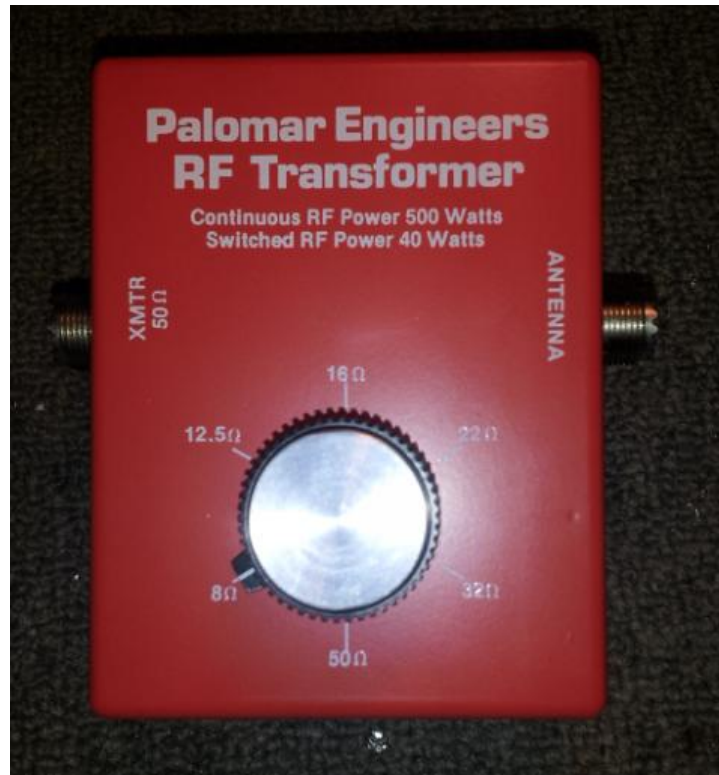




RF Transformer – 500 Watts



The Palomar RF Transformer is designed to give a proper match between a mobile antenna (or any short vertical antenna) and a 50 ohm coaxial feedline. Rated at 500 watts continuous duty into a matched load.

500 WATT
RF TRANSFORMER

Purpose. The 500 watt RF Transformer is designed to give a proper impedance match between a mobile antenna (or any short vertical antenna) and a 50 ohm coaxial feedline. It is particularly useful with the new solid state broadband transceivers that require a close match to a 50 ohm load. Practically none of the mobile antennas currently on the market will match the coaxial feedline closely enough to provide a proper load for the broadbanded amplifier. With the 500 watt RF Transformer, a switch position will be found that will provide SWR readings of 1.4 or less when using common type mobile antennas such as those manufactured by Nutronics, Swan, and HyGain.

Installation. The best location for the 500 watt RF Transformer is right at the base of the antenna. Run a short length of coaxial cable from the "Antenna" terminal of the transformer to the antenna. Then run a 50 ohm coaxial cable from the "Xmtr" terminal of the transformer to your SWR meter (if you use one) and then to the transmitter. The length of the coaxial line from the transformer to the transmitter is not important.

Adjustment; R-X Noise Bridge Method. 1) Use a plug/plug adapter to connect the noise bridge "Unknown" terminal to the "Xmtr" terminal of the transformer. 2) Set transformer knob to 35 ohms. 3) Measure R and X according to instructions supplied with the bridge. Caution: Use receiver only; Do not transmit with noise bridge connected. 4) If R is less than 50 ohms turn the transformer knob to a lower resistance setting and take another reading. If X is not zero, adjust the antenna length or the loading coil tap as required. 5) When the noise bridge reading is as close as possible to R=50 and X=0, remove the noise bridge and connect the transmitter cable directly to the transformer.

Adjustment; SWR Bridge Method. 1) Connect the SWR bridge between the transmitter and the transformer. 2) Set the transformer knob to 35 ohms and measure the SWR according to instructions supplied with the bridge. 3) Adjust antenna or loading coil for minimum SWR. 4) If minimum SWR is higher than 1.1 try another transformer tap. Adjust antenna or loading coil for minimum SWR. Caution: To avoid damage to transmitter, use minimum power required to get SWR readings and do not leave transmitter on any longer than needed.

Transformer Power Rating. The 500 watt RF Transformer is rated at 500 watts continuous duty into a matched load. If the switch position is changed with power on, maximum power capability is 40 watts.

Palomar Engineers

P.O. Box 455, Escondido, California 92025

Palomar Engineers

Manufacturers of Radio Communications Equipment since 1965

Palomar Engineers is proud of the quality and workmanship of its communication equipment. If properly installed and operated in accordance with our instruction manual, it should give reliable performance.

LIMITED 12 MONTHS WARRANTY

Palomar Engineers warrants to the original owner only of this product, if purchased from an authorized dealer or directly from Palomar Engineers, that this product will be free of defects in material and workmanship for a period of 12 months from date of purchase provided the terms of this warranty are satisfied.

1. The purchaser must retain a dated proof-of-purchase (bill of sale, cancelled check, credit card or money order receipt, etc.) describing the product and must submit the original or a machine-reproduction of such proof-of-purchase to Palomar Engineers at the time of warranty service to avoid unnecessary difficulties in establishing the validity of warranty claim. Palomar Engineers shall have the discretion to deny warranty without dated proof-of-purchase.
2. Along with proof-of-purchase, a detailed description of the problem, including details of the electrical connection to associated equipment and a list of such equipment must be submitted.
3. Under no circumstances shall Palomar Engineers be held liable for any loss of damage, direct or consequential, arising out of the use of, or inability to use, this product. Some states do not allow the exclusion or limitation of incidental or consequential damages or limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you.
4. This warranty is given in lieu of any other warranty express or implied.
5. Out-Of-Warranty-Service: Palomar Engineers will normally repair any out-of-warranty products. Write or call the factory at the address or phone number below for authorization. An estimate will be given with this authorization.

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