

# Instructions for the SENDFILE and GETFILE Programs

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If you do not have the TRIMMAP program, Trimble Survey Office, or GPSurvey, you can transfer files to and from the Survey Controller version 6.0 using the utility programs SENDFILE and GETFILE. These programs are provided with the Survey Controller and are saved in the directory C:\TSC1 when you run the TSC1 Install program.

This document describes how to send and receive files using them. Basic step-by-step instructions are given, followed by a detailed description of the screens involved.



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**Note** – This document describes how to operate the programs using a mouse. If you do not have a mouse, use the arrow keys to move the highlight to the field or option, then press **Enter**. Alternatively, if the options in a popup window have numbers alongside, press a number.

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**Caution** – If an auxiliary device is attached to the PC serial port that is used for SENDFILE/GETFILE communications with the Survey Controller, and the PC is communicating with that auxiliary device, SENDFILE and GETFILE do not operate correctly. You must remove the device **before** you start SENDFILE or GETFILE from the DOS prompt.

If unpredictable behavior occurs while you are running SENDFILE or GETFILE, make sure that no auxiliary device is communicating on the relevant serial port. If further erratic behavior occurs, contact your Trimble dealer.

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## 1 Sending Files

The SENDFILE command lets you send the following types of files to the Survey Controller:

- DC files, to provide coordinates for Control points or for setting out.
- Feature code files produced by TRIMMAP, to put in the data collector's stack of feature code lists. This can significantly speed up the entry of codes while collecting data and forces you to use the correct name.
- DTM files, to enable the Survey Controller to display the cut or fill of the point being measured to the DTM (for example, a design surface, or a previous survey).
- Language files, to provide display in another language.
- Antenna file (new or amended), to provide information on supported antenna types and how to measure uncorrected antenna heights.

To send a file to the Survey Controller:

1. Switch on the TSC1 and connect it to a serial port on the PC using the serial cable (part number 20887).
2. On the TSC1 select *Files / Import/export* then *Send/receive files from PC*. The rest of the operation is controlled from the PC.
3. On the office computer type **SENDFILE** at the appropriate DOS prompt (such as C:\Tsc1>).

The *Send files* screen appears:

Send files	
Output device	Survey Controller v4 or later
File type	Not connected
Communications port	COM1
Max baud rate of transfer	38400
Before sending any files, connect the Survey Controller to the computer. The Survey Controller should be displaying: "Send/Receive files, Waiting for PC connection." Press [F1] to make a connection, then [F2] to select and send files.	
[F1]	Connect to Survey Controller
[F2]	Select and send current file(s)
Press ESC to exit	

This dialog contains fields that specify the details of the file transfer.

4. Set the *Output device* field to Survey Controller version 4 or later.
5. Specify the port that the Survey Controller is connected to. The other fields in the screen are set to the defaults for the Survey Controller and do not usually need to be changed.
6. Press [F1] to connect to the Survey Controller.

7. Click the *File type* field and choose the type of file(s) to be sent.
8. Press **[F2]** and a window pops up. This lets you select the file(s) to be sent and where they are to be sent to.
9. Choose **OK** to send the file(s).

## 1.1 SENDFILE Screens

This section describes the screens that appear when you run SENDFILE.

When you run SENDFILE at the DOS prompt, the *Send files* screen appears:

Send files	
Output device	Survey Controller v4 or later
File type	DC file
Communications port	COM1
Max baud rate of transfer	38400
Data destination	Main memory

Before sending any files, connect the Survey Controller to the computer.  
The Survey Controller should be displaying:  
"Send/Receive files, Waiting for PC connection."  
Press [F1] to make a connection, then [F2] to select and send files.

[F1] Connect to Survey Controller  
[F2] Select and send current file(s)

Press ESC to exit

### Output device

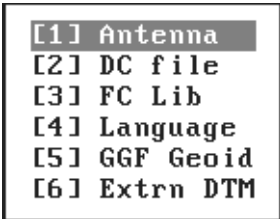
When you select the *Output device* field, an option appears:

[1] Survey Controller v4 or later
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SENDFILE is designed to send files only to Survey Controller.

### File type

Use this field to select the type of files that you want to send. When you select the *File type* field, a list of available file types appears:



```
[1] Antenna
[2] DC file
[3] FC Lib
[4] Language
[5] GGF Geoid
[6] Extrn DTM
```

#### *[1] Antenna*

Select the Antenna file type if you want to transfer an ANTENNA.DAT file. You may for example be using an antenna that is not described in the antenna file provided with the Survey Controller, or you may have edited the file to switch off antenna options that you do not have. For more information about antenna types, see the chapter about batteries and antennas in the *Survey Controller Reference Manual*.

