Information centre

Commodore interface

Could you tell me if you have described any simple interfacing projects suitable for the Commodore 64/128 (B.J., Orbost, Vic).

● *We have not published any interfacing projects specifically for the Commodore 64 and 128 machines. However in our March 1988 issue, we published an article entitled "Connect your PC to the outside world". We're curently developing a more elaborate unit, which you might also find of interest.*

Soil conductivity

For some time now I've been searching for a circuit for a conductivity meter as used by hydroponic gardeners.

Do you know of any previously published circuits? If not, would it be possible to consider this as a future project?

There are several makes available in NZ, some analog and others digital, but at $200-300 they are too dear for the home gardener.

The ideal meter would have maximum and minimum settings (adjustable) which would drive a relay which in turn would operate a solenoid valve. This would allow the gardener to go on holi-day while the garden would feed itself.

Such automatic feeders are available here too (they also control the pH level but pH is of far less importance to the home gardener). However these auto units cost around $1200.

On the back of one meter I saw was the following: 1 cf.(conductivity factor) unit = 100 mS.

I also understand an AC signal is necessary between probes so that there's no buildup or erosion on the probes. (T.J.S., Manapouri, NZ)

● *Unfortunately, to this date we have not published a circuit such as the one you describe. However, we will keep the idea in mind for a possible future project.*

Lighting system

At the moment I am designing a circuit which incorporates a push-bike dynamo lighting set with rechargeable batteries. As part of that circuit it is necessary to step-up a DC voltage so that it can be regulated correctly. I have found it difficult to obtain information on how to do such a thing. Someone suggested that I obtain the circuit from a battery-powered flourescent torch and adapt that in the circuit. Could you please send to me a circuit diagram (showing the components) of a circuit which will boost a DC voltage. It needs to be as simple as possible. Perhaps this circuit may be very similar to the circuit in a flourescent battery torch.

I would prefer not to use a transformer, but if this is not possible, it needs to be as small as possible. The current rating is 1-2A.(M.V., Garden Suburb, NSW).

● *Unfortunately, we have not published a circuit suitable for such a purpose. You'd need to use a small DC-DC convertor, with a suitable transformer, switching transistor(s) and output rectifier system.*

Circuit idea.

Some months ago I built a 16k memory expansion for my son's VZ-300, so far I have found it impossible to get to run properly. The fault seems to be incorrrect memory addressing.

The circuit used came from your May 1987 magazine, in the Circuit and Design Ideas section.

Could you please tell me if any alternations or corrections were made to the circuit you published. My son is hoping to try and run Stan Blaster, which needs the extra memory, and at present is not pleased with a Dad who can't build things that work. (J.B., Nowra, NSW).

● *Sorry J.B., but items published in the Circuit and Design Ideas section are presented "as is", directly as sent in by readers. As we note each month, we're not in a position to provide any further help with them.*

Very low resistance.

Have you published (or do you intend publishing) a circuit diagram (or project) for the measuring of extremely low resistance. I was thinking of a 4 wire instrument capable of measuring down to 100 micro ohms, that could be used on printed circuit boards with a fairly high degree of accuracy. Could you also tell me what are "Kelvin needle probes" as described in the Toneohm 700 PCB fault tracer on page 108 of the April edition. (J.O'N, Cooma. NSW)

● *As yet we have not published a project of this kind. However, we will*