

The following is a short description of each Command available under The ENHANCER. To use a Command you should treat it as if it were a standard Quill Action but with one condition. Just as in the (say) the **EQ** Command two numbers **MUST** come after the Command or the Interpreter will not accept it. e.g. The Command to do a Ramsave is not **RAMSAVE** but **RAMSAVE 0 0**

For the first block of commands it does not matter what numbers you enter as they will be ignored, for the second block of commands only the first number is, relevant, the second will be ignored and for the third block BOTH numbers are used,

The following 4 Commands act on the Quill's automatic Clear Screen & the **CLS** command. Whenever the Quill does one of those the new action will take its place instead.

SHUTCLS 0 0 : Changes the Clear Screen into a special 'Shutter' type effect,
FADECLS 0 0 : Changes the Clear Screen into a special 'Fade' type effect,
NOCLS 0 0 : No action is taken whenever a Clear Screen is demanded, This will give a continuously scrolling game with no Clear Screens at all.
NORMCLS 0 0 : Return to the Normal Clear Screen effect.

The next 2 Commands are an alternative to Saving a game position to tape and reloading it later. The game position is saved to memory where it can be restored at any time, even after a player has restarted a game.

NOTE The memory is not saved to tape and so a position can not be copied back from memory should the Computer be switched off and the game reloaded.

RAMSAVE 0 0 : Save the current Game position to Memory,
RAMLOAD 0 0 : Restore a previously **RAMSAVE**'d Game Position from Memory,
(An attempt to **RAMLOAD** a position before one has been **RAMSAVE**'d will be ignored.

The next 2 commands are of use when presenting Inventories or Room Descriptions. In the case of Inventories, rather than have each object appear on a different line, selecting **CROFF 0 0** will result in all the object descriptions appearing in one large block with no Carriage Returns after each description.

CROFF 0 0 : Hold the Printing of Carriage Returns.
CRON 0 0 : Enable the Printing of Carriage Returns. (i.e. Return to Normal)

The next 2 commands allow the user to type in commands that use *ALL* as a Noun, e.g. *EXAMINE ALL*, *GET ALL*, *DROP ALL* etc.

DOALL 0 0
REPEAT 0 0

The best way to explain these Commands is to give an example. Let us say you wish to include an *EXAMINE ALL* Command. The first step is to include the word *ALL* in the Vocabulary using as high a Word Number as possible - at present use 253 not 254 as this is used for something else. Once all the *EXAMINE* commands have been entered into the Database then *EXAMINE ALL* should be entered with the only entry being **DOALL 0 0** . Then enter another *EXAMINE ALL* but this time the only entry should be **REPEAT 0 0** . Now when the player types in *EXAMINE ALL* the Quill will go through all the *EXAMINE* entries and interpret each one producing a valid response if all the Conditions for an entry prove correct and skipping those that do not.

The next 2 commands make use of the Object Word Table (O.W.T) and entries associated with that. To recap - whenever an Object is created a null entry is made in the O.W.T. and you can amend that entry to a valid word in the Vocabulary so that whenever that word is used as a Noun a direct correlation can be made between that word and its associated object.

NOUNOBJ 0 0 : This places the Object Number related to that NOUN into Flag 11.
e.g. if Object 15 is a Book and an entry has been made in the O.W.T. against the WORD *Book* then if *READ BOOK* is used then **NOUNOBJ 0 0** will return the value 15 in Flag 11,

NOUNLOC 0 0 : Similar to **NOUNOBJ 0 0** but returns the Current LOCATION at the Object Number related to that NOUN into Flag 11.

e.g. using **NOUNLOC 0 0** in the case of the Book above will result in the Location of that object being placed in Flag 11 where :

0-250 Room number where Object is
251 Object in Current Room
252 No such word (i.e. Not in Vocabulary)
253 Worn
254 Carried
255 Word is in Vocabulary but no entry in O.W.T.

To finish off the first block of Commands are 2 miscellaneous Actions.

