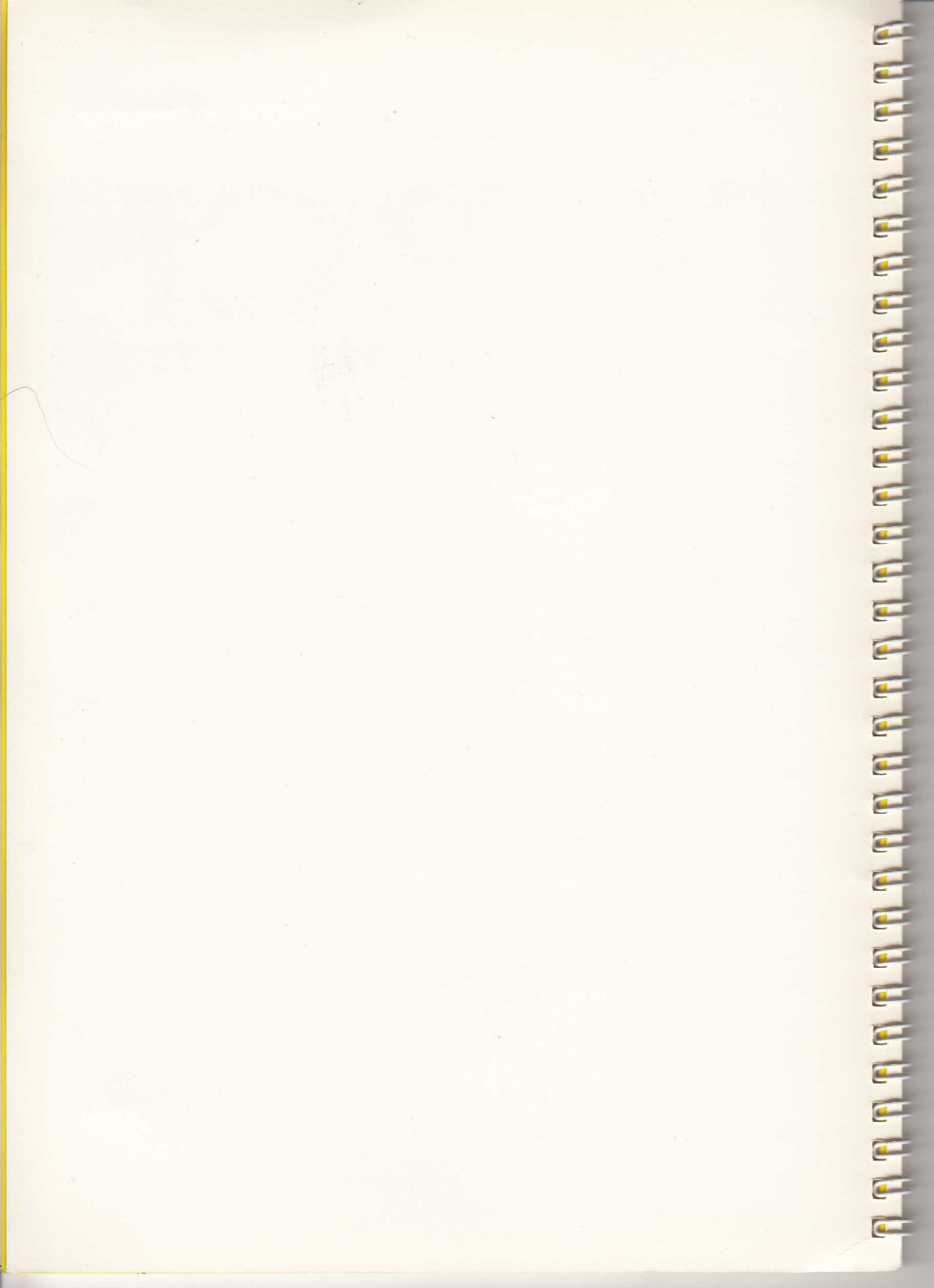


**Communications  
Guide**

**TORCH**  
**COMPUTERS**



# **Communications Guide**

# **TORCH** **COMPUTERS**

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# TORCH

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# TORCH

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# Torch Communications Guide

This manual explains the use of the 3 main telephone communications packages provided with the TORCH Computer you have purchased. The programs make use of the automatic dialling and automatic answering features of the TORCH and enable every TORCH owner to contact many information services and other computers throughout the world. For specialist applications or for communications with unusual types of computer at different speeds, your dealer may be able to supply you with a suitable program.

The three programs provided are:

TORCHTEL for autodial viewdata access (e.g. Prestel)

DATEL for autodial mainframe access (e.g. PSS, Telecom Gold)

TORCHMAIL for Torch to Torch communication over telephone lines.

For information on the various services available (telephone numbers etc.) contact your dealer.

The table below summarises the programs required to access various common services. Those marked with a '\*' are available at extra charge from TORCH dealers. For other services, contact your dealer.

Program:	Service:
TORCHTEL	Prestel, TOPS, PVS-990, METROTEL, IVS-3 TOPIC, Bildschirmtext, Viditel, Lawtel, Doctel and other videotex services
DATEL	Telecom Gold, BL Comet, EDP Mail, Dialog, Source, Dow Jones, Dialcom, SERC-Net, MidNet, Commshare, GEIS-CO, Gallinet, Extel, Eurolex, Lexis, Echo, Euronet, BLEND, Blaise, Packet Switchstream (PSS) and other V23 (Datel 600 1200/75) services.
TORCHMAIL	TORCH Central 0223 840238 pw=SECRET and any other TORCH worldwide
MAIL-PLUS(*)	Automatic unattended operation and message switching, with OBEY language and automatic retries
TERMINAL(*)	Any local RS232/423 asynchronous terminal line or modem at baud rates 75 to 9600baud. E.g. DEC, DG, GEC4000 etc.

