

GPS1200 Quick Guide

Airlink IP Based CDMA Setup

March, 2003

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LEICA SYSTEM 1200

Leica
Geosystems

Overview



Overview

This guide is intended to describe the steps in configuring GPS1200 to use an Airlink IP Based CDMA modem. The guide is broken into three sections:

- Creating a new modem device....(Steps 01 – 10)
 - Creating a new “Station to Dial”....(Steps 11 – 19)
 - Connecting to the base when using the rover.....(Steps 20 – 22)
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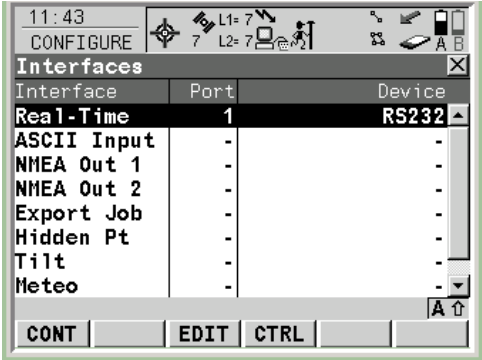
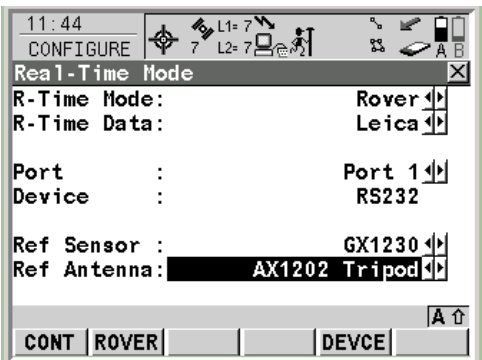
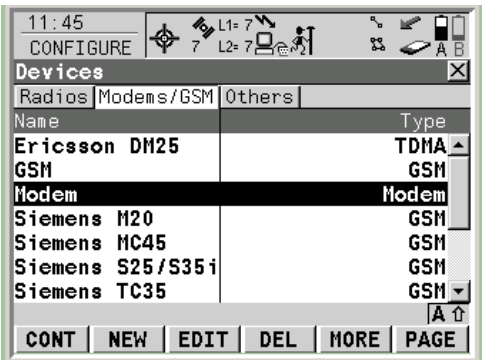
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Creating an Airlink IP Based CDMA Device

Step	Action	Display
<p>1</p>	<p>From the Main Menu:</p> <ul style="list-style-type: none"> Select menu item 5 Config... by tapping on the icon or press 5 on the numeric keypad access the Configuration: DEFAULT screen. <p>This takes you to the Configuration: DEFAULT screen.</p>	
<p>2</p>	<p>In the Configuration: DEFAULT screen.</p> <ul style="list-style-type: none"> Use the up/down arrow keys to move the focus bar to highlight menu item 4 Interfaces... Press the F1 (CONT) soft-key <p>This takes you to the Interfaces screen</p>	

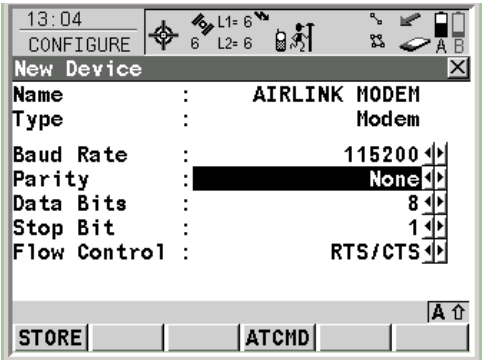
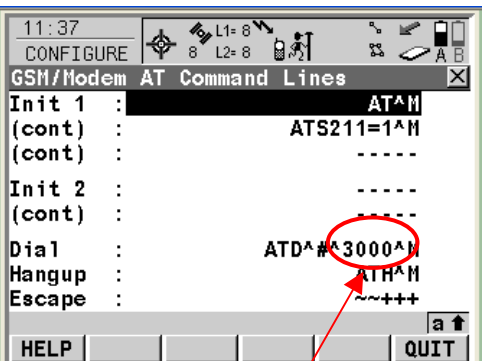
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Creating an Airlink IP Based CDMA Device...Continued

