

## 30m QRSS Beacon

Written by Hans Summers

Wednesday, 06 May 2009 05:22 - Last Updated Wednesday, 06 May 2009 05:42

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A borderline insane 30m QRSS beacon project, completely independent of computer control and contains

- o 12 WPM ordinary CW
  - o QRSS3 (CW with 3 second dot length)
  - o QRSS10 (CW with 10 second dot length)
  - o DFCW3 (dual frequency CW with 3 second dot length)
  - o DFCW10 (dual frequency CW with 10 second dot length)
  - o A type of slow-hellschreiber
- {gallery}qrss/title{/gallery}

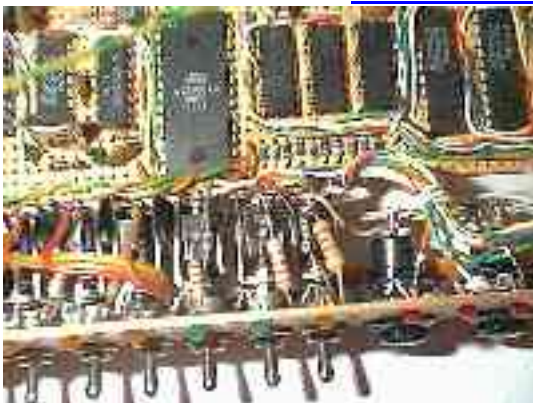
These very narrow bandwidth modes are decoded using a Fast Fourier Transform (FFT) program running on a PC. For more details of these modes visit [ON7YD's Extreme narrow bandwidth techniques](#) page.

This project was/is a long series of modifications, operation periods, reports, and endless expenditure of frustration, patience and sometimes jubilation. Eventually I received reception reports from all around Western and Northern Europe. Since I have a large quantity of material on this topic I have divided the page into a series of sub-pages, which are presented below in chronological order.



**30m Transmitter:**

At the heart of the beacon is the [30m transmitter](#) itself. It uses a 74HC240 octal inverter IC as a power a



**Beacon Controller:**

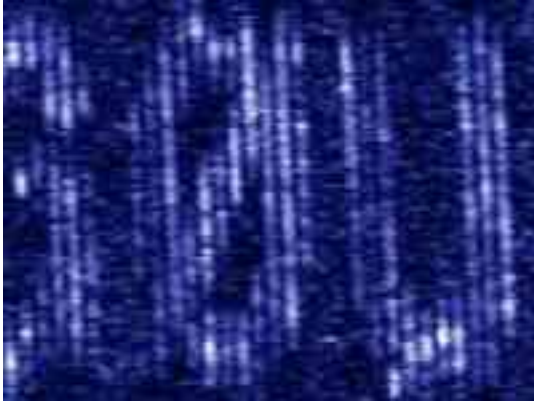
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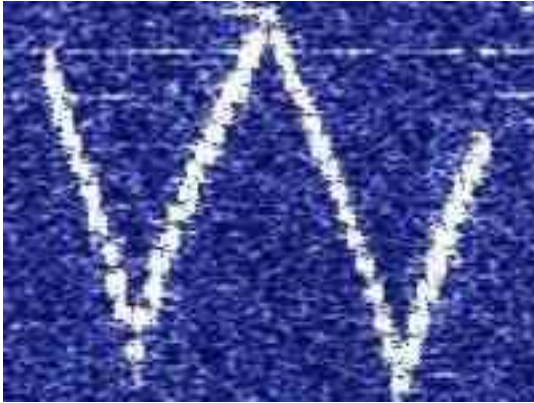
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The QRSS controller uses [Flash](#) Electrically Erasable Programmable Read Only Memory (EEPROM) to s



**26-Mar-04 to 04-Apr-04:**

Initial transmissions during [Read more](#) 2003 had failed to produce even a single report. In March I tried a



**25-Aug-04 to 27-Oct-04:**

Another round of beacon [Read more](#) experiments later in 2004 produced a whole new batch of reception reports. A