DGBASE

A WORLD OF INFORMATION
AT THE TOUCH OF A BUTTON

MAILING LISTS

MAIL-MERGE

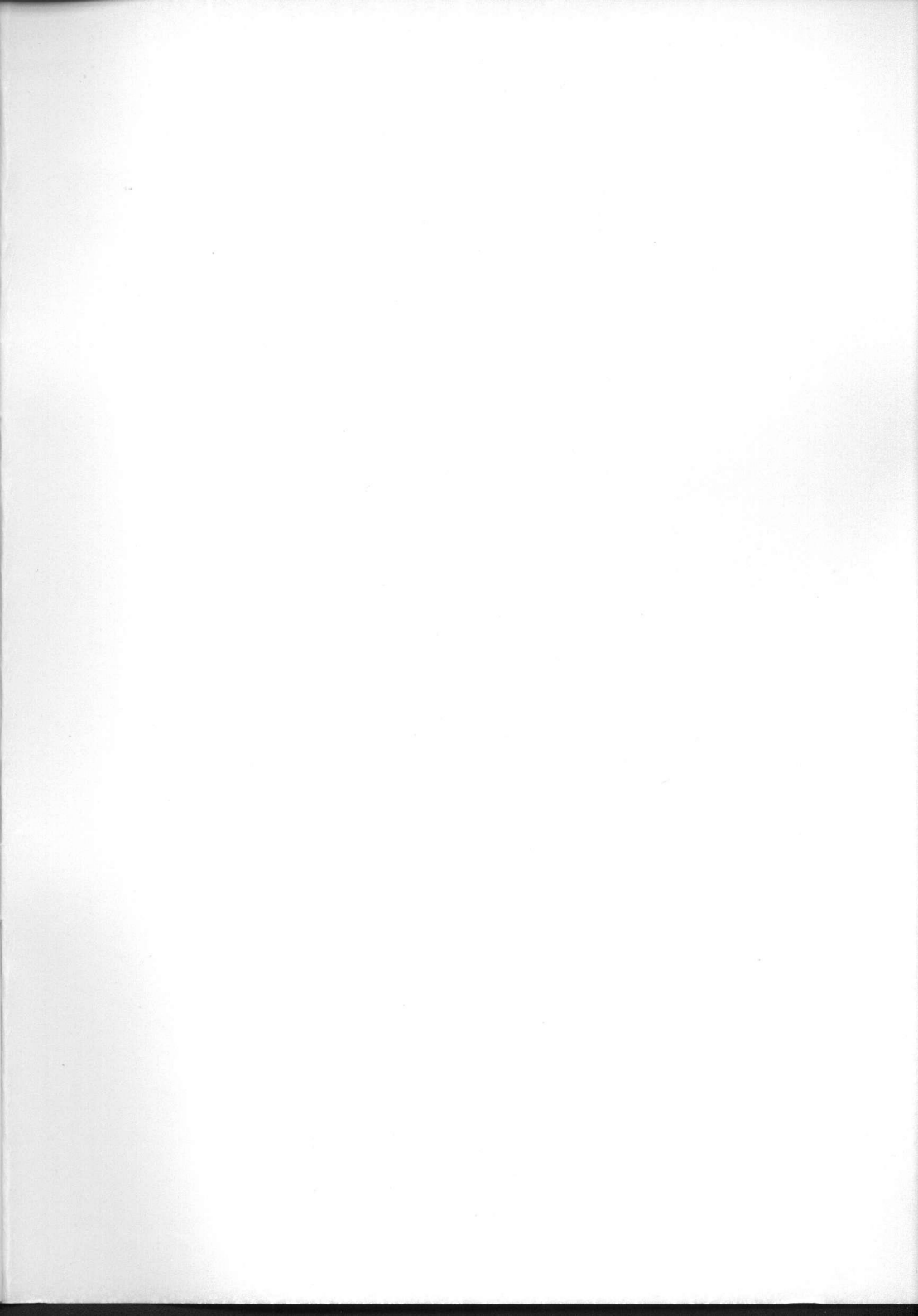STOCK CONTROL

JOB CARDS
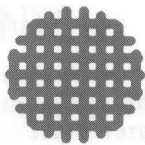
TELEPHONE DIRECTORY

PERSONNEL RECORDS

ORDER FORMS

PLANT RECORDS

SCHOOL REPORTS

MEMBERSHIP RECORDS

CUSTOMER RECORDS

DIGITA INTERNATIONAL

DGBASE

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CONTENTS

INTRODUCTION

Welcome to DGBASE.

DGBASE is designed to make full use of your Atari ST and GEM. There are many features and basic concepts which are important to understand before setting up your application. Therefore, we would strongly recommend that you run through the tutorial several times before entering actual information. This will save you time in the long run.

As with all Digita software, we hope that this package will not only prove to be a practical and invaluable tool, but that you will enjoy using it!

Your DGBASE package consists of:

1. This user manual
2. One program disc
3. User registration and support card

GENERAL SYSTEM OVERVIEW
Hardware Requirements:

DGBASE will run on any Atari ST computer with or without a printer. Although not essential, the addition of a medium or high resolution monitor (as opposed to TV) and/or a second disc drive will improve the software use further.

DGBASE will utilise any extra memory and the RAM disc.

System Design And Features

Designed and developed in the UK

Fully GEM based and written specifically for the Atari ST

Entire program resides in memory - no disc swapping

Lightning search feature - typically under 1 second

UNDO facility reverses most recent changes

Comprehensive manual, with tutorial and worked examples

General utilities include disc formatter, disc info, calculator.

Date and clock functions (7 formats for each)

6 Global variables

On-line HELP facility

FILE SPECIFICATION:

Open 4 files simultaneously (allowing cross referencing between files)

File size dependent on disc capacity not RAM

Records per file - unlimited

ASCII file importing/exporting (selective)

Optional autosave feature

Integrates with Digita's Mailshot Plus and DGCalc

Multi-file output to screen, printer, disc, new database file

Password security

Merge/project files

RECORD SPECIFICATION:

Free format layout

Adjustible layout, re-sizeable window

Record size 32K

(window 320 x 100 characters i.e., 16 screens)

FIELD SPECIFICATION:

Add, edit, re-size, or remove fields at ANY TIME

Field types: text, numeric, decimal, date, time, money, enumerated (pre-defined values), formula linked, validated

Field input range checking

Selective field display/input

Full function formula derived fields (very useful for VAT, etc.)

Single/multi line validation

Field formatting includes: left, right, centre, decimal, float in scientific notation, decimal floating, octal, hexadecimal

Fields may extend over multiple lines/blocks

4 Key fields (indexed and sorted)

64 fields, 255 characters per field

Global field(s) update/delete

REPORTING SPECIFICATION:

Comprehensive reporting templates

Printer attributes support (bold, underline, etc.)

Format margins, page length, form feeds, etc.

Report header and footer

Page headers and footers

Quick database listing

Free mix of text and fields

Dedicated label printing

Mail-merging (using built-in word processor)

Store and recall any number of report formats

Record counter, averages, field totals

SEARCH FILTER SPECIFICATION:

Search on any field

Combinational field search (AND, OR, NOT)

Search (with optional wildcards) for: text, number, date, time

Search criteria include: LIKE, BEGINS WITH, BEGINS WITH LIKE, CONTAINS, CONTAINS LIKE, =, <, >, <=, >=, <>

Full mathematics support

Unlimited parentheses

QUICK START FOR EXPERIENCED USERS

If you have some operating knowledge of the Atari ST and GEM, and computing experience, this section will help you get going quickly by simply pointing you in the right direction. However, you will still need to refer to various parts of the manual for detailed information.

1. Send off the warranty card! This ensures free support is available.

2. Ensure that you have a formatted disc ready (discs can be formatted with the Extra - Format option from within DGBASE). Then backup the disc supplied by Digita.

3. Check to see if a READ.ME file exists on the disc. If so, print it for your reference.

4. Read the sections General System Overview and Operating Notes, to gain a general appreciation, and information on editing.

5. Run DB.PRG from your backup copy of DGBASE.

6. Be sure you have a blank formatted disc in the drive (this is for your data) and select File - New to create your first DGBASE file. Press RETURN at the password prompt if you do not want a password (if you enter a password, you will be prompted to enter it again, to confirm your entry).

7. Double click the file icon to open and then use the Design options to create your various fields and Record - New to add information.

The menu options are explained in the Reference Section. Alternatively refer to the Help option.

Note: When you have loaded DGBASE, it is not essential to keep the program disc in the drive (since DGBASE resides in memory). However, should you wish to refer to the Help options, and you have removed the program disc, it will be necessary to copy the Help file onto your data disc.

Remember - you may add, edit, re-size, move or delete fields having already entered your data.

COMPUTER TERMINOLOGY

Align - This optional facility will align all text, etc. within one character size when creating your record. Note: All fields are automatically aligned.

Box - The entire record card is a box. You may set up additional boxes on the record. They represent a definable background onto which you place your fields and text.

Character - Single letter, number, symbol or punctuation mark

Click - When using the mouse to position the pointer over an option you "click" the left hand button of the mouse to select that option.

Cursor - Used to indicate on the screen where the next character will appear when a key is pressed. On the Atari the cursor is a short vertical line.

Cursor Keys - The four keys with arrows used to move the cursor.

Data - Information, as opposed to instructions. For example, your data file is the file on your disc containing the information within your database.

Decimal - This is a field type, numeric with decimal places.

Default Data -In some cases when the program is waiting for you to enter information it will offer Default Data as an option (e.g., when amending details the existing entry is given as Default for changing as required). Fields may be configured with default data.

Directory - List of files and programs used on your disc.

Double Click - Loading programs or files directly by clicking twice on the required name or icon.

Effects - These are the standard GEM styles for text.

