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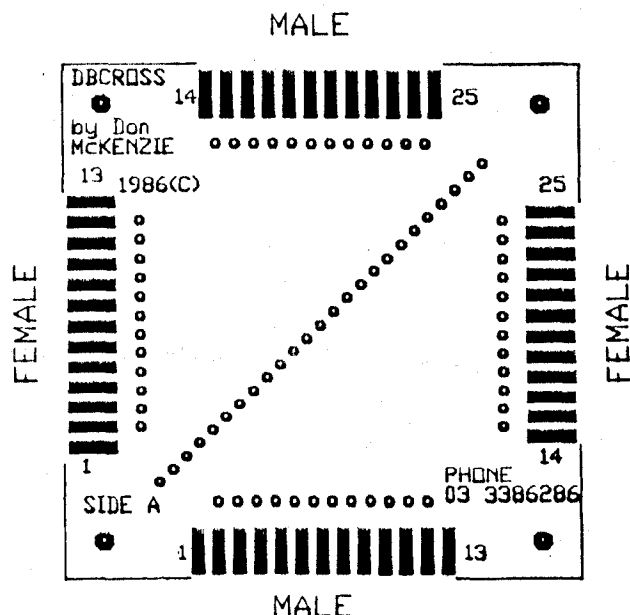
UPDATED 24-SEP-87

DBCROSS-25 SHORT FORM KIT

PHONE 03 3386286

My DBCROSS-25 printed circuit board is a double sided plated through unit that is ideal for any hobbyist or professional user. It connects the full 25 pins of 2 male and 2 female DB-25 type connectors together. This type of connector is used for EIA or RS232 type cables. The additional LOW cost parts required to assemble this unit are only 2 by DB-25 male solder tail connectors and 2 by DB-25 female solder tail connectors. These are pushed hard on to the edge of the printed circuit board into position as shown by the overlay drawing. These connectors are then soldered to the board. It should take all of 10 to 15 minutes to assemble this unit. DBCROSS-25 is a MALE TO MALE gender bender, and a FEMALE TO FEMALE gender bender. This eliminates all cable sex problems. It also provides a point to connect a tester or monitor via one of the unused connectors, and allows several devices to be connected together without additional wiring. If you have used RS232 mini testers (or break out boxes) on the back of terminals, modems, computers, etc., you have found that 50% of the time the business end of your tester is facing down or away from you, and you can't see the readout. Turning DBCROSS-25 end for end will solve this problem as the connectors are flipped over from end to end. Of course you can fit DB-9, or DB-15 connectors as well as the DB-25's. This allows you to manufacture 4 way gender benders for all sizes up to 25 pins with one printed circuit board design. This sheet of paper is the only information provided with the DBCROSS-25 SHORT FORM KIT as nothing else is needed. You supply the four DB-25 connectors.

Price of the DBCROSS-25 SHORT FORM KIT is \$14.00 This includes postage and handling. Similar commercial units are selling for \$94 assembled.



LITTLE DBBOARDS (OVERLEAF)..... These popular boards are available at a cost of \$4.00 each. To offset postage and handling charges, the minimum order is \$15.00, else add \$3.00 P&P.

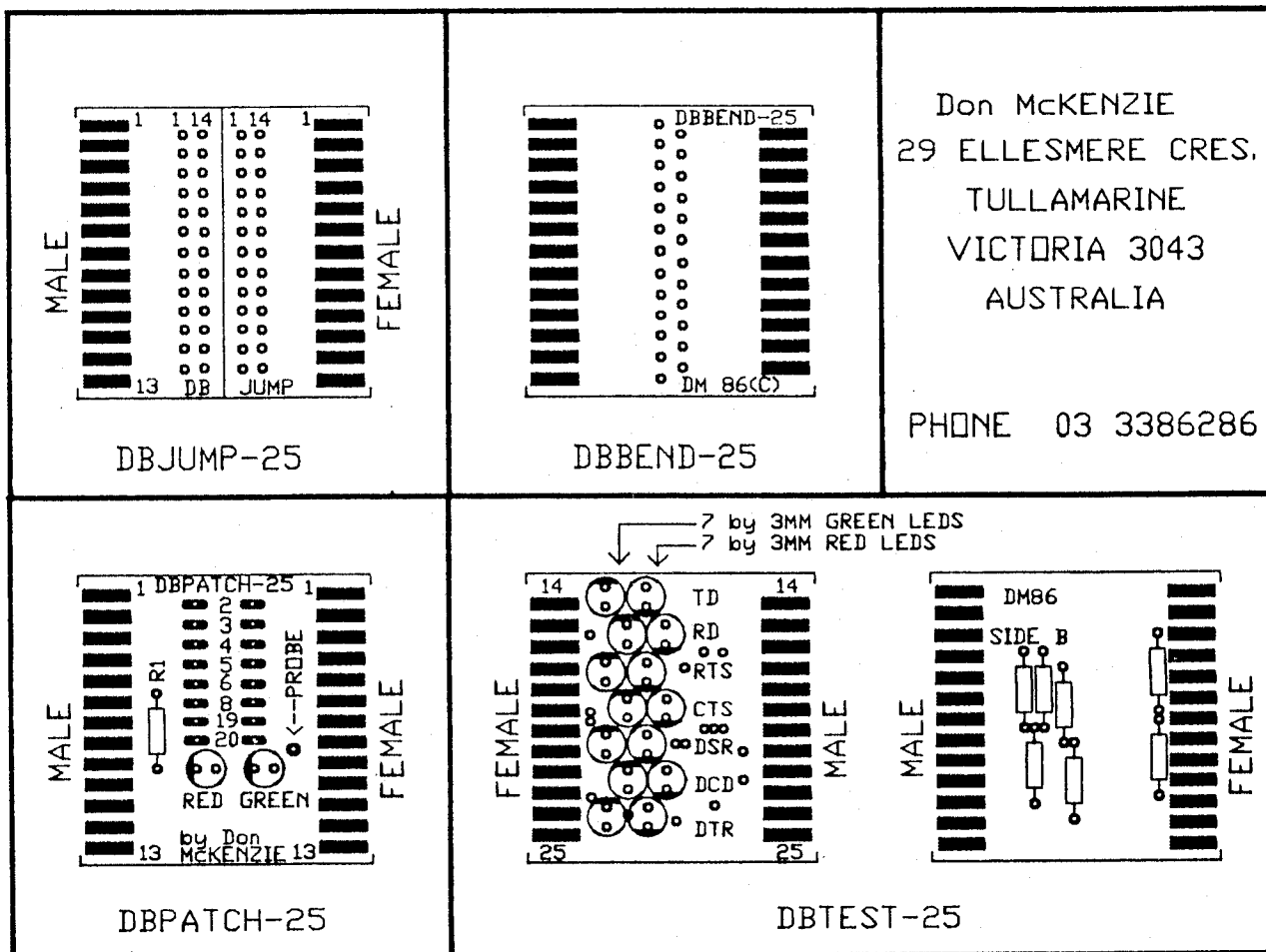
Additional notes DBBOARDS..... For a full understanding of RS232 connections, I recommend Roger Harrison's article "The ins and outs of RS232" published in Australian Electronics Monthly NOV & DEC 1985 editions.