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EMUHP(*)	Any RS232/423 connection to local system to emulate HP262X terminal control codes.
BISYNC-80(*)	IBM synchronous link, 3270, 2780, 3780, HASP
COSY-3(*)	ICL CO-3 synchronous link
TORTELEX(*)	Direct Telex connection using external modem
BSTAM(*)	CP/M micro file transfer utility using serial port on TORCH and any other CP/M micro, e.g. Superbrain, Sirius, IBM-PC, Altos, Cromemco, Comart.
TRANSFER(*)	File transfer utility using the RS232 terminal port of almost any computer.
METROTEL(*)	Information provider terminal for videotex computers using bulk update.



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# **Torch Mail.**

## **Introduction:**

TORCH MAIL provides an electronic mailing facility with various user options which are listed below. Torch Mail can transmit and receive files to or from any other TORCH that is running TORCH MAIL, and is connected to the telephone line.

### **Features of TORCH MAIL are:**

- Easy to use 'help' facility.
- Automatic dialling.
- Automatic answering.
- Operator connected calls.
- Satellite connection facilities.
- File transfer with full error detection.
- File size transfer limited only by disc system in use.
- File transfer to remote disc, screen or printer.
- On-line user messages.
- Access to remote directories.
- Password facility.
- Privilege facilities for limiting access to remote user.
- Telephone number aliases.
- Internal telephone number storage.
- Alarm calls.
- Personal reminders.
- Local file facilities.
- Calendar.
- User changeable switches to suit environment.

## **The Telephone:**

The TORCH computer is connected to the telephone line using a British Telecom jack plug (this comes as standard with the TORCH), which plugs into a wall socket on the telephone line. If you do not have one, then it will be necessary for you to contact British Telecom and arrange to have one fitted. The TORCH is fully British Telecom approved for connection to the Public Switched Telephone Network. Plugging in your TORCH to the same line as your telephone will still allow you to use your telephone normally.

The TORCH BT approval number is : S/1298/3C/450026

NOTE: TORCH MAIL has superseded Torch-Link and is not compatible with it. This user guide should be read when actually running TORCH MAIL.

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### Running Torch Mail:

The TORCH MAIL Package consists of four files:

MAIL.COM  
MAILMAIN.COM  
MAILHELP.DAT  
MAILFORM.DAT

TORCH MAIL is run by typing MAIL **Return**. The screen will clear, and the TORCH MAIL screen format will be displayed. The user will be asked to enter a name and location, the reply to which, must fit in the boxes provided. For the rest of the current operation of TORCH MAIL, this user name and location will be displayed at the top of the screen, and will be transmitted to any remote TORCH with which contact is made. When suitable replies have been typed in, the EXACT SPACE key should be used to enter them. TORCH MAIL is now running and awaiting user requests or incoming calls from remote Torches.

NOTE: If TORCH MAIL has been run previously, when it is re-run, a message will be displayed relating to the file MAILSUM.MSG. This file is created by TORCH MAIL on each run to store a backward summary of information, that is, a summary of operations that took place when TORCH MAIL was last used.

If the user does not wish to keep this information he should type 'Y' (YES) to the deletion request, in which case TORCH MAIL will be run as described above. If the user does require the information contained in the file, he should answer 'N' (NO) to the deletion request. TORCH MAIL will then terminate allowing the user to rename the file before running TORCH MAIL again.

### Important Note: HELP!

A very useful facility with TORCH MAIL, (especially to the novice!) is the HELP option. Whenever the cursor is visible, i.e. TORCH MAIL is not 'busy', use of the help key will display a 'help' message on the right hand side of the screen until another key is pressed. (This message will contain useful information about the current status of TORCH MAIL, and how to use it.) If TORCH MAIL is waiting for a user option to be selected, information about a particular option may be obtained by entering the number of the option, and pressing the help key. Further information may be displayed by subsequent presses of the help key.

NOTE: A delay of a few seconds sometimes occurs after pressing the help key. The help key is the second blue key from the left, above the left hand keypad.

When TORCH MAIL is running it is essential to have a formatted floppy disc in each drive, (not Write Protected), otherwise, when the local TORCH is accessed by a remote TORCH it could be kept 'hanging' whilst TORCHMAIL searches for a file or a directory of files.

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## Screen Colours:

There are various screen colours displayed whilst TORCH MAIL is running. The purpose of these colours is to inform the user of the current status of TORCH MAIL. These are described below.

Blue text on a cyan background:	No call established.
Yellow text on a black background:	Outgoing call in progress.
Cyan text on a black background:	Incoming call in progress.

NOTE: When a list of user requestable options is displayed, the screen is said to be 'idle'.

## Screen Editing:

There are a number of screen editing functions available as marked, on the keyboard.

Screen: Clear all boxes.

Window: Clear box cursor is currently in.

Move Right:

Return:

Line: Move cursor to beginning of next box.

Move left: Move cursor to beginning of previous box.

