

## CW Transmitter: 30/20m modifications

Written by Hans Summers  
Saturday, 25 April 2009 07:52 -

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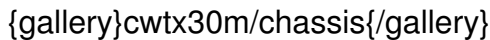
This page describes some simple modifications that were made to this transmitter to allow operation on the 30m and 20m amateur bands, and permit automatic CQ!

**COIL SURGERY:** The first stage was to modify the pi-net coil for 30m and 20m.  
10 turns: 30m  
14 turns: 40m  
27 turns: 80m (whole coil length)



**RELAYS:** This photo shows the installed coil and relays. The large transparent relay in a s

A 12-way rotary switch on the front panel controls both the band-switching relays AND the crystal select

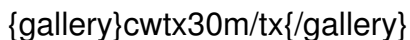


**UNDER THE CHASSIS:** Under the chassis after the modifications. See the new 12-way rotary switch at

I later added another two crystals: 10.106 and 14.060.

In the background, my [80/40m RX](#) with frequency counter [and audio piped from my receiver front end](#)

**NEW LOOK:** New look front panel. At bottom left, there used to be 3



**QRP ON 30M!:** Transmitting on the 10.125 MHz crystal. Under the TX is a little [simple 50mA indicator](#)  
[e 30m direct conversion receiver](#)  
[80/40m RX](#)


The transmitter also tunes fine on 20m using a 14.060 MHz QRP calling frequency crystal. Power output

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 **GO, MACHINE!:**

Look, no hands on the [Key/Crossbeacon](#) (seen here)

 **CROWDED!:**

Behind the rig, it's getting crowded now with all the cab