## - BLACK BOX NETWORK SERVICES

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## Ethernet Transceiver Switches ABC (2 to 1) ABCDE (4 to 1)



## 1. Specifications

Switch-(1) Rotary, 2-position, break-before-make
Connectors-SW045: (3) DB15 female; SW046: (5) DB15 female
Enclosure-High-impact plastic
Power-N one required
Size-3.5"H x 6"W x 6.3"D ( $8.9 \times 15.2 \times 16 \mathrm{~cm}$ )
Weight- $1.5 \mathrm{lb} .(0.7 \mathrm{~kg})$

## ETHERNET TRANSCEIVER SWITCHES

## 2. Introduction

### 2.1 Typical Application

With an Ethernet Transceiver Switch, you can switch one Ethernet device or segment between two Ethernet networks ( see Figure 1). A rotary switch on the front panel controls this operation.


Figure 1. A Typical Application.

### 2.2 Connectors

Three female DB15 connectors, labeled A, B, and C, are mounted on the rear panel of the SW045 (see Figure 2). All 15 of the leads are switched. Five female DB15 connectors, labeled A, B, C, D, and E, are mounted on the rear panel of the SW046A (see Figure 3).


Figure 2. SW045 Rear Panel.


Figure 3. SW046 Rear Panel.

## ETHERNET TRANSCEIVER SWITCHES

## 3. Installation

1. Connect the cable from the device you want to share to the " C " connector on the rear panel of the switch.
2. Connect the cables from the devices that are to be switched to connectors " $A$ " and "B" on the rear panel of the SW045 or connectors "A," "B," "D," or "E" of the SW046A.
3. Set the rotary switch on the front panel as required (see Chapter 4).
4. The $A B C$ or $A B C D E$ switch is now ready for operation.

## 4. O peration

The rotary switch on the front panel controls the switching of the common connector "C" to connector "A" or "B" of the SW045 (see Figure 4 and Table 1) or connector "A," "B," "D," or "E" of the SW046 ( see Figure 5 and Table 2).


Figure 4. Front Panel of the SW045.

## Table 1. Switch Positions of the SW045

## Switch Position Connection

A
Device " $C$ " is connected to device " $A$ "
$B \quad$ Device " $C$ " is connected to device " $B$ "

## ETHERNET TRANSCEIVER SWITCHES



Figure 5. Front Panel of the SW046.
Table 2. Switch Positions of the SW046
Sw itch Position Connection
A
Device " $C$ " is connected to device " $A$ "
B Device " $C$ " is connected to device " $B$ "
$D \quad$ Device " $C$ " is connected to device " $D$ "
$E \quad$ Device " $C$ " is connected to device " $E$ "