#### *[2] DC file*

A DC file is a file in Trimble's Data Collector format. The Survey Controller software uses this format to store data. If your office software can output data in DC file format, you can transfer data to the Survey Controller to provide control points or design points for setting out. The DC file must be in Version 6.00 or Version 4.00 format.

#### *[3] FC Lib*

Select the FC Lib file type if you want to transfer a feature code library to use when collecting data in the Survey Controller. For example, a firm for which you are doing contract work may provide you with their TRIMMAP feature code library so that you can apply their feature codes to the points you survey.



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**Caution** – When you transfer a feature code file, you overwrite an existing feature code library in the Survey Controller.

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**[4] Language**

Select the Language file type if you want to transfer a language file. Use this if you want to run the Survey Controller in a different language.

**[5] GGF Geoid**

Select the GGF Geoid file type if you want to transfer a geoid (.GGF) file.

**[6] Extrn DTM**

Select the Extrn DTM file type if you want to transfer DTM files. A list of DTM file formats appears. 'External file format' is in the list, and any other items you have added. Select the file format of the DTM files you want to transfer.



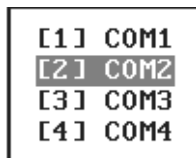
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**Note** – You can add file formats to the list by editing the file DTMIN.DAT For more information about DTM file formats, see the appendix about file formats in the *Survey Controller Reference Manual*.

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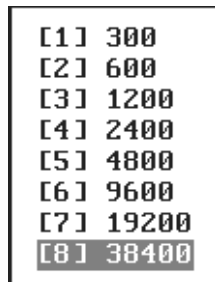
**Communications port**

Use the *Communications port* field to specify what serial port on the PC the Survey Controller is connected to. Click this field and a list appears:



### Max baud rate of transfer

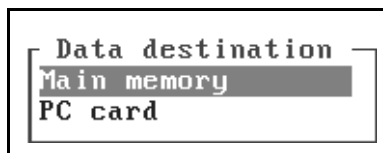
Click this field and a list appears:



This field limits the speed of data transfer. It is set by default to 38400, the speed of the Survey Controller. The actual speed used is negotiated between the PC and the Survey Controller. If you have trouble with data transfer, try using a slower speed.

### Data destination

Click this field and a list appears:



Use this window to specify where the file is to be sent to.

### [F1] Connect to Survey Controller

Press **[F1]** to connect to the Survey Controller before pressing **[F2]**.

**[F2] Select and send current file(s)**

Press **[F2]** and a window appears:

C:\KATIPON\TRANSFER\			
Description	Date	Time	Job ID
<input type="checkbox"/> SJE NETWORK	06-MAY-97	14:43	XXX
<input type="checkbox"/> GARDNER BRIDGE	06-MAY-97	14:43	XXX
<input type="checkbox"/> JACKSON STREET	06-MAY-97	14:43	XXX
<input checked="" type="checkbox"/> RAKAIA BRIDGE	06-MAY-97	14:43	XXX
CANCEL-OK-ALL-NONE-DIRECTORY			

This window is headed by the drive and path of the current directory. It contains the job name, the date and time of creation, and the job ID (DOS extension) of the files of the type specified by the *File type* field. Files selected for sending have a check mark next to them. Press **[Enter]** to place a check mark beside a file, or to remove a check mark.

**CANCEL** discards any changes you have made and returns you to the main screen.

**OK** sends the selected files (those with a check mark alongside) to the Survey Controller.

**ALL** selects all files in the list.

**NONE** deselects all files.

**DIRECTORY** opens a window that allows you to change the current path so as to display files in another drive and directory (for example, to access files on a floppy disk).

If the file type is Extrn DTM, the data in the files is processed in two stages to produce a regular grid of information before being sent to the Survey Controller. If a file has an irregular grid, the largest grid interval must be less than 2.1 times the smallest interval.

If the file type is FC lib, the feature codes is automatically extracted from the library and sent.

## 1.2 Error Messages

The following error messages can occur:

### **Cabling incorrect**

Change cable or crossover switch on the data collector plug.

### **Data Collector connected to the wrong communications port**

Normally, the data collector is connected to the first or second serial port (COM1 or COM2).

## 2 Receiving Files

The GETFILE command lets you receive data files from the Survey Controller.



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**Note** – If your Survey Controller job has raw GPS data associated with it, this will also be downloaded.

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To receive files from the Survey Controller:

1. Switch on the TSC1 and connect it to a serial port on the PC using the serial cable (part number 20887).
2. On the TSC1 select *Files / Import/export* then *Send/receive files from PC*. The rest of the operation is controlled from the PC.

