

# 4 SWITCH CABLE CLONE

SIMULATES THE EFFECT OF COAXIAL CABLE IN SERIAL DIGITAL SYSTEMS

- Emulates cable up to 360 MHz
- Simulates more than 300 metres
- Fixed and Switched Programmable
- Known accurate loss for repeatable performance
- Quick and easy to use
- No power needed
- Pocket size

Order Code	Cable Type	Simulated Lengths
SC75A045B-A	BELDEN 8281	5m + 10m + 10m + 20m
SC75A375B-A	BELDEN 8281	25m + 50m + 100m + 200m
SC75A045B-B	BBC PSF 1/2M	5m + 10m + 10m + 20m
SC75A375B-B	BBC PCF 1/2M	25m + 50m + 100m + 200m
SC75A37B	see table opposite	

<b>SC75A37B</b>				
Cable Type	Switch 2	Switch 5	Switch 10	Switch 20
BBC PSF 1/2M	25	50	100	200
BELDEN 8281	25	50	100	200
BBC PSF 1/3M	19	39	78	156
RG59	18	36	72	144

In serial digital applications it is known that a signal adhering to the amplitude specification of  $800\text{mV} \pm 10\%$  will maintain its integrity if the attenuation at the Nyquist frequency is 30dB or less. It may then be reconstituted correctly by, say, the Sony deserialiser.

The CABLE CLONE has similar attenuation vs frequency characteristics to coax cable over the wide frequency spectrum of the serial digital signal. When installing or testing serial digital equipment it is often necessary to establish the maximum length of cable over which the signal will remain useable, or to ensure there is sufficient margin (headroom) if a certain length of cable is required. Most adaptive equalisers, in deserialisers for example, rely on the attenuation characteristics of the cable to operate correctly.

At present the only way to do this is to insert the actual length of cable into the path. This is time consuming, inconvenient and costly.

The Faraday CABLE CLONE is the solution to the problem.

The CABLE CLONE emulates the loss and group delay frequency characteristics of a cable to approximately 360 MHz. It is supplied in a small metal box fitted with BNC connectors which needs no power supply. It may be carried in the pocket and is always ready for immediate use.

By using the table on the reverse of the SC75A37B box the user can relate the loss to lengths of various types of cable.

Fixed CABLE CLONES of 1dB to 20dB and a Four Switched Programmable version containing 2:5:10 and 20dB are available for all the various systems with  $75\Omega$  for video and  $50\Omega$  for Ethernet. An Eight Switched Programmable version simulating 5:10:10:20:50:100:100 and 200 metres of Belden cable is also available.

Apart from the smaller space requirements of the cable clone (vs cable) it offers the advantage that comparable measurements become possible since the influence of manufacturing tolerances, customary in the case of coaxial cables, is abolished.

# PACKAGE DETAIL

