

Chapter 6

Caller ID Delivery and Security

GENERAL

Your BitSURFR Pro includes two Caller ID features available to both the data port and voice ports:

- **Caller ID Delivery** allows you to *identify* and *log* the telephone numbers of incoming calls.
- **Caller ID Security** allows you to *block* unwanted incoming calls or *screen* (permit delivery of) only those calls desired. Although blocking and screening are mutually exclusive, you can set one port to Call Blocking and the other port to Call Screening.

OPERATION FUNDAMENTALS

You can configure Caller ID Delivery and Security options using AT commands. Operation of Caller ID Delivery and Security commands and responses is the same for both data and voice ports. To use an AT command to configure a voice port, you must precede the command with an asterisk (*) and a 1 or a 2 (for voice port 1 or 2) as in the following examples:

AT Command	Action
AT@N0=1	Enables the logging feature for the data port.
AT*1@N0=1	Enables the logging feature for voice port 1.
AT*2@N0=1	Enables the logging feature for voice port 2.

You may view the current configuration of the data port Caller ID Delivery and Caller ID Security option commands by entering **AT&V**. Enter the command **AT*@N0?** to view the voice port configuration.

CALLER ID DELIVERY

The Caller ID software automatically identifies an incoming telephone number, if possible; what it does afterward will depend upon the features you have selected on a per-port basis.



Note

The BitSURFR Pro does not support Caller ID Deluxe.

The Caller ID Auto Delivery and Logging features may in some cases display one of the following descriptions instead of a telephone number:

BLOCKED: The caller has blocked display of his telephone number.

NO NUMBER: The incoming call does not contain any information identifying the telephone number.

OUT OF AREA: Information on the calling party is unavailable due to network interworking.

NO CID SERVICE: Network does not provide any information on the calling party.

Caller ID Auto Delivery

Caller ID Auto Delivery allows the BitSURFR Pro to display the incoming telephone number. The number is displayed immediately following the incoming call response message (**RING** if verbose responses have been selected, or **2** if numeric responses have been selected). This option is valid only for the data port.

AT Command	Action
AT@N1=1	Enables Caller ID Auto Delivery.
AT@N1=0	Disables Caller ID Auto Delivery (factory default).

Even if Caller ID Auto Delivery is disabled, you may still retrieve the incoming telephone number from the list of telephone numbers if you have enabled Caller ID Logging.

Caller ID Delivery to Voice Ports

If you have an analog Caller ID device connected to a voice port, you may view an incoming analog telephone number immediately after the first ring. If you do not have an analog Caller ID device, you may still retrieve the incoming telephone number from the list of numbers if you have enabled Caller ID Logging; however, you must set the BitSURFR Pro's internal date and time option in order to activate this feature. For more information on setting the Date and Time option, refer to Chapter 4 of this guide.

Caller ID Logging

When Caller ID Logging is enabled, the BitSURFR Pro stores each incoming telephone number. The Caller ID Logging feature is available to both ports—data and voice—and stores up to ten telephone numbers per port. Each number may be up to 16 digits in length. When the list is full, the BitSURFR Pro will replace the oldest number with the most recent. Because the lists of telephone numbers are stored in volatile (temporary) memory, the lists are cleared whenever your BitSURFR Pro is disconnected or loses power. Enabling or disabling this feature *does not* clear the list of stored numbers.

AT Command	Action
AT@N0=1	Enables data port Caller ID Logging.
AT*1@N0=1	Enables voice port 1 Caller ID Logging.
AT*2@N0=1	Enables voice port 2 Caller ID Logging.
AT@N0=0	Disables (factory default) data port Caller ID Logging.
AT*1@N0=0	Disables (factory default) voice port 1 Caller ID logging.
AT*2@N0=0	Disables (factory default) voice port 2 Caller ID logging.

Number Retrieval

You can use these commands to retrieve the most recent telephone number received by a port, or to retrieve the entire list of numbers logged by a port. You can use these commands regardless of whether Caller ID Logging is enabled. These commands *do not* clear the list of stored numbers.

AT Command	Action
AT@L1	Retrieves the most recent telephone number received by the data port.
AT*@L1	Retrieves the most recent telephone number received by voice port 1.
AT*2@L1	Retrieves the most recent telephone number received by voice port 2.

AT Command	Action
AT@L2	Retrieves the entire list of telephone numbers received by the data port.
AT*@L2	Retrieves the entire list of telephone numbers received by voice port 1.
AT*2@L2	Retrieves the entire list of telephone numbers received by voice port 2.

When you retrieve the entire list of numbers, the list is displayed in descending order, most recent to oldest.

Number Clearing

You can use these commands to clear telephone numbers logged by a port.

AT Command	Action
AT@L0	Clears the list of telephone numbers for the data port.
AT*n@L0	Clears the list of telephone numbers for a voice port (where <i>n</i> is the voice port number).

CALLER ID SECURITY

When enabled, Caller ID Security operates on a port in one of two mutually exclusive modes: Call Screening and Call Blocking. Both features operate based on a list of user-entered ID numbers. The entire list of Caller ID Security numbers may be assigned to one port, or the list may be divided between the data port and the two voice ports. If Call Screening is selected, an incoming call is accepted only if its number is in the list of stored ID numbers. If Call Blocking is selected, an incoming call is accepted only if its number is not in the list of stored ID numbers. If this feature is disabled, all incoming calls are accepted. This feature is available to both the data port and the voice ports.



