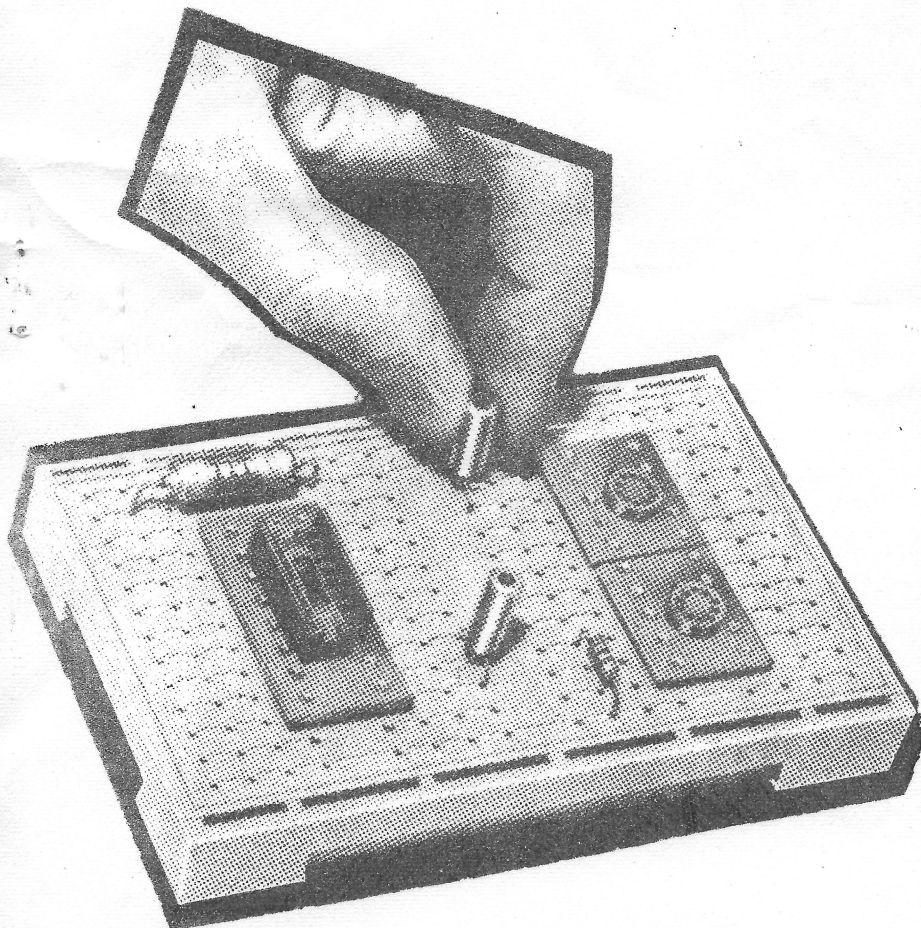
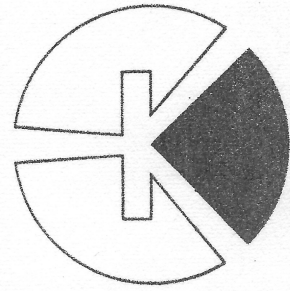




S.D.C. ELECTRONICS (SALES) LTD



DeC

SOLDERLESS
MODULAR
BREADBOARDS

Breadboarding

With the advent of integrated circuitry solderless breadboarding techniques have become necessary for the experimental stage of circuitry. Even in the end-product, servicing demands have seen a growth in the use of I.C. sockets so that integrated circuits may be changed without the problem of soldering and desoldering.

Of the breadboarding systems available some are difficult to use and have unreliable contacts whereas others consist largely of I.C. sockets mounted on printed circuit boards. Nearly all the systems are expensive and may require special leads for patching. Very few accommodate discrete components as well as integrated circuits.

S.D.C. have produced economical breadboarding modules with ultra-reliable contacts which accommodate discrete and integrated circuit components. Patching may be carried out with ordinary solid core wire and all modules link to form breadboarding areas of any desired size.

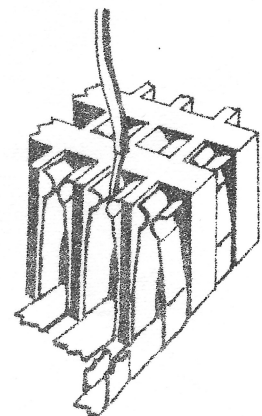
Contact System

Contacts are formed from electrical grade phosphor bronze with a long lever-arm action ensuring low strain on inserting component wires and thus a long life. The diagram shows how the contacts are formed as an integral part of the bus-bar assembly obviating interconnection faults.

The contacts are laid out in parallel rows in a similar fashion to general purpose wiring board. The pre-arranged bus-bar pattern is indicated by raised lines on the surface of the DeC.

The carefully engineered contact pressure enables component wires of any diameter to be accommodated (up to a maximum of .040" (1 mm)). The wiping action on insertion and withdrawal of components ensures reliable contact surfaces.