Enum - Enumerated field type. This allows you to define up to 12 classified entries into a field.

Field - A record is divided up into 1 to 64 fields (e.g., a name would be one field in a record). A field cannot exceed 255 characters.

File - A complete storage unit for information. You may open up to 4 files simultaneously.

Filter - Used to locate specific record(s). When left blank locates all records.

Format - Allows formatting of field data (e.g., justification).

Global - This function will effect the entire database.

Icon - A pictorial representation of a file or operation/function.

Integer - This is a whole number, without any decimal point.

Key Field - This is a field which has at least part of it used as an entry in an "index" automatically maintained by the program on the disc. For example, in a file of names and addresses it would be normal for the surname to be configured as a key field. If the file was listed using the "name" key field it would be in alphabetical order. Up to 4 key fields are possible in each file. Although using more disc space, DGBASE can usually find by key field a single entry out of 1000 in less than a second and display it on the screen, which makes it one of the fastest database programs on the market.

Link - Used to link fields together, normally for calculation.

Load - Transfer information from disc to the computer's internal memory.

Mail-Merge - Combine fields from a database with text (e.g., a letter, memo, etc.).

Mandatory - This is a field setting and determines that the field must have an entry when adding records.

Menu - A list of options on the screen. Options are selected with the mouse.

Mode - This is the standard setting for the display mode of fields, boxes, text, etc.

Money - This is a field type. Displays numbers to 2 decimal places, with commas every 3 significant places.

Operating System - This is a program which gives the computer its basic facilities, such as making the screen and disc drives work. In the case of the Atari ST, GEM is the operating system, and it is explained in the Atari Manual.

Pointer - The arrow which appears on the screen and responds to movement by the mouse.

Scroll - Information which is on the screen in a window, may be moved up/down, left/right using the window sliders.

String - A sequence of characters. For example a word, number or sentence.

Text - This is a type of field, used for record titles.

Upper Case - This term is familiar to typists, and means capital letters.

Validation - Use to validate field contents at time of entry.

DATA FILES AND THEIR SECURITY

It is essential that you make a backup of the disc supplied by Digita, and keep regular backup copies of your data discs.

These data discs will contain all the information that you will be typing into the system in future. It is therefore very important to keep backup copies of these discs on a regular basis in case a fault develops.

Although time consuming, imagine how much time it would take to re-enter all your data, not to mention the inconvenience! Faults can develop on discs and it can be very difficult or impossible to recover your lost data.

Take care to keep one set of backup discs in a separate location.

The standard method of securely backing up your data discs is as follows:

1. For each current data disc you use when running the program keep 3 copies.

2. Label the 3 copies:

Grandfather, Father and Son

For example:-

DGBASE Data Grandfather

DGBASE Data Father

DGBASE Data Son

3. After each day of processing, copy the contents of the data discs you have been using onto the next logical relative, for example, if you have been using Grandfather copy the contents onto Father. If you have been using Father copy it onto Son. If you use Son copy it onto Grandfather. Be sure to check that you are copying the discs the right way and not copying over today's data with yesterday's. This is illustrated below:

FATHER
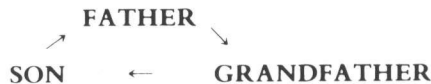
SON ← GRANDFATHER

4. At the next session use the next version of your data disc (i.e., Father, if you had been using Grandfather previously).

By rotating the use of each disc day by day you will extend their life and reliability. Also you will be automatically maintaining the previous day's data (since you only copy the current data onto one generation). Thus providing an extra security of maintaining the previous day's information as well as the current day.

You may find it helpful to keep a simple log, showing the date each disc was used. By using this method you will know exactly which version to use each day.

Refer to the Atari Manual for instructions on copying discs.

GETTING STARTED FIRST TIME

1. Make a backup copy of the disc supplied by Digita, as explained in the Atari manual.

2. Insert the backup copy of the Digita disc in drive A, and then select OPTIONS followed by SET PREFERENCES from the GEM main screen. Change the screen resolution to MEDIUM (for TV or medium resolution monitors) or HIGH (for high resolution monitors).

3. Select OPTIONS again, followed by SAVE DESKTOP. This will update the backup copy with the correct settings for future use.

***** VERY IMPORTANT ******

4. Any amendments to DGBASE not covered in this manual will be included on the program disc in a file called READ.ME. Check to see if this exists by cataloguing the disc. If it does not then go to step 6.

5. Double click the icon and select to SHOW. If a 'more' prompt appears press the SPACE BAR to see the next page of instructions. If you have a printer, it is a good idea to print the READ.ME file for future reference.

6. Double click on the Drive A icon, and then double click the DB.PRG icon. DGBASE will now load and run. Once loaded, you must remove the program disc and insert your data disc into the drive.

Note: Always store your data on a separate data disc, never the program disc. The HELP facility requires the program disc present in a drive. If you require the HELP facility, copy the HELP file onto your data disc.

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OPERATING NOTES

Once you have loaded DGBASE, you may remove the disc since the entire program resides in memory. There is one exception however - the Help facility. Should you wish to access the Help facility it is necessary to copy the Help file onto your current data disc.

DGBASE offers tremendous flexibility by allowing up to 4 files (depending on memory available) to be loaded simultaneously. By selecting the File - Load option you may load up to four different files into memory which are represented on the screen as mini filing cabinet icons.

Once loaded, to open a file (and gain access to the records) simply double click the icon. You may open all 4 files at once. To save your information use the File - Save option, this will save the currently selected file on to disc.

If you wish to exit the current file simply click the top left hand corner of the record card, the file will be closed but remain in memory. If you wish to save a file and also remove it from memory use the File - Close option.

DGBASE runs under GEM, and the menu options are selected using the mouse, as described in the Atari manual. You will notice that letters appear to the right of most of the menu options. They represent the keyboard equivalent of the option (e.g., N for New record).

When using DGBASE (with a file open), there is two modes of operation - BROWSE and EDIT.

Browse Mode

This is when all of the menu options are selectable from the top bar. (To exit Edit mode press ENTER. To exit and abort the current entry press the CLR HOME key.)

To abort an operation in Browse mode press SHIFT and CONTROL.

Browse Mode - Using The Mouse

As well as selecting options from the menus, the mouse is used as follows:

Notice 4 arrows on the window (top left). Holding down the right mouse button, clicking with the left button results in:

Left arrow: move 1 record back

Right arrow: move 1 record forward

Down arrow: move to end of file

Up arrow: move to beginning of file

Double click on the field or box to display the field/box details.

If you have more than one file currently open, double click on the background record or icon to make this the current.

Browse Mode - Using The Keyboard

As well as selecting options from the menus, the keyboard is used as follows:

Left arrow: move 1 record back

Right arrow: move 1 record forward

Down arrow: move to end of file

Up arrow: move to beginning of file

Edit Mode

When adding a record (Record - New) or editing (Record - Current) the cursor appears in the first field of the record.

To abort from an operation, whilst in current Edit mode press CLR HOME key. To abort from a global operation press SHIFT, CONTROL and ENTER.

Editing - Using The Mouse.

To move the cursor directly to a field for editing, move the pointer and click the mouse.

Editing - Using The Keyboard

Key:	Action:
TAB	Move cursor onto next field (if last field in 'New' mode, enters record and moves onto next record)
ESC	Clear field completely
BACKSPACE	Delete one character to left of cursor
DELETE	Delete character under cursor
ENTER	Enters record and moves onto next record
CLR HOME	Abort current record and return to Browse mode
ARROW KEYS	Up, down, left, right
UNDO	Restore original field contents
INSERT	Toggles between insert and overwrite mode
RETURN	Enters CR character into field and moves cursor down

Only valid keys may be used. For example, only numeric for money.

Window Size

When adding/editing, DGBASE will only recognise the fields currently on-screen within the window. Therefore, any field outside this, although part of the record, will be ignored. This feature is particularly useful if you are adding new fields to an existing database.

Whenever you select an option for the first time (e.g., browse, new, etc.) there will be a short delay. However, subsequent occasions will be much quicker.

TUTORIAL

Note: Due to the different resolutions available on the Atari, some of the examples in this manual may be slightly varied. This tutorial uses Atari High Resolution mode.

Firstly read the section Operating Notes, and then refer to the READ.ME file if this exists.

For this tutorial we will be setting up a database of stock records.

Load DGBASE as directed in the section Getting Started For The First Time.

The following screen will now appear:


```
Desk  File  Design  Record  Index  Report  Extra  Help
```
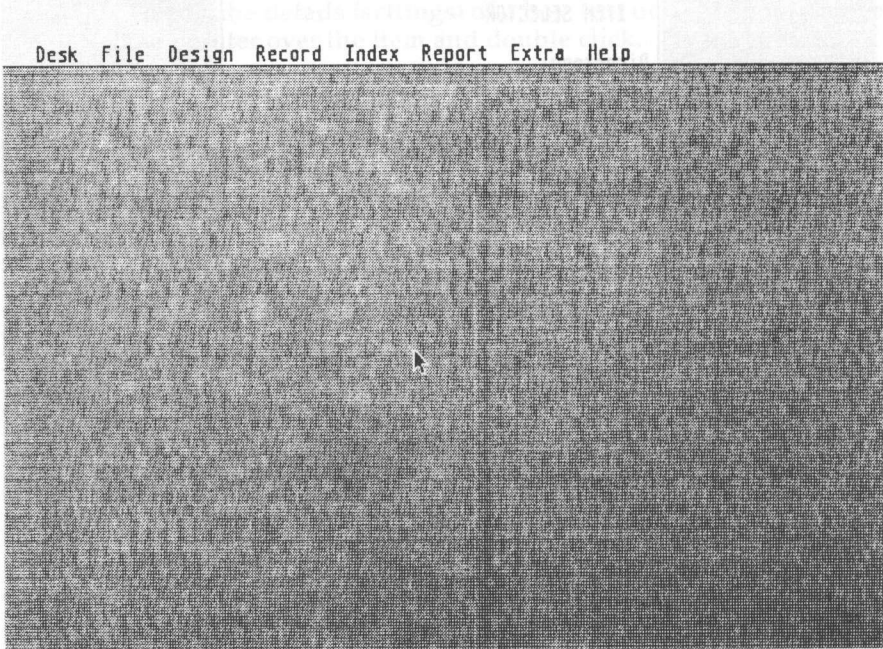
The menu options are displayed along the top of the screen. During this tutorial we will experiment with each option, from left to right.