Step	Action	Display																											
<p>3</p>	<p>In the Interfaces screen use the up/down arrow keys to move the focus bar to highlight the Interface item Real Time</p> <ul style="list-style-type: none"> • Press the F3 (EDIT) soft-key <p>This takes you to the Real – Time Mode screen.</p>	 <p>The screenshot shows the 'Interfaces' screen with a table of interface settings. The 'Real-Time' interface is highlighted. The table has columns for 'Interface', 'Port', and 'Device'. Other interfaces listed include ASCII Input, NMEA Out 1, NMEA Out 2, Export Job, Hidden Pt, Tilt, and Meteo.</p> <table border="1"> <thead> <tr> <th>Interface</th> <th>Port</th> <th>Device</th> </tr> </thead> <tbody> <tr> <td>Real-Time</td> <td>1</td> <td>RS232</td> </tr> <tr> <td>ASCII Input</td> <td>-</td> <td>-</td> </tr> <tr> <td>NMEA Out 1</td> <td>-</td> <td>-</td> </tr> <tr> <td>NMEA Out 2</td> <td>-</td> <td>-</td> </tr> <tr> <td>Export Job</td> <td>-</td> <td>-</td> </tr> <tr> <td>Hidden Pt</td> <td>-</td> <td>-</td> </tr> <tr> <td>Tilt</td> <td>-</td> <td>-</td> </tr> <tr> <td>Meteo</td> <td>-</td> <td>-</td> </tr> </tbody> </table>	Interface	Port	Device	Real-Time	1	RS232	ASCII Input	-	-	NMEA Out 1	-	-	NMEA Out 2	-	-	Export Job	-	-	Hidden Pt	-	-	Tilt	-	-	Meteo	-	-
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<p>4</p>	<p>In the Real – Time Mode screen select the following:</p> <ul style="list-style-type: none"> ○ R-Time Mode: Rover ○ R-Time Data: Leica. ○ Port: Port 1 ○ Device: (Accept Default) ○ Ref Sensor: GX1230 ○ Ref Antenna: AX1202 Tripod <ul style="list-style-type: none"> • Press the F5 (DEVCE) soft-key. <p>This takes you to the Devices screen</p>	 <p>The screenshot shows the 'Real-Time Mode' screen with various configuration options. The 'R-Time Mode' is set to 'Rover' and 'R-Time Data' is set to 'Leica'. Other settings include Port (Port 1), Device (RS232), Ref Sensor (GX1230), and Ref Antenna (AX1202 Tripod).</p>																											
<p>5</p>	<p>In the Devices screen tap the Modems/GSM tab. Alternatively press the F6 (PAGE) soft-key to toggle between the different tabs.</p> <ul style="list-style-type: none"> • Use the up/down arrow keys to move the focus bar to highlight the item Modem • Press the F2 (NEW) soft-key <p>This takes you to the New Device screen.</p>	 <p>The screenshot shows the 'Devices' screen with the 'Modems/GSM' tab selected. A list of devices is shown with columns for 'Name' and 'Type'. The 'Modem' item is highlighted.</p> <table border="1"> <thead> <tr> <th>Name</th> <th>Type</th> </tr> </thead> <tbody> <tr> <td>Ericsson DM25</td> <td>TDMA</td> </tr> <tr> <td>GSM</td> <td>GSM</td> </tr> <tr> <td>Modem</td> <td>Modem</td> </tr> <tr> <td>Siemens M20</td> <td>GSM</td> </tr> <tr> <td>Siemens MC45</td> <td>GSM</td> </tr> <tr> <td>Siemens S25/S35i</td> <td>GSM</td> </tr> <tr> <td>Siemens TC35</td> <td>GSM</td> </tr> </tbody> </table>	Name	Type	Ericsson DM25	TDMA	GSM	GSM	Modem	Modem	Siemens M20	GSM	Siemens MC45	GSM	Siemens S25/S35i	GSM	Siemens TC35	GSM											
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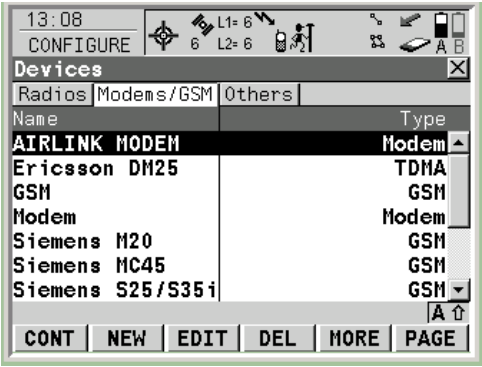
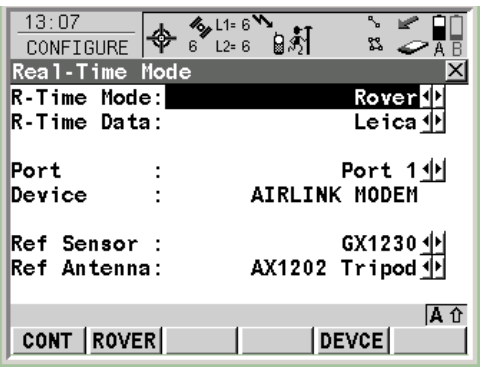
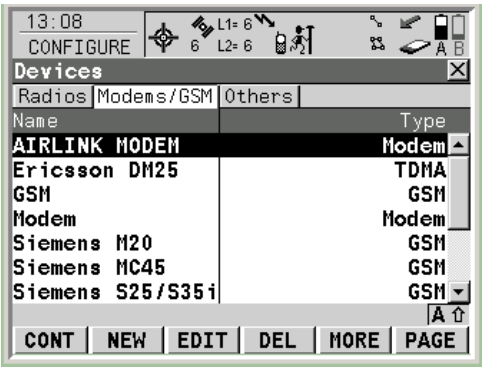
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Creating an Airlink IP Based CDMA Device...Continued