PCONT 0 0 : Continue printing after Last Output.

e.g, MESSAGE 10='YOU HAVE ' : MESSAGE 11 = ' GOLD COINS' and FLAG 22 Holds the number 100.
The Commands.....

MESSAGE 10

PCONT 0 0

PFLAG 22 0

PCONT 0 0

MESSAGE 11

.....will display : 'YOU HAVE 100 GOLD COINS' (See **PFLAG** Command below)

AUTO SCR 0 0 : When this Command is executed the ENHANCER scans the first Character in each line of the display searching for an asterisk ("*" \ Code 42). If it finds it, it sets the split screen scrolling mode to ON and the Scroll Line to that line. (See **SCROLL** Command below)

The second block of ENHANCER Commands make use of the first figure after the Command to impart information to be used by that Command. Any number between 0 and 255 inclusive may be used but if 255 is used then something special happens, Instead of taking the value 255 the ENHANCER takes whatever the value is in FLAG 11 - so **PFLAG 22 0** is the same as **LET 11 22 PFLAG 255 0**

PFLAG n 0 : Prints the Value in Flag n as an Integer Number

Note Whenever an ENHANCER Command acts on a Flag, you are not just restricted to Flag numbers 0-31, you may use any number up to 255. This does not mean that you have an additional 200+ Flags but that the entries after the Flags (Object Position, Current Location, etc. may be accessed).

e.g. **PFLAG 35 0** will print out the Player's Current Location.

The next 4 Commands are similar to the **MESSAGE** Command of the Quill, but rather than being able to print out Messages only you can treat Location Descriptions, Object Descriptions and System Messages as ordinary Messages.

PL0C n 0 : Print Location n as a Message,

PSYS n 0 : Print System Message n as a Message.

P0BJ n 0 : Print Object Description n as a Message.

PMESS n 0 : Although at first glance this may seem to duplicate the **MESSAGE** Command, it has been included here for completeness. It has the advantage over **MESSAGE** in that Flag 11 may be used to hold the Message number for printing.

SCROLL n 0 : Set the Scroll Line to Line n. This allows split Screen Scrolling - everything above the line will remain intact when text scrolls off the screen, it will in fact just scroll up as far as the split and then 'disappear' under it.

NOTE To turn the Split Screen Scrolling Off use **SCROLL 0 0**

WAIT n 0 : Similar to the Quill **PAUSE** Command, this is more in line with the Spectrum BASIC PAUSE facility. **WAIT n 0** Pauses for n seconds (not 50ths) and then carries on. If any Key is pressed any time during the **WAIT** then the **WAIT** is abandoned just like the Spectrum PAUSE.

RND **n 0** : Generates a Random Number between 1 and n inclusive and places it into Flag 11

OVER **0/1 0** : Toggles Global OVER ON(1) or OFF(0). Identical to BASIC OVER Command.

BRIGHT **0/1 0** : Toggles Global BRIGHT ON(1) or OFF(0). Identical to BASIC BRIGHT Command,

FORMAT **0/1 0** : Toggles the Automatic Text Formatting system ON(1) or OFF(0).

The third block of ENHANCER Commands use both figures after the Command to impart information. Unlike the second block, the value 255 may not be used to 'pick up' a value from Flag 11. (The exceptions are the Commands **CARRY**, **SOUND1**, **SOUND2** and **MOVE** where it may be used in place of the SECOND figure only).

SWAPFL **n n1** : SWAP the value held in Flag n with the value held in Flag n1. Flag n now holds the value in n1 and vice versa.

COPYFL **n n1** : COPY the value held in Flag n to Flag n1 This results in Flags n and n1 holding the same number.

ADDFL **n n1** : The value of Flag n is ADDED to the value in Flag n1 and the result is stored in Flag n1 (Flag n is left untouched). Should the resultant figure come to more than 255 then 255 is placed in Flag n1.

SUBFL **n n1** : The Value of Flag n is SUBTRACTED from the value of Flag n1 and the result is stored in Flag n1 (Flag n is left untouched). Should the resultant figure come to less than 0 then 0 is placed in Flag n1.