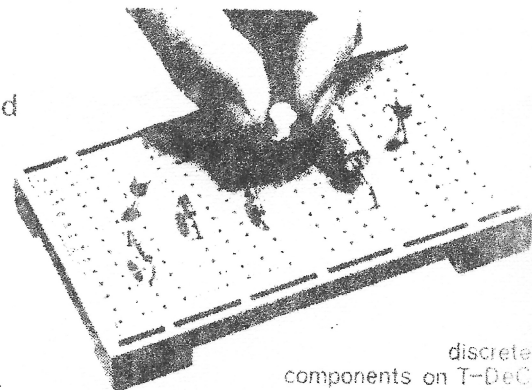
The materials used for the DeC have been selected for their desirable electrical characteristics and their ruggedness. The T and μ range may be heated to 130°C. The diagram shows how each contact is in a separate cell so that neighbouring component wires cannot touch.



contact system

Use With Discrete Components

Component wires are pushed directly into the contact of any desired bus-bar. Components may be replaced with ease. Leads are undamaged, thus a small stock of components may be re-used indefinitely for breadboarding purposes. In addition to these savings the simplicity and reliability of the technique saves considerable time in development and experimental work.



discrete components on T-DeC

Use With I.C.s

In order to accommodate the wide range of I.C. packages, adaptors (carriers) are used which will accept I.C. packages either to be soldered to the carrier or to be inserted into an appropriate I.C. socket which is part of the carrier.

DeCs can also be supplied in which I.C. sockets are an integral part of the DeC.

μ -DeC

μ -DeCs are designed for ease of use with I.C.s but this versatile DeC accommodates discrete components with equal facility. The most useful unit is the general purpose μ -DeC 'A', but special versions (μ -DeC 'B') can be made available which have integrated circuit sockets as part of the DeC. The 'B' version currently available contains two 16 lead DIL sockets.

μ -DeC 'A' has the following features:

208 contact points

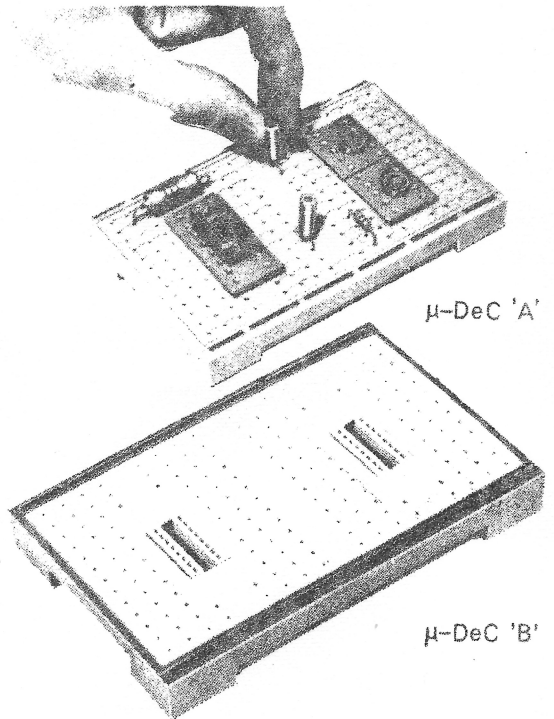
3 bus-bar rows of contacts (16 connecting points per row) across the DeC

Two independent panels of 20 rows of contacts (arranged in 10 pairs, 4 contacts per row)

Use of standard carriers for I.C.s enables all types of I.C. packages to be accommodated

Polarising locations for I.C. carriers

Typical capability — four 10 lead T05 stations or two DIL stations (up to 20 lead DIL).



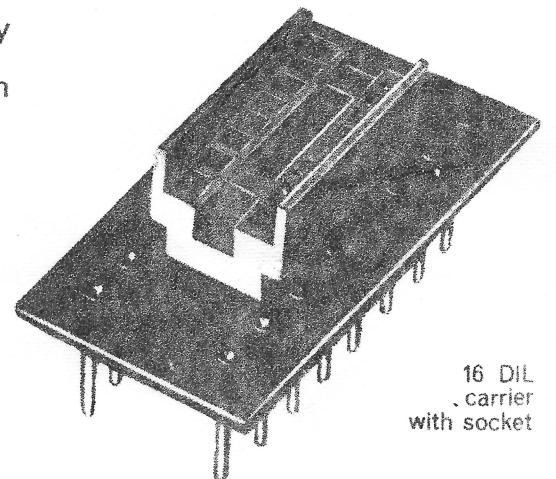
I.C. Carriers

The T-DeC and μ -DeC 'A' breadboards owe part of their versatility to the use of standard carriers. These carriers push directly into the DeCs and contain a polarising pin which ensures correct orientation of the carrier when inserted.

The carriers can be made to accommodate all types of integrated circuit packages (up to 20 leads).

The carriers are available either 'plain' or with appropriate sockets attached. The 'plain' versions have a printed circuit board on to which I.C. packages may be soldered.

The carriers 'with sockets' have I.C. sockets permanently fixed to the same type of board.



