

DYNACALC COMMAND SUMMARY

Type / to enter the command mode when you have the DYNACALC 'Ready' prompt. DYNACALC will display the primary command menu. Follow this with the key for the command you require. Several commands require an additional key or keys. These commands prompt you with subsidiary menus.

For example, to toggle the degrees/radians setting, type /AD.

A 'toggle' command is one that reverses the current setting of something. For example, if you are in 'degrees' mode and you enter /AD you will go into 'radians' mode. Enter /AD again and you will be back in 'degrees' mode.

At any level, typing ? will display the help messages for that command.

KEY	ACTION	DEFAULT	PAGE
/	Enter command mode		14
/A	ATTRIBUTES		14
/AB	Toggle bell on/off	on	14
/AD	Toggle degrees/radians	degrees	14
/AG	Select graphics character		14
/AH	Delete help messages		14
/AL	Toggle label entry mode	single cell	15
/AM	Re-write the screen		15
/AO	(letter O)Toggle row/column order	column/row	15
/AP	Printer		15
/APB	Toggle border print	off	15
/APC	Close present print device		15
/APL	Set lines per page	58	15
/APP	Toggle paginate on/off	on	15
/APS	Select printout spacing	1	15
/APW	Set printer width	80	15
/AR	Toggle re-calculate mode	auto	16
/AS	Report highest row/column		16
/AT	Toggle type protection setting	off	16
/B	BLANK (erase) a cell		16
/C	CLEAR (erase) the entire worksheet		16
/D	DELETE (erase) an entire row or column		16
/E	EDIT a cell		17
/F	FORMAT cell (or window if /WF)		17
/FC	Continuous format (labels)		17
/FD	Default format		17
/FG	General format		18
/FI	Integer format		18
/FL	Left justify		18

COMMAND SUMMARY

KEY	ACTION	DEFAULT	PAGE
/FP	Plotting format (for histograms)		18
/FR	Right justify		18
/FS	Money format		18
/I	INSERT a blank row or column		18
/M	MOVE rows or columns		18
/MA	Ascending sort		18
/MD	Descending sort		19
/MM	Manual move		19
/P	PRINTER output		19
/Q	QUIT from DYNACALC		20
/QO	Return to OS-9		20
/QS	Sleep until key hit		20
/R	REPLICATE (copy) cells		21
/S	SYSTEM		22
/SC	Change data directory		22
/SL	LOAD worksheet from disk		22
/SS	SAVE worksheet to disk		22
/SX	Execute OS-9 command		22
/S##	Data files:		23
/S#L	Load a data file from disk		23
/S*S	Save to a data file on disk		23
/T	TITLES control		24
/TB	Both horizontal and vertical titles		24
/TH	Horizontal titles		24
/TN	No titles		24
/TV	Vertical titles		24
/W	WINDOWS		24
/WD	Toggle value/formula display	Value	25
/WF	Change default format for window		25
/WH	Horizontal window split		25
/WN	No window split (one window)		25
/WS	Synchronise window scrolling		25
/WU	Un-synchronise window scrolling		25
/WV	Vertical window split		25
/?	HELP - DYNACALC help displays		26

KEY ASSIGNMENT SUMMARY

Key Assignment Summary for the Dragon 64

On the Dragon 64 under OS-9 the CLEAR key is used as the CONTROL key. For example, to get 'CONTROL-E', hold the CLEAR key down and hit the E key.