Step	Action	Display
<p>6</p>	<p>In the New Devices screen give the new device a name, for example, AIRLINK MODEM</p> <ul style="list-style-type: none"> • Enter the following parameters: <ul style="list-style-type: none"> ○ Baud Rate: 115200 ○ Parity: None ○ Data bits : 8 ○ Stop Bits : 1 ○ Flow Control : RTS/CTS • Press the F4 (ATCMD) soft-key <p>This takes you to the GSM/Modem AT Command Lines screen.</p>	
<p>7</p>	<p>This takes you to the GSM/Modem AT Command Lines screen.</p> <ul style="list-style-type: none"> • Enter the following information: <ul style="list-style-type: none"> ○ Init 1: AT ^M ○ (cont): ATS211=1^M ○ Dial: ATD^#^3000^M ○ Hangup: ATH^M ○ Escape: ~~+++ • Press the F1 (STORE) soft-key to save the settings and return to the New Devices screen. • In the New Devices screen press the F1 (STORE) soft-key to return to the Devices screen. <p>You will be taken to the Devices screen.</p>	 <div data-bbox="971 1402 1403 1549" style="border: 1px solid red; padding: 5px; color: red;"> <p>Enter the port number of the IP address you are connecting to in the dial string. For port 3000 enter as shown</p> </div>


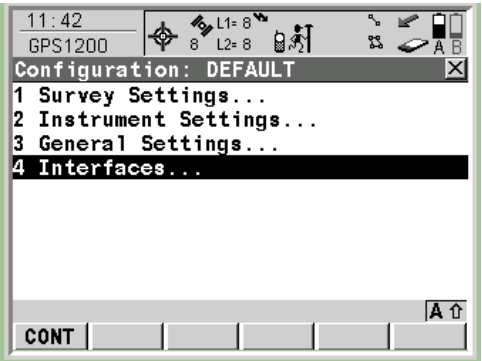
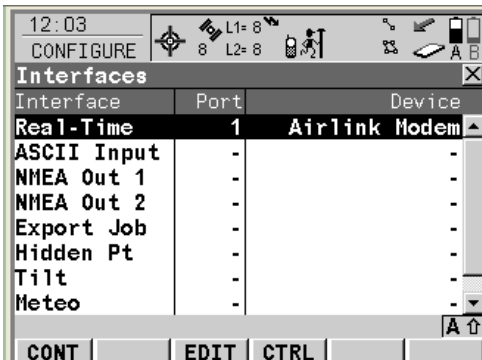
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Creating an Airlink IP Based CDMA Device...Continued

Step	Action	Display
<p>8</p>	<p>In the Devices screen make sure the focus bar is highlighting your new device. In this example it should be AIRLINK MODEM</p> <ul style="list-style-type: none"> Press the F1 (CONT) soft-key to accept this choice. <p>You will be taken to the Real-Time Mode screen.</p>	
<p>9</p>	<p>In the Real-Time Mode check your settings:</p> <ul style="list-style-type: none"> R-Time Mode: Rover R-Time Data: Leica. Port: Port 1 Device: AIRLINK MODEM Ref Sensor: GX1230 Ref Antenna: AX1202 Tripod <ul style="list-style-type: none"> Press the F1 (CONT) soft-key. <p>This takes you to the Interfaces screen.</p>	
<p>10</p>	<p>In the Interfaces screen.</p> <ul style="list-style-type: none"> Press the F1 (CONT) soft-key to accept the Real-Time Interface on Port 1, using the AIRLINK MODEM device and return to the main menu. 	

