# Letters to the Editor

## Fully Automated DDS Sweep Generator Measurement System (Nov/Dec 2008)

**Dear Larry,**

The circuitry for my article, "Fully Automated DDS Sweep Generator Measurement System" in the December 2008 issue of *QEX* requires modifications to operate properly with the 60 MHz DDS Daughtercard, which uses an AD9851. Figure 1 is a revised version of Figure 3 from that article. A pair of inverters in each address line replaces the pull-up resistors R1, R2, and R3. This arrangement prevents a problem that occurs when the parallel port powers up before the DDS, causing the DDS-60 to fail to start. The 30 MHz DDS uses an AD9850 and does not exhibit this problem. This same modification applies to Figures 6, 7 and 8 of the original article.

Input pin voltages on CMOS devices ought not to exceed the supply voltage of the package, as when the DDS card connects to the active computer LPT port with power off.

George Heron, N2APB, is designing a kit based on my article to aid hobbyists. The kit will be available on George's Web site: **www.midnightdesignsolutions.com**.

*— 73, Dr. Sam Green, WØPCE, 10951 Pem Rd, Saint Louis, MO 63146;* **wØpce@arrl.net**

**Hi Dr. Green,**

Thank you for sending along that correction.

*— 73, Larry Wolfgang, WR1B, QEX Editor;* **lwolfgang@arrl.org**

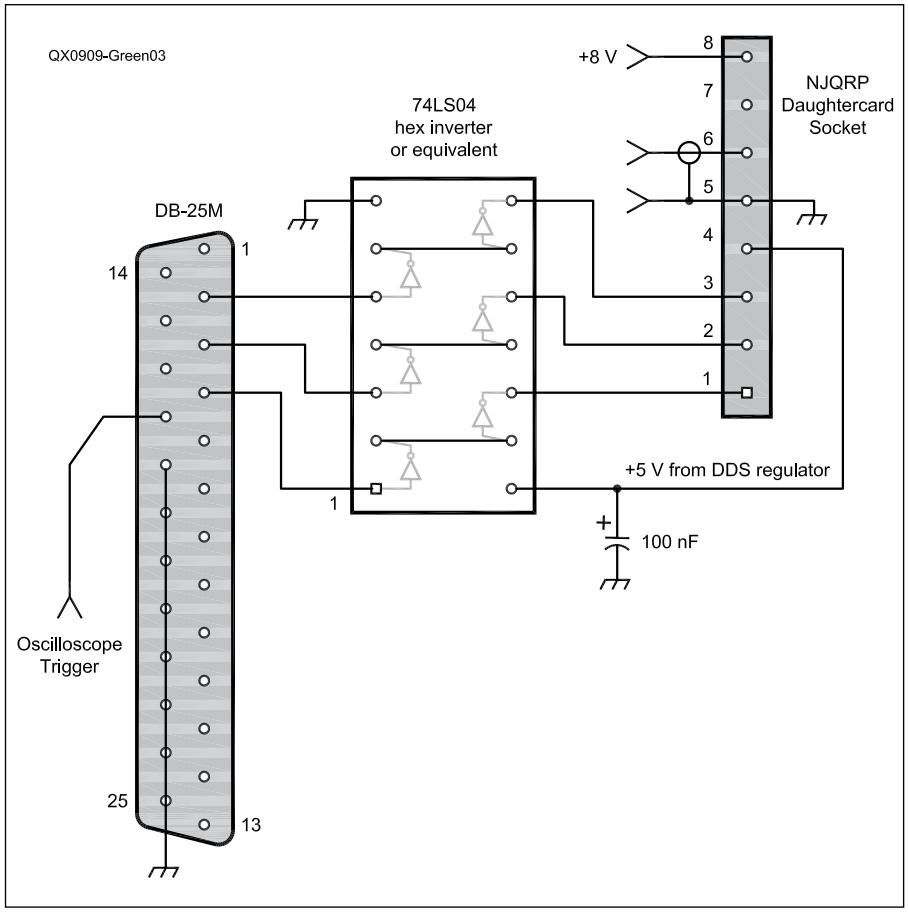


**Figure 1 — This schematic diagram shows a revision to the circuit of Figure 3 in Dr. Sam Green's "Fully Automated DDS Sweep Generator Measurement System" in the Nov/Dec 2008 issue of *QEX*. The revision is only necessary if you are using the NJ QRP Club 60 MHz Direct Digital Synthesis DDS-60 Daughtercard. The modification involves replacing pull-up resistors R1, R2 and R3 with a pair of inverters in each data line. The same modification applies to Figures 6, 7 and 8 of the original article.**

## New Version of HAMCALC Program Collection

**Hi Larry,**

HAMCALC version 110, a single software collection of hundreds of menu-driven "painless math" design programs popular with radio amateurs, professionals and educators worldwide since 1993 is now available as a free download from **www.cq-amateur-radio.com**. There is a direct link to download the program collection on the CQ home page. There are detailed instructions given there for downloading and copying the files to your computer. I hope your readers will find these programs useful.

*— 73, George Murphy, VE3ERP, 77 McKenzie St, Orillia, ON L3V 6A6, Canada;* **ve3erp@rac.ca**

**Hi George,**

Thanks for passing along the information about the new version of your HAMCALC program collection.

*— 73, Larry, WR1B*

## A Cybernetic Sinusoidal Synthesizer: Part 3 (Jul/Aug 2009)

**Dear Larry,**

I have just read Part 3 of Gary Steinbaugh's article in the July/Aug 2009 issue of *QEX* and am sympathetic to his plight in calculating the best resistor pair for his voltage divider.

I too have spent countless hours solving similar problems until I came across *Resistor CAD* a free *Windows* program by Terry Harris of Vader systems. It is small, lightning fast, and does not need to be installed. The program calculates series, parallel and divider pairs, and it knows all the standard resistance values for tolerance ranges from 1% to 20%.

It can be downloaded from Laurier Gendron's download page, **members.shaw.ca/roma/download.html**.

The downloaded file, **rescas.rar**, is compressed using an old pre-Microsoft era compression scheme, which was supplanted by the .zip standard. To uncompress the file, I suggest *7-zip*, a free program that can be downloaded from **www.7-zip.org**. That program will expand .rar files as well as many other compressed file formats including .zip files.

*— 73, Juan A. Mónico, VA7IE, 15020 Ripple Rock Rd, Campbell River, BC, V9H 1N9, Canada;* **juan@monico.org**

**Thanks Juan,**

*Resistor CAD* looks like a very useful program. Thank you for calling it to our attention, and also for the information about *7-zip* to uncompress the downloaded file. To assist readers who may not be able to, or may not want to install *7-zip*, I have also copied the *Resistor CAD* program file into a "standard" .zip file and placed it on the ARRL *QEX* files Web site. Interested readers can go to **www.arrl.org/qexfiles** and look for the file **9x09_rescad.zip**.

*— 73, Larry, WR1B*