

## TPS1200 FAQ

April, 2005

### TPS1200

### How do I program the RH1200, TCPS27B and RX1220T internal radio modems?

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#### *Solutions*

There are several ways to program your radio modems, but please see the following steps for the easiest using the new 2.0 instrument firmware and 1.50 RX firmware.

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- when it has to be **right**

**Leica**  
Geosystems

# TPS1200

## Radio modem configuration

### Required Equipment

The equipment necessary to be able to configure communication parameters on the RH1200, TCPS27B and RX1220T include the following:

TPS1200 with RH1200:

- TPS1200 with communication side cover
- RH1200 radio handle
- Version 2.0 firmware or higher

TPS1200 with TCPS27B:


- TPS1200
- TCPS27B radio modem
- 734697 GEV186 Y-cable
- GEB171/71/70 external battery
- Version 2.0 firmware or higher

RX1220T internal radio:

- RX1220T with internal radio
- GEB211 Lithium-ion battery
- Version 1.5 firmware or higher

### TPS1200 w/ RH1200

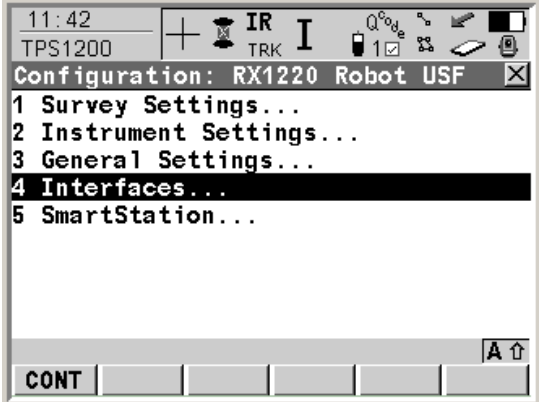
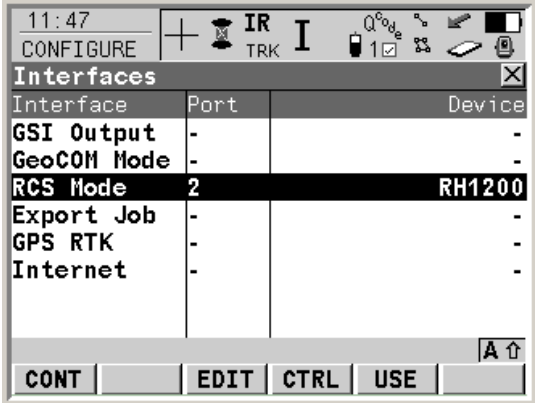
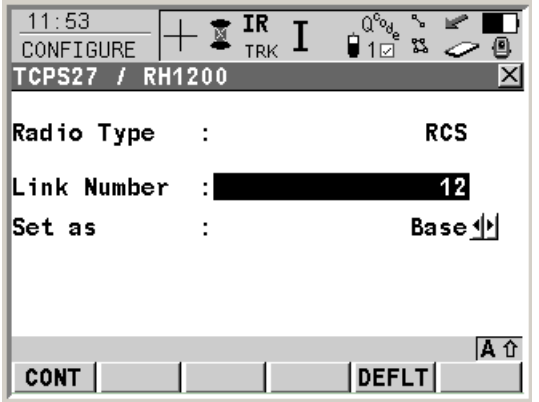
Follow the steps below to change the channels on which the radio broadcasts. Changing radio channels changes the frequency at which the radio operates.

Step	Action	Display
1	<p>From the Main Menu:</p> <ul style="list-style-type: none"><li>• Select <b>5 Config....</b></li><li>• Press the <b>F1 (CONT)</b> button.</li></ul> <p>This takes you to the Configuration: &lt;current config&gt; menu.</p>	

