

```
*****
**
**          GARDOWN-GPS-MENU Version 2.0 MANUAL          **
**
*****
```

1. Introduction

GARDOWN-GPS-MENU is an extension for the GARDOWN software. It was written to have a convenient interface for GARDOWN plus the ability to easily modify data of the GARMIN GPS unit. Details how to modify data can be found in the second section of this documentation (GARDOWN MANUAL).

2. Hardware and Software Requirements

GARDOWN and the GARDOWN-GPS-MENU will work with any PC-XT or PC-AT and MS-DOS 3.3 or later. Both applications need very little system resources and no specific configuration of the PC. They will also work with EGA/CGA screens and LC-Displays.

That means both applications will also work on palmtop computers like the HEWLETT PACKARD 200LX and on palmtops like the PSION 5 Series or the HP JORNADA 700 Series in combination with a MS-DOS Emulator (XTM on the Psion or Pocket-DOS on the HP Jornada 710/720/728).

GARDOWN and GARDOWN-GPS-MENU will only work with GARMIN GPS units and has been tested with following models: GPS 12, GPS 12XL, GPS 12CX, GPS II, GPS IIPlus, GPS III, GPSIIIPlus, GPS V. Older models that work are GPS 38, GPS 45, GPS 45XL GPS 65 and GPS 75. eMap and eTrex series will definitely not work with GARDOWN due to different interface standards.

3. Connection to a PC or a Palmtop-PC

Cable connection is a very important issue. Many problems result in faulty connections. Connecting a GARMIN to a STANDARD-PC is quite simple: Plug the GARMIN cord into COM1 and connection is possible.

If a Palmtop-PC is used in most cases a combination of GARMIN cable and the serial cable of the Palmtop-PC is used. On the HP200LX, the HP JORNADA 700 Series, the PSION 5 Series and many other Palmtop-PCs the serial link cable does not have the standard pin layout. To overcome this problem a special cable is required or a so called "Null Modem Adaptor" has to be added. Null Modem Adaptors are available at the computer store.

Layout of a 9-pin SUB-D-Nullmodem-Adaptor:

```
1 --connect to-- 1
2 --connect to-- 3
3 --connect to-- 2
4 --connect to-- 6
5 --connect to-- 5
6 --connect to-- 4
7 --connect to-- 8
8 --connect to-- 7
9   leave open   9
```

Connection looks like this:

```
-----
GARMIN-> GARMIN CABLE-> NULLMODEM-ADAPTOR-> SERIAL-CABLE-> PALMTOP-PC
-----
```

4. Functions of GARDOWN-GPS-MENU

```
-----
MAIN MENU -----
  DOWNLOAD MENU  --- DOWNLOAD WAYPOINTS FROM GPS
                  --- DOWNLOAD TRACKS FROM GPS
                  --- DOWNLOAD ROUTES FROM GPS
                  --- DOWNLOAD PROXIMITY WAYPOINTS

  ----- UPLOAD MENU  --- UPLOAD WAYPOINTS TO GPS
                  --- UPLOAD TRACKS TO GPS
                  --- UPLOAD ROUTES TO GPS
                  --- UPLOAD PROXIMITY WAYPOINTS

  ----- EDIT GPS-DATA  --- EDIT WAYPOINTS
                  --- EDIT TRACKS
                  --- EDIT ROUTES
                  --- EDIT PROXIMITY WAYPOINTS

  ----- GPS INFORMATION  --- SHOW GARMIN DATE AND TIME
                  --- SHOW GARMIN MODEL CODE
                  --- TURN OFF GARMIN

  ----- EXIT
```

DOWNLOAD MENU is to get data from the GPS into the PC. Data will be saved
----- immediately after transfer in GARDOWN-subdirectory. No data
in the GPS will be changed or moved.

UPLOAD MENU is to get data from the PC into the GARMIN GPS. It is
----- recommended to erase all data in the GARMIN manually to
ensure enough space for new data and to avoid double entries.

