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DECEMBER 1998 SWL650A SWL655A SWL665A SWL665A SWL670A SWL675A SW664A-R2

Twinaxial Connector Switches ABC, ABCDE, X and Cable-Thru



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TWINAXIAL CONNECTOR SWITCHES

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1. Specifications

Switch — Rotary, self-wiping, break before make, all positions labeled

Enclosure — Black, high-impact plastic

Connectors — SWL650A: (3) twinaxial female, SWL655A: (3) twinaxial female, SWL665A: (5) twinaxial female, SW664A-R2: (5) twinaxial female, SWL670A: (4) twinaxial female, SWL675A: (5) twinaxial female

Power — None required

Size — SWL650A, SWL655A, SWL665A, SW664A-R2, SWL670A: 2.5"H x 6"W x 6.3"D (6.4 x 15.2 x 16 cm), SWL675A: 3.3"H x 6"W x 6.3"D (8.4 x 15.2 x 16 cm)

Weight — SWL650A, SWL655A, SWL665A, SW664A-R2, SWL670A: 1.4 lb. (0.6 kg), SWL675A: 1.5 lb. (0.7 kg)

2. Introduction

The Twinaxial Connector Switches are used for applications requiring the switching of twinaxial devices, such as terminals or printers, within twinaxial systems. Any equipment or devices using twinaxial cables may be interconnected and switched via these basic switches. There are six models:

- ABC Twinaxial Switch (SWL650A)
- ABC Twinaxial Terminating Switch (SWL655A)
- ABCDE Twinaxial Switch (SWL665A)
- ABCDE Twinaxial Terminating Switch (SW664A-R2)
- X Twinaxial Switch (SWL665A)
- Cable-Thru Twinaxial Switch (SWL675A)

3. Model SWL650A: ABC Twinaxial Switch

The ABC Twinaxial Switch is used to switch between two compatible devices that need to share a third. It can be used to connect two terminals or printers to one system.

To operate the ABC Twinaxial Switch, connect the device being switched to "common" connector "C" on the rear panel. Device A will then connect to the "A" connector and Device B will connect to the "B" terminal. Refer to **Figure 1**. With the switch selector on the front panel in the "A" position, the common device is connected to Device A. With the switch in the "B" position, Device B is connected to the common device. The unused connector is terminated in 51 ohms.



Connections made are AC and BC - "C" IS COMMON

Fig. 1. Typical Application for the ABC Switch.

4. Model SWL655A: ABC Twinaxial Terminating Switch

The ABC Twinaxial Terminating Switch is similar to the standard ABC switch but is used in those applications that require constant termination of twinaxial cables. The twin center conductors are switched while the shields are tied together. Both A and B connections are always terminated in 51 ohms.

CAUTION

For proper operation, ensure that the "cable thru" feature on the terminal at your workstation is set for "cable thru" operation and is not in the "terminate" position.

5. Model SWL665A: ABCDE Twinaxial Switch

The ABCDE Twinaxial Switch is used to connect any of four different twinaxial compatible devices to a fifth device. The switch can be used to permit four terminals to share one host or one computer to select from four different printers. Refer to **Figure 2**. The two center conductors of each connector are switched and the shields are tied common. Positions A, B, D, and E are always terminated in 51 ohms.

CAUTION

For proper operation, ensure that the "cable thru" feature on the terminal at your workstation is set for "cable thru" operation and is not in the "terminate" position.

ABCDE SWITCH



Connections made are AC, BC, DC, and EC-"C" is COMMON

Fig. 2. Typical Application for the ABCDE Switch.

6. Model SW664A-R2: ABCDE Twinaxial Terminating Switch

The ABCDE Twinaxial Terminating Switch is similar to the standard ABCDE switch but is used in those applications that require constant termination of twinaxial cables. The switch input terminates the unused port allowing one twinax device or string of devices to attach to one of four twinax host systems. This box will terminate the unused port so the unattached system will not see an open cable connection.

7. Model SWL670A: X Twinaxial Switch

The X Twinaxial Switch is a crossover switch used for reversing compatible devices. Two pairs of devices can be switched at the same time.

The front panel is labeled to show which devices are connected at one time. With the switch in the "A-BB" "B-AA" position, device "A" is connected to device "BB" while device "B" is connected to device "AA."

With the switch in the "A-AA" "B-BB" position, device "A" is connected to device "AA" while device "B" is connected to device "BB." Refer to **Figure 3**.

The two center conductors of each connector are switched and the shields are tied common.



Connections made are A-AA & B-BB or A-BB & B-AA

Fig. 3. Typical Application for the X Switch.

8. Model SWL675A: Twinaxial Cable-Thru Switch

The Twinaxial Cable-Thru Switch is used for applications requiring the switching of a twinaxial terminal or printer between two twinaxial systems. The switch allows a terminal to be switched between Systems A and B in such a way so that while the terminal or printer is active in one system, the other system is cabled through the switch.

When the switch on the front panel is in the "System A" position, the Sharing Device (a Terminal or Printer) is connected to System A. At that time, System B is cabled through the Cable-Thru Switch. When the switch is in the "System B" position, System B is connected to the Sharing Device and System A is cabled through. Refer to the diagram in Figure 4.

The two center conductors of each connector are switched and the shields are tied common.

CAUTION

For proper operation, ensure that the "cable thru" feature on the terminal at your workstation is set for "cable thru" operation and is not in the "terminate" position. All but the last workstation on a line must be set for cable thru operation.

TWINAXIAL CONNECTOR SWITCHES



Fig. 4. Typical Installation for the Cable-Thru Switch.