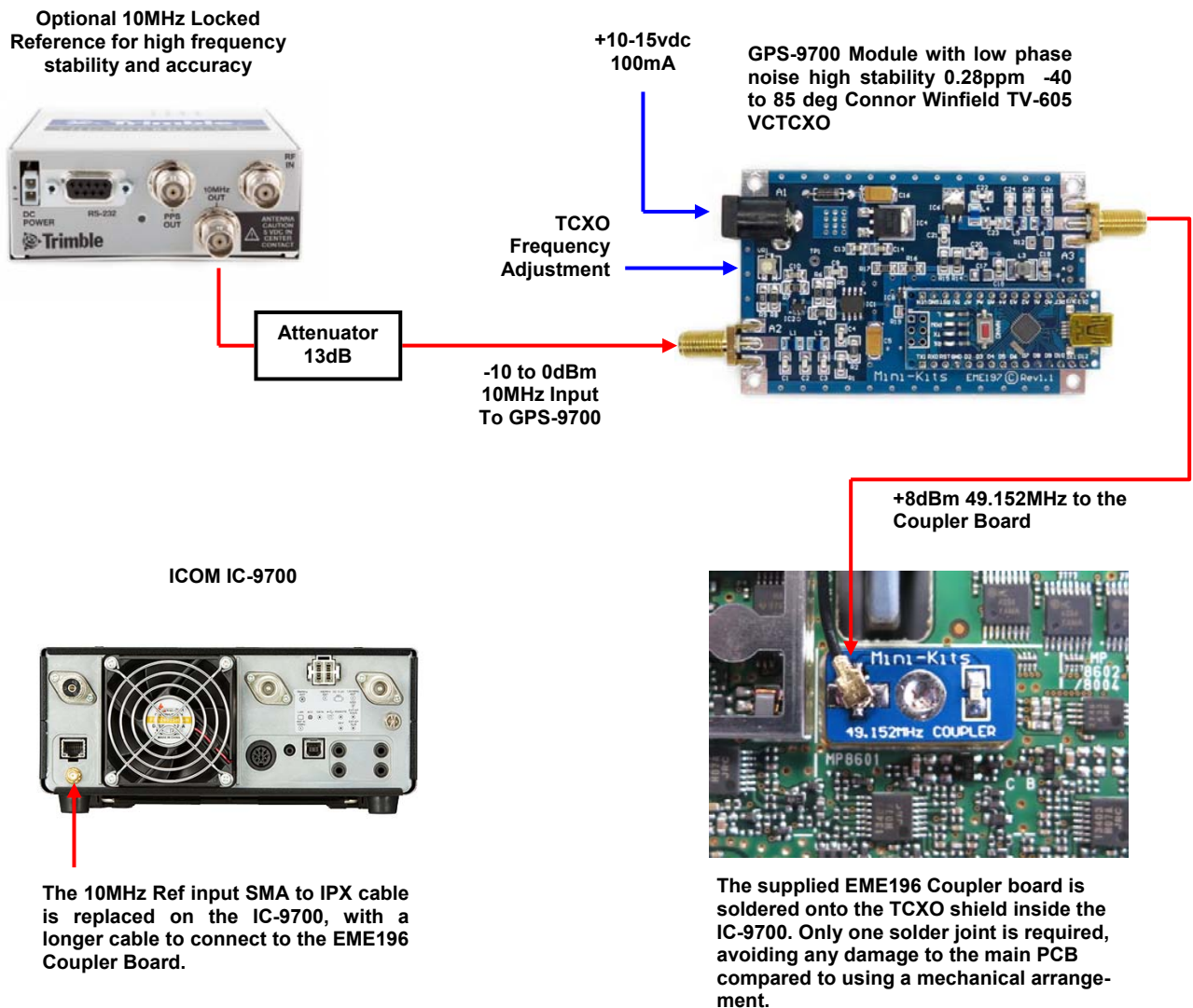


Description: The GPS-9700 is an external signal source that was developed at Mini-Kits by VK5EME and VK5WA for the Icom IC-9700 Transceiver to stabilize frequency when using narrow band weak signal modes. The GPS-9700 can be used with or without an external 10MHz reference input to make an IC-9700 frequency stable to less than 1Hz on all weak signal modes including on the 23cm band. If you need absolute frequency accuracy, it is suggested that the GPS-9700 is locked to a high quality external GPS derived 10MHz frequency reference. The design incorporates a 0.28ppm low phase noise 49.152MHz Voltage Controlled Temperature Controlled Crystal Oscillator (VCTCXO) reference which is amplified, and filtered to produce a very clean RF output. The signal is then injected into the IC-9700's internal 49.152MHz frequency reference using a small coupler PC board to mode lock the frequency.

Due to the frequency stability of the IC-9700's internal TCXO, the Ref Adjustment procedure will be required at times due to seasonal changes of temperature in many parts of the globe.

Disclaimer: The use of this product does require removal of the IC-9700 bottom cover, and replacement of the 10MHz Ref input SMA to IPX cable, and soldering of the small coupler PC board over the brass TCXO compartment. When the GPS-9700 is not used, the Transceiver will still function the same as from the factory and be locked to its internal TCXO. However, the use of the automatic 10MHz calibration on the IC-9700 will no longer work, but this is not an issue as manual calibration is still available. Mini-Kits takes no responsibility if you damage your Transceiver.



The GPS-9700 and Mode locking using a coupler into the IC-9700 was first developed at Mini-Kits by VK5EME and VK5WA in March 2019. Similar products to couple into the IC-9700 TCXO using mode locking have been copied from our product.