T-DeC

This DeC has only one I.C. station in the centre of the DeC so is primarily intended for discrete work or for linear I.C. applications where considerable numbers of discrete components may be required.

Features of the T-DeC include:

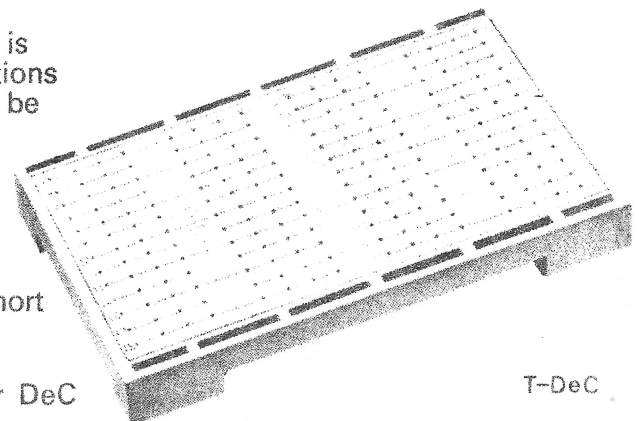
208 contacts per DeC

38 rows of contacts per DeC

5 mm separation between rows — enables modern short lead devices to be inserted directly into the contacts

Typical capability — six to ten stages of discrete circuitry and two T05 stations or one DIL station per DeC

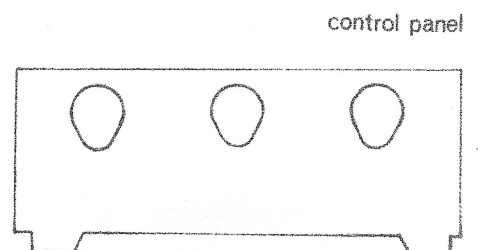
Polarising locations for I.C. carriers.



T-DeCs and μ -DeCs interlock using the dovetailed sections of the DeC walls.

Packs

Each T and μ -DeC pack contains a DeC together with a 'control panel'. This panel is pushed into slots in the DeC body and is used for mounting items such as potentiometers, switches, lamps, etc.



S-DeC

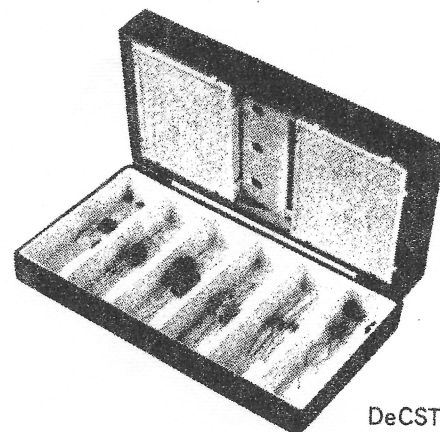
The S-DeC is formed in a high impact polystyrene (upper temperature limit 70°) providing a sturdy economical unit particularly useful in education.

Each DeC has 70 contact points arranged in two panels each of which has 7 parallel rows of connected contact points.

Packs

S-DeCs are supplied in three packs; the S-DeC Unit Pack contains one S-DeC, a control panel together with a useful booklet of circuits with full instructions for assembly on the S-DeC and a set of five 1 mm. plugs. The DeCSTOR Pack contains two DeCs, one control panel, a set of 1 mm. plugs, a booklet of circuits, together with a divided component tray with its own lid, and is especially useful for education. The 4-DeC Pack contains four DeCs, two control panels, two sets of plugs and a booklet of circuits.

The DeCSTOR and 4-DeC Packs are contained in a black plastic storage container.

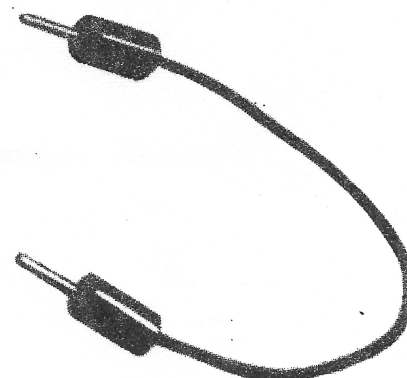


DeCSTOR

Accessories

One of the features of the DeC breadboards is that patching and links may be carried out using ordinary solid-core wire. In many circumstances, however, it is convenient to use leads terminated in plugs. Accessories supplied include 1 mm. plugs and leads terminated either at both ends or at one end by a 1 mm. plug. 1 mm. plugs available in Red, Blue, Yellow, Black, Green.

Leads (Both ends in plugs) 5 cm; 7.5 cm; 10 cm; 12.5 cm; 17.5 cm.
(One end in plug, the other end tinned) 50 cm.



Lead
both ends in plugs

Technical Data

Capacitance	0.6 pF/contact
Resistance between adjacent contacts	< 10 m.Ω
Insulation resistance	> 100 M.Ω
Contacts	Phosphor bronze BS 407/2
Maximum current	5 A
Maximum voltage	1 kV
Maximum temperature	130°C (T and μ); 70°C (S)
Dimensions	125 x 81 x 16 mm. (T and μ); (S)

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