Format Disc:

So that we may create a new file, it will be necessary to prepare a blank formatted disc. We shall perform this within DGBASE.

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Remove the DGBASE disc from the drive and insert a blank disc. Move the pointer across to the Extra option and select Format. Follow the prompts and format the disc.

Create A New File:

From the File option, select New. The Item Selector will now appear:

Desk **File** Design Record Index Report Extra Help

```
ITEM SELECTOR

Directory:
A:\*.DES_____

   [X]        *.DES            Selection:
                              --------!---
                       ⇧
      --------!---
      --------!---
      --------!---
      --------!---
      --------!---        [    OK    ]
      --------!---
      --------!---        [  Cancel  ]
      --------!---  ⇩
```
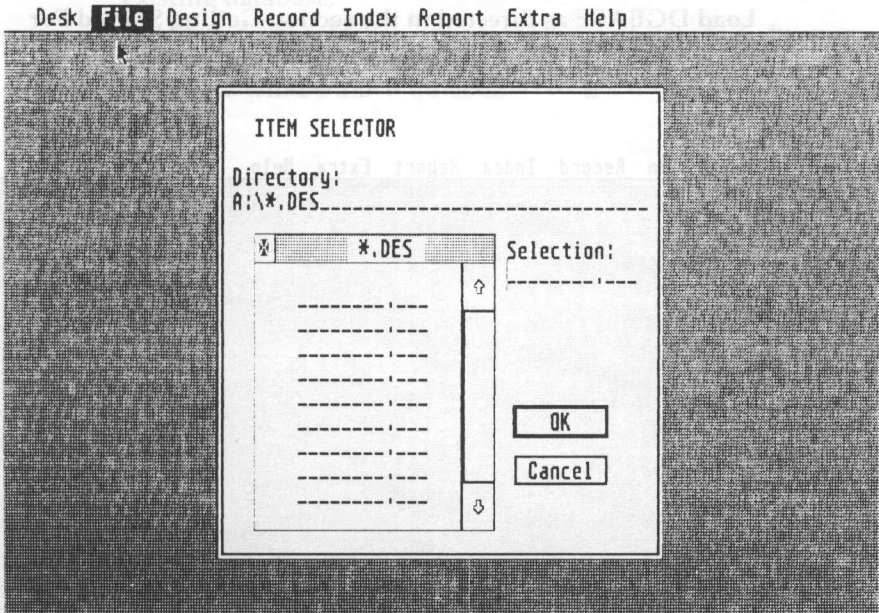
This is two windows. The smaller window has the files and programs listed. The selection and disc directory options are in the larger window.

Enter the filename DEMO and press RETURN (or click OK). You will be prompted to enter a password. Press RETURN, since we wish to ignore this feature.

After a short disc access, an icon labelled DEMO (similar to a filing cabinet) will appear on the screen. This indicates that the file has been loaded and is ready for opening (you may load up to 4 files simultaneously).

Opening The File:

Double click the icon to open the file. A blank window will appear (as with normal GEM windows, it may be resized or moved at any time).

Setting Up The Record Layout:

When creating a record layout there are basically 3 types of design:

1. Box (you may set up and configure multiple boxes)

2. Text (you may add multiple text messages)

3. Field (this is for entering your information - up to 64 fields)

To edit the details (settings) of a box, text or field simply move the pointer over the item and double click.

Although the record displayed in the screen has no fields or text, it is filled by one large box forming the background. Let's look at the design of this, so double click in the middle of the record.

The following screen will appear showing the details:
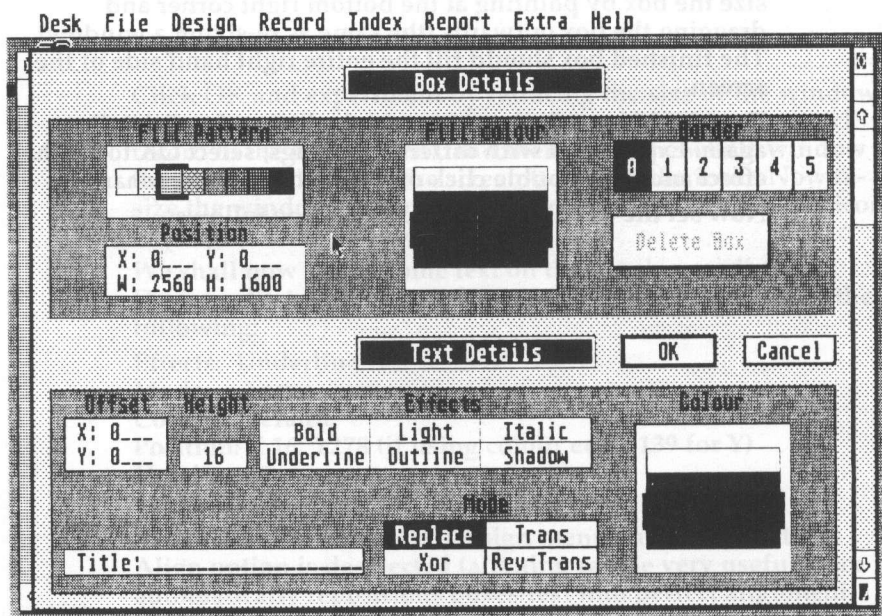
The 'Box Details' define:
fill pattern
fill colour
border
position
size

The 'Text Details' define:
offset (position of the title in respect of the box)
height
effects
colour
title (which will appear on the screen)
drawing mode

Since this is the background box, leave the settings as per the defaults and select OK to exit.

Now we shall set up our own box, select Design - Box. When the 'details screen' appears, simply select OK. A small black box will appear in the top left hand corner of the window. When you create new boxes this is how they appear by default. Position the mouse pointer over the box, press the left mouse button and drag the box into the top, middle of the screen. Re-size the box by pointing at the bottom right corner and dragging the box outwards (the same as re-sizing a window). The finished box should fill the entire right hand side of the screen.

Double click on the box to reveal the box and text details again. Experiment with different settings, select OK to set the effect and then double click on the box for further changes.

Now set the details for the box exactly as follows:

Box Details

Fill Pattern

Fill colour

Border

| 0 | 1 | 2 | 3 | 4 | 5 |

Position

X: 216_ Y: 0___
W: 384_ H: 304_

Delete Box

Text Details   OK   Cancel

Offset   **Height**   **Effects**   **Colour**

X: -8__   Bold   Light   Italic
Y: -8__   15   Underline Outline Shadow

Mode

Replace │ Trans
Xor │ Rev-Trans

Title: _____
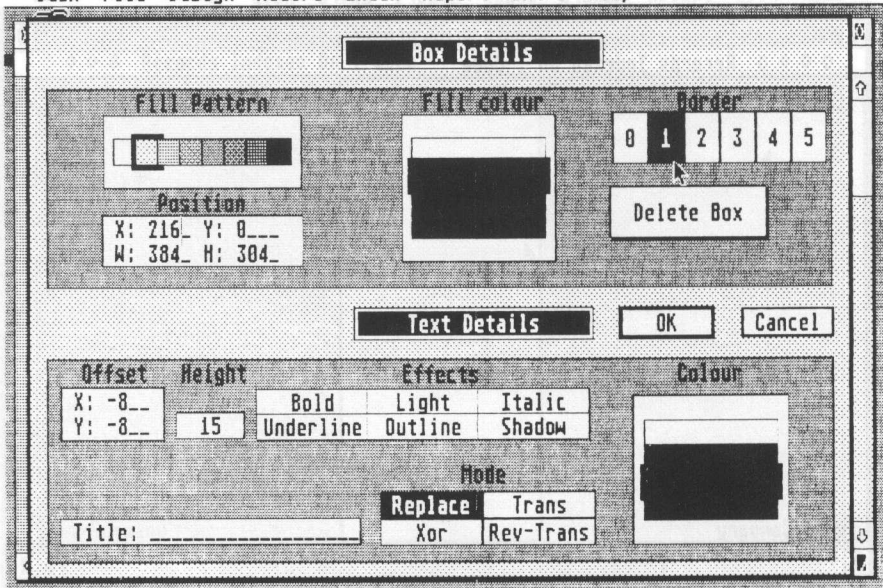
Click OK and experiment by reducing the size of the window
to fit around the stock card (you will need to move the stock
record to the far left first), and then move the whole window to
the right hand side of the screen (to reveal the icon). Now re-
size the window as previously by clicking on the full box icon
(top right of the window).

We shall now set up some text on the 'stock record'. Select
Design - Text and the usual text details will appear. Enter the
following:

Effects: Underline
Mode: Trans
Colour: default
Position: X 16: Y278 (if using colour enter 139 for Y)
Height: 10
Text: Demo Company

Now click OK. Select the Design menu and check that the
Align option is deselected (aligning can be very useful since it
automatically repositions boxes/text into perfect alignment.
Fields are always aligned automatically).

