

Not Recommended for New Installations.

Please contact Technical Support for more information.

Anti-Streaming Device

Model 3001

Documentation Number 3001AD3297

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B&B Electronics -- September 1997

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1.0 WARRANTY INFORMATION

B&B Electronics warrants all Model 3001 components to be free from defects, and will—at our option—repair or replace the product should it fail within one year from the first date of shipment.

This warranty is limited to defects in workmanship or materials, and does not cover customer damage, abuse or unauthorized modification. If this product fails or does not perform as warranted, your sole recourse shall be repair or replacement as described above. Under no condition shall **B&B Electronics** be liable for any damages incurred by the use of this product. These damages include, but are not limited to, the following: lost profits, lost savings and incidental or consequential damages arising from the use of or inability to use this product. **B&B Electronics** specifically disclaims all other warranties, expressed or implied, and the installation or use of this product shall be deemed an acceptance of these terms by the user.

1.1 RADIO AND TV INTERFERENCE

The Model 3001 generates and uses radio frequency energy, and if not installed and used properly—that is, in strict accordance with the manufacturer's instructions—may cause interference to radio and television reception. If the Model 3001 does cause interference to radio or television reception, which can be determined by disconnecting the unit, the user is encouraged to try to correct the interference by one or more of the following measures: moving the computing equipment away from the receiver, reorienting the receiving antenna and/or plugging the receiving equipment into a different AC outlet (such that the computing equipment and receiver are on different branches).

1.2 SERVICE

All warranty and non-warranty repairs must be returned freight prepaid and insured to B&B Electronics. All returns must have a Return Materials Authorization number on the outside of the shipping container. This number may be obtained from B&B Electronics Customer Service at (815) 433-5100. *Packages received without an RMA number will not be accepted.*

B&B Electronics technical staff is also available to answer any questions that might arise concerning the installation or use of your Model 3001. Technical Service hours: **8AM to 5PM CST, Monday through Friday.**

2.0 GENERAL INFORMATION

Thank you for your purchase of this B&B Electronics product. This product has been thoroughly inspected and tested and is warranted for one year parts and labor. If any questions or problems arise during installation or use of this product, please do not hesitate to contact B&B Electronics Technical Support at (815) 433-5100.

2.1 FEATURES

- Transparent to data rate and format
- Operates in point-to-point or multi point environment
- Prevents malfunctioning equipment from locking up the network
- User selectable timeout periods
- No external power required
- Miniature size
- Made in USA

2.2 DESCRIPTION

The B&B Model 3001 is an anti-streaming device that monitors your communication line for streaming conditions caused by a malfunctioning terminal. Deriving power from the RS-232 interface, the Model 3001 requires no AC power or batteries. It can be connected directly to a terminal via a female DB-25 and to a modem or multiplexer via a male DB-25. The Model 3001 operates in point-to-point or multi-point environments and is transparent to data rate and format. It is housed in a sturdy ABS plastic case measuring only 2.2" long x 2.1" wide x 0.7" high.

The B&B Model 3001 prevents malfunctioning terminal equipment from locking-up a network with a continuous RTS signal. When the terminal raises RTS, the Model 3001 activates its timer. If RTS exceeds a pre-selected time-out period, the Model 3001 discontinues communication with the DCE. The user can choose from four jumper selectable time-out periods: 12.5, 25, 50 and 400 seconds.

3.0 CONFIGURATION

The Model 3001 is designed to be easy to use. There are no internal jumpers or DIP switches to set, so there is no need to open the case to configure the unit. The only configuration necessary for operation is proper setting of the external strap.

3.1 SETTING THE EXTERNAL STRAP

For your convenience, the Model 3001 has a single strap that can be placed on configuration pegs. There are two sets of pegs; one on each side of the LED indicators. Figure 1 shows the peg numbers relative to their position on the Model 3001.

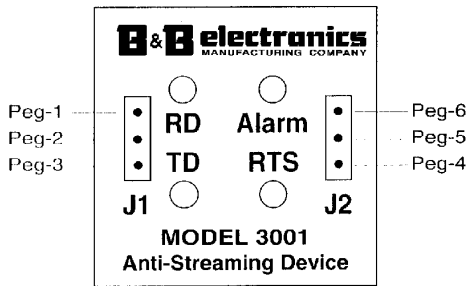


Figure 1. Model 3001, showing strap and peg locations

Figure 2 (below) shows the orientation of the configuration strap. Observe that the strap can either be on pegs 1 or 2, or on pegs 2 or 3. To change the setting, simply use your fingers to pry off the plastic strap. Then place it on top of the appropriate pegs.

