

Thank you for choosing This 4:1 Dual Core Current Balun

Our 4:1 Current Baluns use 2 separate cores. They are wound with Teflon sleeved wire giving a good match to the required transmission lines to make a 4:1 current balun.

We suggest they will handle 100W of SSB easily and probably quite a lot more, depending on the antenna being close to the ideal of 200 ohms.

Tests with a nanoVNA suggest efficiencies around 98% when used with a 200 ohm load. Other tests using temperature sensors bore this out (we used a 200 ohm dummy load).

Be aware that efficiency drops when the load departs from 200 ohms – and hence the cores will heat more as SWR deviates from 1:1. We used a 135 ohm dummy load which resulted in approx 85% efficiency (so the cores got more warm).

This is an ideal balun to use with an OCF (Off Centre Fed) antenna, and what we have used it for. We used wire lengths cut with 1/3 and 2/3 ratios. Note that nearby structures will affect tuning significantly.

We made a 40/20/10m OCF with lengths 6.5m and 13m (again may need pruning) we are very happy with. We used it on a 7m squid pole during the 2024 RD Weekend in country VK3 and tested it against other antennas. We doubled those lengths for an 80/40/20/10m OCF.

As with all antenna and antenna products, monitor SWR, if the balun heats too much the SWR will rise quickly. Shut down immediately.

Always test your antenna system with low power before applying full power.

We like this box. We tested this balun and box during a particularly rainy early 2024, leaving it in the weather for a month. On opening and inspection it was dry inside.

The box has a sealing gasket that is “reasonable” at keeping water out – however (and un proven) we believe that the gasket will lose efficacy after time, perhaps some years.

We strongly suggest using sealing silicone on the box and also ideally a rain protection method (a plastic shroud for example) if mounting permanently. The coax connector should be similarly treated for weather protection.