PAT **n n1** : Where n = 0-21 and n1= 0-41 This is identical to the Spectrum BASIC PRINT AT Command and lets you set the print position to anywhere on the screen.
NOTE This only works in 42 CPL Mode.

NEWSYS **n n1** : This allows you to change any of the System Messages to any one of the normal Quill Messages (Useful for changing the prompt messages). In reality only the Pointers are changed so that the pointer to System Message n is amended to point to Ordinary Message n1.
NOTE Be careful if editing either of these Messages once you have used **NEWSYS** as some very strange effects may crop up,

FORCE **n n1** : This forces the execution of an entry in the EVENT table from within the EVENT table itself, (it is also possible to use this in the STATUS table but care must be taken). e.g. *READING* a *BOOK* at a certain Location will result in a door opening, *EXAMINING* the *BOOK* will also make the door open. Using **FORCE** the code need only be written once (for *READ BOOK*) so under *EXAM BOOK* you would enter **FORCE n n1** (where n is the Vocabulary Word number for *READ*, n1 for *BOOK*) to Force the Interpretation of *READ BOOK*).
NOTE This is equivalent to a JUMP not a CALL.

CARRY **n n1** : Where n is a number between 0 and 3 inclusive and n1 a number between 0 and 255. **CARRY** allows you to change the Objects Conveyable Flag during the running of a game (e.g. to simulate Weight Factors). There are 4 options available depending on what n is set to.

n=0 The Current value of Objects Conveyable is returned in Flag 11

n=1 Objects Conveyable is set to the value n1

n=2 Similar to SUBFL where n=n1 here and n1=Objects Conveyable

n=3 Similar to ADDFL where n=n1 here and n1=Objects Conveyable

MOVE **n n1** : This is an extension of the Quill PLACE Command but with far greater scope. **MOVE** allows you to change the status of an Object n1 where n= 0 to 6 inclusive.

n=0 Returns Object n1's Current Location in Flag 11

n=1 Causes Object n1 to be **REMOVED**

n=2 Causes Object n1 to be GOT (i.e. performs a **GET**)

n=3 Causes Object n1 to be WORN (i.e. performs a. **WEAR**)

n=4 Causes Object n1 to be **DROPPed**.

n=5 Causes Object n1 to be **DESTROYed**

n=6 Causes Object n1 to be **CREATED**

NOTE Unlike the Quill **PLACE** Command, Flag 1 is NOT amended as a result of any of these actions

SOUND1 **n n1** : This is the first of 2 Sound routines available within the ENHANCER. There are 9 Values you can set where n is a number between 1 and 9 inclusive :

n=1 Number of times sound is to be repeated

n=2 LSB of Start Pitch

n=3 MSB of Start Pitch

n=4 LSB of Duration

n=5 MSB of Duration

n=6 LSB of Pitch Change/Step

n=7 MSB of Pitch Change/Step

n=8 LSB of Pitch Limit

n=9 MSB of Pitch Limit

To PLAY the Sound use the Command **SOUND1 0 0**

SOUND2 **n n1** : This is similar to **SOUND1** but produces a different type of sound. With this Command only 7 Values are used where n is a number between 1 and 7 inclusive :

n=1 Repeat Sound n1 times

n=2 LSB of Start Pitch

n=3 MSB of Start Pitch

n=4 LSB of Duration of Sound

n=5 MSB of Duration of Sound

n=6 LSB of Pitch Change/Step

n=7 MSB of Pitch Change/Step

To PLAY the Sound use the Command **SOUND2 0 0**

WHITE **LSB MSB** : Produces a burst of White Noise (MSB*256)+LSB 'Clicks'

PEEK **LSB MSB** : The Byte at the specified address is copied into Flag 11. This is equivalent to the Spectrum BASIC PEEK Command.

POKE **LSB MSB** : The Byte in Flag 11 is copied into the specified address. This is Equivalent to the Spectrum BASIC POKE Command.

CALL **LSB MSB** : A Machine Code Routine at the specified address is Called. When using this routine care must be taken not to corrupt the IX IY Or SP Registers. The Normal Register Set may be used with no qualms but if the Alternate Register Set is used then care should be taken with HL' and BC, If in doubt SAVE IT!

