

OCF antennas are very convenient as they will allow multiple bands of operation with a simple wire antenna which is fed off center. Rather than feeding the conventional 33%/67% we like the 29%/71% feed point wherein the feed point is 21% from one end and fed with a 4:1 OCF Current balun with built in feed line choke ([Palomar part# CB-4-1500OCF](#)). For the PAL-OCF1606 the short side is 49.9 feet and the long side is 184feet. The 40/20 meter resonator stub allows choice of 40 meters at low SWR or 20 meters at low SWR. As originally shipped the stub is adjusted for minimum 40 meter SWR.

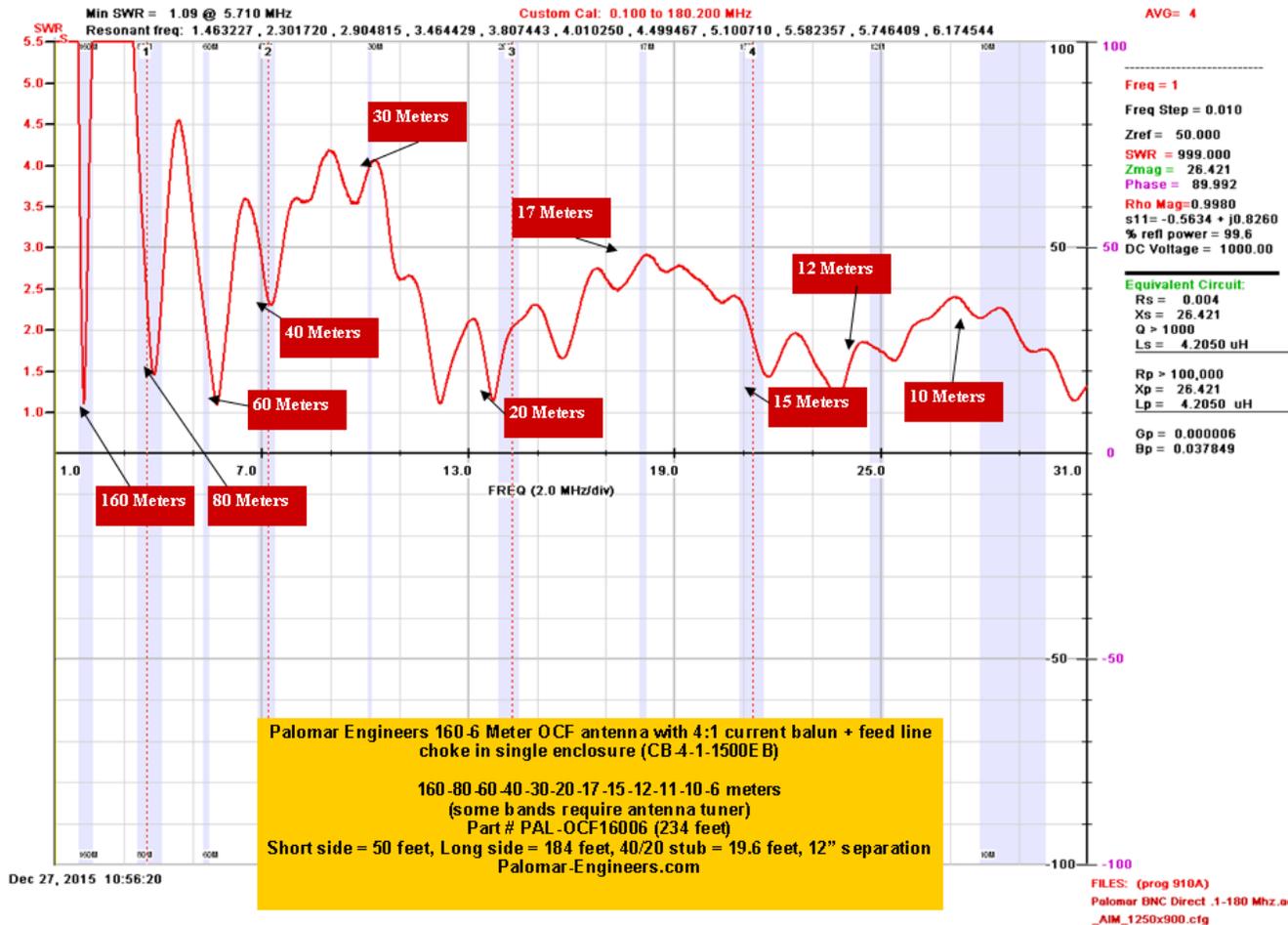
Installation

For best results support center at 30+ feet and ends over 15 feet. Angle of feed each side must be greater than 45 degrees or 120 – 180 degrees total between each side preferred. Any length of 50 ohm feed line ok but longer feed lines over 50 feet may show reduced SWR on some bands due to losses in feed line and soil conductivity, nearby objects, etc. Due to local ground conditions, antenna height and feed line length, SWR may vary from samples shown and an antenna tuner may be required or some bands to bring SWR at end of feed line to acceptable levels. Use a good quality 52 ohm cable adequate for the power level of your station.

The PAL-OCF1606 is rated for 1500 watts PEP at 30% duty cycle for RTTY, AM, or other continuous modes. The PAL-OCF1606HP and PAL-OCF1606EHP are rated for 3KW and 5KW PEP respectively.

To adjust the antenna for minimum SWR on 20 meters (rather than 40 meters), adjust the 40/20 stub by removing 6 feet of length or fold back 6 feet of length on itself to fine tune. For best 40 meter SWR, the stub length is approximately 19 feet, and for 20 meter minimum SWR, the stub length is approximately 13 feet. These dimensions will vary depending on ground conductivity, height above ground, proximity to adjacent objects. Use your SWR meter at the end of the coax to determine the best stub length for 40 or 20 meters.

Typical SWR curves through 200 feet of RG-213 and 35 foot average height (Your curves may be different depending on terrains, ground conditions and surrounding object/antennas):



Note: Second stub (under the longest part of OCF) has the effect of shortening the overall antenna length to 234 feet. If you do not want the second stub, then make the antenna 260 feet long with legs of 79% and 21% of the total length.

CAUTION

USE CAUTION WHEN INSTALLING ANTENNA AND KEEP AWAY FROM ANY POWER LINE WIRES!

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