A good book on the subject is "The RS232 Solution" by Joe Campbell, published by SYBEX COMPUTER BOOKS. This gives practical examples of various computer, printer, & modem hookups.

I have a range of printer buffer kits, including serial converters, computer sharers, & printer sharers available. If interested, please send a 9 1/4 by 4 3/4 (235mm by 120mm) post office preferred size self stamped addressed envelope for my "PBOFF Catalogue."

Use a file to bevel the edges of my DB Boards to a 45 degree angle along the connector tracks. This will allow easy installation of the solder type DB connectors. They will push on without any force or damage.

ID CODE	DESCRIPTION	
DB25M	DB25 MALE SOLDER CONNECTOR	\$2.50
DB25F	DB25 FEMALE SOLDER CONNECTOR	\$2.50



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DBBOARDS.... These double sided plated through boards measure 1.5 by 1.5 inches and have been designed and manufactured in Australia. You will save money on imported boards by building your own. All components are readily available and low cost.

DB Connectors... These boards use DB type solder tail connectors and have been designed for the DB-25 type however DB-9 and DB-15 types can be used if the need arises. These connectors push hard onto the edge of the board as indicated on the overlays, and then soldered in position.

THE RESISTORS.... shown are all 1K and are mounted on the side of the boards as shown.

THE LED'S..... are all 3mm and mounted on the side of the boards as shown. The LED's must be connected up the correct way around. The dark area shown near one leg of each LED on the overlay is the cathode. The LED should have a flat spot on one side of it. This is the cathode side of it. The anode leg is always longer than the cathode leg.

DBTEST-25..... Connects in series to an RS232 interfaced line and used to monitor Transmit data (2), Receive data (3), Request to send (4), Clear to send (5), Data set ready (6), Data carrier detect (8), and Data terminal ready (20). All 25 lines are connected straight through. The LED's display the polarity of each line. A red LED indicates a positive voltage and green negative. Uses no power and may be left in line for permanent monitoring of essential devices. You will have trouble getting a commercial unit these days for under \$30.00

DBPATCH-25..... I used to think that all RS232 hookups required me to pull the covers off cable connectors and resolder or jumper cables and connectors to make the unit work before replacing the covers. What a waste of time, and if I decided to hook up a different device at a later stage then I went through the same procedure again. I knew there had to be an easier way. By leaving my cables alone, ie:- 25 wires straight through, and using DBPATCH in line, I am able to configure a DBPATCH for each device. The patch board can be tagged and kept with the device. These intercepted lines should allow you to make 95% of all RS232 hookups. A single LED tester is included to help you make these connections. I suggest that the user reserve one DBPATCH as a setup and test unit. Solder wire wrap size pins in all positions, and one for the probe. With a set of jumper leads the correct connections can be found. When satisfied a new DBPATCH can be wired up permanently for this device. The LED section need not be wired up on the new board.

DBPATCH-25 can also be wired up for a pin 2/3 flip as follows:- Connect all positions straight across ie:- 4 to 4, 5 to 5 etc., but cross over pins 2 and 3. This reverses the transmit and receive lines. This is one of the most common foul-ups with RS232 connections. I believe it is worth one board just for this function. When the correct connections for pins 2 and 3 are found, it can be wired up into a DBPATCH.

DBJUMP-25.... Allows you to jumper the full 25 lines in any way you wish to. This is a full extension of DBPATCH. Can be used to hook up special connections between say a DB-9 and a DB-15 for example.

By soldering 2 by 26 pin IDC type headers into the board, a 25 pin breakout box is created. A set of jumper leads (or hooks) can be used to configure the breakout box. Make you own cable, any length. With a pair of tin snips, cut DBJUMP in half along the line marked. Solder the 2 IDC headers onto the boards. The 2 boards can be linked with a 26 wire flat ribbon cable that has 2 by 26 pin crimp type headers on each end. Watch out for pin 1 orientation if trying this trick.

Can also be used as a 0.1 inch spacing to DB25 spacing converter board if required.

DBBEND-25.... Solder either 2 male connectors, or 2 female connectors onto this board. It becomes a male to male, or female to female gender bender. The plated through holes have been set out in the pattern of a standard DB-25 PCB mount connector. This allows you to make a "T" connector, but watch out for pin 1. It shifts position from male to female.