Directions for using LoadICE for Linux with parallel port

Background

The linux parallel port drivers for kernel versions prior to 2.4 have some issues. These drivers do not allow low level pin control from a normal user application. Unfortunatley, LoadICE requires this type of control. In order to gain this functionality for older kernel versions, an intermediate kernel module must be used. Grammar Engine Inc. has chosen to use the *ppuser* module written by Tim Waugh (http://people.redhat.com/twaugh/parport/). Please follow the directions below to install LoadICE for your kernel version.

Kernel Version 2.4

1) Extract loadice.tar.gz
2) Enter the loadice directory
3) Run '*make*'
4) Become superuser
5) Run '*make install*'
6) Loadice is now installed in /usr/local/loadice

Kernel Version 2.2

1) Extract loadice.tar.gz
2) Enter the loadice directory
3) Run '*cp makefile.lnx22 makefile.lnx*'
4) Run '*make*'
5) Change directory to ppuser
6) Run '*make*'
7) Become superuser
8) Run '*make devices*'
9) Change directory back to loadice
10) Run '*make install*'
11) Loadice is now installed in /usr/local/loadice
12) Finally, the parallel port drivers need to be loaded into the kernel by entering the following commands. Also add these commands to the bottom of your rc.local script so these modules are loaded upon system boot.
    '*modprobe parport_pc*'   (this may not be needed)
    '*insmod /usr/local/loadice/ppuser.o*'

Loadice.ini Device Names

Kernel Version	Parrallel Device Name
2.2	/dev/ppuser00
2.4	/dev/parport0

Troubleshooting

If you experience any difficultly following the above directions send an e-mail to support@gei.com or call us at 614-899-7878.