Select Design - Field and just change mode to Trans and enter
the title: Code. Click OK and move the clear box (using the
mouse pointer) from the top left hand corner of the stock
record to the position as shown:

```
┌────────────────────────────────────────────────────────────────┐
│ ⊠      ┌──────────────── A:DEMO.DES ────────────────┐        ⊠ │
│        │ ⇧ ◇ ◇ ⇩  Records Indexed On : Code          │          │
│ ┌──────────────────────────────────────┬─────────────────┐   ⇧ │
│ │ Code                                  │                 │     │
│ │  ▼                                    │                 │     │
│ │        ▶                              │                 │     │
│ │                                       │                 │     │
│ │                                       │                 │     │
│ │                                       │                 │     │
│ │                                       │                 │     │
│ │ Demo Company                          │                 │   ⇩ │
│ └──────────────────────────────────────┴─────────────────┘     │
│ ◇ │                  │                              │ ◇ ▚      │
└────────────────────────────────────────────────────────────────┘
```
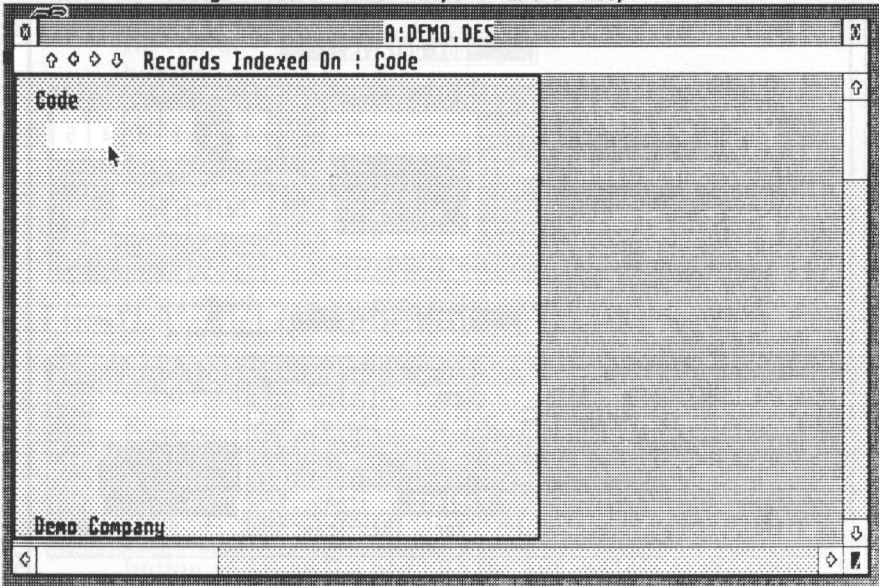
Now add another field (Design - Field) changing the mode to
Trans and the title: Description. Move the field onto the stock
record and position it just below Code.

Note: When moving fields, click and hold down the left mouse
button on the field, not the title.

Note: Titles (for fields) are very important since they are used
for reference when searching/reporting.

Now expand the field horizontally across the whole record and
across two lines as shown (use the same method as per re-
sizing a box):

A:DEMO.DES

⇧ ◇ ◇ ⇩ Records Indexed On : Code

Code

Description

Demo Company
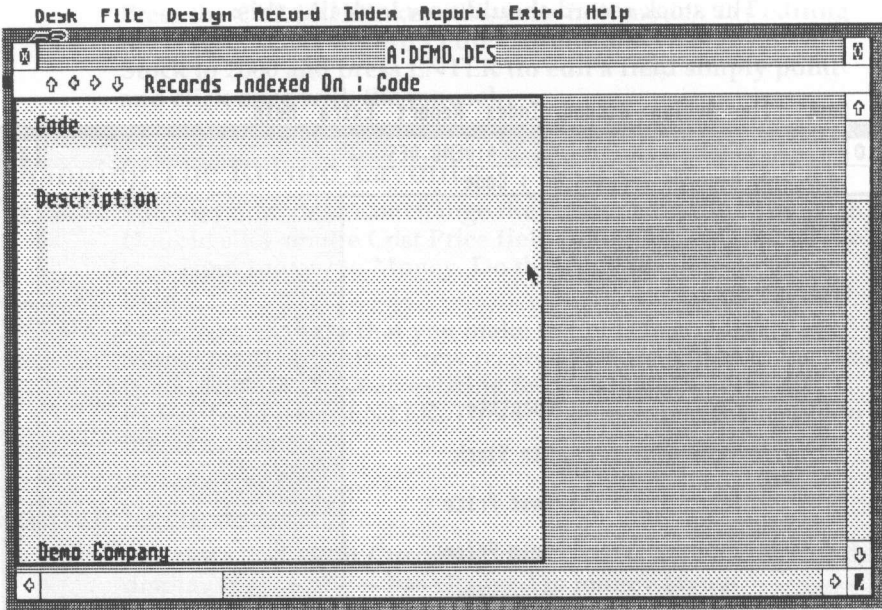
Although the field titles are essential (since this is how you search and index) you may elect not to display them on the record and then enter any titles separately using the Design - Text option. So now, lets add the rest of the fields, and then the text titles:

Select Design - Field, set the type to Integer, mode to Trans, title to Quantity and then select Hide. Exit the details screen by clicking OK and then move the field under the description field, but on the right hand side of the Stock Record.

Now enter the following integer fields (with the title set to Hide), one under the other on the stock record:

Title: Min_Stock
Title: Cost_Price
Title: Sale_Price
Title: Margin

Now enter the following text fields (Design - Text), set the mode to Trans. Move the text to the left of each field.

Text: Quantity
Text: Min_Stock
Text: Cost_Price
Text: Sale_Price
Text: Margin (%)

The stock record should now look like this:

Desk File Design Record Index Report Extra Help

```
⌼                          A:DEMO.DES                          ⊠
   ⇧ ◇ ◇ ⇩  Records Indexed On : Code

  Code
  [        ]

  Description

  [                    ]

                        Quantity      [      ]

                        Min Stock     [      ]

                        Cost Price    [      ]

                        Sale Price    [      ]

                        Margin(%)     [      ]

  Demo Company                         ▶
```

Adding A Record

We can now add a stock item. Select Record - New. Notice the
cursor appear in the Code field. Enter the following
information:

Code: D3007
Description: HOME ACCOUNTS BY DIGITA
                INTERNATIONAL FOR
                THE ATARI ST, AMIGA AND PC.

(Notice that DGBASE will move automatically onto the next
line and that a field may extend beyond one line).

Quantity: 5000
Min Stock: 1000
Cost Price: 20
Sale Price: 30
Margin (%):   (leave this blank)

There will be a short delay whilst the program saves the record
and then the cursor will reappear in a blank stock record.

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Press the CLR HOME key (this exits Edit mode). Try editing the record, select Record - Edit Current, and change the Min Stock to 2000 and press ENTER (to edit a field simply point and click once with the mouse).

Changing The Record Layout:

You may add, delete or change the fields at anytime you wish. Double click on the Cost Price field (not title) and change the type from Integer to Money. Do the same for the Sale Price field.

Note: Any changes that you make to fields (e.g., Integer to Money) will only affect new records that are added to the file. If you wish to affect an existing record simply select Edit Current and press ENTER. This will then adjust the record to the new format.

Editing Records:

Select Record - Edit Current and then press ENTER. Notice the display for the prices has changed to money layout.

Double click on the Quantity field and enter the Default: 1000. The Margin field may be automatically calculated by DGBASE. To do this double click on the field and enter the following into Link:

(Sale_Price - Cost_Price)/Sale_Price * 100

Important Note: Whenever you are referencing fields, you must use the field title (as above). The title should be typed exactly as it appears in the field details, however you do not need to observe upper and lower case.

Now Edit the stock record once again and see DGBASE calculate the margin automatically. Now enter the following stock records (Margin will be entered by DGBASE, notice the default for Quantity that you set up earlier):

Code: D3009
Description: DGCALC SPREADSHEET
Quantity: 2000
Min_Stock: 50
Cost_Price: 30
Sale_Price: 40

Use TAB or ENTER to move off this record and to add the next.

Code: D3010
Description: MAILSHOT
Quantity: 500
Min_Stock: 10
Cost_Price: 20
Sale_Price: 25

Code:	D3011
Description:	MAILSHOT PLUS
Quantity:	300
Min_Stock:	10
Cost_Price:	45
Sale_Price:	49
Code:	D3019
Description:	CASHBOOK CONTROLLER
Quantity:	39
Min_Stock:	40
Cost_Price:	50
Sale_Price:	70
Code:	D3020
Description:	FINAL ACCOUNTS
Quantity:	39
Min_Stock:	20
Cost_Price:	80
Sale_Price:	90

At the end of this record (after pressing TAB or ENTER), press CLR HOME to finish adding records.

Now select Record - Edit Global. This facility allows you to globally edit a range of records.

The Filter:

Refer to the separate section in this manual entitled 'The Filter'.

The line entitled Filter is central to DGBASE. As you work through this tutorial you will notice frequent reference to the Filter. Basically it is used to enter your searching criteria for selecting specific records. If you leave the Filter empty, it assumes you wish to select all records.

We shall now globally change all of the Min Stock levels to 2000. To do this leave the Filter blank (thus select all records), set the following:

Field: Min_Stock

Change From: ?*

(this expression, which will be explained later, basically means replace the whole contents of the field)

Change To: 2000

Now click OK. DGBASE will then query every record, click USE each time to change each record.

Now if you browse the records, you will see that each of the Min_Stock fields have been changed to 2000. This facility may be used on specific records (set in the Filter), and you may replace all or just part of the existing data (see Examples).

Select Record - Edit Duplicate. This simply adds a duplicate copy of the current record into the file.

Deleting Records:

Now select Record - Delete Current. Select OK and this will delete the duplicate record that you have just added.

Select Record - Delete Global. Should you wish to delete a range of records you would simply enter the Filter and click OK. Enter the following into the Filter and then click OK:

Description CTL "digita"

(CTL means 'contains like')

The query message will appear, select USE. The record has now been deleted. Since this was the only record containing 'Digita', you will now be returned to Browse Mode.

