

PRODUCT ENVIRONMENT: ICL PERSONAL COMPUTER - MODELS 19, 39, 49

NOTICE SERIES TITLE: CONCURRENT CP/M-86 OPERATING SYSTEM
+ PERSONAL BASIC
FOR ICL PERSONAL COMPUTER (16 BIT) MODELS

NOTICE NO.: 1

DATE: 19 August 1985

1. RELEASE NOTICE

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The Program Product Set described in this notice may be used only in accordance with the conditions of the licence under which it is supplied by ICL.

Certain of the facilities described in this notice may be diagnostic and/or test routines which are incorporated solely for the use by ICL and/or by the customer but only during the currency of an ICL Maintenance Service Contract for the equipment with which the program is licensed and ICL reserves the right to change or withdraw such facilities.

1.1 Affected Products

SET NO.: E14406-01

This Program Product Set Notice announces Concurrent CP/M-86(*) Release 3.1.S. issue 1 for use with the ICL Personal Computer Models 19, 39 and 49.

2. PURPOSE OF RELEASE

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This release is based upon Concurrent CP/M-86 release 3.1.R. (product set number E14401-01). The main new features available with this release are:

Support of new faster processor - 8086, with optional 8087 arithmetic co-processor (CHSET 8087 option and PC-Mode 8087 command now supported). Note that this product set will not function correctly on ICL Personal computers equipped with 8088 processor units (ie. models 6, 16, 36, 46).

New help information print utility HPRINT, and enhanced HELP facility.

New utility SETUP automatically entered at startup time on an unconfigured system. This utility is designed to assist even a complete novice through the steps necessary to configure the operating system, including the creation of backup discs if appropriate.

Support of 6402G and 6404CG workstations with a mouse.

Support of 6404CG workstation, including colour palette setting utility PALETTE.

Menu driven interfaces to the following utilities: CONFIG, DCOPY, DSKINIT, OPTION, SETUP.

For users who regularly vary their configuration, the ability to create CONFIG steering files.

Unified system for system configuration - CONFIG now handles all the system features previously handled by ASSIGN and TTYSET (which are now withdrawn), as well as virtual disc configuration (previously dealt with by ASSIGN and OPTION).

User alterable printer timeout.

Read and write support of ICL DRS POWERBUILD 9 sectored CCP/M discs.

New diskette containing the LEARN tutorial system - a program which teaches the user about the ICL PC and CCP/M-86 3.1.S.

Note also, that the GINSTALL facility is now withdrawn.

3. RELEASE MEDIA, CONTENTS, DOCUMENTATION AND INSTALLATION

3.1 RELEASE MEDIA

The product set is available on four diskettes with the following format:

96 tpi diskette - media code F7

The four diskettes are labelled:

LOAD DISC

SYSGEN DISC

ADD UTILS DISC

LEARN DISC

3.2 RELEASE CONTENTS

LOAD DISC

Name	Bytes	Version	Attributes	Name	Bytes	Version	Attributes
CCPM	SYS 86k		Sys RO	DCOPY	CMD 32k	1.13	Sys RO
DIR	CMD 4k		Sys RO	DO	CMD 12k	1.3	Sys RO
DSKINIT	CMD 40k	3.16	Sys RO	DSKRESET	CMD 2k		Sys RO
ED	CMD 10k		Sys RO	ERA	CMD 4k		Sys RO
ERAQ	CMD 4k		Sys RO	FUNKEY	CMD 22k	3.6	Sys RO
HCREATE	CMD 12k	1.2	Sys RO	HELP	CMD 14k	1.2	Sys RO
HELP	HLP 230k		Sys RO	HPRINT	CMD 12k	1.4	Sys RO
LOGOUT	CMD 2k	0.0	Sys RO	MAKESYS	CMD 30k	1.19	Sys RO
PIP	CMD 10k		Sys RO	PRINT	CMD 8k		Sys RO
READ	ME 26k		Dir RO	REN	CMD 4k		Sys RO
SDIR	CMD 14k		Sys RO	SET	CMD 8k		Sys RO
SETUP	CMD 32k	1.10	Sys RO	SHOW	CMD 8k		Sys RO
SUBMIT	CMD 4k		Sys RO	SYSTAT	CMD 20k		Sys RO
TOD	CMD 18k	1.5	Sys RO	TYPE	CMD 2k		Sys RO