EDIT GPS-DATA Data stored in GARDOWN-subdirectory can be edited. This is
----- to add or remove entries in the files for Waypoints, Tracks,
Routes and Proximity Waypoints. A description of file syntax is included in
the GARDOWN Manual below.

GPS-INFORMATION displays time of GARMIN unit, the model code and has an
----- option to switch off the GARMIN.

EXIT terminates GARDOWN-GPS-MENU.

5. Predefined Settings -----

GARDOWN-GPS-MENU was mainly made for use with a HP200LX palmtop-PC. This
is the reason that many settings are predefined and fixed.

Serial communication: COM1 (the first serial port, HP200LX has only COM1)
Waypoints file: WAYPOINT.GAR (text file in GARDOWN subdirectory)
Tracks file: TRACKS.GAR (text file in GARDOWN subdirectory)
Routes file: ROUTES.GAR (text file in GARDOWN subdirectory)
Proximity Waypoints: PROXWP.GAR (text file in GARDOWN subdirectory)

```
*****  
**                                                                 **  
**                      GARDOWN MANUAL                          **  
**                                                                 **  
*****
```

```
*****  
* This part is the original GARDOWN Documentation made by M.J. Montgomery.*  
*      Copyright (c) 1995 - 1998 by Mike J. Montgomery          *  
*****
```

GARDOWN will Download (to the PC) and Upload (to the GARMIN(sm) GPS)
Waypoints, Tracks, Routes, and Proximity Waypoints held in the GARMIN
GPS using Serial Port COM1 or COM2.

GARMIN (sm) is a trademark of GARMIN International

GARDOWN has been tested with GARMIN 45, 65, 75, 45XL, GPS-II.

IMPORTANT -----

The Datum set in the GPS Navigation page should match that of the map(s)
that you are using or you could get very lost.

Your GPS is only accurate to 15 meters (49 feet) even with Selective
Availability turned off. With S.A. on it is 100 meters (330 feet).
Your GPS does not replace a good map and knowing how to use it.

If you are uploading Tracks or Waypoints, you will not be able to follow the track exactly, don't try to. Waypoints will also be off by some amount.

You should (but it is not always necessary to) delete all Waypoints and the Track in your GPS when uploading. You don't have to delete the waypoints if you have room for the number in the upload file. You do not have to clear the track if you do not mind the potential loss of early track data. The GPS will only hold a limited amount of track data so you also have to be careful of accumulating a track that overlays the track in the upload file.

USAGE

```
GARDOWN {opn} *infile *outfile**
        {  } indicates that one or more is required
        *
        * indicates that the enclosed item is optional
```

When GARDOWN starts, it will tell you the interface mode that you should have your GARMIN GPS set to. See the following chart for the required interface modes for the various GARDOWN operations.

Pressing any key will return you to DOS if:

- Nothing is happening
- you might have the wrong interface mode set, make sure it is set as below
- your position is not changing (i.e., you are in SIMULATOR mode)
- your GARMIN GPS is not connected
- your GARMIN GPS is turned off
- you want to terminate an operation before it completes
- you might want to do this if you are transferring lots of waypoints, routes, and/or tracks and you realize that they are not what you really want

Both the Datum and GPS version are automatically send back when doing a download with GARDOWN. The -D operation can be used to have GARDOWN perform a conversion to a different datum.

Operations are proceeded by a - (dash) and may be entered in either UPPER or lower case. Parameters that may be associated with an operation immediately follow the operation (i.e. -s2 for serial port 2).

Multiple GRMN/GRMN interface mode operations may be specified on a single GARDOWN invocation except that a single operation should not specified more than one time.