UDG **LSB MSB** : System Variable UDG is set to the specified address allowing for the use of 'Banks' of differing UDG's.

CHAR32 **LSB MSB** : System Variable CHARS is set to the specified address allowing for the use of Multiple Character Sets. There is no need to subtract 256 from the base address of the code as per the Spectrum Manual as this is done automatically by the program.

NOTE If in 42 CPL mode **CHAR32 0 0** will switch to 32 CPL mode.

CHAR42 **LSB MSB** : The ENHANCER System Variable 42CHARS is set to the specified address, allowing for the use of Multiple Character Sets as per CHAR32. There is no need to subtract 256 from the base address of the code as per the Spectrum Manual as this is done automatically by the program.

NOTE If in 32 CPL mode **CHAR42 0 0** will switch to 42 CPL mode

As well as the previous Commands, the ENHANCER also contains a number of Special Features. You have already encountered Split Screen Scrolling and 42 Characters Per Line Output but also available are Automatic Text Formatting in both 32 and 42 CPL mode and a unique system of Text Compression. As you may have guessed, Text formatting is automatic and means that no matter what is printed out it will never be split in half when you come to the end of one line and the beginning of another, So when entering in a (say) Location description you do not have to worry about an untidy display as everything will be taken care of for you automatically.

The Text Compression system remains dormant until you activate it. Any part of the Quill may be compressed (except the Vocabulary and its attendant Options) and will result in a saving of anywhere between 30 & 50 percent. To use the Compressor all you have to do is enter a CODE 127 (© - the Copyright Symbol) at the start of the text and press ENTER. Everything AFTER the Symbol will be compressed and the Symbol itself removed. If you now **PRINT** or **LIST** the text you will see it, apparently, unchanged, But it has been Compressed! An important point about the Text Compressor is that certain characters will not be accepted by the Compressor (UDG's and some obscure Punctuation) and if the Compressor comes across these characters it will convert them to a SPACE, but the majority of Characters (including Colour and Tab Control) are included and will be retained intact.

NOTE You cannot EDIT or AMEND compressed text because that would result in the Compressor trying to compress already compressed text! If you find that you have accidentally tried to edit such a text DO NOT PRESS ENTER. To get out of the edit and keep the compressed text unchanged use CAPS SHIFT 6 to abandon the edit.

You may recall that when **DOALL** and **REPEAT** were explained it was noted that Vocabulary Word Value 254 was used for something else. This is the final feature of The ENHANCER and allows the Adventure Player to use the Pronoun 'IT' during the game, Using Option A on The Quill, insert the word *IT* as Word No. 254 in the Vocabulary. Now whenever the Player enters a Command with *IT* as the Noun the program will 'remember' the last Noun entered and use that as the valid Noun. e.g. The player types in *GET BOOK* and the Database responds 'YOU HAVE THE BOOK', If the player now types in *READ IT* the database will interpret that as *READ BOOK* and carry out any Conditions and Actions entered under *READ BOOK*.

When the Adventure has been completed and saved to tape via the **SAVE ADVENTURE** option of The Quill it is also necessary to save a 'run-time' copy of the ENHANCER as well. This is where the second program on the tape comes in as this will allow you to save off a shortened version of The ENHANCER and hence allow you to run the Adventure as a stand alone program.

On loading the program you will be asked where you want the ENHANCER to be in memory, you should pay particular attention to the size of your completed Adventure (via option O on The Quill) and ideally the ENHANCER should be placed somewhere just above the top of your program, If you intend to use the ILLUSTRATOR from Gilsoft then you should be careful to place the code somewhere in between the two Databases. Remember, The Quill builds UP into memory, the Illustrator builds DOWN and the size of the run-time ENHANCER code is 2900 bytes.

To complete the system, a BASIC loader should be created to load all the necessary parts and a RANDOMIZE USR nnnn used where nnnn is the address at where you instructed The ENHANCER to reside in memory. Do not use the BASIC loader created by the Quill/Illustrator as this will not include instructions for loading The ENHANCER.