Relational/Transfer:

The remaining options on the Record menu, Relational and Transfer are for moving fields and data between different DGBASE files and other programs. These are detailed in the Reference Section. Suffice it to say, you may rest assured that the information you are typing into DGBASE may be easily exported (or imported) to any other program (provided the program supports ASCII files) including Digita's Mailshot Plus and DGCalc.

Creating An Index:

Select Index. This displays the current fields which are indexed. You may set up to four simultaneously. An index is the sorted order by which the records are maintained. You will notice that your records are currently indexed (sorted) by code.

Move the pointer onto the stock card, over the Code field and double click. Notice in the field details that the Key Field box is set to Yes. If you recall, when creating this field, you didn't set the Key Field to Yes. DGBASE has done this automatically since all records require at least one index, so the first field you create is always an index field. Select OK and double click on the Description field - change the Key Field setting from No to Yes and click OK.

There will be a short delay while DGBASE creates an index for Description. Now select Index from the menu bar again, notice that Description has been added to the list. Point and click at Description and now you will notice by browsing the records that they have been sorted into Description order.

Indexing can be performed on any type of field, on Text fields the priority is as follows: 1-9, A-Z (upper case), a-z (lower case).

You may remove an index (but at least one must remain) by simply double clicking on the field and changing the Key Field setting from Yes to No.

Note: Creating any index will use disc space, so ensure you have sufficient room on your data disc.

Reporting:

DGBASE provides three types of report:-

1. List: For standard reports, summaries, etc.

2. Label: For labels, address labels, etc.

3. Mail-Merge: For merging fields into a letter, memo, etc.

Having selected the type of report, it is then necessary to set the Configuration and Edit, before outputting.

Therefore, the sequence when creating a report is: select report type (i.e., List, Label, Mail-Merge), select Configure, select Edit and then select Output.

The List type should be already selected (indicated by a tick) so now select Configure. Notice that the Filter appears again, allowing you to define exactly which records you wish to list. Leave this blank.

Set the Width and Height (of your page) suitable for your printer. For an 80 column printer enter Width: 75 (thus leaving a margin of 5) and Height: 66 (the normal number of lines on standard listing paper).

The Wait For Page option allows you to pause the listing after each page, set this to Yes if you are using single sheet paper. Set the Output to Printer (ensure your printer is connected and on-line, if you do not have a printer, set this option to Screen) and the position to Start (this indicates that you wish to start listing from the Start of the file, as opposed to the Current position). Now click OK.

Now select Report - Edit. This is divided into five sections:

1. Report Header: used to set up the title for the beginning of the report

2. Page Header: used to set up the title for the top of each page

3. Report Body: used to define what fields, text you wish to appear in the report.

4. Page Footer: used to set up the title for the bottom of each page

5. Report Footer: used to set up the title for the end of the report, which will be printed on the next page.

Enter the following for each section, using TAB to move between sections:

1. Report Header: DEMO COMPANY STOCK SUMMARY (press F1 twice)

2. Page Header: Code Description Quantity (press F1 twice)

3. Report Body: <Code> <Description> <Quantity> (press F1 once)

4. Page Footer: End Of Page (press F1 once)

5. Report Footer: END OF DEMO COMPANY STOCK REPORT (press F1 once)

Note:

When setting up the reports, the normal field editing facilities apply. For example ESCAPE clears the whole entry, UNDO restores the entry, etc.

Pressing F1 or RETURN inserts the carriage return character into the layout.

Simply enter text directly, and it will be printed as entered.

To output field contents insert the field title, with < > either side.

When editing, remember that the INSERT key toggles between overtype and insert modes.

Click OK and select Report - Output. The report looks a mess, so let us see why.

The report header and page title seem to be acceptable, but the stock records are very messy. The reason for this is because we have not formatted the layout of the fields and the information is being printed regardless. Ideally we want to set parameters wherein the field information appears.

To do this, firstly select Report - Field Summary. This will provide a summary of every field title, type and length. Now select Report - Edit again and change to the following:

Page Header: "Code,-6s""Description,-38s""Quantity,6s" (press F1 twice)

Report Body: <Code,-6s><Description,-38s><Quantity,6i> (press F1 once)

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Report Footer: Average Stock Quantity = <Quantity/5,6i> (press F1 once)

Now print the report again using Report - Output. Experiment further by reducing the setting for the length of the Description field from 38 to 20.

Note: You have complete control over the formatting of the fields when creating a report. However, the contents of a field will overwrite the format should you set the display length of the field to less than the length of the contents.

When referring to fields in the Report Footer, the field contents represents the total of all of the fields contained in the report. Therefore in the expression you entered for the Report Footer (i.e., the quantity divided by 5, display as integer to 6 places) the quantity is the total quantity. This is how we achieved the average. The 5 represents the number of records. We could replace this with a special instruction 'RCNT' which represents the record count (i.e., 5).

Other special instructions include:

F1 - inserts carriage return code (same as pressing RETURN)

F2 - inserts form feed code

F3 - inserts start double strike print code (press F3 again to end)

F4 - inserts start italic print code (press F4 again to end)

F5 - inserts start underline code (press F5 again to end)

F6 - inserts start NLQ code (press F6 again to end)

(See Extra - Set Printer for further details)

[Date] - the current date

[Time] - the current time

The date and time depend on the setting (See Extra option).

Experiment by changing the Report Header to:

DEMO COMPANY STOCK SUMMARY [date] (press F1 twice)

Having created a list format you may save this by selecting Report - Save. The Item Selector appears as normal and the file will be saved with .OLI extension (this is the same for all report formats but with different extensions i.e., List - .OLI, Label - .OLA, Mail-Merge - .OMM). You may save (and load) any number of formats.

REPORT - CREATE QUICK: This is a special feature which allows you to produce a report rapidly. From the design of your record, DGBASE will automatically create a List report style layout, which you can print immediately. However, you may also amend this as required, so very often it provides an excellent basis from which to set up your List report.

Now change the Report type from List to Label. Notice that the Configure and Edit settings have changed. Select Report - Edit.

You may now set up a label format, using the same method as previously. It will be necessary to insert carriage return codes into the text and these are represented by CR in this example (every time you see CR, press F1 key). Enter the following:

<Code,-6s><Description,-20s>CRCRNET
Price: <Sale_Price,6m> plus VATCRGROSS
Price: <1.15*Sale_Price,6m>CRCRCR

Click OK and select Output.

Notice that the gross price (i.e., sale price + VAT) has been automatically calculated in the report.

Now change the report to Mail-Merge. Select Edit and the Mail-Merge Edit screen will be displayed. Similarly, you may use the same format to merge fields into a letter/memo.

Enter the following:

Dear Supplier,CRCRTHANK you for supplying <Description>.CRCRWOULD you kindly quote us for dispatching a further 500 units. Your previous unit price was <Cost_Price>.CRCRYours faithfully,CRCRDavid Rogers

Press F2 after Rogers to send a form feed to the printer.

This completes the end of the tutorial. To understand DGBASE fully, we would recommend that you experiment with the example files which are contained on the program disc and explained in detail in the next section.

Note: The sample stock records and reports that you have set up during this tutorial are already contained on the program disc in the Examples Folder.

Examples Folder

Before you can access this, it is necessary to uncompact the folder. To do this proceed as follows:

1. Prepare a blank formatted disc.

2. Insert the program disc and double click UNPACK.TOS. This will then start to unpack the files into memory.

3. Once unpacking is complete, at the prompt, replace the program disc with the blank formatted data disc.

4. Press any key and the unpacked data will be written to the data disk in the same directories as it was packed.

You may then load the file DEMO. The following section other sample data files contained in the Examples folder.

Hard disc users: ensure you are in the root directory of your hard disc and that no folder called DATA exists in the root.

Examples

School Database

DESIGN: The school example consists of some 150 records of the exam results of school children and is indexed by their surname. The following should be noted:

1. The 'sex' and 'dob' fields have validation entries applied to them to ensure correct entry of data.

2. As there are only so many teachers at the school, the field 'teacher' is enumerated and so a choice is displayed when adding a record.

3. The 'report_date' defaults to today's date. This is only updated to today's date if the field is edited else it is left. Note that the cursor stays in the field to allow you to override the default value if you wish.

4. The field 'av' holds the average mark of the 12 subjects and is automatically calculated. This is because the field has a link entry that links it to other fields.

5. Most of the fields have the 'mandatory' entry set so as to ensure that data is not left out of the field.

REPORTS: There are two mail-merge reports:

1. SCHOOL.OMM - This is a mail-merge letter to the child's parents if the child's mark is greater than 70 (as entered in the configuration Filter).

2. SCHOOL01.OMM - This is a mail-merge letter to the child's parents if the child's mark is less than 40 (as entered in the configuration Filter).

There is one label report:

SCHOOL.OLA - This is used to output a label consisting of the name and address and can be used for labelling envelopes to send the mail-merge reports. The same configuration Filter is used for the mail-merge so it only generates the labels for the corresponding letters.

There is one list report:

SCHOOL.OLI - This lists the pupils name, stream, marks and average. Note that the output is in the order of the index (i.e., by surname). At the bottom of the report there is a line giving the average for each of the pupil's marks. Remember that field values that appear in the report footer are taken as the total for that field for the whole report. Because of the width of the report the printer should be set to a width of 132 cols.

Club Database

DESIGN: The club example is used to demonstrate how a club's records could be applied:

1. The design layout consists of personal information on the left and achievements on the right. The field 'member', 'class' and 'sex' are all enumerated fields because of the limited choices of input.

2. The weights fields are left justified except the 'total' and 'weight' fields are formatted to give 15.2f. That means format the output as a decimal (floating point) value 15 characters wide with 2 decimal places.

