



# KARS KEY KLICKS



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## JUNE MEETING FEATURES FIELD DAY PREP

The next KARS meeting will be Tuesday, June 1st, 7PM at St. Mary's Hospital. After a short business meeting, there will be a program featuring Field Day Prep. Also a video featuring the work in progress on the new EM-COMM emergency trailer.

### KARS EMCOMM TRAILER YOUR HELP IS NEEDED

Rollie N9RJM has been working tirelessly on renovating KARS emergency trailer. There is still much work needing to be done. We can't expect one person to do it all.

The trailer is here in Kankakee at Rollie's house on Grinell Road. Give him a call at 815-263-2683 or send an E-Mail to rjmrcing@gmail.com. He is working on the trailer daily from 11AM to whenever? He doesn't have time to call everyone and set up a work session. So make the first move and help out!

It would be nice to have the trailer for Field Day and the Hamfest. With **YOUR** help, this can become a reality.

### KARSFEST FAST APPROACHING

Mark your calendar for KARS 27th annual hamfest. KARSFEST 2010 will be held on Sunday July 18th.

### HAPPY BIRTHDAY

June 10	N9OQC
June 26	KF9DM
June 26	W9IOU
June 30	K9BAK

If we miss your birthday or get it wrong, please let us know!



Staring down the borehole of the satellite antenna at Field Day 2008. Mysterious hand pointing at something!

### KARS KALENDAR

June 1.....	KARS General Meeting
June 5-6.....	ANARTS RTTY Contest
June 6.....	Starved Rock Hamfest
June 12-14.....	ARRL VHF QSO Party
June 15.....	KARS Board Meeting
June 20.....	6 Meter Club Hamfest
June 26.....	ARRL <b>Field Day</b>
July 6.....	KARS General Meeting
July 10-11.....	IARU HF World Championship
July 17-18.....	CQWW VHF Contest
July 17-18.....	NAQP RTTY
July 18.....	<b>KARSFEST!</b>
July 20.....	KARS Board Meeting

*The Kankakee Area Radio Society operates repeaters on:*

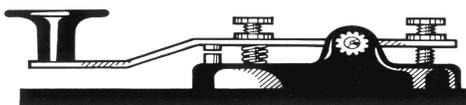
<i>146.34/.94</i>	<i>107.2 PL Access</i>
<i>449.8/444.8</i>	<i>114.8 PL Access</i>

*Also, co-sponsors:*

*145.130 107.2 PL Access*

*Additionally, KARS sponsors:*

<i>144.39</i>	<i>Wide Area APRS digi-peater</i>
<i>145.53</i>	<i>KARS DX Cluster</i>



# W9AZ

### FIELD DAY 2010!

It really is that time again...ARRL Field Day...the largest operating event in amateur radio! Once again, the KARS Field Day operations will be at Kevin N9REG's QTH on RT.115W...Thanks Kevin!

To find Kevin's place, take Rt. 115 west toward Herscher about 1 1/2 miles. The coordinates are:

N 41 03 42.5
W 87 56 00.4

Setup begins at 10:00 A.M. local time Saturday. Operations start at 1300 local time and will end, for us, at 1300 local on Sunday. Of course you can come and go any time you please. However, if you arrive or depart at night, remember to do so quietly.

Naturally, we will need the most people at setup and teardown. Don't miss the steak fry Saturday night...a free steak for participating KARS members. Contact Francis KE9MG to reserve your steak.

We will have a minimum of four operating positions...two HF stations, a VHF/UHF station and a GOTA station. Modes available will include CW & SSB.

Be sure to bring a chair. If you're joining us for dinner bring your favorite beverage, table service and some food to share. See you there!

### NCS FOR JUNE

June 7	KC9FAV
June 14	N9LYE
June 21	K9NR
June 28	WR9L

The net meets every Monday at 2100 hours local time. All stations with or without traffic are invited to check in.

Don't forget the net!

## See you at Field Day!

# KARS HOMEPAGE—WWW.W9AZ.COM—KARS HOMEPAGE

## PARALLEL PORT KEYING—Part 2

by John N9LYE

After a few more late nights and flurry of e-mails back and forth, several other options have come to my attention. In Part 1, I covered the original circuit and a few of the issues that concerned me. The port limitations were addressed and two options were presented. Here are a few more suggestions for you to consider.

