Converting
Lassen LP to TAIP Protocol

Technical Tip

The Lassen LP GPS receiver has a single I/O port. The device is delivered from the factory with the TSIP protocol configured on this single I/O port. Many users want to configure the device to use the TAIP protocol. This can be accomplished by using input from the TSIPCHAT program. It is also possible to store the customer's TAIP configuration into the Lassen LP's SEEPROM so that when power is removed, the device will retain the customer's TAIP configuration. This Technical TIP will detail the methodology to accomplish this using Trimble's TSIPCHAT program.

NOTE 1: MAKE SURE YOU ARE USING THE TSIPCHAT PROGRAM THAT IS DESIGNED FOR USE WITH THE LASSEN LP. (TK_782.EXE CONTAINS THIS PROGRAM OR IT IS DELIVERED ON THE CD WITH THE LASSEN LP STARTER KIT).

1. Plug the Lassen LP board to be configured into the LP Starter Kit box.
2. Plug the RS232 serial cable into the Starter Kit Port 1 and into COM 1 or COM 2 serial port on your PC.
3. Provide 9-32 volt DC power to the Starter Kit box.
4. Execute the Lassen LP TSIPCHAT program.
5. Use the 8Ex40 command to set the TAIP configuration. You may only set the device to output one Auto Output Heartbeat Sentence. (See note 3 below)
6. Use the BC command to configure Port 1 for Baud Rate and TAIP IN/OUT. After completing the BC configuration, the device is now speaking TAIP.
7. Use the vertical bar (|) key in TSIPCHAT to enter the following command: >SRTSAVE_CONFIG<
   Hint: The vertical bar key is found above the backslash key on most QWERTY keyboards.
8. Remove the Lassen LP from the Starter Kit box and let sit without any power applied (this includes battery back up power also) to drain all capacitance from the unit's memory. This takes about 180 seconds (3 minutes). (See Note 2)
9. The Lassen LP is now permanently configured to TAIP.

NOTE 2: THE LASSEN LP STARTER KIT CONTAINS A BATTERY. THIS IS WHY THE BOARD MUST BE REMOVED FROM THE STARTER KIT BOX AS DESCRIBED IN STEP #8.

NOTE 3: THERE IS AN ERROR IN THE VALUES OF BYTE 2 IN PACKET 8Ex40 DESCRIBED IN THE LASSEN LP SYSTEM DESIGNER REFERENCE MANUAL. PLEASE SEE CORRECTED BYTE 2 DEFINITION BELOW.

Byte	Item	Type	Value	Definition	Default
2	TAIP	UINT8	0	AL	
	Output		2	CP	
	Heartbeat		6	ID	
	Sentence		10	LN	
			14	PV	14 PV
			17	ST	
			18	TM	
			19	VR	

For More Informtaion
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