Opn	Par	Description	Port	Datum	File(s)	Ifce Mode
-A		Output Date format for GPSS	n/a	n/a	*Output*	NMEA/NMEA
-B		Download from a Micrologic GPS.	Yes	n/a	*Output*	
-C		Download GARMIN time	Yes	n/a	*Output*	GRMN/GRMN
-D	?	Show Datum Numbers	n/a	n/a	n/a	n/a
-D	nnn	Set Coordinate Datum	n/a	n/a	n/a	n/a
-F	nnn	Set the format to LL UTM OSGB GRID	n/a	n/a	n/a	n/a
-G		Convert ODB file to GARDOWN (D75)	n/a	n/a	Both	n/a
-H		Show GARDOWN help	n/a	n/a	n/a	n/a
-J	nnn	Convert GARDOWN file to ODB (D75)	n/a	Yes	Both	n/a
-M		Upload Extend WPTS to NMEA device	Yes	Yes	Input	NMEA/NMEA
-N		Log NMEA 183	Yes	n/a	n/a	NMEA/NMEA
-O		Turn off GARMIN	Yes	n/a	n/a	GRMN/GRMN
-P		Download Proximity Waypoints	Yes	Yes	*Output*	GRMN/GRMN
-Q		Download Current Position	Yes	Yes	*Output*	GRMN/GRMN
-R		Download Routes	Yes	Yes	*Output*	GRMN/GRMN
-S	n	Set Serial Port Number	n/a	n/a	n/a	As Needed
-T		Download Track	Yes	Yes	*Output*	GRMN/GRMN
-U		Upload file (Datum set in file)	Yes	Yes	Input	GRMN/GRMN
-V		Get code level	Yes	Yes	*Output*	GRMN/GRMN
-W		Download Waypoints	Yes	Yes	*Output*	GRMN/GRMN
-X	nnn	Change file datum	n/a	Yes	Both	n/a
-Y		Upload Waypoints to NMEA device	Yes	Yes	Input	NMEA/NMEA

OPERATIONS

- A Output Date format for GPSS
Date format is presented in a format compatible with the GPSS program. See below for the format.

- C Download GARMIN time
This is the time without adjustment for the OFFSET.

- B Download Extended Waypoints, Routes & track from a Micrologic GPS.

- D? Show Datum Numbers
Displays a list of Datum numbers and definitions.

- Dnnn Set Coordinate Datum
Sets the Datum number to use for the subsequent option. Defaults to 100 (WGS 84). Valid are 0-103. The GARMIN only handles one datum at a time. It should be set to the same as the maps that you are using.

- Fnnn 0 being the normal DD MM.MMMM format
1 Ordnance Survey Great Britain (ODB)
2 Universal Transverse Mercator (UTM)
See below for the format of these positional representations.

- G Convert ODB file to GARDOWN (D75)
Convert an ODB file used with Psion s3a program to call tidestream into a GARDOWN file. Datum is set to 75 (Ordnance Survey Great Britain).

- H Show GARDOWN help
Same as invoking GARDOWN with no parameters

-Jnnn Convert GARDOWN file to ODB (D75)
 Convert a GARDOWN file into an ODB file used with Psion s3a program to call tidestream. Datum is set to 75 (Ordnance Survey Great Britain) by default. Produces one file for each route and one .ODB file.

-M Upload Extended Waypoints, Routes & track to a Micrologic GPS.
 ***** W A R N I N G *****
 * This IS NOT intended to be used to upload waypoints to a *
 * Garmin GPS. On the GARMIN GPS-II it causes a lockup requiring *
 * removal of the batteries. After reinserting the batteries, *
 * ALL stored data is lost and the GPS is set to the state as *
 * received from the factory!! *
 * Position = N39 00.000, W095 00.000, ALT 1081' *
 * Re-initialization is required *

 Send the waypoints in the input file to a NMEA device using the \$PMCLF NMEA sentence. This sentence consists of:
 \$PMCLF,lat,latq,long,longq,wptnam,?unk1,?time,?date,?unk2,comment
 where: lat is the latitude in the form DDMM.MMM
 latq is N or S
 long is the longitude in the form DDDMM.MMM
 longq is E or W

 wptnam is the name of the waypoint
 unk1 is unknown
 time is (maybe) the time that the waypoint was created
 (format= UTC, hh:mm)
 date is (maybe) the date that the waypoint was created
 (format= DDMMYY)
 unk2 is unknown
 comment is the comment from the waypoint, truncated to 9 characters

-N Log NMEA 183
 Logs NMEA 183 data
 This is currently being worked on. You can log the output by redirecting to a file (GARDOWNB -N > nmea.fil).

