

UPDATED 4-MAY-87

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COMPUTER SWITCH (C2P1)

This board allows you to connect two or more parallel centronics type computers to one printer. It is designed to be used with my PBUFF printer buffer board and BP10 (back panel I/O) board. It uses the standard PBUFF bus system as detailed in my BP10 advertising.

This board is designated C2P1 (Computers 2, Printer 1). A Centronics 36 pin solder tail female connector is soldered to the edge of the C2P1 board and used for mounting to the rear panel. A small cutaway is required in the rear panel, so that this board can be mounted component side down, and as near as possible to the top left hand side of the rear panel. (Looking from the rear.) Two by 26 pin dual row male headers are soldered into the board at positions J1 and J2. J1 is used to connect this board to your PBUFF, Serial, or printer switch. J2 is used to jumper to your BP10 board, or other computer switches.

The overlay of the board, and component values are shown below, and I feel that this board is that simple, you should be able to assemble it in 10-15 minutes without any further constructional information.

The PBUFF board supplies the +5 Volt power for this board.

C2P1 inputs from either computer A, or computer B. Computer B appears on pins 14 to 26 of J2. Computer A appears at the 36 pin Centronics connector. Computer B is the default computer selected. To select computer A, short out pads A and B. Pad A is a ground, so by grounding pad B, computer A is selected. By using this method, multiple boards can be daisy chained together, one board for every extra computer input needed. A rotary switch can be used to ground the B pad on the selected board. With no ground switched, the BP10 board becomes the selected computer.

In combination with the serial board, the C2P1 board gives you the following configurations:-

Serial or Parallel in to a Parallel printer.
Serial or Parallel in to a serial printer.
Parallel or Parallel in to a serial printer.

On the 36 pin Centronics connector, pins 1 to 11 are the standard Centronics type signals that line up with PBUFF pin numbers. Pin 12 is connected via a 1K resistor to ground, and pins 13 & 32 are connected via a 4K7 resistor to +5 volts. Pins 19 to 30, and pins 16 & 33 are grounded. Pins 14, 15, 17, 18, 31, 34, 35, & 36 are not connected.

If for any reason you need to use additional handshaking, so that things like printer init can be jumpered between Centronics connectors and DB25 printer outputs. DB25 pins 12, 13 and 14 are the same as Centronics 12, 13 and 14.

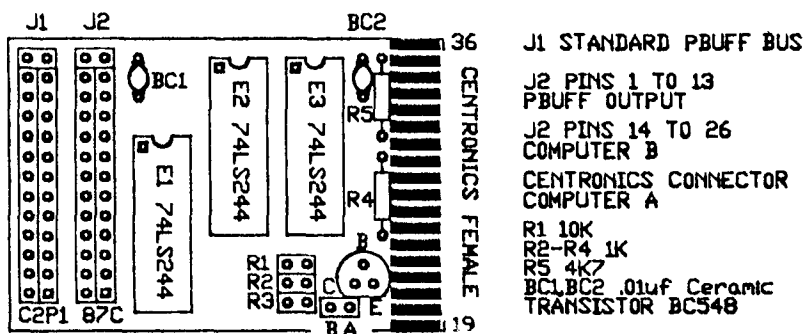
DB25/15 = Centronics 32 (ERROR), DB25/16 = Centronics 31 (INIT), and DB25/17 = Centronics 36. (SELECT INPUT.)

A stand alone computer switch can be built as follows:- Build up a BP10 and a C2P1 board and mount them into a case. Connect them together with approx. eight inches of 26 wire flat ribbon cable that has a female IDC header crimped onto each end. This header connects to J2 on the C2P1 end. Instead of connecting a PBUFF to J1, jumper the following pins of J1 together.

1 to 14, 2 to 15, 3 to 16, etc, right up to 11 to 24. This connects the PBUFF bus straight through without a buffer. A low current source of +5 volts is all that is needed to power this setup. Your existing Centronics printer cables connect to the input of the BP10 board and C2P1 board, and a new IBM type cable is used for the printer.

The "C2P1 SHORT FORM KIT" CONSISTS OF :- One bare double sided plated through printed circuit board, and this sheet of paper. You provide all other parts and labour. Check my ORDER FORM for current prices.

COMPUTER SWITCH C2P1



C2P1 NEW \$12.00