Note

If Caller ID Logging is enabled, the incoming telephone number will not be logged if the call is screened or blocked. If Call Screening is enabled, but the originating call does

not contain Caller ID information, the call will not be accepted. However, if Call Blocking is enabled, the call will be accepted. Also, note that the Caller ID Security list is not the same list as the list of logged numbers.

AT Command	Action
AT@IS=S	Enables Call Screening for the data port.
AT@IS=B	Enables Call Blocking for the data port.
AT@IS=D	Disables Caller ID Security for the data port.
AT*1@IS=S	Enables Call Screening for voice port 1.
AT*1@IS=B	Enables Call Blocking for voice port 1.
AT*1@IS=D	Disables Caller ID Security for voice port 1.
AT*2@IS=S	Enables Call Screening for voice port 2.
AT*2@IS=B	Enables Call Blocking for voice port 2.
AT*2@IS=D	Disables Caller ID Security for voice port 2.

ID Numbers

When comparing the incoming Caller ID number and the stored Caller ID Security list, your BitSURFR Pro begins with the last number of the incoming Caller ID and reads right to left. If the stored list includes abbreviated numbers (fewer than the normal seven digits for a local call) the BitSURFR Pro will allow a match with any incoming call that ends with those numbers. For example, a stored number of 8000 will be considered a match with 1-205-430-8000 and 1-901-555-8000. To ensure complete security, enter the entire desired phone number (seven digits for local calls or 10 for long distance) in the stored list.

Wild Card Characters

You can use the question mark (?) as a wild card character when entering numbers to the Caller ID Security list. The wild card character causes a match with any single digit in the incoming number. For example, the incoming calling ID number "2054308000" produces a match with stored numbers "80??", "43080??", "205???8000", and "0?", but not with "80?", "205?", or "430?". Note that any wild cards to the left of a matched number will be ignored.

Entering ID Numbers

You can add up to 44 14-digit numbers to the Caller ID Security list. You can divide the numbers among the ports as you like. Note that identical numbers assigned to different ports are treated as one number in the Caller ID Security list. In other words, you may assign 44 numbers to each port if the numbers are the same. Unless preceded by an asterisk (*), the commands below configure and operate the data port. The voice ports must be configured using the AT* prefix as previously discussed.

AT Command	Action
AT@IA=<i>n</i>	Adds a telephone number to the Caller ID Security list for the data port (where <i>n</i> equals the telephone number). If no space is available, an ERROR message is returned.
AT*1@IA=<i>n</i>	Adds a telephone number to the Caller ID Security list for voice port 1 (where <i>n</i> equals the telephone number).
AT*2@IA=<i>n</i>	Adds a telephone number to the Caller ID Security list for voice port 2 (where <i>n</i> equals the telephone number).
AT@ID=<i>n</i>	Deletes a telephone number from the Caller ID Security list for the data port (where <i>n</i> equals the telephone number). If the ID does not exist, an ERROR message is returned.
AT*1@ID=<i>n</i>	Deletes a telephone number from the Caller ID Security list for voice port 1 (where <i>n</i> equals the telephone number).
AT*2@ID=<i>n</i>	Deletes a telephone number from the Caller ID Security list for voice port 2 (where <i>n</i> equals the telephone number).
AT@IC	Clears the Security ID list. (This command deletes <i>all</i> IDs from the data port.)
AT*1@IC	Clears the Security ID list for voice port 1.
AT*2@IC	Clears the Security ID list for voice port 2.
AT@IL	Lists the status of Caller ID Security for the data port, and lists all IDs stored in the list.

AT Command	Action
AT*1@IL	Lists the status of Caller ID Security for voice port 1, and list all IDs stored in the list.
AT*2@IL	Lists the status of Caller ID Security for voice port 2, and list all IDs stored in the list.
AT@IV	Copies the Security status and Caller ID Security list from the data port to the voice ports.
AT*1@IP or AT*2@IP	Copies the Security status and Caller ID Security list from a voice port to the data port.

Network Verification of Caller ID Information

In some networks, the Caller ID information can be generated either by the caller's equipment or by the network. If the caller's equipment provides its own ID, the network may or may not verify the Caller ID information provided by the caller. Bits are provided in the incoming call setup message to identify the source and verification of the calling party ID. It would be possible for a caller to falsify his Caller ID information. Therefore, if Caller ID Security screening is enabled, then a caller whose ID is not network-generated or network-verified will be rejected, even if his Security ID is in the list.

If it is necessary to make an exception for a particular caller, then the “!” may be included anywhere in the stored ID string to indicate that network generation or verification of the calling ID is not required for that particular caller. If Caller ID Security blocking is enabled, the ISDN modem will block the call if it is on the Caller ID Security list, but accept callers that are not on the ID list, regardless of the source or verification.

Note

On AT&T central office switches, there is no information supplied in the incoming setup message to identify the source and verification of the calling party ID. Therefore, if the ISDN modem is configured on an AT&T switch, there will be no security screening of calls based on network veri-

fication of Caller ID information. If the network verification character (“!”) is included in a stored ID string, it will be ignored.