Delete left: Move cursor left one position, or to last position in previous box if at first position of current box.

Delete right: Move cursor right one position, or to start of next box if at end of current box.

Delete this: Deletes character at current cursor position, shunting characters to the right in the box to fill the gap.

Insert: Inserts a space character at the current cursor position.

### Torch Mail Facilities

A) Facilities available at all times:

1) Local file operations:

This option gives the user some file/disc facilities to enable manipulations of files without having to leave Torch Mail. The format displayed gives all options available but only one may be used at any one time. The options are:

Directory	(Display a directory of the disc.)
Type	(Display contents of a file on the screen.)
Print	(Output the contents of a file to the printer.)
Copy	(Allows copying of files.)
Delete	(Delete a file.)
Rename	(Rename a file.)

NOTE: The Directory option is selected by entering the drive name (A: or B:) and/or the ambiguous filename in the box shown as File 1 on the screen.

2) Create personal reminder :

A personal reminder consists of a short piece of text i.e. a message and a time/date. When the time set for the reminder expires, the message is displayed at the top of the screen remaining there until it is overwritten by another message. When a message is displayed on the screen, there will be a short 'bleep' (if the sound switch is set) to attract the attention of the user.

3) Change switches:

There are currently 6 switches available to the user to modify the behaviour of TORCH MAIL to suit individual requirements. They are:

Sound.	Serial printer.
Summary.	Parallel printer.
Accept incoming calls.	Satellite timeouts.

The effect of 'Sound' is to ring a bell on the speaker when an error or an action message is put up. Note, when an alarm call is made the telephone is muted. The 'Summary' switch enables/disables the backward summary option, (see below). The 'Accept incoming calls' switch is used when a user does not want the TORCH to answer the telephone immediately, this facility is used to disable the auto-answer. The printer switches are for selecting the type of printer in use. The 'Satellite timeouts' switch is not used in normal operation, only when an international satellite link is connected. The use of this switch allows longer time for operations to take place when a satellite is used, due to transmission delays.

NOTE: Switches are changed by selecting the relevant option, from the menu. (Press 'HELP' key for further information.)



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B) Facilities available only while there is no telephone activity:

1) Call remote TORCH:

This option is used to call another TORCH for information interchange using auto dial-out and auto answering. To call another TORCH a password is required but privileges are not mandatory. For any other type of call out, the operator connected call option should be used. (See below).

2) Operator connected call:

This option enables the TORCH to either initiate a logon or receive a logon without having to dial-out or answer the call. (For an explanation of the 'logon' procedure, see section on Logging-on.)

3) Create alarm call:

The alarm call option enables the user to specify a time when a particular number is to be called, at a period of time set by the user. (Up to a maximum of 45 seconds.)

4) The 'Summary' request is split into forward and backward summaries. The backward summary informs the user of the history of the current run of TORCH MAIL. The forward summary gives details of the events set up for the future, e.g. personal reminders and alarm calls. There are two levels of forward summary, brief and detailed.

5) Change clock:

Provides a useful clock and calendar. To take advantage of timed events in the future it will need to be set-up. Leaving boxes blank will leave the relevant field unchanged.

6) Change passwords:

The user can change the passwords available to outside users using this option. Up to 10 passwords may be stored, each with individual privileges. The passwords may be stored in the file MAIL.PWS.

To add a new password just enter the name and its privileges in the boxes. (there is no need to specify a number unless a particular position is required). To delete a password simply specify its number and press EXACT SPACE.

7) Change Telephone numbers:

Telephone numbers are treated similarly to passwords. The alias is put in the first box and the number put in the second. Valid numbers can include the characters 0 to 9, colons, semicolons, or spaces. A semicolon introduces a delay of one second in the dial sequence. The telephone number file is MAIL.PHN and is also used at the beginning of a run to read in telephone numbers automatically.

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# TORCH

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C) Facilities available only while a call is established:

1) Terminate link with remote TORCH:

This option will transmit a logoff command to the remote TORCH and then drop the line, reverting back to the idle mode. This should be used for all line disconnections unless circumstances do not allow it.

2) Request a file from remote TORCH:

This option allows a user to request a particular file from a remote TORCH providing the access is allowed. The file received may be filed on disc, printed on a printer and/or typed on the screen. The request will be rejected if the user does not have the R privilege or the specified file is one of the following:

MAILMAIN.COM  
\*MAIL.COM  
\*MAIL.PHN  
\*MAIL.PSW  
\*.MSG

3) Send a file to remote TORCH:

Similar to requesting files but in reverse. The user must have the S privilege to send files. The send will be rejected if the destination file already exists, thus preventing the remote user overwriting files on other machines.

4) Send a message to remote TORCH:

This option enables the user to type in a message on the screen and transmit it to the remote TORCH. There is also the option of having the message filed locally as OUT<number>.MGS. This facility is useful if the remote TORCH rejects the message request since the message file can be sent at a later time. The user must have the M privilege to send a message.

5) Request remote directory:

This option allows the user to get a directory of the remote TORCH (any drive may be specified). The user must select the D privilege to request a directory.

## Privileges, Passwords, and Logging-on.

Privileges have been provided to limit the amount of access a user has over a remote TORCH. There exist 5 types of privilege which may be associated with a password and 4 types which can be granted to a remote user. The privileges are:

R - Allow file requests.  
S - Allow files to be sent.  
M - Allow user messages.

D - Allow remote directory requests.  
L - Do not allow logon to succeed.