The first incorporates both positive and negative keying. Since there are a few older rigs out there that still use this method of keying, including it sounded like a good idea. In Figure 1, both a PNP and an NPN transistor are used along with two resistors and a diode. Even if only the negative keying connection is used, it offers far better port isolation over the original design. It also resolves most of the idle port timing issues encountered with some computers while rebooting.

After all this talk of port isolation, I thought it best to bring this next item to your attention (Figure 2).

The 4N35 optocoupler not only requires less parts, it is a very effective way of isolating the rig from the computer port (See Note 1). Also the input-to-output peak voltage isolation is nearly 3.55 kV. This means, if Plate voltage somehow appears across the keying jack, it won't take out your brand new laptop or desktop! (See Note 2).

Speaking of brand new laptops and desktops, many of the new ones don't have a parallel port.

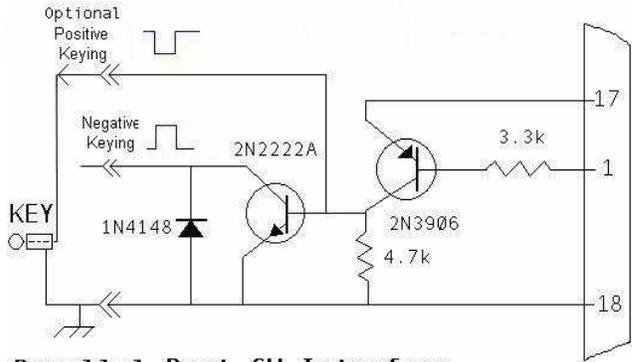
Not a problem. One device available is a USB to Parallel Converter. But these can be expensive and difficult to set up. The other is the serial port version of the original circuit (Figure 3). The reason for the extra components, serial ports operate on a much wider range of voltages. The serial port transmits a '1' as -3 to -25 volts and a '0' as +3 to +25 volts where as a parallel port transmits a '0' as 0 volts and a '1' as 5 volts (See Notes 3,4,5). The extra components and the logging software takes care of the differences between the two ports so you don't have to.

Once again Reality pays us a visit. How am I supposed to put all those parts inside that tiny DB9 connector shell? There is a simple solution to that too (Figure 4). This is why the IC chip revolutionized the electronics and computer industry. All those parts fit nicely in one tiny little package. The 4N35 suits this purpose and will fit inside the DB9 shell.

So there you have it. These are just a few of the various designs I have encountered over the years. I know there are many more out there, but time and space limitations in print are luxuries that I don't have. And remember this, if you always follow the path of electron flow, it will never lead you astray.

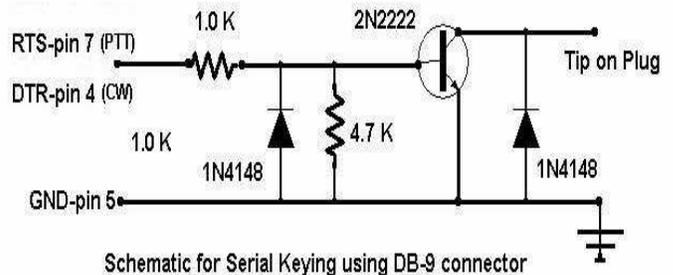
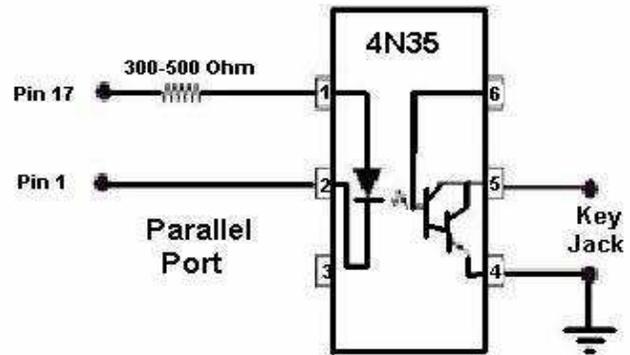
References:

