## A Simple Video Interface You Can Build

This project uses a light sensitive transistor to let the chat program control your adult toy via the video display (computer monitor). It's powered by 6 volt battery pack (4 D cells) and should cost you about \$5 or less to build excluding the toy and batteries. First you'll need to get the following items. Most should be available at most electronics stores. Radio Shack® has some of the components or you can try a local radio/tv distributor. If you're talking to the counter person and they ask what you're trying to build just tell them you're building a simple computer interface to experiment with.

In **addition to the list below** you'll also need a **3 volt BATTERY POWERED** adult toy for either males or females (available from an adult store, takes 2 batteries). You'll also need a soldering iron and some electrical solder (NOT the plumbing type) and doorbell wire (light stranded wire) and a 4 battery holder (D cell). You'll also need a wooden dowel the same diameter as the batteries that fit your toy and two UNPAINTED and UNVARNISHED brass tacks.

## Simple Computer Video Interface Parts List (capacitors 16 volts or higher)

- 2 0.1 μF monolithic capacitor, non-polarized
- 1 1N4001 diode
- 1 TIP120 or 2N6044 power transistor
- 1 2N3904 transistor
- 1 2N5777 Darlington photo transistor

The circuit schematic is below, showing the interconnections of the components. As you can see it is quite simple. If you need help in understanding the schematic your local public library has books that explain how to build electronics projects. For the power transistor either a TIP120 or 2N6044 or similar transistor.

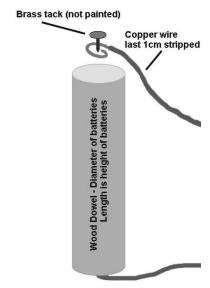
To control the toy take a dowel the same diameter as the batteries that fit into your vibrator. Cut the dowel to

match the total length of the batteries in the case. Now take a brass tack (large flat head type) and press in the end of the dowel about half way. Bare about 1cm of copper wire and wrap around the tack then push the tack in all the way to create an electrical contact between the tack and the wire. Now repeat on the other end. Connect the leads from this dowel to the points marked with X's on the schematic. When placed in the toy this dowel will supply electrical current to the toy in place of the batteries. See diagram (right) for a better idea of how to prepare this dowel. If the battery case is tight you may want to cut a groove down the side of the dowel to run the wires down. A small hole can be drilled or melted in the side of the battery compartment to feed the wire through. Test your connections with a battery to supply power to the wires. Make sure the

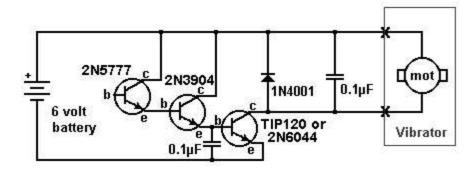
through. Test your connections with a battery to supply power to the wires. Make sure the toy switch is **ON**. With power supplied it should run. If you're handy with tools and you might be able to wire the power directly into the toy.

We were able to mount all the components (with the exception of the batteries) in a small black plastic case. A small hole was drilled for the photo transistor to "look" out of and the case was held on the screen by small plastic suction cups we purchased at an auto supply store (used to hold stuff on car windows). Mount the photo transistor with hot glue. Use the test -setup function of the chat program to test your stimulator.

If your circuit doesn't work check all the solder connections. Next check your batteries to make sure that they're good and inserted in the holder properly and that the connections from the batteries to the circuit are properly made. Make sure no parts are shorted out (bare wires don't touch each other) and that the leads on each component are connected to the others properly (Important for transistors and the diode). You might also have to adjust the brightness of your computer monitor for the best operation.



## The Circuit Schematic



Notes: Base (b) lead on the 2N5777 is not connected. Motor (mot) is in vibrator. Make sure polarity on diode (1N4001) is correct. Remove batteries when not in use. Batteries are 4 D-cells in series to give 6 volts DC.