FUNCTION	KEY	ACTION
CONTROL	CLEAR	Return to 'Ready' prompt.
ESCAPE	CONTROL-BREAK	ARROW KEYS:
		UP
		Move up
		DOWN
		Move down
		LEFT
		Move left
		RIGHT
		Move right
		BACKSPACE
		Backup cursor to erase character
		RETURN
		ENTER
		Enter data
		GOTO
		> Go to cell' command
		HOME
		Go to top left cell
		JUMP
		SHIFT-→
		Jump to other window
		EDIT
		CONTROL-E
		Edit cell, (same as /E in Ready mode.)
		OVERLAY
		CONTROL-O
		When editing, toggles overlay/insert mode.)
		ADDRESS
		SHIFT-↓
		Put address of current cell in expression.
		VALUE
		ε
		In entry mode, causes a cell address to be replaced by the value in that cell. In ready mode, copies value of current cell to edit line.
CALCULATE	!	In entry mode, causes current expression to be replaced by its current value. In ready mode, causes entire worksheet to be recalculated.
FUNCTION	@	Introduces a function (@SIN, @SQRT, etc.)
RANGE	.	Range separator, prints as '...'
COMMAND	/	Introduces a command, displays the command menu.
HELP	?	Displays 'HELP' messages for any command menu.
FLUSH	CONTROL-C	Empties the type-ahead buffer.
LOG-OFF	CONTROL-D	ABORT DYNACALC, saving the work sheet in file 'dyna.xxxxx.cal', where 'xxxxx' is your user number.

STARTING THE SYSTEM

To start up your OS9 system follow these steps:

- 1 Turn the Dragon Computer and the disk drive(s) on. You should see the normal Dragon DOS greeting message on the screen.
- 2 Insert the OS9 system disk into drive zero and close the drive door. This is the bottom slot on the drive.
- 3 Type "BOOT" and press ENTER. After a few seconds of disk activity you should see a screen with the words "OS9BOOT".
- 4 OS9 will then begin its loading process, which involves ten to twenty seconds of disk activity. When the system startup has finished a message followed by a request for the time will be displayed. This is part of the loggon procedure.
- 5 To set the time, type in the year followed by an oblique, the month followed by an oblique, the day followed by a space, the hour (using the 24 hour system) followed by a colon, the minutes followed by a colon and the seconds followed by the ENTER key.
i.e. YY/MM/DD HH/MM/SS
TIME? 83/11/27 10:43:22
- 6 If you require the 51 x 24 screen format, for Dynacalc, Stylograph etc., type: OS9: GO51 (ENTER)
- 7 Note: When you ask the computer to execute a program, if the program module does not exist in memory the computer will load it from disk from the directory specified by the chx command. Make sure therefore that the relevant disk is in the drive.

FORMATTING A BLANK DISK

Before a disk can be used with your OS9 system it must be formatted.

Formatting a disk firstly wipes it clean of any data and then marks the disk so that data can be later loaded on to it in an ordered manner.

When entering commands it is very important to place spaces where required.

a) Single disk system

If you have only one disk drive you have to be extra careful not to accidentally FORMAT your system disk.

With your OS9 disk in drive 0. Type:

```
OS9 : FORMAT /D0
```

then immediately remove your system disk when you see the message. . .

```
DRAGON DISK FORMATTER 1.2
```

```
FORMAT DRIVE /D0
```

```
Y(YES) OR N(NO)
```

```
READY?
```

Now place the disk you wish to be formatted into drive zero, press the Y key and then press ENTER.

This initiates the formatting process. After a few seconds of disk activity you will be asked for a disk name, enter this followed by ENTER. The name you give is not important. If the format program has reported an error, try again, otherwise you are now ready to use your newly formatted disk with your OS9 system.

b) Dual disk system

If you have a dual disk drive place the disk to be formatted into drive one, top slot on

When the blank disk is in the right drive type "Y" then ENTER. If the correct device name (/D1) is not displayed: type "N" then ENTER and start again, or you may format your system disk.

After a few seconds of disk activity you will be asked for a disk name, type this in followed by ENTER. The name is not important. If the format program has reported an error, try again otherwise you are ready to use your newly formatted disk with your OS9 system.

