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9601-DGS Remote Update and Ping Format

Introduction

The following gives the format for the remote update and ping messages for the 9601-DGS modem.

Remote Updates

This will arrive by SBD and will have the following format:

Name	Num bytes	Description
Header	1	Test "u" SBD Only Update. This is here to keep updates from happening accidentally.
version	1	Version of update. Currently value is 0
Date Time Stamp	8	YY YY MM DD HH MM SS HH where every 2 characters are combined into a single byte.
Password	8	Safety mechanism
Time between Reports	2	Binary number representing time between reports in minutes.
Time to Keep Trying	1	Binary number representing time to keep on retrying in increments of 5 seconds. 0 means only try once and 255 means keep on trying until next report.
DSC	1	Delivery Short Code byte for use with the SBDDSC command. (Currently not used, but may be in future 9601-DGS units)
Indicators	1	This has different bits to indicate whether changes should be made. Update values are 1 if an update should be made. Bit 0 – Callable – 0 indicates it will sleep between reports and 1 indicates it will stay awake between reports. Bit 1 – Update Callable – whether to update the callable setting on the modem. (Currently not used, but may be in future 9601-DGS units) Bit 2 – Update Time – whether to update time between reports and time to retry. Bit 3 – Update Delivery Short Code – whether to update the delivery short code on the machine.
Checksum	1	Binary checksum to make sure data is correct and to keep from accidentally doing an update.

Receiving a remote update will cause the modem to make the update and then immediately start a new cycle. For an update to be made the header and version must be correct, date time stamp must be greater than last update, password must be correct, and the Checksum must be correct.

When the update is made this will send back a response of the following form:

Name	Num bytes	Description
Header	1	Test "v" SBD Only Response.
Version	1	Version of update response. Current version is 0.
Date Time Stamp	8	YY YY MM DD HH MM SS HH where every 2 characters are combined into a single byte.
Status	1	0 successfully updated 1 Invalid Password

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		2 Old Date Time Stamp 3 SBD reports that are the wrong length, have a bad header, or an invalid checksum will be ignored and no response will be returned.
Time between Reports	2	Binary number representing time between reports in minutes.
Time to Keep Trying	1	Binary number representing time to keep on retrying in increments of 5 seconds. 0 means only try once and 255 means keep on trying until next report.
DSC	1	Delivery Short Code Command
Indicators	1	A copy of the indicators Byte
Checksum	1	Binary checksum to make sure data is correct and to keep from accidentally doing an update.

The date time stamp in the response will be copied from the update in the send. It will be assumed that this is unique and can be used to identify the update being made.

Ping Requests

When the unit receives this it will automatically send out a GPS report because of the SBDRING message or accidentally. What the ping really does it just causes the unit to send over a GPS report and not send back a remote update response.

Name	Num bytes	Description
Header	1	Test “p” SBD Only Ping. This is here to keep updates from happening accidentally.
version	1	Version of update. Currently value is 0
Password	8	Safety mechanism
Checksum	1	Binary checksum to make sure data is correct and to keep from accidentally doing a ping request.