SYSGEN DISC

Name	Bytes	Version	Attributes	Name	Bytes	Version	Attributes
ABORT	RSP	2k		Sys	RO		
BDOS	PC	22k		Sys	RO		
CIO	CON	6k		Sys	RO		
CONFIG	CMD	48k	3.17	Sys	RO		
CONFIG3	CMD	18k	3.17	Sys	RO		
DIR	RSP	4k		Sys	RO		
GENIN	SKL	2k		Sys	RO		
KOKVTE	RSP	22k	S6	Sys	RO		
MEM	CON	6k		Sys	RO		
PIN	RSP	4k		Sys	RO		
SLOUTPUT	RSP	2k	S0	Sys	RO		
SYSDAT	CON	4k		Sys	RO		
TMP	PC	18k		Sys	RO		
VCMODE	CMD	4k		Sys	RO		
XIOS	CON	22k	S16	Sys	RO		
BDOS	NOR	16k		Sys	RO		
CCPM	SYS	86k		Sys	RO		
CLOCK	RSP	2k		Sys	RO		
CONFIG2	CMD	22k	3.17	Sys	RO		
DATASAVE	CMD	24k	2.4B	Sys	RO		
GENCCPM	CMD	52k	3.1B	Sys	RO		
INITDIR	CMD	36k		Sys	RO		
LOGINRSP	RSP	2k	S2	Sys	RO		
OPTION	CMD	24k	2.17	Sys	RO		
RTM	CON	8k		Sys	RO		
SUP	CON	10k		Sys	RO		
TMP	NOR	4k		Sys	RO		
VOUT	RSP	4k		Sys	RO		
VT6405	RSP	26k	S2	Sys	RO		

ADD UTILS DISC

Name	Bytes	Version	Attributes	Name	Bytes	Version	Attributes		
ASM86	CMD	26k	1.1	Sys RO	ASSIGN	SYS	2k	Sys RO	
BASIC	CMD	54k	1.2	Sys RO	BASIC	DOC	68k	Dir RO	
BATCH	CMD	6k		Sys RO	CHSET	CMD	10k	Sys RO	
COPY	EXE	30k		Sys RO	DATE	EXE	4k	Sys RO	
DC3ANADX	SYS	16k		Sys RO	DC3CITOH	SYS	16k	Sys RO	
DC3CNTXM	SYS	16k		Sys RO	DC3DIABC	SYS	28k	Sys RO	
DC3DS180	SYS	16k		Sys RO	DC3EPSNH	SYS	16k	Sys RO	
DC3EPSNL	SYS	16k		Sys RO	DC3IDSM	SYS	16k	Sys RO	
DC3LA100	SYS	16k		Sys RO	DC3LA50	SYS	16k	Sys RO	
DC3MTLYH	SYS	16k		Sys RO	DC3OKI92	SYS	16k	1.1	Sys RO
DC3PHILR	SYS	16k		Sys RO	DC3PHLIP	SYS	16k		Sys RO
DC3PRINT	SYS	16k		Sys RO	DC3TSTAR	SYS	28k		Sys RO
DD6402G1	SYS	16k	1.14	Sys RO	DD640XM	SYS	20k	1.5	Sys RO
DD747X	SYS	14k		Sys RO	DDGP1760	SYS	14k	1.3	Sys RO
DDHIDMP2	SYS	14k		Sys RO	DDICL84	SYS	16k		Sys RO
DDKDS	SYS	8k		Sys RO	DDSTR2X2	SYS	14k		Sys RO
DDT86	CMD	14k	1.2	Sys RO	DDTTP24C	SYS	28K	1.2	Sys RO
DIR	EXE	4k		Sys RO	DSP	CMD	14k		Sys RO
ERASE	EXE	2k		Sys RO	GENCMD	CMD	6k		Sys RO
GRAPHICS	CMD	8k	1.3	Sys RO	HEADPARK	CMD	12k	1.6	Sys RO
PALETTE	CMD	26k	1.6	Sys RO	REN	EXE	2k		Sys RO
SPL	CMD	22k		Sys RO	SPOOL	CMD	34k		Sys RO
SYSDISK	CMD	2k		Sys RO	TIME	EXE	2k		Sys RO

Note: ASM86.CMD contains the assembler

BASIC.CMD contains the PBASIC interpreter. BASIC.DOC contains further information about the BASIC system.