MAKING A BACKUP

Make a copy of a disk on a freshly formatted blank disk, use the instructions relevant to your system.

a) Back up using a single Disk Drive:—

Back up will read a portion of the source disk (the disk you wish to copy) into memory. You then remove the source disk and place the destination disk (a freshly formatted disk) into the drive. Back up will then write on this disk (the destination disk), you then remove this disk and replace it with the source disk. This process of swapping the disks continues, until the entire disk has been copied. Back up will prompt you for the disk it expects to be in the drive during this operation.

Example:

```
OS9 : BACKUP /D0 #32k
```

```
READY TO BACKUP FROM /D0 TO /D0 ? : Y
```

```
READY DESTINATION, HIT A KEY: (hit any key)
```

```
(name of disk see format above)
```

```
IS BEING SCRATCHED
```

```
OK? : Y
```

```
READY SOURCE, HIT A KEY: (hit any key)
```

```
READY DESTINATION, HIT A KEY : Place destination disk in drive zero (hit any key)
```

```
READY SOURCE, HIT A KEY: Place source disk in drive zero
```

```
READY DESTINATION, HIT A KEY: Place destination disk in drive zero.
```

```
(SEVERAL REPETITIONS)
```

```
READY DESTINATION, HIT A KEY: Place destination disk in drive zero (hit any key)
```

```
NUMBER OF SECTORS COPIED: $02D0
```

```
VERIFY PASS
```

```
NUMBER OF SECTORS VERIFIED: $02D0
```

Backup using a double disk drive

To perform a BACK UP using a double disk drive, place the source disk (the disk you wish to copy) into drive zero, and the destination disk (a freshly formatted blank disk) into drive one. The backup will be made automatically, all you will have to do is reply to the prompts backup gives.

```
OS9 : BACKUP
```

```
READY TO BACKUP FROM /D0 TO /D1 / ? : "Y"
```

```
(name of disk in drive one see format above)
```

```
IS BEING SCRATCHED
```

```
OK? Y
```

```
NUMBER OF SECTORS COPIED : $02D0
```

```
VERIFY PASS
```

DYNACALC FUNCTION SUMMARY

Type **@** to enter a function. Parenthesis input is optional. You need type only the first 2 letters of the function name (3 for COS, INDEX, and LOOKUP).

ABS (x)	returns absolute value of x.
ACOS (x)	returns the arccosine (inverse cosine) of x.
ASIN (x)	returns the arcsine (inverse sine) of x.
ATAN (x)	returns the arctangent (inverse tangent) of x.
AVERAGE (x...y)	returns the average value from range x...y.
CHOOSE (n,x...y)	returns the value of the nth cell in range x...y.
COS (x)	returns cosine of x.
COUNT (x...y)	returns number of cells in range x...y.
ERROR	returns >ER< error message (general use).
EXP (x)	returns e (2.718...) to the x power.
INDEX (n,x...y,z)	returns value adjacent to first cell equal to n in range x...y.
INT (x)	returns the integer part of x.
LN (x)	returns natural (base e) logarithm of x.
LOG (x)	returns common (base 10) logarithm of x.
LOOKUP(n,x...y,z)	returns value adjacent to first cell greater than n in range x...y.
MAX (x...y)	returns the greatest value from range x...y.
MIN (x...y)	returns the smallest value from range x...y.
NA	returns >NA< (not available) error message.
NPV (r,x...y)	returns the net present value at rate r from range x...y.
PI	returns 3.141...
ROUND (d,x)	returns x rounded to nearest d (d must be a power of 10) (10e-9 < d < 10e9)
SIN (x)	returns sine of x.
SQRT (x)	returns the square root of x.
STDDEV (m,x...y)	returns standard deviation of data in range x...y m sets method used: <0 =population; >=0 =sample.
SUM (x...y)	returns sum of cells from range x...y.
TAN (x)	returns tangent of x.

NOTE: Third argument (z - cell address) in **@INDEX** and **@LOOKUP** functions is optional. If present, causes value returned to be taken from column or row given. If z is omitted, value is returned from adjacent column or row.