Instructions for the SENDFILE and GETFILE Programs

- On the office computer type **GETFILE** at the appropriate DOS prompt (such as C:\TSC1>). The *Receive DC file from data collector* screen appears:

Receive DC file from data collector	
Input Device	Survey Controller v4 or later
Communications port	COM1
Max baud rate of transfer	9600
File type	DC file
File version	Not connected
<p>Before receiving any files, connect the Survey Controller to the computer. The Survey Controller should be displaying: "Send/Receive files, Waiting for PC connection." Press [F1] to make a connection, then [F2] to receive files.</p>	
[F1]	Connect to Survey Controller
[F2]	Receive DC file
Press ESC to exit	

Fields in this screen specify the details of the file transfer.

- Specify the port that the Survey Controller is connected to. The other fields in the screen are set to the defaults for the Survey Controller and do not usually need to be changed.
- Press [F1] to connect to the Survey Controller.
- Press [F2]. A window pops up. Select the file(s) to be sent:

Description	Main memory			
	Date	Time	Sent	Size
J GARDNER BRIDGE	6-MAY-97	14:57	NO	1915
J SJE NETWORK	6-MAY-97	14:57	NO	1915
J JACKSON STREET	6-MAY-97	14:57	NO	1915
J FLETCHER DAM	6-MAY-97	14:57	NO	1915
CANCEL-OK-ALL-NONE-SOURCE				

By default, unsent jobs are check marked ('ticked') for sending. Alter the selection if necessary.

7. Choose **DIRECTORY**, and specify the directory in the PC to which the files will be sent.
8. Choose **OK** to send the checked file(s) from the Survey Controller to the PC.

## 2.1 GETFILE Screens

When you run GETFILE at the DOS prompt, the *Receive DC file from data collector* screen appears (see page -10).

### Input Device

When you select the *Input Device* field, two options appear:

```
[1] Survey Controller v4 or later
[2] Survey controller v1/2/3
```

GETFILE is designed to receive files only from the Survey Controller.

### Communications port

Use the *Communications port* field to specify what serial port on the PC the Survey Controller is connected to. Click the field and a list appears:

```
[1] COM1
[2] COM2
[3] COM3
[4] COM4
```

### Max baud rate of transfer

When you click this field, a list appears:

- [1] 300
- [2] 600
- [3] 1200
- [4] 2400
- [5] 4800
- [6] 9600
- [7] 19200
- [8] 38400

This field specifies the speed of data transfer. By default it is set to 38400, the speed of the Survey Controller. If you have trouble with data transfer try using a slower speed.

### [F1] Connect to Survey Controller

Press [F1] to connect to the Survey Controller before pressing [F2]. The *Receive DC file from data collector* screen appears:

Receive DC file from data collector

Input Device	Survey Controller v4 or later
Communications port	COM1
Max baud rate of transfer	9600
File type	DC file
File version	DC v6

Before receiving any files, connect the Survey Controller to the computer.  
The Survey Controller should be displaying:  
"Send/Receive files, Waiting for PC connection."  
Press [F1] to make a connection, then [F2] to receive files.

[F1] Connect to Survey Controller  
[F2] Receive DC file

Press ESC to exit

**[F2] Receive DC file**

Press **[F2]** to obtain DC files from the Survey Controller. A window appears:

Description	Main memory Date	Time	Sent	Size
<input checked="" type="checkbox"/> GARDNER BRIDGE	6-MAY-97	14:57	NO	1915
<input checked="" type="checkbox"/> SJE NETWORK	6-MAY-97	14:57	NO	1915
<input checked="" type="checkbox"/> JACKSON STREET	6-MAY-97	14:57	NO	1915
<input checked="" type="checkbox"/> FLETCHER DAM	6-MAY-97	14:57	NO	1915
CANCEL-OK-ALL-NONE-SOURCE				

It displays all jobs in the Survey Controller. Each line contains the job name and the date and time when the job was last changed in the Survey Controller. The *Sent* column shows whether the job has already been sent from the Survey Controller. By default, files that have not been sent have a check mark beside them. They are selected for sending.

**CANCEL** discards any changes you have made, and returns you to the main screen.

**OK** sends the selected files (those with a check mark) from the Survey Controller to the PC.

**ALL** selects all files in the list.

**NONE** deselects all files.

**SOURCE** allows you to receive files from either the main memory or the PC card (if applicable). The *Data source* window appears:

Data source
Main memory
PC card

Change the setting as required. The source of the files to be downloaded will be displayed at the top of the list of jobs.