-O Turn off GARMIN
 This happens really fast, you can't push a key to stop it. It does NOT go through the normal GARMIN shutdown count. By a nice way to turn off the garmin in a hurry.

-P Download Proximity Waypoints
 Get Proximity Waypoints from the GARMIN GPS.
 If proximity waypoints are not supported on your GARMIN GPS, the program will wait, you have to push a key to end the program.

-Q Download Current Position
 Download your current position from the GARMIN GPS. If you are not moving, nothing is transferred to the PC. This will be display in lat long only. This must be terminated by pushing a key to end the program.

-R Download Routes
 Download all routes from the GARMIN GPS.

-Sn Set Serial Port Number
 Sets the Serial Port Number to use for the subsequent option.
 Defaults to 1 (COM1).

-T Download Track

Download the track from the GARMIN GPS.

- U Upload file (set Datum in the file)
Upload the information in a GARDOWN file to the GARMIN GPS.
File(s) created by GARDOWN downloads are directly uploadable.
You should set the datum to what you used for the download.
If you are uploading new data, make sure that the datum is
the same as for your map. See below for the format and
content of the text file to upload.
- V Get code level
Downloads the GARMIN GPS code version number. This contains
both the GARMIN GPS type and version number of the internal
GARMIN GPS code.
- W Download Waypoints
Download all waypoints from the GARMIN GPS.
- Xnnn Change file datum
Change the Coordinate of the input file to the datum number
specified in the output file.
- Y Upload Waypoints to NMEA device
Send the waypoints in the input file to a NMEA device using the
\$YMWPL NMEA sentence. This sentence consists of:
\$YMWPL,lat,latq,long,longq,wptnam
where: lat is the latitude in the form DDMM.MMM
latq is N or S
long is the longitude in the form DDDMM.MMM
longq is E or W
wptnam is the name of the waypoint, truncated at 4 characters

Examples

Download Track using COM2. WGS 84 datum is used by default:

```
gardowna -s2 -t
```

Download Waypoints using Datum 75, Ord Srvy Grt Britn & output
to file my.way. COM1 is used by default:

```
gardowna -w -d75 my.way
```

Download Routes using NAD 27 CONUS, COM1 to file mytrip.rte:

```
gardowna -s1 -d61 -r mytrip.rte
```


Download everything (clock, proximity waypoints, routes, track,
code level, waypoints)

```
gardowna -s2 -d75 -c -p -r -t -w
```

The sequence that these are presented in the download data is:

- D Coordinate Datum - sent by default as WGS84
- V GARMIN Type and Version - sent by default, not necessary to specify
- P Proximity Waypoints
- R Route Data
- C GARMIN Time
- T Track Data
- W Waypoint Data

At the end of this file, there is a sample DOS batch file that will download all pertinent information contained in the GARMIN GPS for a particular excursion.

Text File Format

The text file being used for upload into the GARMIN GPS is always less than or equal to 80 characters per line.

Blanks and . (period/dot) and : (colon) are required and _ (underscore) is a place-holder.