3. Most fields are mandatory to ensure data is entered for that field.

REPORTS: There are 3 mail-merge reports:

1. AGM.OMM - This informs members of the forthcoming AGM. Note the use of the variable <agm>. This is useful so that in future years only the actual variable 'agm' will need changing, the letter stays the same. Also note the use of <agm - 28,a> in the letter. This is saying take the variable 'agm', defined as a date, subtract 28 days from it and output the value as a date (given by ,a).

2. SUBSDUE.OMM - This informs members that their subs are due for renewal. The configuration Filter gives them 21 days notice as follows:

'td < subs_due and td + 21 > subs_due'. This will purposely not include those who are overdue.

3. SUBS.OMM - Will find those overdue and send them a reminder to pay. Note the poor use of the file name 'SUBS'. To make more impact and make you remember what the file contains, a better choice would be 'SUBSOD'. Note the extension .OMM is fixed.

There is one list report:

WEIGHT.OLI - This lists the members and their weight of fish caught.

There is one label report:

NAMES.OLA - This will output the names and addresses of members used for the mailshot.

Stock Database:

DESIGN: A simple stock control system. The record consists of a stock number with its description and various quantities and determines stock value and reordering information.

1. The field 'extended_price' is a link field and keeps tally of what the stock held is worth as given by the configuration Filter 'unit_price * qty'. The output is right justified as given in the format entry of the field.

2. The selling price is given by another link field as 'unit_price * mark_up'. 'Mark_up' is a variable that gives a price multiplier to the unit_price. The advantage of this is that it is easily changed and the values recalculated. For example to increase the mark-up by twice the unit price do the following:

a. Edit the variable 'mark_up' contents to 2.0

b. Select global–edit from the menu

c. Ensure that the Filter line is empty so that all records are selected

d. Ensure that the 'field', 'change from' and 'change to' entries are empty.

e. Select 'search' to start.

f. Select 'query' to no.

g. Select OK.

Each entry will then be read in turn. As the 'change from' and 'change to' were empty no field changes will be carried out but what will happen is that the link fields will be updated as part of the record checking and validation process. When finished you should find that the 'selling_price' is now 2 * 'unit_price'. This technique can be used to update fields where for example, you wish to make the field right justified after you have entered data.

REPORTS: There is one mail-merge report:

STKLOW01.OMM - This will report when stocks get low and need to be reordered. Note the use again of variables to simplify updates. The use of the variable 'opt' gives us an optimum value of stock, i.e., 1.5 times the min value.

There is one label report:

STOCK.OLA - This will output labels giving the name and address of the supplier.

There is one list report:

STOCK.OLI - This outputs a listing of the current stock in code order. The report footer gives the stock values held and the margin.

REFERENCE SECTION
The Filter

This section assumes a basic understanding of DGBASE and where 'the Filter' is relevant to the program.

This entire section is dedicated to the Filter in view of its enormous power and flexibility. However, a quick glance will confirm that does not mean it is complicated!

A empty Filter will assume you require every record.

Basic Rules For Using The Filter

Searching is divided into 3 parts:

1. Location - where are you searching?

2. Condition - what is your criteria for searching?

3. Requirement - what are you searching for?

A simple example might be : SURNAME = "SMITH"

Therefore, the Location is SURNAME (the field where you are searching), the Condition is = (the criteria is you want a surname equal) and Requirement (the requirement is SMITH).

Obviously part 3 - the Requirement is known only to you!

Remember: place all text in inverted commas (i.e., " ")
place all dates/time in square brackets (i.e., [ ])
enter integers/decimals directly

You may search for text (letters and numbers), integers, decimals, dates, time and money.

Now, let's look at parts 1 and 2 individually.

The Location

When searching you must specify where you wish to search i.e., the field Title (see Design - Field Details). For quick reference try printing the field details (see Report - Field Summary), this will list all field titles, field size and type of data (this report will also be useful when setting up your reports).

There is no upper or lower case discrimination on field titles.

The Condition

The normal conditions are accommodated for, including:

=   equal
<>   not equal
!=   not equal
<   less than
>   greater than
=<   equal or less then
=>   equal or greater than
()   parentheses

However, here are the more advanced features:

+   add
-   subtract
*   multiply
/   divide
LIKE   this is used to search for text without case sensitivity
BW   Begins With
BWL   Begins With Like
CT   Contains
CTL   Contains Like

When searching for text, wildcards can be used as listed below:

?   Matches any character.
c*   Matches zero or more occurrences of the character c
c+   Matches one or more occurrences of the character c
\?   Matches a question mark
*   Matches an asterisk
\+   Matches a plus sign.

It is also possible to link several different search operations using:

AND
OR
NOT

If you are unfamiliar with these searching expressions a quick glance at the following examples should illustrate their potential function.

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Note: The field titles are NAME, AGE and COUNTY.

NAME = "SMITH"   Find every person called SMITH

NAME <> "SMITH"   Find every person not called SMITH

NAME != "SMITH"   Find every person not called SMITH

NAME LIKE "SMITH"   Find person called SMITH, smith, Smith, smIth

NAME BW "S"   Find all persons with name starting S

NAME BWL "S"   Find persons with name starting S, s

NAME CT "M"   Find persons with letter M in their name

NAME CTL "M"   Find persons with letters M or m in their name

AGE = 45 Find all persons 45 years old

AGE < 45 Find all persons under 45 years old

AGE > 45 Find all persons over 45 years old

AGE =< 45   Find all persons 45 years old and under

AGE => 45   Find all persons 45 years old and over

Searches may be linked using AND, OR:

NAME = "SMITH" AND AGE < 45   Find persons called SMITH under 45 years of age

AGE < 45 OR COUNTY = "DEVON"   Find persons aged under 45 or live in Devon

AGE < 45 AND COUNTY = "DEVON"   Find persons aged under 45 and lives in Devon

NAME = "SMITH" AND AGE <> 45   Find persons called SMITH who are not 45 years old.

AGE = 45 + 5 Find all persons 50 years old

Examples of wildcards:

"ABC" will only match "ABC"

"AB*C" will match "AC" , "ABC" , "ABBC", and so on.

"AB+C" will match "ABC" , "ABBC" , and so on.

As you can see, the possibilities are endless, limited only by the size of the Filter.

The Menu Options

This section covers each of the menu options in detail. It is suggested that you work through the tutorial section in order to grasp the basic system design. The methods of using the editing and menu section facilities are covered in 'Operating Notes', but refer to the Atari manual if you are not familiar with basic concepts, such as copying discs, formatting and using GEM.

Help

An on-line help screen is available. This summarises the editor commands/options.

Desk

This is the copyright screen. If you need to use the Digita Software Support Service and have returned your User Registration Card, refer to the copyright screen and make a note of the version number you are using. This will help the programmers with your query.

File

File - New

Use this option to create a new database file.

You will see a standard GEM Item Selector appear. This is two windows. The smaller window shows the files and programs listed. The selection and disc directory options are in the larger window.

Do not create a new file on your program disc, use a blank formatted disc.

Enter the name of the new file (it will automatically assume .DES (DESIGN) extension. Before creating the file, DGBASE will request a password. Enter a password of up to 6 characters (letters or numbers) and press RETURN. You will then be requested to re-enter the password (for verification).

Note: These is no upper and lower case discrimination.

If you don't wish to use the password facility simply press RETURN at the password prompt.

IMPORTANT NOTE: Digita International cannot be held responsible to retrieve any information protected by a password. DO NOT FORGET YOUR PASSWORD.

When the filing cabinet (with your filename) appears, double click to open the file.

You will now be presented with a blank record card in the form of a GEM window. Notice the sliders along the sides, these indicate the potential size of the record card.

Note: As a safety precaution, if you attempt to create a new file, and there is insufficient memory available, DGBASE will abort this process, save all currently open files and then exit back into Desktop.

File - Load

Use this option to load an existing DGBASE file. DGBASE will allow you to load up to 4 different files simultaneously depending on available memory (using a 520ST, you will be limited to 2 files).

The Item Selector screen will appear. The current directory will be displayed showing all files with the DGBASE extension DES. To load a file, point at the required filename and double click, or click once and confirm with the OK box.

If you change discs, click the top left hand corner of the small window showing file names. Scroll the directory using the up and down arrows.

Additionally, it is possible to use 'wildcards' and file paths in the directory listing, and these can be set after the 'directory' prompt. The default option is for the drive from which the program was loaded (probably drive A), with all files displayed. A detailed description of this facility is beyond the scope of this manual, and for most users the default option should suffice.

If applicable, you will be requested for the password prior to loading. If an incorrect password is given DGBASE will return to the main menu.

The file is loaded into memory when an icon (resembling a filing cabinet) appears on the screen. To open the file simply double click the icon (you may open up to 4 files depending on memory).

File - Save

This option is used to save the currently open file to disc. This may not take long since DGBASE is intelligent and only saves the updated parts of the file.

File - Auto Save

This is a safety option which when enabled (shown with a tick) will automatically save the current file every ten minutes.

File - Close

This will close the current file and remove it from memory (i.e., the icon disappears).

File - Re-Organise

This option enables the structure of the files to be optimised and compacted. Basically, this option will save you disc space particularly if, for example you have been deleting fields or records. When you select this option an Item Selector box will appear. This allows you to redefine the destination, name and password of the re-organised file.

Note: Ensure that the disc you are re-organising is at least 50% empty.

File - Quit

Quit will save all open files and exit the program.

Design

Use these options to set up the design of your records. With the blank record card on the screen (GEM window), firstly experiment with changing the size and position of the window. It will be necessary later on to move the window away from the left hand side so that you may open other files by double clicking the 'cabinet' icons. As you can see from the sliders, it is possible to set up very large records far exceeding the size of the screen.

Remember if you wish to close the current file, simply click on the window closer button.

Refer to the section Hints & Tips for setting up your record card.