SPOOL.CMD, SPL.CMD, DSP.CMD comprise the print spooler system

BATCH.CMD and all .EXE files comprise the PC-Mode optional facility

GRAPHICS.CMD, ASSIGN.SYS, and all DD*.SYS and DC3*.SYS files comprise the GSX graphics product.

LEARN DISC

Name	Bytes	Version	Attributes	Name	Bytes	Version	Attributes				
BLEARN	CMD	20k	1.1	Sys	RO	EIGHTRUN	DAT	12k	Sys	RO	
EIGHTRUN	OVR	8k		Sys	RO	FIVERUN	DAT	32k	Sys	RO	
FIVERUN	OVR	16k		Sys	RO	FOURRUN	DAT	16k	Sys	RO	
FOURRUN	OVR	12k		Sys	RO	FOURRUN1	DAT	28k	Sys	RO	
FOURRUN1	OVR	18k		Sys	RO	LEARN	CMD	22k	1.0	Sys	RO
LEARN	DAT	6k		Sys	RO	MENU	DAT	2k	Sys	RO	
MENU	OVR	4k		Sys	RO	ONERUN	DAT	20k	Sys	RO	
ONERUN	OVR	16k		Sys	RO	ONERUN1	DAT	22k	Sys	RO	
ONERUN1	OVR	12k		Sys	RO	SEVNRUN	DAT	20k	Sys	RO	
SEVNRUN	OVR	16k		Sys	RO	SEVNRUN1	DAT	10k	Sys	RO	
SEVNRUN1	OVR	8k		Sys	RO	SIXRUN	DAT	36k	Sys	RO	
SIXRUN	OVR	20k		Sys	RO	THREERUN	DAT	16k	Sys	RO	
THREERUN	OVR	12k		Sys	RO	THREERUN1	DAT	26k	Sys	RO	
THREERUN1	OVR	14k		Sys	RO	TWORUN	DAT	8k	Sys	RO	
TWORUN	OVR	8k		Sys	RO						

4. ENVIRONMENT SUPPORTED

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The environment supported by the issued software is:

- * 6 asynchronous serial ports, 2 synchronous ports (one RS232, the other RS422).
- * a minimum of 256KB and a maximum of 1MB RAM.
- * 2 floppy disc drives and 1 virtual disc - Model 19 only.
- * 1 floppy disc drive, 1 hard disc drive and 1 virtual disc - Models 39 and 49 only.
- * Within the limit of the number of serial ports, 4 workstations each supporting 4 virtual terminals, 4 printers, 1 auxiliary serial I/O device. The workstations may include any mixture of the following types: ICL 6402/0, ICL 6404, ICL 6402G, ICL 6404CG, unspecified ICL video.
- * Up to two external disc units of either 10 or 20 MB capacity. Note that external disk units of these sizes are not compatible with the 10 MB disks formatted to 5 MB that can be fitted to converted 8 bit models 15, 25, 26.

As distributed on floppy diskette, the system is configured to support:

- * 1 ICL workstation of unspecified type, attached to port 0 (note that screen switching and system status lines are not supported on any individual workstation until that workstation has had its type specified using CONFIG)
- * 2 floppy diskettes, identified as drives A: and B:
- * 1 hard disc drive identified as drive C:

This configuration can be altered with the CONFIG utility. Note that CONFIG is called by the system setup utility: SETUP.

The system as distributed on diskette or fixed disc is configured so that the system setup utility, SETUP, will automatically be invoked when the system is loaded. Automatic entry to SETUP will be disabled when the system has successfully been configured.

Note that both CONFIG and this document refer to the ICL 6405 video. This device is not available as part of this product set.

5. SOFTWARE LIMITATIONS CLEARED

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5.1 Release 3.1.R limitations cleared at 3.1.S. issue 1.

This section describes improvements made between 3.1.R issue 1 and 3.1.S issue 1. Some of the items mentioned were in fact included in 3.1.R issue 2. 3.1.R limitation numbers refer to section numbers of the PPSN (READ.ME file) for product set number E14401-01.