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# TPS1200

## Radio modem configuration

Step	Action	Display																					
2	<p>In the Configuration: &lt;current config&gt; menu:</p> <ul style="list-style-type: none"> <li>Select <b>4 Interfaces....</b></li> <li>Press the <b>F1 (CONT)</b> button.</li> </ul> <p>This takes you to the Interfaces screen.</p>	 <p>The screenshot shows the 'Configuration: RX1220 Robot USF' menu with options: 1 Survey Settings..., 2 Instrument Settings..., 3 General Settings..., 4 Interfaces... (highlighted), and 5 SmartStation... The bottom of the screen shows a 'CONT' button.</p>																					
3	<p>In the Interfaces screen:</p> <p>When the instrument is set up to use RCS Mode interface through Port 2 and Device RH1200:</p> <ul style="list-style-type: none"> <li>Highlight interface <b>RCS Mode</b>.</li> <li>Press the <b>F4 (CTRL)</b> button.</li> </ul> <p>This takes you to the TCPS27 / RH1200 screen.</p>	 <p>The screenshot shows the 'Interfaces' screen with a table of interface settings. 'RCS Mode' is selected in the 'Interface' column, with '2' in the 'Port' column and 'RH1200' in the 'Device' column. The bottom of the screen shows 'CONT', 'EDIT', 'CTRL', and 'USE' buttons.</p> <table border="1"> <thead> <tr> <th>Interface</th> <th>Port</th> <th>Device</th> </tr> </thead> <tbody> <tr> <td>GSI Output</td> <td>-</td> <td>-</td> </tr> <tr> <td>GeoCOM Mode</td> <td>-</td> <td>-</td> </tr> <tr> <td><b>RCS Mode</b></td> <td><b>2</b></td> <td><b>RH1200</b></td> </tr> <tr> <td>Export Job</td> <td>-</td> <td>-</td> </tr> <tr> <td>GPS RTK</td> <td>-</td> <td>-</td> </tr> <tr> <td>Internet</td> <td>-</td> <td>-</td> </tr> </tbody> </table>	Interface	Port	Device	GSI Output	-	-	GeoCOM Mode	-	-	<b>RCS Mode</b>	<b>2</b>	<b>RH1200</b>	Export Job	-	-	GPS RTK	-	-	Internet	-	-
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4	<p>In the TCPS27 / RH1200 screen:</p> <ul style="list-style-type: none"> <li>Set the following:</li> <li>Link Number: <b>[0-15]</b> (to match Rover)</li> <li>Set as: <b>Base</b></li> <li>Press the <b>F1 (CONT)</b> button, again.</li> <li>Press the <b>F1 (CONT)</b> button, again.</li> <li>Press the <b>F1 (CONT)</b> button, again to return to the Main Menu.</li> </ul>	 <p>The screenshot shows the 'TCPS27 / RH1200' configuration screen with the following settings: Radio Type: RCS, Link Number: 12, and Set as: Base. The bottom of the screen shows 'CONT' and 'DEFLT' buttons.</p>																					


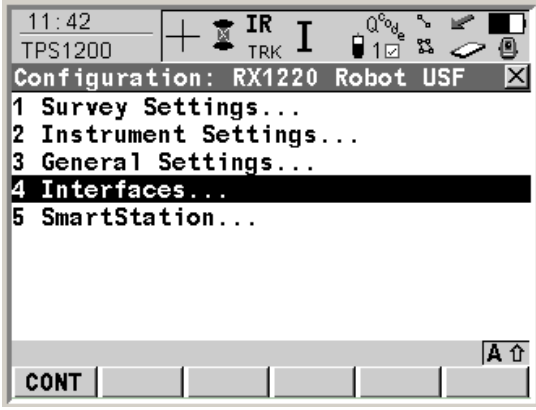
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# TPS1200

## Radio modem configuration

TPS1200 w/  
TCPS27B

Follow the steps below to change the channels on which the radio broadcasts. Changing radio channels changes the frequency at which the radio operates.

