

CIRCUIT SWITCHED OPERATION



Model	Chameleon CTM-130/132 modem
Revision:	1849.0046#9 revision 1.0

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1 Contents

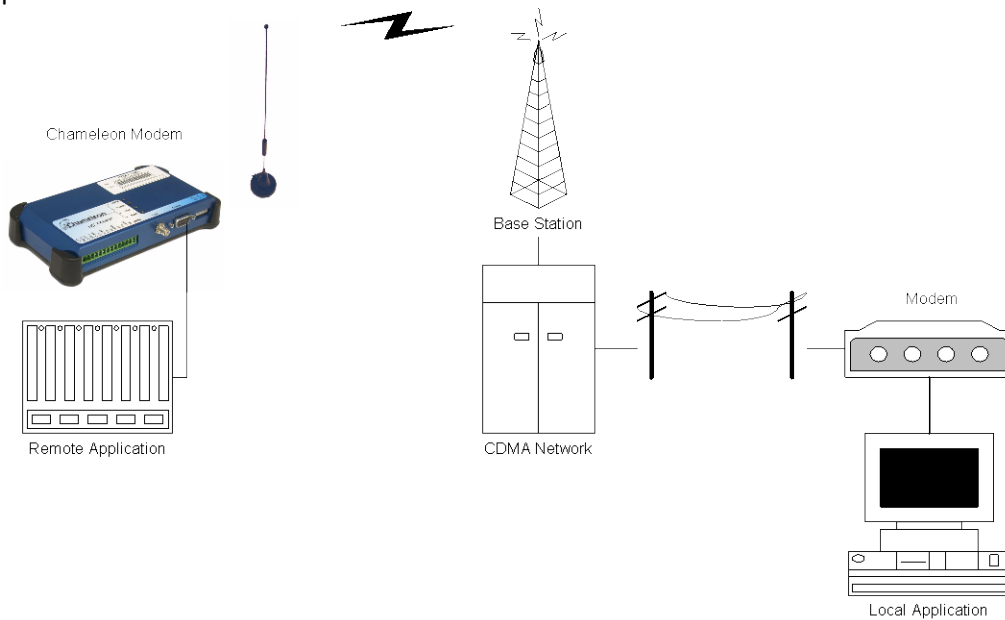
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2 Revision Control

Description	Revision	Date
Customer Release	1849.0046#9 revision 1.0	20-May-05

3 CTM-130/132 Circuit Switched Operation

This application note details how to setup the CTM-130 or CTM-132 CDMA wireless data modem for RS232 communications over a circuit switched connection. A circuit switched connection is similar to a traditional landline modem connection – it uses the CDMA IS95 protocol and not the CDMA 2000 1x packet data network.



AT Commands used for circuit switched operation:

The following AT commands will set the modem's serial interface.

The default baud rate is 115,200. If you need to change the serial port settings use the following command:

`AT^HOSTSP=nnnn,P,D,S` where nnnn is the required serial interface baud rate.
P is the parity setting: N, E, or O
D is the number of data bits: 7 or 8
S is the number of stop bits: 1 or 2

You will now need to adjust the terminal application to these new settings.

If the end application does not use hardware flow control then it can be disabled:

`AT&K0`

`AT^HOSTIF=3` Direct connect mode – this disables the modem's internal stack.

If the modem is required to auto answer incoming circuit switched calls, then configure this using:

`ATSO=1`

`AT&W` Save the current settings to non-volatile memory.

The modem will now always power up in circuit switched mode.

To initiate a call from the modem:

`ATDT[number]` where [number] is the 10 or 11 digit telephone number of the remote modem being called.

Once the far end has answered and the modems have negotiated a connection, the CTM-130/132 will send the message CONNECT over its RS232 port. A transparent RS232 connection will now be available for your application to use between the two modems.

To answer an incoming call:

If the modem is not configured for auto answer it can still be used to answer an incoming call. The text RING will be sent over the serial port when an incoming call is detected. To answer, send the command ATA to the modem and the CTM-130/132 will send the message CONNECT over its RS232 port. A transparent RS232 connection will now be available for your application to use between the two modems.

To close a connection:

During the connection either end may send +++ to return the modem to command mode (the sequence +++ should therefore not be used in the content of the data connection). Sending the AT command ATH0 will then cause the connection to be torn down by both sides and the CTM-130/132 will be ready to make or receive another circuit switched connection. HyperTerminal and Dial-up Connections using this COM port number.

4 Technical Support/Warranty:

**Cypress Solutions Service
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