- 5.1.1 3.1.R issue 1 limitation 6.1.2 (DD6402G device driver only supports hollow and solid fill styles for circles, circles still filled by software) was stated in error. The limitation was in fact cleared prior to issue 1.
- 5.1.2 3.1.R issue 1 item 6.1.8 (Superfluous BDOS error message from GINSTALL): GINSTALL is no longer supplied.
- 5.1.3 3.1.R issue 1 item 6.4.12 (Occasional data loss when pressing a function key): Considerable improvements have been made to the keyboard input handler such that this problem should no longer occur on standard configurations. However if any application is run which inhibits interrupts for long periods (Eg. the COMMS driver package) it is occasionally possible for the PC to miss a character from a long function key string. Users who suspect they may be prone to this problem are advised to omit a carriage return from function key texts so that the data can be checked after using the function key, and any errors amended before the enter key is pressed.
- 5.1.4 TOD will now accept spaces in American format dates (3.1.R issue 1 item 6.7.2).
- 5.1.5 6402G device driver set to use graphic screen size 160mmx225mm. DRDRAW logo enabled.
- 5.1.6 Queue buffer space allocated by standard configuration file increased to allow for queue buffer requirements of the print spooler.
- 5.1.7 The HELP data file was corrupt on issue 1. Virtual consoles help information was inaccessible. A new HELP system is included in 3.1.S issue 1.

- 5.1.8 3.1.S issue 1 includes the new version of the virtual terminal emulator for ICL 6402/0 and 6404 workstations first included in 3.1.R issue 2. The following improvements over the 3.1.R issue 1 version were introduced: 6404 paint command (Escape z 2) supported. A bug whereby spaces were occasionally repainted in the wrong colour when a virtual screen was switched to foreground was fixed. An improvement was made to ensure that a status line update cannot interrupt an unsupported escape sequence - as a result, even unsupported sequences have the correct effect provided the virtual screen remains in foreground. However, if unsupported escape sequences are used, the screen contents may still be corrupted if the screen is switched from background to foreground.
- 5.1.9 A problem whereby a user status line of precisely 78 characters resulted in the terminal alarm sounding on a 6402G workstation, has been fixed.
- 5.1.10 Macrographs are now usable on 6402G workstation (macrographs are a means of invoking a sequence of pre-defined graphics commands by sending a short character sequence to the video. For full details, see the workstation documentation).
- 5.1.11 Various deficiencies in the BASIC interpreter have been fixed. See file BASIC.DOC on the additional utilities disc for full details.
- 5.1.12 The following changes have been made to the 6402G device drivers:
- To ascertain the type and attribute settings of the connected terminal, the escape sequences Esc Z 2 and Esc ~ are sent during the GSX open workstation call.
- The graphics process is locked in foreground (NOSWITCH) while the above escape sequences are active. This prevents the response from the terminal being picked up by another process if a screen switch occurs in between the escape sequence being sent and the response being received.
- The intensity when drawing a hollow rectangle using the GSX Bar GDP is now correct. Previously, the intensity was always the maximum.
- 5.1.13 The 8087 processor option of CHSET is now supported on the ICL PC (3.1.R issue 2 restriction 6.2.6).
- 5.1.14 The method for programming shifted function keys is now covered in the HELP system (3.1.R issue 2 restriction 6.4.13).
- 5.1.15 'Groping' software now locks into foreground before outputting enquiry sequences to the video (3.1.R issue 2 restriction 6.4.14).

- 5.1.16 As ASSIGN is now withdrawn, 3.1.R issue 2 restriction 6.6.3 (ASSIGN permits you to assign multiple names to a single disc drive) is cleared. CONFIG does not permit multiple names for the same disc drive.
- 5.1.17 The system will not display the date and time on the status line until TOD or DATE have been used to set the date to any date later than 31 December 1984 (3.1.R issue 2 restriction 6.7.3).
- 5.1.18 CONFIG store occupancy reduced to clear 3.1.R restriction 6.5.1. It is still possible to build a configuration which leaves insufficient space to run CONFIG, but only the largest possible configuration will produce this problem. See HELP texts for full details.
- 5.1.19 The restriction as to the order in which function keys are programmed using FUNKEY has been lifted. Note however, that if any other method is used to program a function key, the order 1, shift and 1, 2, shift and 2... must be adhered to.

