PRODUCT BULLETIN

May 2018

New Version of ADLCONF: 4.20.0002



All ADL Vantage, ADL Vantage Pro and ADL Vantage 35 radio users are invited to go to

https://www.pacificcrest.com//support.php?page=updates and download the zip files for ADL radio firmware v5.02.0004 and ADLCONF software v4.20. Extract the contents of both files to the PC and change the name of the software installer from ADLCONF_v4.20_Setup.zzz to ADLCONF_v4.20_Setup.exe. Then launch the installer. Use ADLCONF 4.20 to connect to any ADL Vantage, ADL Vantage Pro or ADL Vantage 35 radio and upgrade the radio's firmware to version 5.02.0004 by clicking File > Upgrade Modem FW. If asked to by the program, please power cycle the radio to continue with the firmware upgrade. The quickest way to do this is by unplugging and reconnecting the power/data cable.



Most of the changes to both ADLCONF and ADL radio firmware are related to the graphical user interfaces. The aim is to make radio configuration simpler by grouping the commonly used "wireless modes" (combinations of radio settings) together into a short list. These six modes are displayed when you click the Radio Mode pull down menu on ADLCONF's Radio Link screen:

Current Channel:	•
Radio Mode:	Link Rate:
Sensitivity: HIPCCFST, FECOn SATEL, EC Off, FEC SATEL, EC Off, Wh	C On
Address Settings	▼ L5: □ L4: □ L3: □ L2: □ L1:
Local: 0	35W • 25W • 16W • 8W • 2W •
Destination: 255	Transmit Settings
	Transmit Retries: 10
CSMA	TX ACK Timeout 10 ms
	☐ Repeater
	Advanced

You can alternatively check an "Allow uncommon modes" check box and display the less common modes in a longer list:

Current Channe	əl:	•
Radio Mode:	Link Rate:	•
 ✓ Allow Unco Sensitivity: Hi Address Setti Local: Destination: ✓ CSMA 	TRIMTALK v1 PCC EOT PCC EOT, FEC Off PCC EOT, Scrambling Off PCC EOT, FEC Off, Scrambling Off PCC FST, FEC Off SATEL, EC Off, FEC On SATEL, EC Off, FEC Off SATEL, EC Off, FEC Off SATEL, EC Off, FEC Off SATEL, EC Off, Whitening, FEC On SATEL, CRC16, Whitening, FEC Off SATEL, CRC16, Whitening, FEC Off	nport Channels
		Advanced

The end goal was to make it impossible for users to create radio configurations that are in fact not supported by the radios. With the short list and the long list of wireless modes, you cannot select any unsupported configuration. This is actually how the radio front panel application has always worked.

The user interface has changed in other ways. Protocols, modulation types and other configuration parameters such as Forward Error Correction (FEC) and data scrambling/whitening have been merged into **radio modes**.

- All the old names of Trimble radio protocols (TRIMTALK, TT450S, TRIMMARK 3, etc.) have been merged into a single protocol/mode called TRIMTALK v1 that is backward compatible with all the older protocols. This means that any radio configured in any of the older Trimble modes will remain compatible with any 4W and 35W ADL Vantage radio configured in TRIMTALK v1 mode. In addition, TRIMTAL v1 has some significant improvements such as improved range performance with R8 and R10 internal radios and improved repeater performance.
- The Pacific Crest protocols Transparent EOT and EOC have been combined under the name PCC EOT. You now
 set the transmission trigger mechanism (Timeout or Character) on the Serial Interface screen. Transparent FST is
 now called PCC FST.
- Modulation selection is now automatic since it was an option only for the Pacific Crest Transparent EOT/EOC protocols and was confusing to people using all the other protocols. Instead of selecting a modulation scheme for Transparent EOT/EOC, you select with "PCC EOT" (GMSK modulation) or "PCC EOT4" (with 4FSK modulation). All Trimble protocols use only GMSK modulation and Transparent FST and SATEL protocols use only 4FSK modulation, so there are no options for these.
- Instead of turning **FEC** on or off, you now select a radio mode that has it on or off. Those protocols that do not support FEC are not displayed in combination with it, so you cannot select an unsupported combination.
- Those protocols that function with or without scrambling (aka whitening) are double-listed in the long list of radio modes, allowing you to fine tune a radio to be compatible with other brands of radios already in use on a job.

When you select the mode you wish to use, you then set the radio **link rate**. To make things simpler, ADLCONF 4.20 displays only those link rates that are supported by the selected mode.

Those radio parameters that are independent of the wireless mode selected are displayed below the Radio Mode and Link Rate windows. These include receiver sensitivity, transmit power level, CSMA and the transmit setting (either base/rover or repeater). The only exception is the channel selection field which remains at the top since it is the field most commonly edited by the user.

The **user guides** have been updated to reflect all the changes. The new versions are installed on your PC when you install the new version of ADLCONF. You can easily access them by clicking Help > User Guide.