Positional (coordinate) data is usually expressed in degrees and decimal minutes out to four digits.

```
HDD MM.MMMM
|  --  -----
|  |      |
|  |      +----- Decimal Minutes of Latitude
|  +----- Degrees of Latitude
+----- Hemisphere (N or S)
```

```
HDDD MM.MMMM
|  --  -----
|  |      |
|  |      +----- Decimal Minutes of Longitude
|  +----- Degrees of Longitude
+----- Hemisphere (E or W)
```

If -D102 is specified, the positional (coordinate) data is expressed in the Ordnance Survey of Great Britain (ODB) format:

```
ZZ EEEEE NNNNN
|  --  -----
|  |      |
|  |      +----- Northing (5 digits)
|  +----- Easting (5 digits)
```


+----- ODB Zone (two letters)

If -D103 is specified, the positional (coordinate) data is expressed in the Universal Transverse Mercator (UTM) format:

ZZ L EEEEEEE NNNNNNN

```
-- | -----
| | | | |
| | | | | +--- Northing in meters from the Equator
| | | | | +----- Easting in meters relative to the Zone
| | +----- Latitude Zone Letter
+----- Longitude Zone Number
```

As can be seen from the above, the position information can vary in length. The position information in the following text file formats will be shown as: position_data

Timestamp (date and time) is usually expressed as:

DDD MMM dd hh:mm:ss YYYY

```
-- | | | | | |
| | | | | | +----- Year (nnnn)
| | | | | | +----- Seconds (nn, 00-59)
| | | | | | +----- Minutes (nn, 00-59)
| | | | | | +----- Hour (nn, 00-24)
| | | | | | +----- Day of Month (01-31)
| | | | | | +----- Month (Jan, Feb, Mar, Apr, May, Jun,
| | | | | | Jul, Aug, Sep, Oct, Nov, Dec, Cur).
| | | | | | If 'Cur', then the Current PC time
| | | | | | will be used. (This depends on the
| | | | | | GARDOWN software level and may not
| | | | | | work in all cases. If it does not
| | | | | | work, the date will be:
| | | | | | Sun Dec 31 00:00:00 1989
+----- Day of Week (Sun, Mon, Tue, Wed, Thu,
| | | | | | Fri, Sat). Not needed but must be padded.
```

If the -A parameter is included, then the timestamp is converted to the format that the GPSS program can use:

DD-MMM-YY hh:mm:ss

```
-- | | | | |
| | | | | | +----- Seconds (nn, 00-59)
| | | | | | +----- Minutes (nn, 00-59)
| | | | | | +----- Hour (nn, 00-24)
| | | | | | +----- Year (Last two digits, GPSS must assume 19YY)
| | | | | | +----- Month (JAN, FEB, MAR, APR, MAY, JUN, JUL, AUG,
| | | | | | SEP, OCT, NOV, DEC)
+----- Day of Month (01-31)
```


As for positional information, timestamp information is also of variable length. Therefore, timestamp information in the following file formats will be shown as:

```
_timestamp_data_
```

When you upload, BEFORE you upload any routes, waypoints, or tracks, you should set the datum properly.

You do not have to separate the waypoints from the routes. The waypoint (W) or named waypoint (WR) definition can be contained within a route (R nn) ... (E nn) definition. If (WR) is used, the WPNAME must be defined in the upload file with a waypoint (W) line somewhere.

Any lines other than those defined below are treated as comments and ignored in the upload file.

Datum Number:

```

D      nnn
|      ---
|      |
|      +-- datum number, left justified
+----- line must start with an UPPER case D and two spaces

```

Waypoints:

```
W      WPNAME   _position_data_  _timestamp_data_  WAYPOINT_COMMENT_____
|-----|-----|-----|-----|-----|-----|-----|-----|
|       |       |               |               |           |       |
|       |       |               |               |           |       |
|       |       |               |               |           |       |
|       |       |               |               |           |       |
+-----+-----+-----+-----+-----+-----+-----+-----+
|       |       |               |               |           |       |
|       |       |               |               |           |       |
+-----+-----+-----+-----+-----+-----+-----+-----+
line must start with an
UPPER case W and two spaces
```

Routes:

Start a Route:

```

R 01 MY ROUTE 1
|  -- -----
|  |           |
|  |           +-- Comment
|  +----- route number must be two digits
+----- line must start with an UPPER case
              R and two spaces

```


Defined Waypoint added to Route:

WR WPNAME

--

```
|      |
|      +-- Six character waypoint name or number
+----- line must start with an UPPER case WR and one space
          This will take waypoint WPNAME from the waypoint in
          the same upload file
```

Defining a Waypoint in Route:

W WPNAME _position_data_ _timestamp_data_ WAYPOINT COMMENT____
(same a waypoints above)

Ending a Route:

E 01

--

```
|      |
|      +-- Route Number (two digits)
+----- line must start with an UPPER case E and two spaces
```

Proximity waypoints:

P WPNAME nn.n

--

```
|      |      |
|      |      +-- two digits and one decimal place, in Nautical miles
|      +----- Six character waypoint name or number
+----- line must start with an UPPER case P and two spaces
          This will take waypoint WPNAME from the waypoint in
          the same upload file
```

Tracks:

T _position_data_ _timestamp_data_

```
|      |      |
|      |      +-- Creation Date
|      |      (e.g. Sat Feb 04 10:29:23 1995)
|      +----- Location
+----- line must start with an UPPER
          case T and two spaces
```

Current Position:

_position_data_ *_timestamp_data_

```
|      |      |
|      |      +-- Position timestamp
|      |      (e.g. Sat Feb 04 10:29:23 1995)
|      +----- Tab (X'09') character
+----- Location
```


Position data can not be uploaded to the GARMIN but may be downloaded from the GARMIN. The format on download is as shown.

SAMPLE BATCH FILES

Note:

You have to change all occurrences of GARDOWNx to the version of GARDOWN that you are using.

```
REM ----- Cut here ----- SAMPLE01.BAT
@ECHO OFF
GOTO START
:INSTR
CLS
REM This batch file should be saved as GETALL.BAT
ECHO This batch file, *%0* invokes the GARDOWNx program to work with a GARMIN
ECHO GPS attached on the specified Serial Port, using the GRMN/GRMN protocol.
ECHO
ECHO It sets the Datum and gets Waypoints, Routes, and Tracks into separate
ECHO work files using the name specified with file Extensions:
ECHO      .STM for Start time, deleted at end of job
ECHO      .WPT for Waypoints, deleted at end of job
ECHO      .RTE for Routes, deleted at end of job
ECHO      .TRK for Tracks, deleted at end of job
ECHO      .ETM for End time, deleted at end of job
ECHO      .ALL for of the above, with the GARMIN GPS time, kept
ECHO
ECHO          +----- 1 : 1 = Port 1, 2 = Port 2
ECHO          I   +----- 2 : 61=NAD27, 75=Ord GB, 99=WGS72, 100=WGS84
ECHO          I   I       +-- 3 : 5 characters max., to screen if omitted
ECHO          I   I       I
ECHO Format: %0 port datum *name*
ECHO
ECHO Invoked as: %0 %1 %2 %3 %4
ECHO
GOTO END
:START
IF p == p%1 GOTO INSTR
IF 1 == %1 GOTO GOTPORT
IF 2 == %1 GOTO GOTPORT
GOTO INSTR
:GOTPORT
IF d == d%2 GOTO INSTR
IF 61 == %2 GOTO GOTDAT
IF 75 == %2 GOTO GOTDAT
IF 99 == %2 GOTO GOTDAT
IF 100 == %2 GOTO GOTDAT
GOTO INSTR
:GOTDAT
CLS
ECHO Push any key to terminate GARDOWN if no response is received
IF f == f%3 GOTO SCREEN
REM      Port Datum Opn
ECHO
ECHO                                     Getting Start Time
ECHO
GARDOWNx -S%1 -D%2 -C %3%2.STM
ECHO Start Time Above----- Start Time Above >> %3%2.STM
CLS
```



```

ECHO
ECHO
GARDOWNx -S%1 -D%2 -W %3%2.WPT
ECHO Waypoints Above ----- Waypoints Above >> %3%2.WPT
CLS
ECHO
ECHO
GARDOWNx -S%1 -D%2 -R %3%2.RTE
ECHO Routes Above ----- Routes Above >> %3%2.RTE

CLS
ECHO
ECHO
GARDOWNx -S%1 -D%2 -T %3%2.TRK
ECHO Track Above ----- Track Above >> %3%2.TRK
CLS
ECHO
ECHO
GARDOWNx -S%1 -D%2 -C %3%2.ETM
ECHO End Time Above ----- End Time Above >> %3%2.ETM
COPY %3%2.STM + %3%2.WPT + %3%2.RTE + %3%2.TRK + %3%2.ETM %3%2.ALL > NUL
DEL %3%2.STM > NUL
DEL %3%2.WPT > NUL

DEL %3%2.RTE > NUL
DEL %3%2.TRK > NUL
DEL %3%2.ETM > NUL
GOTO END
:SCREEN
REM      Port Datum Opn
GARDOWNx -S%1 -D%2 -C
GARDOWNx -S%1 -D%2 -W
GARDOWNx -S%1 -D%2 -R
GARDOWNx -S%1 -D%2 -T
GARDOWNx -S%1 -D%2 -C
:END
ECHO
REM ----- Cut here ----- SAMPLE01.BAT