Addendum

i) **PCONT 00** will only work in 42 C.P.L. mode.

ii) **PAT n n1** will only work properly in 42 C.P.L. mode and if used in 32 C.P.L. Mode will set the Print Position to its approximate 42 C.P.L. position.

iii) Entering the Editor portion of The Quill under 42 C.P.L. mode or with Automatic Text Formatting on will cause portions of the display to be printed out of step or even corrupted. This is purely cosmetic and has no effect on the Program itself.

A SUMMARY OF EXTRA COMMANDS/FEATURES AVAILABLE WITH THE 'ENHANCER'

SHUTCLS 0 0 - Change 'normal' **CLS** into a special 'shutter' type effect
FADECLS 0 0 - Change 'normal' **CLS** into a special 'fade' type effect
NORMCLS 0 0 - Restore **CLS** to normal ROM based one
NOCLS 0 0 - Whenever a **CLS** is encountered no action is taken
CRON 0 0 - Turn Carriage Return after printing messages ON
CROFF 0 0 - Turn Carriage Return after printing messages OFF
RAMSAVE 0 0 - Save Current game position to Memory
RAMLOAD 0 0 - Restore a previously **RAMSAVE**'d game position
PCONT 0 0 - Start outputting text at the end of the last output
AUTOSCR 0 0 - Set Scroll line to first line containing an asterisk***\Code 42
DOALL 0 0 - Step through all words (1-252) **FORCE**'ing that action
REPEAT 0 0 - Repeat **DOALL** until all values accounted for
NOUNOBJ 0 0 - Return Object Number associated with current NOUN
NOUNLOC 0 0 - Return Object Status associated with current NOUN

* **PFLAG** n 0 - Print Value in flag n
* **PLOC** n 0 - Print Location n as a Message
* **PSYS** n 0 - Print System Message n as a Message
* **POBJ** n 0 - Print Object Description n as a Message
* **PMESS** n 0 - Equivalent to **MESSAGE** (but can use Flag 11)
* **SCROLL** n 0 - Set Scroll Line to line n
* **WAIT** n 0 - Pause n Seconds (Break off if a key is pressed)
* **RND** n 0 - Generate a Random Number between 1 and n inclusive
* **OVER** 0/1 0 - Toggle Global OVER on/off
* **BRIGHT** 0/1 0 - Toggle Global BRIGHT on/off
* **FORMAT** 0/1 0 - Toggle Automatic Text Formatting on/off

* Indicates that if 255 is used instead of the FIRST figure then the value held in Flag 11 will be used instead.

CHAR32 lsb msb - Toggle 32 CPL mode ON (or set SYSVAR CHARS to address)
CHAR42 lsb msb - Toggle 42 CPL mode ON (or set 42CHARS to address)
UDG lsb msb - Set SYSVAR UDG to address
CALL lsb msb - Call Machine Code routine at address
PEEK lsb msb - Returns value of Byte at address
POKE lsb msb - Place Byte in Flag 11 into address
WHITE lsb msb - Output White Noise (value) number of 'clicks'
SWAPFL n n1 - SWAP value of flag n with flag n1
COPYFL n n1 - COPY value in flag n to flag n1
ADDFL n n1 - ADD value in flag n to flag n1 and store in flag n1
SUBFL n n1 - SUBTRACT value in flag n from flag n1 and store in n1
PAT n n1 - Set Print Position to n,n1
FORCE n n1 - Force the running of VERB n and NOUN n1
NEWSYS n n1 - Change System Message n to Ordinary Message n1
* **CARRY** n n1 - ADD to, SUBTRACT from or SET number of Objects carried
* **SOUND1** n n1 - LOAD Sound(1) Register n with value n1 (or PLAY)
* **SOUND2** n n1 - LOAD Sound(2) Register n with value n1 (or PLAY)
* **MOVE** n n1 - Change Object Number n1 to status n

* Indicates that if 255 is used instead of the SECOND figure then the value held in Flag 11 will be used instead.