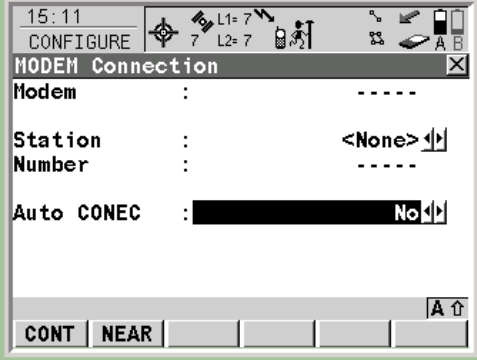
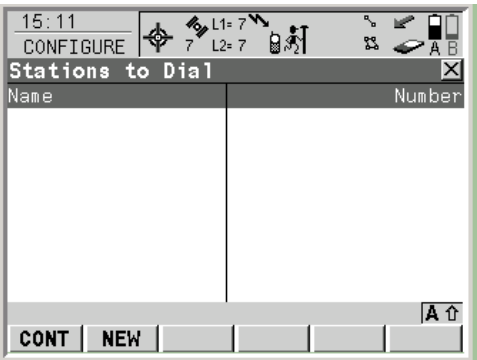
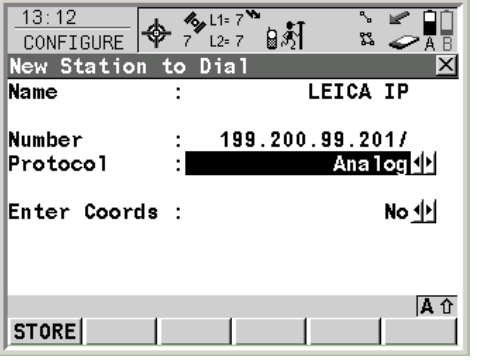
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Setting the Base Station to Dial IP Address

Step	Action	Display																											
<p>11</p>	<p>From the Main Menu:</p> <ul style="list-style-type: none"> Select menu item 5 Config... by tapping on the icon or press 5 on the numeric keypad access the Configuration: DEFAULT screen. <p>This takes you to the Configuration: DEFAULT screen.</p>																												
<p>12</p>	<p>In the Configuration: DEFAULT screen.</p> <ul style="list-style-type: none"> Use the up/down arrow keys to move the focus bar to highlight menu item 4 Interfaces... Press the F1 (CONT) soft-key <p>This takes you to the Interfaces screen</p>																												
<p>13</p>	<p>In the Interfaces screen use the up/down arrow keys to move the focus bar to highlight the Interface item Real Time</p> <ul style="list-style-type: none"> Press the F4 (CTRL) soft-key <p>This takes you to the Modem Connection screen.</p>	 <table border="1" data-bbox="935 1339 1398 1581"> <thead> <tr> <th>Interface</th> <th>Port</th> <th>Device</th> </tr> </thead> <tbody> <tr> <td>Real-Time</td> <td>1</td> <td>Airlink Modem</td> </tr> <tr> <td>ASCII Input</td> <td>-</td> <td>-</td> </tr> <tr> <td>NMEA Out 1</td> <td>-</td> <td>-</td> </tr> <tr> <td>NMEA Out 2</td> <td>-</td> <td>-</td> </tr> <tr> <td>Export Job</td> <td>-</td> <td>-</td> </tr> <tr> <td>Hidden Pt</td> <td>-</td> <td>-</td> </tr> <tr> <td>Tilt</td> <td>-</td> <td>-</td> </tr> <tr> <td>Meteo</td> <td>-</td> <td>-</td> </tr> </tbody> </table>	Interface	Port	Device	Real-Time	1	Airlink Modem	ASCII Input	-	-	NMEA Out 1	-	-	NMEA Out 2	-	-	Export Job	-	-	Hidden Pt	-	-	Tilt	-	-	Meteo	-	-
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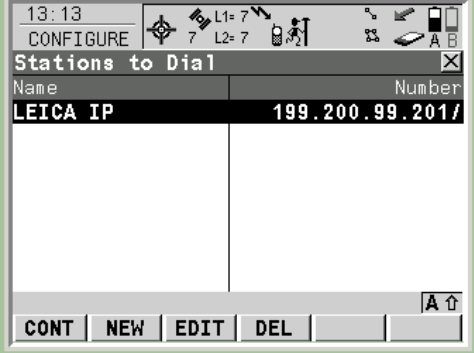
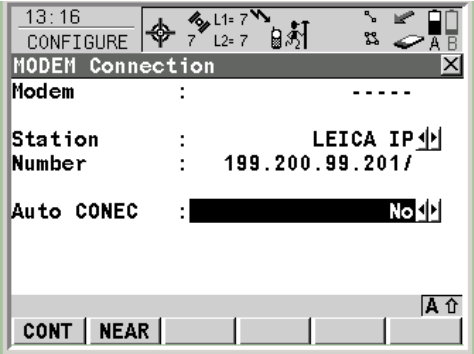
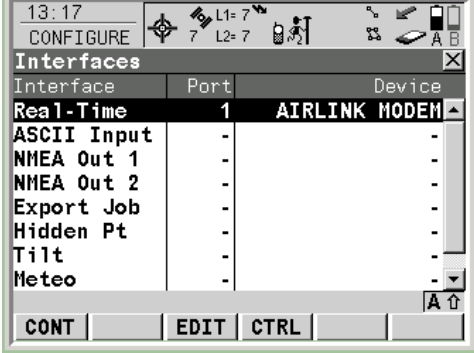
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Setting the Base Station to Dial IP Address...Continued