Design - Box

Boxes are useful only from a visual design point-of-view. They are not related to the information stored in the file. You may configure the box details and box text details from the menu which appears. The box will always appear by default in the top left hand corner of the window.

The following notes also apply to Text and Field options.

MODE selects the way in which the field is displayed on the screen:

Replace: overlays the field

Trans: makes the field transparent

Rev-Trans: makes the field reverse transparent

Xor: uses the exclusive OR logic when displaying

The menus offer setting for Position. Use this only if you need to be highly specific regarding the position of the box.

Normally, these are best left as defaults (top left corner) and then re-position and re-size the box using the mouse.

If you wish to edit an existing box (in fact the entire window is also a box) simply double click on the background and the menu will appear.

To move a box drag it with the mouse pointer. The box title will automatically follow. Click the mouse on the bottom right hand corner to re-size the box.

If you wish to make a copy of a box (and its details settings), hold down the SHIFT key, click on the box, move the pointer to the position of the copy and then release (alternatively use the right mouse button instead of the SHIFT key).

To access a hidden box, press the CONTROL key when clicking.

To re-order the priority of Boxes press the ALTERNATE key when clicking.

Design - Text

Use this option to set up text (not field titles) which you may require on your record (headings, etc.). Menu options as per Box.

Design - Field

Whenever you create a field, it is necessary to assign a title. Although this may be hidden on the record card, it is used to reference fields when using the Filter for searching.

You may configure up to 64 fields.

Note: You may add, delete or move your fields at any time. When adding/editing records, DGBASE will move from field to field in the priority of left to right, before moving downwards to the next field.

Type:

TEXT - any characters

INTEGER - any whole number

DECIMAL - any fractional number

ENUM - enumerated or pre-defined characters. By selecting this button you will be prompted to enter up to 12 pre-defined strings (this option basically allows you to pre-determine what may be entered into the field).

DATE - for date fields (format will be as per the date setting); see Extra - Date.

TIME - for time fields (format will be as per the time setting); see Extra - Time.

MONEY - this uses the format 000,000.00 (i.e., commas every 3 digits and 2 decimal places)

KEY FIELD: You may have up to 4 key fields. Select this button to make the current field a key field (the first field you create on a new file will automatically become a key field, however this may be changed when other key fields have been created).

MANDATORY: Forces entry to be made on this field when adding records.

LINK: This option, used in number fields, sets the field contents to be the result of other fields. For example, the field could be set to be the result of adding two other fields together. To do this you would enter Cost1+Cost2 (where Cost1 and Cost2 are the titles of two other fields). You may use a combination of field titles, numbers, normal maths functions and parenthesis (use same expressions as per Filter - see Filter Section).

DEFAULT: The option allows you to enter the default for the field.

Two special functions are also provided:

TD - this will insert the current date

CT - this will insert the current time

VALIDATION: Similar to the Enum option, this allows you to define what may be allowed to be entered into a field. You may use the same expressions as with the Filter (see Filter Section). For example, if the field was wages, you could ensure that the amount was within a range of, say 0-1000, by simply entering: wages > 0 and wages < 1000 (where wages is the field title).

Any fields failing the validation will be listed at the end of entering a record together with the reason for failure. Select OK to correct these entries or Cancel to ignore and carry on adding records.

FORMAT: This option determines the format of the contents of a field. Normally, fields are left justified.

The easiest method of setting the justification is R - for right justified, C for centred (no entry or L sets left justification).

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If you wish to be more specific:

i - integer
e - float in scientific notation
f - decimal floating
g - selects e or f (whatever is shortest)
o - octal
s - string
u - unsigned
x - hexadecimal

The default justification for these is right. To left justify precede the width value by -. For example:

10i - integer 10 numbers
-20s - string, left justified, 20 characters
08x - hexadecimal, leading zeros, 8 numbers
12.4f - floating 12 number, 4 decimal places

As you can see, there is a multitude of different methods of setting up fields, defaults, enumerated, etc.

Design - Variable

This allows you to define up to 6 global variables per file. These variables are referenced by their Name (as per field titles) and are used when defining the Filter.

Enter the Title, Contents (whatever the variable is to contain) and Type (this is the type of information - Text, Integer, etc. as per field types).

Design - Status

This displays the overall status of the files currently loaded including number of: Boxes, Fields, Strings, Indexes, Records.

Design - Align

When you setting up your file, you will probably find it quite difficult to get the boxes to line up perfectly (either vertically or horizontally). Switching this option on (illustrated by a tick) will automatically align the box when adding.

Record

Once you have loaded/created your file, this option controls the adding/deleting/editing/searching of your information. Additionally, options are included for integration with other DGBASE files and ASCII files.

Record - Search

SHORT SEARCH: This provides an extremely quick method of searching through the file. However, the search is limited to searching on the current Key field only (see Index). You should enter PRECISELY what you are looking for (note: upper/low case discrimination).

DGBASE will screen the record card and put you into Edit Mode (notice cursor in first field). If this is not the record you require simply press CLR HOME (to leave Edit Mode) and click the browse arrows (or left and right cursor keys) to browse the records.

When using Short search, since you are searching on the current key field (by which the records are sorted), if the record you require is not screened (i.e., there are several records using identical names) it will naturally be in front of, or behind the current record since the records are sorted in this order. Therefore using the Browse Mode will quickly locate the required record.

LONG SEARCH: This is a very powerful feature of DGBASE.

Position - this is where you wish to start search from

Action - whether you wish to query each record as it appears

Filter - this is where you enter your search criteria

The filter is fundamental to DGBASE - see the separate section on the Filter.

Record - Edit

NEW EDIT: Use this option to enter a new record. (Max record size: 30K, Max field size: 255). After entering one record you will remain in this mode (to add more records) until you press the CLR HOME key. Use TAB to move between fields, press ENTER to enter the current record and go to a new record. See Operating Notes regarding editing records.

CURRENT EDIT: This allows you to edit the current record.

GLOBAL EDIT: If you wish to edit more than one record, you may use this option to globally edit the records. As with Searching, enter the Filter criteria and then the field name(s) to be changed together with their current entry and the new entry to replace them.

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If you wish to replace every current entry (regardless of contents) use ?* for the Change From entry. These wildcards will replace everything with the new requirement (see Filter).

This option is deceptively powerful. Imagine for example, with a file of 2000 stock items, you had to change only those stock codes starting with UK1 to EU11 and all their respective descriptions from UK SPEC to EUROPEAN SPEC. This option will do this for you all in one go!

Another example, if you wished to update a money field (titled Hourly_Pay) by 15%, you would enter:

Field: Hourly_Pay
Change From: (leave blank)
Change To: Hourly_Pay * 1.15

By leaving the Change From field blank, DGBASE assumes that a calculation is required on this field.

To update a date field, by say 15 days, you would simply enter:

Field: Date
Change From: (leave blank)
Change To: Date + 15

To update the date by a year, you would enter Date + 366 for the Change To.

To update the month, you would enter:

Field: Date
Change From: Jul
Change To: Aug

Since you have made an entry for the Change From, DGBASE assumes that you are making a text change (rather than a calculation).

Note: If you wish to globally edit a Key field, you will need to temporarily switch off the Key Field.

DUPLICATE EDIT: This simply makes a copy of the current record and adds it to the file.

Record - Delete

CURRENT DELETE: This removes the current record.

GLOBAL DELETE: This removes a range of records. As with Searching, simply enter the Filter.

Remember, once you have deleted a record, it is not recoverable and so be particularly careful when using global delete.

Record - Relational

This option is used to transfer records between DGBASE files.

PROJECT RELATIONAL: Use this option to create a new file from an existing file or files, using all or some of the records (you define which records you require in the Filter). Ensure that the files from which you wish to project are loaded. Now create a new file (without any fields). Having selected Project the menu will list Source File Names. Click on the files from which you wish to Project. The Destination filename will also be displayed although it is not necessary to click on this.

Now enter your Filter selection to determine which records you wish to Project.

Note: All fields will be Projected into the new file. However, this will not include Boxes or Text.

MERGE RELATIONAL: This allows you to merge identical records from another file(s) into your current file (only the field data will be transferred). Firstly load the files which contain the records you require. Now open the file that wish to merge records into and then the Merge option. Select the Source File Names and then enter the Filter selection.

Record - Transfer

This option is used to transfer records between DGBASE and Digita's labelling program Mailshot Plus and spreadsheet DGCalc. Also records may be transferred with third party programs.

EXPORT TRANSFER: This will create an ASCII file of the contents of the fields of the current DGBASE file which is open. Simply define the End of Field and End of Record markers, the Filter and then the filename for the ASCII file that you are creating.

IMPORT ASCII TRANSFER: This will load an ASCII file into the current DGBASE file which is open. For trouble-free importing check that:

a. you have set up sufficient number of fields

b. the field lengths are large enough

c. the field layout in DGBASE is similar to the program from which you are importing (you always change the field layout once the data has been imported).

d. the End of Line markers and End of Record markers are the same for both programs.

Remember, the priority of fields is from left to right top row, left to right second row, etc.

Simply define the End of Field and End of Record markers, the Filter and then the filename of the ASCII file.

Note: Use this option to load Mailshot Plus files, however from within Mailshot change the End of Record marker to ONE character (see Appendix).

IMPORT DGCALC TRANSFER: See Appendix for details of importing DGCALC spreadsheet files.

Index

This determines the order in which the records are displayed and sorted. Simply click on the field name. If you wish to add a new field to the index, simply double click the field (on the record) and set the Key field to YES. To remove a Key field change the Key field from YES to NO.

The Key field is sorted in order. This means the field is sorted in the following priority:

Spaces

Numbers (0-9)

Upper case letters (A-Z)

Lower case letters (a-z)

Report

This option contains the reporting facilities of DGBASE. To interrupt the output press CONTROL and SHIFT.