Step	Action	Display
1	<p>From the Main Menu:</p> <ul style="list-style-type: none"><li>• Select <b>5 Config....</b></li><li>• Press the <b>F1 (CONT)</b> button.</li></ul> <p>This takes you to the Configuration: &lt;current config&gt; menu.</p>	
2	<p>In the Configuration: &lt;current config&gt; menu:</p> <ul style="list-style-type: none"><li>• Select <b>4 Interfaces....</b></li><li>• Press the <b>F1 (CONT)</b> button.</li></ul> <p>This takes you to the Interfaces screen.</p>	

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# TPS1200

## Radio modem configuration

Step	Action	Display
3	<p>In the Interfaces screen:</p> <p>When the instrument is set up to use RCS Mode interface through Port 1 and Device TCPS27:</p> <ul style="list-style-type: none"> <li>Highlight interface <b>RCS Mode</b>.</li> <li>Press the <b>F4 (CTRL)</b> button.</li> </ul> <p>This takes you to the INFORMATION: 982 screen.</p>	<p>The screenshot shows the 'Interfaces' configuration screen. At the top, it says '11:38' and 'CONFIGURE'. Below that is a table with columns 'Interface', 'Port', and 'Device'. The 'RCS Mode' row is highlighted, showing '1' in the Port column and 'TCPS27' in the Device column. Other rows include 'GSI Output', 'GeoCOM Mode', 'Export Job', 'GPS RTK', and 'Internet'. At the bottom, there are buttons for 'CONT', 'EDIT', 'CTRL', and 'USE'.</p>
4	<p>In the INFORMATION: 982 screen:</p> <ul style="list-style-type: none"> <li>Follow the on screen directions to disconnect and reconnect the battery to the TCPS27.</li> <li>Press the <b>F4 (OK)</b> button.</li> </ul>	<p>The screenshot shows the 'INFORMATION: 982' screen. A large text box in the center contains the instruction: 'Please disconnect then reconnect the battery to the TCPS27 and then press F4 (OK)'. The background shows the 'Interfaces' table with 'RCS Mode' selected. At the bottom, there is an 'OK' button.</p>
5	<p>In the TCPS27 / RH1200 screen:</p> <ul style="list-style-type: none"> <li>Set the following:</li> <li>Link Number: <b>[0-15]</b> (to match Rover)</li> <li>Set as: <b>Base</b></li> <li>Press the <b>F1 (CONT)</b> button, again.</li> <li>Press the <b>F1 (CONT)</b> button, again.</li> <li>Press the <b>F1 (CONT)</b> button, again to return to the Main Menu.</li> </ul>	<p>The screenshot shows the 'TCPS27 / RH1200' configuration screen. It displays the following settings: 'Radio Type : RCS', 'Link Number : 5', and 'Set as : Base'. At the bottom, there are buttons for 'CONT' and 'DEFLT'.</p>

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# TPS1200

## Radio modem configuration

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### *RX1220T w/ internal radio*

Follow the steps below to change the channels on which the radio broadcasts. Changing radio channels changes the frequency at which the radio operates.

Step	Action
1	<ul style="list-style-type: none"><li>• Press the USER button for 2 seconds to access the Main Configuration Menu on the RX1220T.</li></ul> <p>From the Main Configuration Menu:</p> <ul style="list-style-type: none"><li>• Select <b>3 Radio/Comms Settings</b>.</li><li>• Press the <b>F1 (CONT)</b> button.</li></ul> <p>This takes you to the Radio/Comms Settings screen.</p>
2	<p>In the Radio/Comms Settings screen:</p> <p>Under the Modes tab:</p> <ul style="list-style-type: none"><li>• Select <b>ComMode: RCS Mode</b>.</li><li>• Select <b>Modem: Internal</b>.</li><li>• Press the <b>F6 (PAGE)</b> button.</li></ul> <p>Under the Param tab:</p> <ul style="list-style-type: none"><li>• Select <b>Link Number: [0-15]</b> (to match Base).</li><li>• Select <b>Set as: Remote</b>.</li><li>• Press the <b>F1 (CONT)</b> button.</li></ul> <p>This takes you to the Main Configuration Menu.</p>
3	<p>In the Main Configuration Menu:</p> <ul style="list-style-type: none"><li>• Select <b>4 Work with Sensor</b>.</li></ul> <p>This activates the communication connection with your total station and you should now view the same screen display as what is showing on the total station.</p>