

5.2 - Single-Stub Tuning

Reading Assignment: pp. 228-235

Q: *If we cannot use "lumped" elements like inductors or capacitors to build lossless matching networks, what **can** we use?*

A: Recall that a section of **lossless transmission line** is purely reactive, thus we can build lossless matching networks using specific lengths of transmission lines.

We call these lengths of transmission line "**distributed**" elements.

The distributed element analogue of the lumped element L-network is the **single-stub tuner**.

Just like the L-network, there are **two** versions of this design:

HO: THE SHUNT-STUB TUNER

HO: THE SERIES-STUB TUNER