5.2 Additional HELP texts.

A large number of the published 'limitations' in the PPSN for release 3.1.R were in fact clarifications of the design and/or omissions from the documentation.

The following 3.1.R limitations are still outstanding in 3.1.S:

3.1.R. limitation number	3.1.S. limitation number.
6.2.3	6.1
6.3.1	6.2
6.7.5	6.3

With the exception of the above and items mentioned in section 5.1, all other 3.1.R limitations were permanent design features which are now covered in the appropriate HELP text.

6. SOFTWARE LIMITATIONS OUTSTANDING

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For ease of reference, when a restriction is lifted, the relevant item number is left in the list with the description altered to "This limitation cleared". Thus subsequent items are not renumbered and so any given item will retain the same reference number over all issues of 3.1.S.

- 6.1 A PC-Mode BATCH file may terminate prematurely and return to the A> prompt before all the commands in the BATCH file have been executed. This fault occurs if the BATCH file executes a command which is very short in duration at the same time as some other process in the machine is accessing disc. If a BATCH file terminates in this way, it will resume after the next program has been executed on the virtual screen on which it was running. Thus when this fault occurs, the BATCH file can be set going again by typing eg. TOD on the affected virtual console.
- 6.2 ICL Microline ML84 printers should be run with STALL and DTR protocols. To this end, SWITCH 2 POSITION 4 must be set ON as in Section 1 of the Reference Manual (R10402). Note that if this printer is also intended for GRAPHIC output (eg. from DRDRAW or DRGRAPH) then SWITCH 1 POSITION 8 must also be set on.
- 6.3 If two or more processes attempt to make simultaneous use of the AUX (auxiliary) port, unpredictable results will occur.
- 6.4 When the networking option has been selected and the system subsequently reloaded, messages output by the network initialisation code will be output before the virtual terminal emulators have finished initialising. As a part of their initialisation procedure, the virtual terminal emulators clear the workstation screens, thus any messages output by network initialisation will be lost.
- 6.5 If SETUP is used to install a system onto a hard disc on a machine which has previously been in use, and the disc is nearly full, then SETUP will fail. It is the responsibility of the user to abandon setup when error messages are displayed. SETUP requires sufficient free space on the disc for all new files and any file size increase, and in addition for the largest replacement file.
- 6.6 Sometimes a command of the form NAME* (e.g. DIR*.BAS) will result in corruption of subsequent messages to the VDU from the command line interpreter. You should avoid typing such commands. If this occurs, the system will continue to run. You may, if you wish, continue to use the screen, as only the messages are corrupt. Alternatively you may switch to another screen which will have the correct messages.
- 6.7 Errata in the Personal Computer Reference Manual (R10402-01),

in the section covering the RP1500Q printer:

On page 1-22 the manual states that the French language switch settings are all off. The settings should in fact be:

OFF ON OFF OFF

The manual fails to point out that the rear of the printer there is a 'paper out' detector bar. The paper must run UNDER this for the printer to function correctly.

- 6.8 Errata in the Personal Computer Reference Manual (R10402-01), in the section covering the GP1760 printer:

On pages 1-27, 1-28 the switch setting of switch 1 position 7 is incorrectly specified. It should be set OFF which represents X-ON/X-OFF protocol enabled.

On page 1-29 some of the language switch settings are wrongly defined. The correct definitions are defined in the GP1760 Installation and Operation Manual.

- 6.9 The PALETTE utility must only be run on the foreground virtual console, and must not be switched into background. If it is switched into background and returned to foreground it will sometimes be aborted to the system prompt.

- 6.10 EXECUTIVE SUITE BUILDER (ESB)

ESB Version 1.2 does not explain how some new peripherals are installed correctly for applications on the ICL PC.

This note explains how to drive ESB for the new peripheral devices by comparing them against existing peripherals.

The RP1500Q should be installed as an RP1600.
The Microline ML193 should be installed as a Microline ML84.
The Thermal Printer should be installed as a Microline ML84.
The 6404CG should be installed as a 6404 colour workstation.
The 6402G should be installed as a 6402 monochrome workstation.

Technical queries about this notice should be directed to local ICL representatives or Customer Service Desks.

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