Step	Action	Display
<p>14</p>	<p>In the Modem Connection screen the “Station” field is highlighted.</p> <ul style="list-style-type: none"> Press the Enter soft-key to go to the Stations to Dial screen. <p>This takes you to the Stations to Dial screen.</p>	
<p>15</p>	<p>In the Stations to Dial screen.</p> <ul style="list-style-type: none"> Press the F2 (NEW) soft-key. <p>This takes you to the New Station to Dial screen.</p>	
<p>16</p>	<p>In the New Station to Dial screen.</p> <ul style="list-style-type: none"> Type in the Name of the Base Station e.g. “LEICA IP” in the Name field Type in the IP address of the base station in the Number field. e.g. 199.200.99.201/ <ul style="list-style-type: none"> Make sure to enter the IP address is entered as shown. Make sure the Protocol field is set to Analog. Make sure the Enter Coords field is set to No. <p>Press the F1 (STORE) soft-key to return the Stations to Dial screen.</p>	


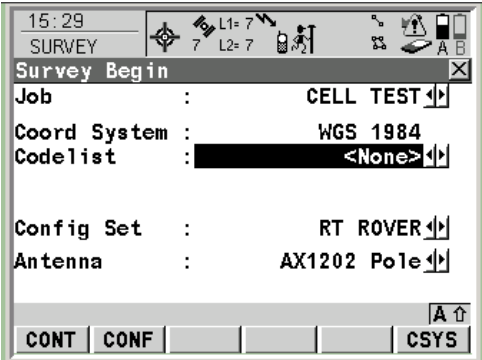
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Setting the Base Station to Dial IP Address...Continued

Step	Action	Display
<p>17</p>	<p>In the Stations to Dial screen. Your new Station to Dial (LEICA IP) should be highlighted.</p> <ul style="list-style-type: none"> Press the F1 (CONT) soft-key to accept your choice base station to dial and return to the Modem Connections screen. 	
<p>18</p>	<p>In the Modem Connections screen.</p> <p>Press the F1 (CONT) soft-key to return to the Interfaces screen.</p>	
<p>19</p>	<p>In the Interfaces screen.</p> <ul style="list-style-type: none"> Press the F1 (CONT) soft-key to return to the Main Menu. 	

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Connecting to the Base Station

Step	Action	Display
20	From the Main Menu: <ul style="list-style-type: none"> Select menu item 1 Survey... by tapping on the icon or press 1 on the numeric keypad access the Survey Begin screen. 	
21	In the Survey Begin screen. <ul style="list-style-type: none"> Press the F1 (CONT) soft-key to access the Survey screen. 	
22	In the Survey: CELL TEST screen. <ul style="list-style-type: none"> Press the SHIFT key and then the F3 (CONEC) to establish a connection with the base station. 	