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Before user communications may proceed after a call has been established between two TORCHes, there is a logon procedure performed automatically by TORCH MAIL. This logon has been provided to prevent unwanted users accessing the machine. The logon message contains a password to access the remote TORCH, a set of privileges the remote TORCH will have if it allows the logon, and information regarding the user. The TORCH receiving the logon will check the password received against the ones stored in its memory. If there is a match then the logon is allowed, and a log reply is made with the privileges associated with the password, together with information regarding the remote user. If however the password is not known the logon will be rejected and the call terminated. The call will also be terminated if the password used had the L privilege which indicates the password has been suspended.

For outgoing calls, if a valid log reply is not made within a fixed time period the TORCH will retransmit the logon. This will be repeated several times and if a valid reply is still not received, then the logon will have failed and the call abandoned. Similarly for incoming calls a valid logon message will have to be received within a fixed time or the call will have failed.

The suggested use of passwords is to set up a series of passwords with certain privileges. The user can inform remote users of the password(s) they may use. Thus several users will be able to access the same TORCH but have completely different types of access according to the privilege bestowed upon them. If an existing password is to be taken off, it is better to give it the L privilege so that remote users will know that it has been suspended and that they have not quoted an incorrect password.

## **Escape Key:**

The Escape key is used to abort the current activity:

<b>Current Activity.</b>	<b>After Escape has been pressed.</b>
Dialling.	Dialling stopped.
Information Transfer.	Call established but idling.
Idling Call.	Call cleared, idle mode.
Local file operation.	Idle mode, operation cancelled.
Idle mode.	Program terminated.

Pressing the escape key will result in a short message appearing on the right hand side of the screen asking for confirmation of the request. The reply N (NO) will cancel the request, whereas Y (YES) will perform the necessary escape. This option should not be used regularly to cancel a call as it might 'hang' the phone line at the remote TORCH for an unnecessary amount of time.

### **Telephone Numbers:**

To perform an outgoing call using direct dialling, a phone number must be provided. TORCH MAIL provides an aliasing facility whereby a user defined name may be associated with a particular telephone number. The alias may then be quoted instead of an actual number. There can be up to 14 such aliases which can be written to disc and read again during a later run of TORCH MAIL. The file is automatically read on start up if it exists. (See section on changing telephone numbers).

### **Establishing a Call:**

An outgoing call may be made in two ways, in both cases from the idle screen. The first method is for the case where direct dialling is possible which the TORCH can do automatically. The second case is when the call has to be made by an external body e.g. a switchboard or telephone operator. The information required for direct dialling is the telephone number, the password, and the privileges to be given to the remote user for access to the local machine. Once this information has been correctly supplied the call is made automatically. The telephone is 'picked up' and dialling starts. The TORCH will wait a number of seconds after dialling is complete for the line to connect, and the remote machine to answer.

The procedure for an outgoing operator controlled call is not as simple. The information required is the password and the privileges. The line must be established manually using the switchboard or the operator. If the remote TORCH answers the call, the logon can proceed immediately by pressing the EXACT SPACE key. If however a user answers the call, then the connected incoming call option must be selected at the remote TORCH. This process has to be synchronised and agreed by the users at both TORCHes.

### **Incoming Calls:**

There are two ways of receiving incoming calls, automatic and operator connected. For automatic answering the user need not do anything except set up passwords for remote users. If there is a call on the line, and the TORCH is accepting incoming calls, then the TORCH will automatically answer the call and await a logon message. For operator connected incoming calls the procedure is to manually pick up the telephone to receive the call, and just before the remote machine sends a logon, the user at the local TORCH should request an operator connected incoming call. In both cases the TORCH will wait a fixed period of time before a connection is deemed to have failed.

### **Timeouts:**

TORCH MAIL transmits data across the telephone line in small blocks called frames. There are several types of frame to control the link between the two

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TORCHes and ensure that user data is transferred error free. Whenever information is transmitted, the receiving TORCH will acknowledge the receipt of the data, thus allowing the next frame of data to be sent. If however the transmission is corrupted, the receiving TORCH will ignore it. The transmitting TORCH will monitor the response time of the remote TORCH, and if this time exceeds a certain period the transmitting TORCH will retransmit the frame. This period of time is referred to as the timeout. The retransmission can occur several times up to a fixed retry count. If a reply is still not received after this count is exceeded the link will have failed and the call abandoned.

On normal telephone links this time period does not need to be very long, but with satellite links the delay in the actual transmission between the TORCHes is significant and it is necessary to increase the timeouts by setting the satellite timeouts switch. (As described above.)

### **Terminating a Call:**

A call should always be terminated cleanly using the terminate call option which will cause a logoff sequence to be initiated. If however the line is required to be dropped in exceptional circumstances then the escape key will allow it. Note that in doing so the remote machine will not know that this has happened and will be kept 'hanging' on the line until it times out.

### **Local operations during a call:**

There are various operations available while a call is established. Whenever the 'call established' idle screen is displayed, the package will allow remote and local requests. However if the idle screen is not displayed, and information is not being transferred, then remote requests will be rejected. Non idle screens will be timed out and replaced by the idle screen approximately 3 minutes after the last key depression. This prevents a remote user 'hanging' the TORCH for too long by typing a file on the screen for example.

NOTE: It is not possible to use TORCH MAIL while information transfer is in progress unless escape is used which will abandon the transfer.