```

Change History

Ver 0.02beta 30/3/95

Now will download Track, Waypoints & Routes
Now works without FPU
Packet bug fixed

Ver 0.03beta 3/4/95

Now using COM1 or COM2

Ver 0.04beta 18/4/95

Now you can upload waypoints to the GARMIN GPS from a text file

Ver 0.05beta 17/5/95

BUGFIX: comment field now converted to upper-case as the GARMIN GPS will
only accept upper-case

BUGFIX: Math calculation fix on some waypoints which were .9 out

BUGFIX: Better handshaking when uploading waypoints
BUGFIX: Well, I did one more but can't remember what

Ver 0.6Beta 22/5/95

You can now upload Routes from a text file
You can download & upload Proximity waypoints
You can download GPS time
You can download current position
If the month in a upload waypoint is Cur the date uploaded will be the PC
system time.

Ver 0.7Beta 30/7/95

You can now set datums at the command line type "GARDOWNx -D?", this will
list all datum numbers.
You can now upload tracks but there is a bug in my GARMIN 75. To get around
this you must clear all tracks before uploading tracks. You also
should reset track to loop after upload.
BUGFIX: Getting GPS time crash fixed.

Ver 0.08 14/Sept/96

GARDOWN now uses better command line options & better file handling.
You can now use GARDOWN to log NMEA 183 to a file or screen.
GARDOWN can upload waypoints to a Yemon ploter.
You can change a file of one datum to an other datum.

Ver 9.00 20/Feb/97

BUGFIX: Routes 10-30 now fixed

Ver 10.00 11/Mar/97

BUGFIX: Carrage return now put back.
BUGFIX: No longer leaves deg.cap file
Now can download waypoint to a NMEA 183 device but only in datum no 75

Ver 11.00b 21/Aug/97

You can now download or upload with datums 102 British O/S Grid and
103 UTM grid.
Also so you can upload waypoints to an extended NMEA device i.e. Micrologic
ML-150 ML-250 GPS. (Do NOT upload to a GARMIN GPS with this).
Changes are being made to the Log NMEA operation, these are incomplete at
this time.

Ver 12.00 05/Feb/98

I have changed add a format command so OSGB & UTM can now have there own
Datum's. There for datum number 102 & 103 no longer work to get these format
-F0 Lat Long
-F1 OSGB
-F2 UTM

Ver 13d.00 19/Feb/98

Bug fix for South lat Long to UTM

Programm Registration

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GARDOWN can be downloaded from:
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