TECHNICAL BULLETIN
Intrusion
Modem Init Strings
October 12, 2007

**Issue Severity:**
- High: Act immediately
- Medium: Bosch Security Systems, Inc.
  strongly recommends you take the action(s) described below.
- Low: Advisory

<table>
<thead>
<tr>
<th>Products Affected:</th>
<th>RPS</th>
</tr>
</thead>
</table>

1.0 **Issue**
RPS cannot connect to a control panel using a modem and Public Switched Telephone Network (PSTN) connection.

2.0 **Resolution**
For some modems, the default reset or init strings do not work with RPS.
Perform the following procedures to create a custom modem init string:

**Start HyperTerminal**
1. Start a new HyperTerminal session (Start → All Programs → Accessories → Communications → HyperTerminal). When prompted for a name, enter a name of your choice and click OK.
2. **For external modems (recommended):**
   In HyperTerminal, on the **Connect To** screen, select **Connect using**; then select the Com port you connected the modem to. Continue with **Step 3**.

   ![Connect To Screen](image1)

   **For internal modems:**
   Select the modem itself, enter an area code and phone number (the phone number is never dialed, so simply enter a single digit), then continue with **Step 4**.

3. At the **Com Properties** screen, set the following parameters unless your modem communicates at a different baud rate:
   - Bits per second = 9600
   - Data bits = 8
   - Parity = none
   - Stop bits = 1
   - Flow control = none

   ![COM1 Properties Screen](image2)

4. At the Connect screen, click **Cancel** to continue.
5. A blank screen opens in which you can type commands to the modem. To test your connection to the modem, type AT [Enter]. You should see OK or a 0 on the screen. If not, cycle the modem’s power and try again. The SD light on the modem should flash as you type. If you still cannot complete this step, check all modem cable connections and settings. This step must provide correct results before you continue to the following steps.

Determine Reset String
6. Type AT&F [Enter]. If you receive an ERROR result, typing ATZ [Enter] should return an OK result.

Determine Init String
7. In Steps 8 through 21, type the listed commands and press [Enter]. If you receive an OK, place a check in the OK column of the table below. If you receive an ERROR, then place a check in the ERROR column for that step.

<table>
<thead>
<tr>
<th>Modem Command</th>
<th>OK</th>
<th>ERROR</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. ATB1 [Enter]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. ATF1 [Enter]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. ATL1 [Enter]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. ATM1 [Enter]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. ATN0 [Enter]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. ATX0 [Enter]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. ATY0 [Enter]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. AT&amp;C1 [Enter]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. AT&amp;D2 [Enter]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. AT&amp;Q0 [Enter]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. AT%C0 [Enter]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. AT\N0 [Enter]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. ATS7=255 [Enter]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. ATS10=255 [Enter]</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

22. Assemble all of the commands marked OK into a string starting with one AT command. The rest of the string is the text from the OK commands minus the AT portion of each command (for example, ATB1L1M1N0 … and so on).

23. For Easy Series control panels, add S8=5S11=200S37=5 to the end of the string.

24. If you have a USR or 3COM modem, add &K0&M0&N1&U1B to the end of the string.

25. To confirm the string’s accuracy, type the entire string into HyperTerminal and press [Enter]. If you receive an ERROR result, then check for mistakes in the string. If you receive an OK result, proceed to Step 26.
Enter Strings into RPS

26. In RPS, select the account, then select **Config → System**. Select the control panel type, then click **Edit**. The **Edit Modem** dialog opens.

27. In the **Reset String** field, type the string that returned an **OK** result in Step 6 (either AT&F or ATZ).

28. In the **Init String** field, type the string that you assembled in **Steps 22 through 25**, then click **OK**.

![Edit Modem dialog](image)

Connect to Control Panel

Attempt connecting to the control panel with RPS. If unsuccessful:

29. For control panels other than Easy Series, **if the modem does not produce an answer tone** when you call a control panel, add ;ATA to the end of the control panel phone number in RPS. If there is still no tone, this modem will not work with RPS.

30. For control panels other than Easy Series, **if the modem is producing the answer tone, but the tone changes in pitch**, try adding S37=3 to the end of the init string. If the modem answer tone still changes, this modem will not work with RPS.

Bosch Security Systems, Inc. supports only the modems listed in the RPS online help. Bosch does not guarantee that any other modems will function reliably.