## **Examples of using Torchmail:**

### **Example 1**

Sending a message to a remote user on a standard STD link

- 1) Prepare the message in a file on disc using the input command or an editing program e.g. Wordstar.
  - 2) Run TORCH MAIL as outlined above.
-



- 3) Select option 1 to call remote TORCH.
- 4) Enter the telephone number, password and privileges in relevant boxes and press the EXACT SPACE key.
- 5) The TORCH will automatically dial the remote user and perform the logon operation.
- 6) After logon the user may select the 'send a file' option to enable transmission of the file. On this screen format the user must enter the appropriate filename and select the type of output the remote machine will perform when it has been received, i.e. file it on disc, type it on the screen, and/or print it on a printer.
- 7) Once the screen format has been filled in and the EXACT SPACE key is pressed, Torch Mail will send a request to the remote machine for it to accept the file, providing the password used afforded the S privilege. This being so, the remote TORCH allows the request, and the transmission starts immediately.
- 8) The user will be notified by an action message when the transmission is complete. The user may then perform other transfers of data or terminate the call by sending a logoff (option 1).

### **Example 2**

Sending a message to a remote user over a satellite link where the originator must use an operator connected link.

- 1) Prepare the message in a file on disc using the input command or an editing program e.g. Wordstar.
- 2) Run TORCH MAIL as outlined above.
- 3) Ensure the 'accept incoming calls' switch is turned off to prevent a call interfering with the outgoing operator connected call. Also ensure that satellite timeouts have been selected, (both are checked/changed on option 8) - Change Switches.
- 4) Select the operator connected call screen. On this screen select outgoing call by putting a 'Y' or '-' in the box next to the 'outgoing call' label.
- 5) Fill in the password given as valid for accessing the machine to send the file to, and also put in the privileges to give the remote machine. Note if the only action during the call is to send files no privileges need be given to the remote TORCH.
- 6) Establish the call with the remote user/TORCH using conventional handset and dialling procedure.

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7) IF a TORCH answers the phone then the EXACT SPACE key should be pressed as soon as the tone from the remote TORCH is heard. The logon will proceed from there automatically. If the call is answered by a user then it must be arranged for the remote user to put the remote TORCH on the telephone line and perform an operator connected incoming call. Both users should initiate the 'call' at approximately the same time. In both cases the logon may not be completed immediately as the user timing may be out of step. However the automatic retries programmed into TORCH MAIL cause the logon to proceed after a timeout period.

8) After logon the user may select the 'send a file' option to enable transmission of the message/file. On this format the user must fill in the appropriate filename and select the type of output the remote machine will perform when it has been received i.e. file it on disc, type it on the screen and/or print it on a printer.

9) Once the screen format has been filled in and the EXACT SPACE key is pressed, TORCH MAIL will send a request to the remote machine for it to accept the file, providing the password used afforded the S privilege. This being the case the remote TORCH allows the request, and the transmission starts immediately.

10) The user will be notified by an action message when the transmission is complete. The user may then perform other transfers of data or terminate the call by sending a logoff (option 1).





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# Torchtel

The TORCHTEL package will enable you to use your TORCH computer as a terminal for Prestel and other viewdata systems. TORCHTEL is an easy to use menu driven package with many powerful features.

## Features of Torchtel

- Save text displayed on screen to disc.
- Recall saved text.
- Send text displayed on screen to printer.
- Select printer from within the package.
- Screen information via the 'help' key.
- Automatic logon facility.

All of the above features of TORCHTEL are available as single key presses on the left hand keypad. These are described fully below in the section 'Special Functions of TORCHTEL.'

## The Telephone

The TORCH computer is connected to the telephone line using a British Telecom jack plug (this comes as standard with the TORCH) which plugs into a wall socket on the telephone line. If you do not have one then it will be necessary for you to contact British Telecom and arrange to have one fitted. The TORCH is fully approved by British Telecom for connection to the Public Switched Telephone Network. Plugging in your TORCH to the same line as your telephone will still allow you to use your telephone normally.

The TORCH BT approval number is: S/1298/3C450025

## Using Torchtel

The TORCHTEL package consists of two files:

TORCHTEL.COM  
TORCHTEL.DAT

The first is the TORCHTEL program itself and the second is a file that stores the telephone numbers that you wish TORCHTEL to 'remember'. (The file TORCHTEL.DAT is created the first time TORCHTEL is run.) As with all programs the first

thing you should do is to make a working copy of the TORCHTEL program so that you do not risk damaging the master copy. For details of how to use the DUPLICATE command, refer to the TORCH USER GUIDE.

**IMPORTANT:** TORCHTEL and DATEL are normally supplied on the TORCH systems disc. This disc is full to capacity with the various free packages that come with your TORCH computer. As stated above, the first time TORCHTEL is run, the file that stores your telephone numbers is created. As this new file is created it may try to take up more space than is available on the disc. This may cause problems the next time TORCHTEL is run. For this reason it is essential that you copy TORCHTEL.COM to a blank formatted disc before running it. This will prevent the new file TORCHTEL.DAT being corrupted. The above procedure should also be followed in the case of DATEL.