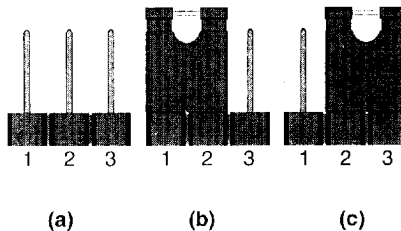


Figure 2. Demonstration of different jumper settings: Your jumper can be Totally removed (a), covering pins 1 and 2 (b), or covering pins 2 and 3 (c)

To specify the RTS timeout period, you can either place the strap over pegs 1&2, 2&3, 4&5 or 5&6. Figure 1 shows the number of each peg, and the chart below shows the jumper settings and their respective timeout periods.

Place the strap over:

Pegs 1 & 2
Pegs 2 & 3
Pegs 4 & 5
Pegs 5 & 6
Removed

To have a timeout period of:

12.5 seconds
25 seconds
50 seconds
400 seconds
Disabled

4.0 INSTALLATION

The Model 3001 is designed to be easy to use, with one unit installed between a DTE and a DCE on either end of a polled or multidrop communication link. Because the Model 3001 is mono-directional, it **must** be configured according to Sections 4.1 and 4.2. If it is configured differently, your anti-streaming device will not work. Figure 3 illustrates a typical Model 3001 installation.

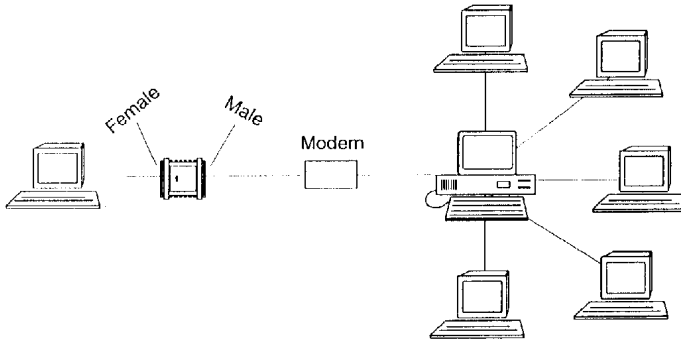


Figure 3. Typical Model 3001 Installation

4.1 CONNECTING THE DCE PORT

One port of the Model 3001 is a DB-25 female, and is configured as "DCE". Therefore it wants to talk to a DTE device such as a terminal or PC. The Model 3001 may be plugged directly into the DB-25 serial port of a DTE, or connected via "straight through" cable.

4.2 CONNECTING THE DTE PORT

The second port of the Model 3001 is a DB-25 male, and is configured as "DTE". Therefore, it wants to talk to a DCE device such as a modem or multiplexer. The Model 3001 may be plugged directly into the DB-25 serial port of a DCE, or connected via "straight through" cable.

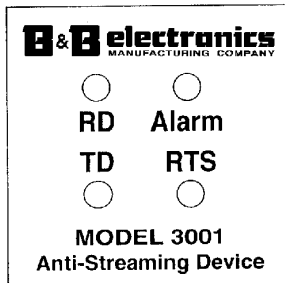
5.0 OPERATION

Once you have configured each Model 3001 and connected the cables, you are ready to operate the unit. This section describes the LED status monitors and the power-up procedure.

5.1 LED STATUS MONITORS

The Model 3001 features four front panel LEDs that indicate the condition of the communication link. Figure 4 shows their front panel positions. Following Figure 4 is a description of each LED's function.

Figure 4. Model 3001's LED indicators



- The red "TD" and "RD" indicators blink to show data activity.
- The "RTS" LED glows when the remote terminal is requesting to send data.
- The "Alarm" LED glows to indicate an RTS streaming condition. You must reset your terminal (see Section 5.2).

5.2 WHY YOUR ALARM LED IS RED....

If your "Alarm" indicator is red, a streaming condition exists and you must reset your terminal. This occurs because the RTS signal from the DTE has exceeded your preset timeout period (see Section 3.0). The timer begins to count when the DTE raises RTS. If the time period that RTS remains high exceeds the preset timeout period, the anti-stream circuit forces RTS low on the 3001's output. The "Alarm" LED becomes red; indicating a streaming condition. This feature prevents a malfunctioning terminal from tying-up a computer port in a multidrop or polling environment. When the DTE drops RTS, the antistreaming timer is automatically reset and the "Alarm" LED turns off.

APPENDIX A: SPECIFICATIONS

Connectors: DB-25 male on DCE side; DB-25 female on DTE side

DTE Interfaces: EIA RS-232-A, CCITT V.24

Data Rates: Transparent to data

Power Supply: None required, derived from the DTE (TD, RTS, DTR, Pin 9)

Indicators: 4 LEDs monitor RTS (from DTE), TD, RD and the Timeout Alarm

Timeout Periods: 12.5, 25, 50, 400 \pm 10%

Temperature Range: 0-50°C (32-122°F)

Humidity: Up to 95% non-condensing

Dimensions: 2.2" x 2.1" x .81"

Weight: 1.5 oz.

APPENDIX B: BLOCK DIAGRAM

