

WAVEMETER CLASS D. No. 1.

ABRIDGED WORKING INSTRUCTIONS.

PRELIMINARY:

1. Connect a 6-volt Battery with Polarity as indicated.
2. Plug in L.R. Phones, put Dial to "0" and switch to Frequency Range required.
3. Turn "Set Zero" Control until a Whistle is heard and adjust to give Zero Beat. This Control will require Resetting when the other Frequency Range is used.

COUPLING TO SENDER OR RECEIVER AERIAL:-

Connect short length of wire to "Coupling" Terminal and place it near to Aerial Terminal of Sender or Receiver in case of a Sender. Move Coupling wire towards or away from the Aerial until Whistle is about the same strength as "Set Zero Whistle". For a Receiver the Aerial Coupling should also be weak. N.B. Aerial Circuits of Sender or Receiver must be Correctly Tuned.

TO CHECK CALIBRATION OF A SENDER OR RECEIVER:

1. Listen on Receiver Phones when Calibrating a Receiver, and on Wavemeter Phones when Calibrating a Sender.
2. Put Switch to "Mc/s". Wavemeter now Radiates at 2-0, 3-0, 4-0, . 8-0 Mc/s.
3. Adjust Sender or Receiver Tuning to nearest Megacycle and Re-djust slightly until Whistle is heard and adjust to Zero Beat.
4. Put Switch to Required Range and put Dial at "0". Wavemeter now Radiates at 100 Kc/s points Over the Range,
5. Check Sender or Receiver Calibration at nearest 100 Kc/s Point by Counting Whistles from nearest Megacycle Point.

TO SET A SENDER TO A DEFINITE FREQUENCY:

1. Tune Sender as near a possible to Required Frequency. e.g. 5.345 Kc/s; taking into account the Calibration Error as determined above.
2. Put Dial to Last two figures of Frequency, e.g. to 45 for 5.345 Kc/s. Signals are now radiated over the band at 5.045, 5.145, 5.245, 5.345, 5.445, etc., Kc/s.
3. Re-adjust Sender Tuning slightly until a Whistle is heard in Headphones and press "Check" Button. IF WHISTLE DOES NOT CHANGE IN PITCH THEN THIS IS THE WRONG WHISTLE. On obtaining the Correct Whistle adjust to Zero Beat. Sender is now Tuned Accurately.

SETTING FREQUENCY OF W.S. No. 19 AND W.S. No. 22:

When using the Wavemeter with W.S. No. 19 or W.S. No. 22 use the Netting Procedure given in the Working Instructions for those Sets considering the Wavemeter as the Control Station

TO MEASURE FREQUENCY OF A RECEIVED SIGNAL

Tune in Required Signal and Switch Off B.F.O. if in use. Turn Wavemeter Dial until a Whistle is heard and adjust to Zero Beat.

Dial Reading gives Last Two Figures of Frequency and Other Figures are found from Receiver Calibration taking into account Calibration Error at determined above.

EXAMPLE - if Dial Reading is 28 Kc/s and from Receiver Calibration the Frequency is between 4.700 and 4,800 Kc/s, then True Frequency is 4,700 Kc/s plus 28 Kc/s = 4,728 KC/s.

OCR of the Instruction to be found inside the lid of the Wavemeter.