## Registering on Prestel

If you are not already a Prestel user, then you register as follows: First check your Torch is plugged into the telephone line and then place your working disc in the top drive. To run TORCHTEL enter:

TORCHTEL **Return**

on the screen will be displayed the TORCHTEL main menu:

TORCHTEL 4.0 MAIN MENU

A  
B  
C  
D  
E  
F

Q=Exit H=Help M=Modify

Select number to dial

At this stage you must establish a vacant telephone number. To do this press the M (for Modify) key followed by the A key and the cursor will move to slot A on the menu.

Press: **Return**

to indicate that you do not wish to enter a number.

Now telephone the operator (dial 100), and ask for Freefone 2314. You will be asked to give information on such things as your telephone number and address, either now or at a later time. You will then be telephoned back (to check the

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number you have given is correct), and asked to put your terminal 'on line'. Simply 'dial' the empty telephone number you previously set up, by pressing the A key (dial number A). This will connect the Torch to the telephone line.

Your Torch will display the messages:

Dialling

followed by: Awaiting Carrier

Go back to your telephone and tell BT that your set is on line. It will then be programmed with all the information the Prestel computer needs to identify you when you call it. As this happens, messages on the screen will tell you what stage has been reached. The last thing printed on the screen will be the telephone numbers of your Prestel computers. You will have at least two numbers, so that if there are any problems with one computer you can still use Prestel. Note the numbers down on paper (you will probably also wish to input them into the file TORCHTEL.DAT using the MODIFY option).

Disconnect your Torch, by pressing the red ESC key followed by Q and any other key. Return to your telephone.

You are now registered as a Prestel user.

There are several other privately owned, viewdata systems available to you; you may wish to register on these and add them to the list of numbers your Torch can dial for you.

## **New Registration Scheme**

The above procedure is the old method of registering on PRESTEL, however, there is now a new system in operation which works as follows: When you apply for PRESTEL membership, PRESTEL send you a letter through the post giving you a customer identifier of 10 digits. This identifier is automatically sent to PRESTEL by TORCHTEL when you connect to it. First you must 'program' the identifier into TORCHTEL in the following way:

When the TORCHTEL main menu is displayed on the screen press the M (for modify) key and then enter @ (press shift and 4), the @ will appear just below the TORCHTEL title, at this point enter the identifier number and press **Return**. The identifier is now stored in TORCHTEL and will be entered to PRESTEL each time TORCHTEL contacts it.

## **The Prestel Character Set**

Prestel uses a different, and smaller, character set to the one your Torch normally uses (the ASCII character set). As a result of this, some of the keys on your Torch will produce a different character than normal on the screen. In general, the

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differences are minor; and, of course, neither numbers nor letters are altered. There are however two major differences in the characters produced by your Torch keyboard when using Torchtel:

i) '#' may be produced by pressing any of:

- a) END
- b) UNDERLINE
- c) EXACT SPACE

This is a symbol used a lot in Prestel. If you read any other books about Prestel, you will find you have to substitute one of the above keys for '#' when using your Torch with Prestel.

ii) '\*' may also be produced by pressing the BEGIN key.

We expect that these keys will be useful for accessing Prestel pages by issuing commands in the form:

BEGIN page number END

rather than:

\* page number UNDERLINE

## Entering Prestel

When the Torchtel main menu is displayed, if there already exists at least one telephone number that the Torch 'knows' (i.e. the number is in the file TORCHTEL.DAT and is shown next to one of the letters), you should press a key in the range A to F, depending on which telephone number you wish the Torch to dial. This will cause the Torch to dial the number you select. The dialling is audible via your Torch's loudspeaker as a series of rapid 'clicks', much as a normal telephone sounds.

If the Torch waits for a long time with the message 'Awaiting Carrier' on the screen, then the Prestel computer is not answering. If this should happen, press 'escape', then Q and any other character, to return to the main menu, and phone another of your Prestel numbers. This calls another Prestel computer which should be working.

If there are no telephone numbers currently in existence or if you wish to change one of the numbers you should type M (to Modify) when the TORCHTEL main menu is displayed.

Other options available from the TORCHTEL menu are:

Q for 'quit' will return you to the CPN operating system.



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M for 'Modify' allows you to change or create telephone numbers. The program will ask:

Modify which number? (reply with A-F)

The cursor now moves to the first typing position of the letter that you gave. You are now free to enter the new or modified number. To indicate that you have finished entering the number press **Return**. Do not forget to include a number to gain an outside line (commonly '9'), if your Torch is connected to an internal telephone system.

When the number has been dialled, the message 'Awaiting carrier' will appear near the bottom of the screen.

This means that the Torch is waiting for the Prestel computer to acknowledge its existence. When the Torch receives a signal from the Prestel computer it will display 'Carrier received'. When this happens Prestel will take control.

Some Prestel computers will request your password before you are granted complete access.

## Leaving Prestel and Torchtel

While you are using Prestel, you may call a separate menu. This allows you to leave Prestel and disconnect the call.

To enter the menu, press ESCAPE. This will cause control to pass to the 'escape menu'. The following message will be displayed on the screen:

Quit,Save,Print or Return

To leave PRESTEL press Q, the telephone will be disconnected and the following message will be displayed on the screen:

\*\*\*Line disconnected\*\*\*

Pressing any key will return you to the TORCHTEL main menu.

NOTE: that you can also leave Prestel by moving to page 90; to do this type:

BEGIN 90 END (or \*90 UNDERLINE).

A farewell page is displayed, along with the message:

\*\*\*Line disconnected\*\*\*

Typing any key will return you to the main menu.

RETURN

Pressing **Return** will return you to Prestel from the escape menu. This is useful if you hit ESCAPE by accident.