- Note 1: CAUTION: It is advised that normal static precautions be taken in handling and assembly of this component to prevent damage and/or degradation, which may be induced by ESD.
- Note 2: Many thanks to Will, K9FO, for explaining to me the hazards of cathode keying in older vacuum tube equipment.
- Note 3: <http://www.beyondlogic.org/serial/serial.htm>
- Note 4: The Strobe and ACK lines use (minus) -5 volts for a Logic Level 1. [http://www.interfacebus.com/Design\\_Connector\\_Parallel\\_PC\\_Port.html](http://www.interfacebus.com/Design_Connector_Parallel_PC_Port.html)
- Note 5: IEEE-1284 Bus replaced the original IBM port and the Centronics Protocol in 1994.

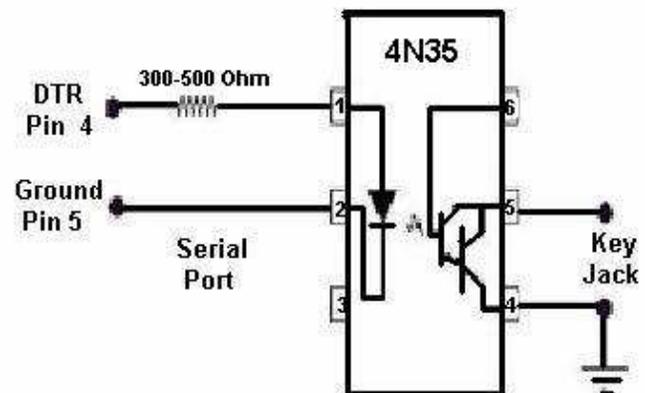


Parallel Port CW Interface

-Circuit courtesy Jerald Volpe, K66TT



Schematic for Serial Keying using DB-9 connector



KARS HOMEPAGE— **WWW.W9AZ.COM** —KARS HOMEPAGE

## DAYTON HAMVENTION 2010 KARS MEMBERS MAKE ANNUAL TREK



Ken, W9YNI; Will, K9FO; Pete, NI9H; Kevin, N9REG and Steve, W9DX in the parking lot of the US Air Force Museum at Wright/Patterson AFB



**KARS MEMBERS BEHAVING BADLY!**  
Greg, WR9L and Clay, N9IO set loose in the Flea Market



Martin Jeu, founder of MFJ greeting Hams at the MFJ booth



Don, K9NR attempts to convince Greg, WR9L to purchase a book at the ARRL bookstore...just a small part of the huge ARRL exhibit at Dayton



The grandstands at Hara Arena are always a popular place to rest tired feet after wandering the flea market.



Dayton's gigantic flea market attracted large crowds as always. So much to see—So little time ...and yes, the weather was beautiful

### WHAT DAYTON IS REALLY ALL ABOUT

by Greg WR9L

I've been going to the Dayton Hamvention for 24 years now, only missing it once for my Son's wedding (Yes it was a priority), and missing part of it this year due to work issues (Yes it was their priority). I was able to make Saturday and Sunday thanks to Clay N9IO who decided to go at the last minute and asked me to be his co-pilot. Thanks again Clay!

This weekend made me realize that catching the Hamfest on Saturday and Sunday is still "missing it." Yes I got to rush through the Flea market and drool over the new gear in the pavilion, but I still had a sense that something was missing. When you go on the weekend you only have one day to really take in the hamfest because everything is packed up and put away Sunday morning. After that its just a matter of watching yourself lose at the final prize drawings. Dayton is not a one day event!

I found that the greatest loss from arriving on Saturday is missing the time that I would have spent with my friends. Leaving on Wednesday afternoon and the next four days that follow, is truly a special time for me. The camaraderie, friendship and fun that we experience as a group during Hamfest week cannot be duplicated in any other setting or at any other time of the year. For me, that's what Dayton is really all about. Eating hamfest food, wishing you had the newest radio and looking at the radio junk all around you can be put off till "next time".

Not being able to be with the guys at Dayton is something that I truly would miss.

Thanks to the KARS group that makes the Dayton pilgrimage every year. You make the Dayton Hamvention a very special event!