Report - Configure

This allows you to enter the settings for the report. As well as the Filter, these include:

Width - page width

Height - page length (also refer to Extra-Set Printer for initialising page size)

Page Start - starting number of page

Wait For Page - this is useful if you are using single sheet since it will cause the listing to pause after each page.

Output - select either screen, printer, disc

Position - to start Filter search from beginning of file (start) or current position.

Note: A separate configuration is provided for each type of output - List, Label and Mail-merge. Therefore, the configuration will relate to which ever output is currently selected (indicated by a tick).

Report - List

For normal purposes you will be using this option to list your records

Report - Label

Use this option to print address labels

Report - Mail-merge

Use this option to mail-merge information from the records with a simple letter

Report - Edit

Depending on the output selected:

LIST: You may define the report header and footer as well as page headers and footers. The report body is where you enter what you want to print from the file.

LABEL: Simply enter the fields you require containing the name and address. Naturally, you may also use this to print any type of label.

MAIL-MERGE: Simply enter the contents of your letter together with the fields applicable.

How To Set Up Reports

Any text entered will appear exactly as typed.

Use inverted commas for text formatting. For example:

"This is some text,-30"   The text will appear as typed, within the format of 30 characters, left justified. This formatting may also be applied to numbers.

Use angle brackets to identify fields. For example,

<pay,6.2f> will output the field titled 'pay', within the format of 6 characters, with 2 decimal places.

You may also include mathematics, for example:

<pay + (over_time * 1.5),-12.2f> will output the field, within the format of 12 characters, 2 decimal places and left justified (this example assumes pay and over-time are field titles).

It is recommended that you work through the examples to gain a thorough understanding of the flexibility and power of this option.

Please note the following special characters:

1. [daten] This will output the current date in the format type n (see Extra - Date). e.g., [date3] will output the date in the third date format i.e., DD-MM-YY. If n omitted, assumes currently selected date type.

2. [timen] As per date.

3. [page] This outputs the current page number.

4. [rcnt] This outputs the number of records, subject to the Filter.

5. Printer control codes: This is set for Epson compatible printers. If you are not using this type of printer refer to Extra - Printer. To invoke a printer code simply press the appropriate function key:

F1 Inserts carriage return
F2 Inserts form-feed
F3 Inserts bold print ON/OFF
F4 Inserts underline ON/OFF
F5 Inserts italic ON/OFF
F6 Inserts NLQ/DRAFT

When screening the output, function keys 3-6 will invoke reverse video and the report will naturally revert to a width of 80 characters.

Three further special characters are provided (they do not require square brackets):

td - today's date
ct - current time
recs - number of records in entire database

These are handled as fields (therefore appear in < >) and are included in calculations. For example,

It was nice to see you yesterday <td - 1,a>

The expression <td - 1,a> means:

td = today's date
- 1 = minus one day
,a = display result as date

For time, the expression <ct - 3600 * 100,t> means:

ct = current time - 3600 * 100 = minus 1 hour (time measured in 1/100's seconds)
,t = display result as time

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Report - Create Quick

This option will create a List style report which is automatically generated by DGBASE. Having selected this option, you may instantly select Output. However, should you wish to edit the report, simply select the Report - Edit option.

Report - Load

This allows you to load different report styles from disc. The Configuration will also be loaded.

Report - Save

This allows you to save different report styles to disc. The Configuration will also be saved.

Report - Field Summary

This will directly output to screen/printer, depending on your current Configure settings. The report lists every field in your current file together with the Type and field width.

Keep a printed version of this report for quick reference when setting up or editing List, Label, Mail-Merge.

Extra

This is a general suite of options, not directly relating to the use of DGBASE.

Extra - Calculator

Simply enter your equation and click Calc. You can also use field titles in the equations.

Extra - Set

DATE: Select the date and style

TIME: Select the time and style

PRINTER: The printer codes displayed are for Epson compatible printers. Left column switch on, right column switch off. The rows correspond to function keys 3-6 as displayed.

The codes are entered as decimal values separated by commas. For example, to set bold printing, Epson printers require the code sequence: ESC G. The ASCII value of ESC (the escape character) is 27, and the ASCII value of the letter G is 71. Therefore you require the entry 27,71.

Consult your printer manual for the ASCII codes.

It is also possible to send an initialisation string to your printer if necessary.

These printer codes will automatically be saved to the file when you exit this option.

Extra - Drive

INFO: This provides information on all currently connected disc drives/discs.

FORMAT: Use this to format discs.

Help

Available throughout DGBASE, select the appropriate option for which you require help. If the 'Help Unavailable' message appears check that you have a copy of the help file on your current disc.

SOFTWARE SUPPORT SERVICE

Program discs supplied by Digita are guaranteed against faulty manufacture or materials for a period of 60 days from the date of purchase. For this period also, users who return their software registration cards will be provided with free written and telephone support by Digita. Your statutory rights are not affected.

IMPORTANT NOTE: At the end of the warranty period, customers have the option to join the Software Maintenance Scheme. For DGBASE the cost is £25.00 per annum. This offers continuing direct support and entitlement to the issue of free program updates.

SEND OFF YOUR WARRANTY CARD NOW TO ENSURE SUPPORT WHEN YOU NEED IT !

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APPENDIX
Hints And Tips
Setting Up Your Record

When you have created your boxes/fields, use the mouse to position them on the record card.

More accurate location will be gained by:

Temporarily switching off all borders and outlines

When lining fields with the edge of boxes, move the box to the field, not the field to the box.

Fields are always automatically aligned. However the Design-Align feature allows optional alignment of boxes and text. When initially setting up boxes/text it is probably better to leave it disabled. When you have completed your setting up, select Align. This option is very much a matter of personal preference and we would suggest experimentation.

Fields are always given priority on the record card. To change the redrawing priority of boxes/text, hold down the ALTERNATE key and click the box with the mouse.

You may delete up to 34 fields from a record card. If you wish to delete more than 34 fields (having deleted 34 fields), select File - Re-organise, then continue deleting the other fields.

File Information

All files created by DGBASE carry the following extensions:

Filename.DES - the file containing the record design

Filename.REC - the file containing the record data

Filename.1 - the file containing the index 1 field data

Filename.2 - the file containing the index 2 field data

Filename.3 - the file containing the index 3 field data

Filename.4 - the file containing the index 4 field data

Filename.OLI - the file containing the format for Report-List

Filename.OLA - the file containing the format for Report-Label

Filename.OMM - the file containing the format for Report-Mail-Merge

HELP - the file containing the help information

Reportn.lst - the file containing the printout, if you were printing to disc

FSUMN.lst - the file containing the field summary

Every time you save a report or field summary to disc, it will be numbered. Therefore on first saving is Report1.lst, the second Report2.lst and so on.

Error Messages

If you get an error message make a careful note, since this will assist our programmers in locating your problem.

Invalid Terminator - when importing, field(s) length insufficient to accept incoming data.

DGBASE requires at least 1 index file to function.

How To Protect Your Program Disc

To ensure the efficient operation of DGBASE:

1. Users MUST make daily backups of their data discs.

2. Under no circumstances remove discs from the drive when the indicator light is on.

3. Keep discs away from magnetic and heat sources such as TV's, telephones, electric fires, etc.

4. Handle disc carefully, always return them to their case after use.

5. Locate the discs and computer in a clean environment.

6. Only move the computer when absolutely necessary. Keep clear from vibration. Take extra care with hard disc systems.

7. Store all discs in dust proof boxes.

8. Keep discs out of direct sunlight.

9. Do not handle discs with dirty or greasy hands.

Loading Spreadsheets From Digita's DGCALC Program

Follow these steps:

1. Load DGCALC

2. Load your spreadsheet

3. Set a common column width for all columns (make a note of the width since we will need this later)

4. Select FILE from the menu and use the EXPORT option

Enter: the filename

select SPREADSHEET

select NO for the Show Grid option

enter the range for spreadsheet

enter the page length

(last row number less first row number, then add 10)

enter page width

(number of columns multiplied by the column width)

and save this on your DGBASE data disc

5. Now exit DGCALC and load DGBASE

6. Firstly, a file must be created so that:

number of fields (DGBASE) = number of columns (DGCALC)

field width (DGBASE)   = column width (DGCALC)

All fields should be set to Integer, Decimal or Money

7. Set the width to fit the size of cells. This is done by multiplying the cell width by 8 (width of 1 character in DGBASE)

Ensure that they are positioned in the same order as left to right and up/down

i.e. F1 F2 F3 F4 F5 F6

or   F1 F2 F3

     F4 F5 F6

8. Select Record - Transfer Import DGCALC and enter the cell width

9. Enter the filter if required or leave blank to import all selected data and then OK

10. Select the DGCALC filename to import into DGBASE

Once the loading has finished a message showing how many records have been imported will be displayed.

You may wish to delete any blank records or records containing dashes and the titles.

N.B. Blank lines are ignored when importing. Spaces in the fields are filtered out when loading as the data is mainly numeric.

When the records are displayed they may not be in the same order as the spreadsheet rows. This is because DGBASE will sort them numerically. The column order of each row however remains unchanged.

Loading Label Files From Digita's MAILSHOT PLUS Program

1. Load MAILSHOT PLUS

2. Load the label file to be exported

Note: If you wish to use the memo lines, ensure they are set to SHOW (Layout Menu) before exporting.

3. Select File from the main menu and enter:

the filename

select TEXT file type

enter ^a as the line seperator, ^b as the record separator

select SAVE

4. Load DGBASE and create a file. The number of fields = number of MAILSHOT PLUS lines + 4 (make sure the fields are of sufficient length). The four extra lines are for Memo Lines, if applicable.

5. Select Record - Transfer Import ASCII and enter:

^a as the end of field maker, ^b as the end of record marker

enter the Filter, if necessary

Click OK and enter the filename

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