Q

This takes you back to the menu from where another depression of the Q key will return you to the CPN operating system. This option will notify you that you are no longer connected to Prestel by displaying:

\*\*\*Line disconnected\*\*\*

at which point you should press **Return** to get back to the main menu.

## Changing Pages

Once in Prestel, you can move to any page number that you want, to do this, press BEGIN followed by the page number and then END. Equivalently you may type \*, followed by the page number and UNDERLINE.

For example to get to page 100, type:

BEGIN 100 END

If you entered the page number incorrectly, just press BEGIN twice (i.e. \*\*) and the command will be cancelled. Indeed, any Prestel command can be cancelled at any time before typing the last character, just by pressing the BEGIN key twice (i.e. \*\*).

If you do not give a page number then the last page you looked at will be shown. This can be repeated up to three times in a row. Thus, if you had moved from page 100 to page 198, and typed:

BEGIN END (\*UNDERLINE)

Then you would move back to page 100.

## Retransmitting a page

Occasionally the page display will be indistinct, because of a bad connection. If this is the case, you can have the same page transmitted and displayed by typing:

BEGIN 00; OR # 00

Alternatively, you may wish to have the page you are looking at updated and retransmitted; this is particularly useful if you are, say, looking at a news page. This is done by typing:

BEGIN 09

If the page is updated, then you will be charged again for viewing it; however if you are just redisplaying it there is no additional cost.

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## Special Functions of Torchtel

There are various functions available with TORCHTEL on the left hand keypad, these are as follows:

**FILE:** This key may be used to save text displayed on the screen to disc. To do this press the FILE key and the current screen will be saved to disc in the file TORCHTEL.PAG

**SCREEN:** Use of this key allows the current screen to be sent to the printer. To turn this facility off press the SCREEN key again. A printer capable of handling high print speeds should be used. The TORCH dot matrix or colour printers are recommended.

**NOTE:** If this facility is to be used, it is necessary to select the printer (serial or parallel) before running TORCHTEL. \*FX 5,2 for serial and \*FX 5,1 for parallel. (The baud rate for a serial printer may also have to be selected, refer to the TORCH SYSTEMS GUIDE for more information on connecting a printer.)

**ESCAPE:** When the ESCAPE key is pressed, an 'escape' menu is displayed on the screen. From this menu any of the functions available on the left hand keypad (mentioned above), may be used. In addition to these a very useful facility which allows you to select a printer (serial, or parallel) is available. This may be particularly useful if you wish to print some pages from PRESTEL but did not use the \*FX command to select a printer before running TORCHTEL. The following keys may be used to select a printer:

- 0..Select no printer.
- 1..Select parallel printer.
- 2..Select serial printer.

**HELP:** At any time the main menu is displayed whilst running TORCHTEL, the HELP key (second blue function key from the left above the left hand keypad), may be used to display useful information on the screen. The letter key H may also be used to call the help screen.





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# **Torch Datel**

## **Introduction**

The TORCH DATEL package is used to communicate with other computers using the British Telecom Datel 600 (CCITT V23) service. This service allows data to be transmitted over the public switched telephone network by setting up a normal telephone call and, when contact has been established, diverting the line to the modem and terminal equipment. Data can be transmitted in one direction at a time to any similarly equipped computer. There are no additional telephone charges for data transmission calls and full use can be made of cheap rates. TORCH DATEL provides a dial-up connection through a normal telephone line to PSS, TELECOM GOLD, SOURCE, and most time sharing devices.

## **Features of Datel**

- Save text displayed on screen to disc.
- Send text displayed on screen to printer.
- Take input from a file on disc instead of keyboard.
- Automatic logon facility.

All of the above features of DATEL are available as single key presses on the left hand keypad. These are described fully below in the section 'Special Functions of DATEL'.

## **The Telephone**

The TORCH computer is connected to the telephone line using a British Telecom jack plug (this comes as standard with the TORCH) which plugs into a wall socket on the telephone line. If you do not have one then it will be necessary for you to contact British Telecom and arrange to have one fitted. The TORCH is fully approved by British Telecoms for connection to the Public Switched Telephone Network. Plugging in your TORCH to the same line as your telephone will still allow you to use your telephone normally.

The TORCH BT approval number is: S/1298/3C450025

## **Using Datel**

The DATEL package consists of two files:

DATEL.COM  
DATEL600.DAT

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# TORCH

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The first is the DATEL program itself and the second is a file that stores the telephone numbers that you wish DATEL to 'remember'. (The file DATEL600.DAT is created the first time DATEL is run.)

As with all programs the first thing you should do is to make a working copy of the DATEL program so that you do not risk damaging the master copy. For details of how to use the CPN FORMAT and COPY commands refer to the TORCH SYSTEMS GUIDE.

**IMPORTANT:** DATEL and TORCHTEL are normally supplied on the TORCH systems disc. This disc is full to capacity with the various free packages that come with your TORCH computer. As stated above, the first time DATEL is run, the file that stores your telephone numbers is created. As this new file is created it tries to take up more space than is available on the disc. This may cause problems the next time DATEL is run. For this reason it is essential that you copy DATEL.COM to a blank formatted disc before running it. This will prevent the new file DATEL600.DAT being corrupted. The above procedure should also be followed in the case of TORCHTEL.

