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Courier Remote Access

You can set a Courier modem so that it can be remotely configured by someone at another modem. This is especially helpful when you have problems making a connection with another modem. For example, if you have trouble connecting with a bulletin board, you can allow the bulletin board operator to dial in to your modem and view its configuration settings. If necessary, the bulletin board operator can send the Courier a configuration string to correct your settings. Another example of how you might use remote configuration is if you want to call into your modem from a remote site and configure it to accept a certain type of call while you're away.

At the Courier Site

Setting the Courier for Remote Access. There are two ways to set the Courier modem for remote access.

1. Set Register S41 for a value of 1 or greater. S41 is used to set the number of allowable login attempts, as explained later. A setting of zero allows no login attempts, and thus disables remote access.
2. Press and hold down the voice/data switch while powering on the modem. Pressing the switch during power-on causes the modem to perform its normal self-test, enables Auto Answer, enables Remote Access by changing the S41 setting to 1, and disables password security.

Password Security

You can designate two passwords for remote access security, each allowing a different level of access to the remote user. You can assign one password that allows viewing privileges only, whereby the Courier's configuration can be remotely viewed but not changed. You can assign another password that allows both remote viewing and configuration privileges.

Passwords can be up to eight alphanumeric characters, and are not case-sensitive. Do not enter any other commands before pressing the <Enter> key. To assign a password that allows viewing privileges only, use the following command format:

```
AT%P0=[password] <Enter>
```

To assign a password that allows viewing and configuration privileges, use this command format:

AT%P1 = [password] <Enter>

NOTE: If you enable remote access by pressing the voice/data switch while powering on the modem, previously set passwords will be erased.

Login Attempts

The Register S41 setting designates the number of allowable login attempts by the remote user, thus enabling or disabling remote access. If the number of allowable login attempts is set to 0, remote access is disabled. If the number of allowable login attempts is set to 1 or greater, remote access is enabled. If the number of unsuccessful login attempts exceeds the limit set by S41, the modem returns online and any further login attempts during the remainder of that connection are refused.

Disabling Password Security

If you want to disable an assigned password (and thereby disable remote access security), use the following command format:

```
AT%P0= <Enter>  
OR  
AT%P1= <Enter>
```

If, for example, you disable the %P0 password, the remote user does not need to enter a password for view-only access.

LED Indicator for Remote Access: the Courier's SYN LED flashes to indicate when it is in a remote access session.

At the Other Modem Site

Remote configuration can be performed at any time during an asynchronous connection. The user performing remote configuration can use any modem; it does not have to be a U.S.Robotics model.

1. Make sure the Courier has been set for remote configuration, as described earlier, and establish a connection. It does not matter which modem originates the call.
2. After a connection has been established, send the following escape sequence.

Pause four seconds,
type four tildes: ~~~~
and pause another four seconds.

NOTE: You can change the escape sequence character with Register S42. The pause duration (guard time) can be modified with Register S43. (These values are set at the Courier modem.)

3. When the Courier begins its login sequence, the caller will see the following display (or a similar display) on his screen.

```
USRobotics Courier 16800 HST Dual Standard Remote  
Serial Number 000000A000000001
```

4. At this point, if password security is active, the caller is prompted for the password.

Password (Ctrl-C to cancel)?

As described earlier in Password Security, entering the pass word assigned with %P0 allows viewing privileges only. Entering the password assigned with %P1 allows viewing and configuration privileges. Note that there is a 3-minute time limit for entering the password.

When a password is accepted, the Courier indicates that it has entered Remote Access mode and the remote prompt appears on the caller's screen.

```
Access Granted
Remote->
```

As mentioned earlier, if the number of unsuccessful login attempts exceeds the set limit, the modem returns online and refuses any further login attempts during the remainder of that connection.

5. If password security is not active (no passwords have been set or both passwords are disabled), the Courier automatically enters Remote Access mode and the remote prompt appears on the caller's screen.

```
Remote->
```

6. Once the remote access session has been established, keep in mind that there is a 3-minute inactivity timer. If the modem detects no activity for 3 minutes, it aborts the remote access session and resumes a normal online connection.

Aborting the Request for Remote Access

You can abort the remote access login procedure and return online by pressing the key combination <Ctrl>-C.

Remote Viewing and Configuration

Once you've gained remote access, you can communicate with the Courier as if you were typing commands at its attached terminal or computer. Depending on your access privileges, you can use the regular Courier AT commands.

If you have view privileges only (with Password 0), you can use any of the view commands described in Chapter 8.

If you have view and configure privileges (with Password 1), you can use any of the Courier commands, except those commands that cannot be used while online, such as the Dial command. You can also use the remote access commands described later.

When you make remote configuration changes, the remote prompt is altered to indicate that changes have been made. The prompt will change from:

```
Remote->
to
Remote+>
```

If you restore the original configuration (with %C1, explained next), the original prompt is also restored (back to Remote->), indicating that the original configuration is intact.

By default, configuration changes do not take effect until the connection is terminated (see %Cn). However, the new configuration is immediately reflected in the information screens (ATIn).

Remote Configuration Commands

There are some additional commands that are only executable during a remote access session. These commands are as follows.

%Cn Configuration control.

%C0 Defer configuration. This is the default. Configuration changes are deferred until the call is ended, and take effect for ensuing connections. You do not need to enter this command; it is the default unless you enter one of the following %C values.

%C1 Restore configuration. Use this command to cancel any configuration changes made during remote access, and restore the original configuration. However, commands that have been written to NVRAM (with &W) will not be restored to their previous settings. Additionally, if you have forced immediate configuration changes (with %C2), those changes cannot be reversed with %C1.

%C2 Execute configuration. Use this command to force configuration changes to take effect immediately, during the current connection. We recommend against forcing immediate configuration changes unless absolutely necessary, as this can result in an unreliable connection or even a loss of connection.

%Bn Configure the Courier's serial port rate.

%B0 110 bps.

%B1 300 bps.

%B2 600 bps.

%B3 1200 bps.

%B4 2400 bps.

%B5 4800 bps.

%B6 9600 bps.

%B7 19,200 bps.

%B8 38,400 bps.

%B9 57,600 bps.

%Fn Configure data format.

%F0 No parity, 8 data bits.

%F1 Mark parity, 7 data bits.

%F2 Odd parity, 7 data bits.

%F3 Even parity, 7 data bits.

Command Format

When typing commands during the remote access session, no delay is necessary between command strings. For example, you can type the following commands without pausing after each one.

a password: ABCDEF <Enter>

a configuration string: AT&H1&R2&W <Enter>

and a request for an information screen: ATi5 <Enter>

The maximum number of characters between carriage returns is 40.

Ending a Remote Access Session

You can issue one of three commands to end a remote access session.

ATZ resets the Courier modem and terminates the connection.

ATH terminates the connection.

ATO ends the remote access session, but the modems remain online.