## *BLACK BOX NETWORIK SERVICES

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\section*{||||||||||||||||| <br> SW015A-FFF <br> FEBRUARY 2000 <br> SW055A-FFFFF <br> SW015A-FFM <br> SW055A-MMFMM <br> SW055AX <br> SW055B-FFFFF <br> SW055B-MMFMM SW015B-FFM

SW015BX}

## 1. Specifications

Enclosure-High-impact plastic
Switches-SW015: (1) rotary 2-position switch; SW055: (1) rotary 4-position switch

Pins Supported-Pin 1 tied common, pins 2 through 25 switched
Indicators-(6) LEDs: TD, RD, RTS, CTS, DSR, and DTR
Pins Monitored by LEDs-2 (TD), 3 (RD), 4 (RTS), 5 (CTS), 6 (DSR), and 20 (DTR)

Connectors-SW015: (3) DB25 female; SW055: (6) DB25 female
Power-???
Size-SW015: 2.5"H x 6"W x 6.2"D ( $6.4 \times 15.2 \times 15.8 \mathrm{~cm}$ ); SW055: 3.5"H x 6"W x 6.3 "D ( $8.9 \times 15.2 \times 16 \mathrm{~cm}$ )

Weight- $1.5 \mathrm{lb} .(0.7 \mathrm{~kg})$

## ABC-25 AND ABCDE-25 MONITOR SWITCHES

## 2. Introduction

### 2.1 Description

With the Monitor Switch, you can connect a common device to two or four devices. A rotary switch on the front panel of the M onitor Switch controls this operation.

- ABC-25 Monitor Switch models ( part number SW015) connects two devices to a common device.
- ABCDE-25 M onitor Switch models (part number SW055) connects four devices to a common device.


### 2.2 Typical Application

Figure 1 shows a typical application of the Monitor Switch.


Figure 1. Typical Application U sing SW055.

### 2.3 Connectors

### 2.3.1 Rear Panel

The M onitor Switch has three or five DB25 RS-232 connectors on its rear panel, as shown in Figure 2.


Figure 2. Rear Panel.

### 2.3.2 Front Panel

The rotary switch on the front panel (see Figure 3) controls the switching of the common connector "C" to the other connectors. The LEDs monitor six leads of the common device.


Figure 3. Front Panel.

## ABC-25 AND ABCDE-25 MONITOR SWITCHES

### 2.4 Sw itch Connections

Table 1 shows the switch connections for the SW015. Table 2 shows the switch connections for the SW055.

## Table 1. SW015 Switch C onnections

| Switch Position | Connection |
| :--- | :--- |
| $A$ | Device " $C$ " is connected to Device " $A$ " |
| $B$ | Device " $C$ " is connected to Device " $B$ " |

## Table 2. SW055 Switch C onnections

| Switch Position | Connection |
| :--- | :--- |
| A | Device " $C$ " is connected to Device " $A$ " |
| B | Device " $C$ " is connected to Device " $B$ " |
| D | Device " $C$ " is connected to Device " $D$ " |
| E | Device " $C$ " is connected to Device " $E$ " |

## 3. Installation

Follow these steps to install the M onitor Switch.

1. Connect the cable from the common device to the "C" connector on the rear panel of the Switch.
2. Connect the cables from the devices that you want to switch to connectors "A" and "B" (and also "D" and "E" for the SW055).
3. Set the rotary switch on the front panel to $\mathrm{A}, \mathrm{B}, \mathrm{D}$, or E to connect the $\mathrm{A}, \mathrm{B}, \mathrm{D}$, or E device to the common device.
4. The Monitor Switch is now ready for operation.

## Appendix. RS-232 and V. 24 Interface

| Pin | Name | EIA RS-232C | $\begin{aligned} & \text { CCCITT } \\ & \text { V. } 24 \end{aligned}$ | Description | Direc To DCE | From DCE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | FG | AA | 101 | Frame/Protective Ground | - | - |
| 2 | TD | BA | 103 | Transmitted Data | X |  |
| 3 | RD | BB | 104 | Received Data |  | X |
| 4 | RTS | CA | 105 | Request to Send | X |  |
| 5 | CTS | CB | 106 | Clear to Send |  | X |
| 6 | DSR | CC | 107 | Data Set Ready |  | X |
| 7 | SG | AB | 102 | Signal Ground | - | - |
| 8 | DCD | CF | 109 | Received Line Signal Detector |  | X |
| 9 | POS | - | - | Reserved for Data Set Testing |  | X |
| 10 | NEG | - | - | Reserved for Data Set Testing |  | X |
| 11 |  |  |  | Unassigned (Handshake Line) |  |  |
| 12 | SDCD | SCF | 122 | Secondary Received Line Signal Detector |  | X |
| 13 | SCTS | SCB | 121 | Secondary Clear to Send |  | X |
| 14 | STD | SBA | 118 | Secondary Transmitted Data | X |  |
| 15 | TC | DB | 114 | Transmitter Signal Element Timing |  | X |
| 16 | SRD | SBB | 119 | Secondary Received Data |  | X |
| 17 | RC | DD | 115 | Receiver Signal Element Timing |  | X |
| 18 |  |  |  | Unassigned |  |  |
| 19 | SRTS | SCA | 120 | Secondary Request to Send | X |  |
| 20 | DTR | CD | 108.2 | Data Terminal Ready | X |  |
| 21 | SQ | CG | 110 | Signal Quality Detector |  | X |
| 22 | - | CE | 125 | Ring Indicator |  | X |
| 23 | - | CH | 111 | Data Signal Rate Selector (DTE) | X |  |
| 24 | - | Cl | 112 | Data Signal Rate Selector (DCE) |  | X |
| 25 | - | - | - | Unassigned |  |  |