To RUN datel enter:

DATEL Return

After a short pause to load the program the screen will show the DATEL main menu:

TORCH DATEL 4.0 MAIN MENU

A  
B  
C  
D  
E  
F

Q to leave DATEL, H for HELP

Select number to dial:

If this is the first time that DATEL has been run then the main menu will appear as shown above. (Without any telephone numbers listed). To enter telephone numbers to the DATEL main menu, press M (for modify). The screen will display the question 'which number do you want to modify?' Press a letter key selected from one of those above (A B C D E F) and the cursor will be moved in front of that letter, you may now enter a telephone number to the DATEL screen. The telephone number that you have just entered will be displayed on the screen every time DATEL is run unless you change or remove it by using the M (modify) option. If you select the modify option (by pressing the letter key M) and then

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decide that you do not wish to enter or modify a number then press **Return** and you will go back to the main menu.

## Dialling a number

To dial a particular number that is listed on the DATEL main menu simply press the letter key corresponding to the telephone number that you wish to dial. DATEL will then automatically dial the number and connect you to the required service. Note that if you wish to pause during the dialling, insert a semicolon (;) between the digits. An example of where this would be used is if you first have to dial an outside line through a switchboard before dialling the number of the service.

EXAMPLE 9;84123

The 9 would be dialled first followed by a short pause to allow connection to the outside line and then the digits of the actual number would be dialled.

## Help Facilities

As with all TORCH software, there are help facilities available with DATEL. At any time when the main menu is displayed it is possible to view the help screen by pressing the second blue function key from the left above the left hand keypad. To go back to the main menu after viewing the help screen press the space bar. (The H key may also be used to view the help screen).

## Datel Special Functions

There are various functions available with DATEL on the left hand keypad these are as follows:

**FILE:** This key may be used to save text displayed on the screen to disc. To do this press the FILE key and any text that is typed after this will appear on the screen in reverse video. All of the text in this reverse video area will be saved to disc when you press FILE again. Before saving the text to disc DATEL will ask you to enter the name of the file you wish the text to be saved as. Enter a filename and press **Return** this file now exists on the disc. For a full explanation of filename syntax refer to the TORCH SYSTEMS GUIDE. If you decide you do not wish to save the text press the **Return** key without entering a filename.

**SCREEN:** Use of this key allows any text displayed on the screen to be sent to the printer. After dialling a telephone number and logging on to the required service, press the SCREEN key to send text to the printer. To turn this facility off press the SCREEN key again. Note that after pressing the SCREEN key text is sent to the



printer continuously. A printer capable of handling high print speeds should be used. The TORCH dot matrix or colour printers are recommended.

Note: If this facility is to be used, it is necessary to select the printer (serial or parallel) before running DATEL. \*FX 5,2 for serial and \*FX 5,1 for parallel. (The baud rate for a serial printer may also have to be selected, refer to the TORCH Systems Guide for more information on connecting a printer.)

LINE: The LINE key is used to take input from a file on disc rather than from the keyboard. An example of where this would be a useful facility would be where a long text file is prepared in WordStar (or any other word processor) off line, and put into a mailbox in Telecom Gold when actually running DATEL. The advantage of using this method is the low cost of sending a large text file because the text was actually typed in before the TORCH 'picked up' the telephone line.

To send a text file from disc when running DATEL press the LINE key. The instruction 'Enter name of file to send' will be displayed on the screen. Enter the name of the file you wish to send and press **Return**.

NOTE: That if the file that you wish to send is on the disc in disc drive B then you must incorporate this in the filename.

EXAMPLE: B:TORCH.TXT **Return** will send the file TORCH.TXT which is on the disc in disc drive B.

If after you have pressed the LINE key you decide that you do not wish to send a file from disc then press **Return** and this will abandon the file send operation.

## Automatic Logon

An automatic logon may be provided by creating logon files which correspond to the service dialled. For instance to provide an automatic logon for the service connected to by selecting letter A from the DATEL main menu, the file LOGON.A must be created. LOGON.B for letter B and LOGON.C for C and so on.

When DATEL dials a number and is connected to the host computer, it will look on the disc to see if a logon file for that telephone number exists. If it does it will take the text of the file and input it to the host computer (the text of the file would contain the correct Identity and Password), in this way an automatic logon is allowed to proceed. Note that automatic logons make use of special characters such as |M, |A, and delays are provided by |1, |2 etc. this is explained fully below.

## Creating a Logon File

To create a logon file for DATEL the correct characters (ID and Password) must be stored in a file as text. This text file may be created by using the CPN INPUT



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command or a word processor such as WordStar. In the example given below an automatic logon is provided for the Telecom Gold service by entering the number of the mailbox and the password. (For details of the CPN INPUT command refer to the TORCH Systems Guide.)

EXAMPLE:

INPUT LOGON.A

|2|M

ID TOR002 SECRET

|M

When creating a logon file, the bar key '|' followed by a letter will send the corresponding control character. For instance |M would be control M which is a carriage return. The bar key followed by a number suspends or delays input to the host computer for  $X * 1.5$  seconds, where X is a number entered by the user when writing the logon file.

In the example given above, the first line (|2|M) provides a delay of 3 seconds (|2) and then sends a carriage return (|M). The next line (ID TOR002 TORCH ) is the identity and the password which is entered to the Telecom Gold computer by the carriage return (|M) on the third line.

When a logon file has been created it should be stored on the same disc as the DATEL program.





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# **Communications Guide**

