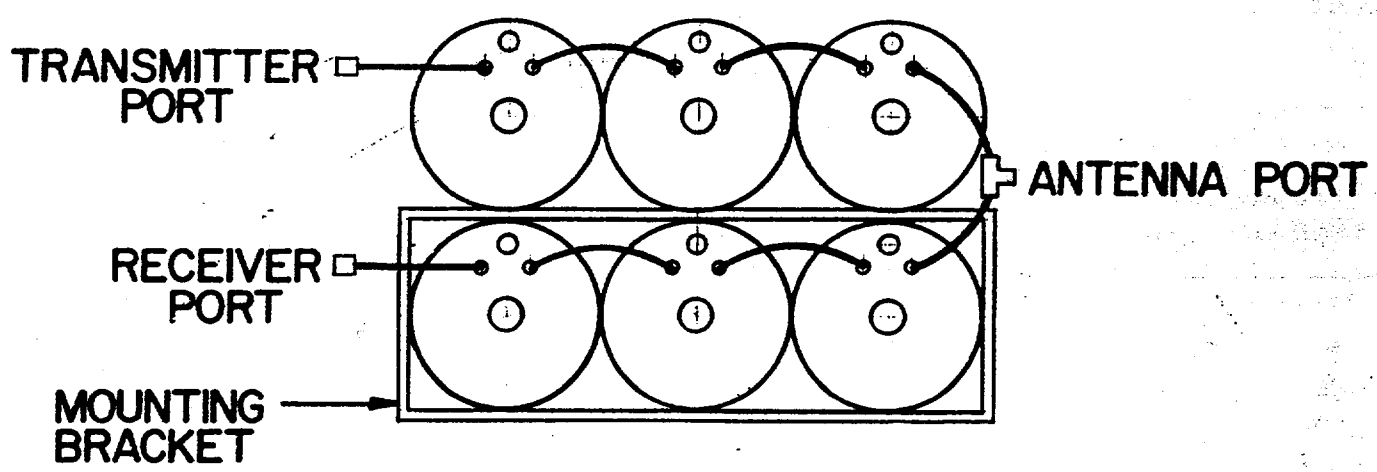
The resonator will normally be factory tuned to the customer specified pass and reject frequencies.

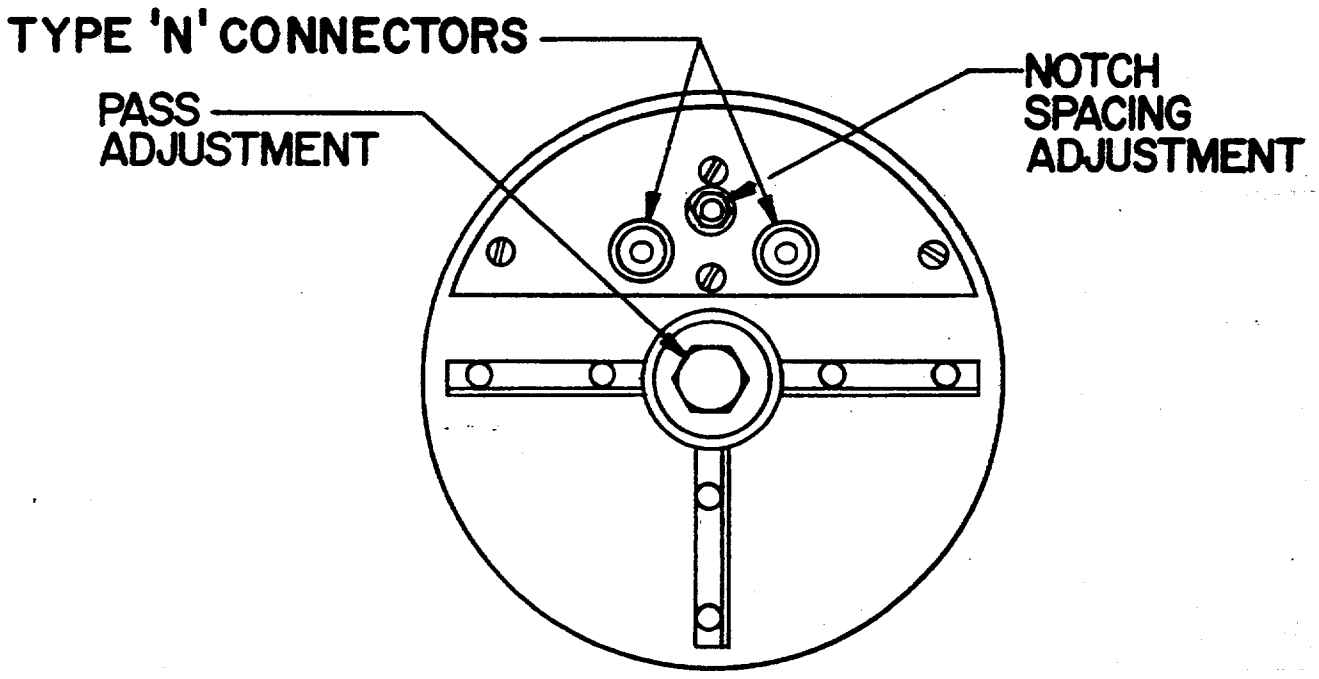
There are two tuning screws on the top cover of the cavity. The large centrally located screw adjusts the pass frequency. The smaller screw on the connector plate assembly adjusts the notch frequency.

When initially tuning or retuning the cavity, first adjust the cavity to the desired pass frequency using the large screw. The notch will move along with the pass frequency so as to maintain approximately the same pass-notch spacing. Then adjust the cavity for the desired notch frequency using the smaller screw. Turning the notch screw in moves the notch above the pass, towards the pass and moves the notch below the pass, away from the pass. Turning the notch screw out moves the notch above the pass, away from the pass and the notch below the pass, towards the pass.

The dual notch nature of the frequency response allows the same cavity to be used for either hipass or lowpass operation. As a lowpass cavity the notch above the pass is tuned. As a hipass cavity the notch below the pass is tuned.

FRONT VIEW OF DUPLEXER WIRING





SINGLE CAVITY