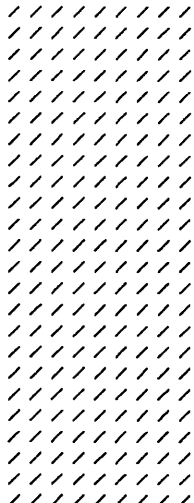


INFO ONLY
NEVER
RELEASED
A 1.2.
COULD HAVE BEEN
USED FOR 1.1.

BASIC-2/Turbo Operating System Release 1.2

Customer Software Release Notice



1st Edition – August, 1992
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715-4921



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FCC and DOC Notices

The Federal Communications Commission (FCC) and the Canadian Department of Communications (DOC) require that information regarding the interference potential of electrical equipment be included in the user documentation for the equipment. They also require that specific information be provided for components that will be connected to the Public Switched Telephone Network (PSTN).

Electromagnetic Interference Requirements

Wang Laboratories, Inc., manufactures both Class A verified computers and peripherals and Class B certified computers and peripherals. To determine which of the following warnings apply to the equipment, the user should refer to the label affixed to the device.

An example of a Class A verified label is the following:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

An example of a Class B certification label is the following:

FCC ID. B4YPC250-16

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Warning

For Class A - This equipment^(1,2,4) has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his or her own expense.

For Class B - This equipment^(1,2,3,4) has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

DOC Warning

For Class A - This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

For Class B - This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Connection to the PSTN

FCC Part 68 Requirements

If this equipment connects to the PSTN, it complies with Part 68 of the FCC Rules. A label is affixed to this equipment that contains, among other information, the FCC Registration Number (REN) and Ringer Equivalence Number (REN) for this equipment. Upon request, the user must provide this information to the telephone company.

The REN is useful to determine the number of devices that the user may connect to the telephone line and still have all those devices ring when the telephone number is called. In most but not all areas, the sum of the RENs of all devices connected to one line should not exceed five (5). To be certain of the number of devices that the user may connect to the line, as determined by the REN, the user should contact the local telephone company to determine the maximum REN for the calling area.

If the telephone equipment causes harm to the telephone network, the telephone company may discontinue service temporarily. If possible, the user will be notified in advance. However, if advance notice is not practical, the user will be notified as soon as possible. The user will be informed of the right to file a complaint with the FCC.

The telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the proper functioning of the equipment. If such changes are made, the user will be notified in advance to give the user an opportunity to maintain uninterrupted telephone service.

If the user experiences trouble with this telephone equipment, the telephone company may ask that the user disconnect the equipment from the network until the problem has been corrected or until the user is sure that the equipment is not malfunctioning. For service or repairs, the user should contact the point of sales representative or Wang Laboratories, Inc.

This equipment may not be used in conjunction with coin service provided by the telephone company. Connection to party lines is subject to state tariffs.

DOC Notice for Canadian Users

Notice – If this equipment contains a Canadian Department of Communications label, it identifies DOC-certified equipment. This certification means that the equipment meets certain telecommunications network protective, operational, and safety requirements. The DOC does not guarantee that the equipment will operate to the user's satisfaction.

Before installing this equipment, the user should ensure that it is permissible for it to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. In some cases, the company's inside wiring associated with a single line individual service may be extended by means of a certified connector assembly (telephone extension cord). The user should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be made by an authorized Canadian maintenance facility designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request that the user disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines, and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

Caution: Users should not attempt to make such connections themselves, but should contact the appropriate electrical inspection authority or electrician, as appropriate.

Load Number – The Load Number (LN) assigned to each terminal device denotes the percentage of the total load that can be connected to a telephone loop. The termination on a loop may consist of any combination of devices, subject only to the requirement that the total of the Load Numbers of all devices does not exceed 100. An alphabetical suffix is also specified in the Load Number for the appropriate ringing type (A or B), if applicable. For example, LN=20A designates a Load Number of 20 and an "A" type ringer. The Load Number for this equipment can be found in the installation instructions pertaining to connection to the PSTN.

-
- (1) This equipment requires the use of shielded cables.
 - (2) If the user attaches a Class A verified device to equipment otherwise labeled as Class B, the combined system meets Class A regulations only. Class A specifications provide reasonable protection against radio and television interference in a commercial environment. Operation of Class A equipment in a residential environment may cause interference.
 - (3) This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
 - (4) Any modifications to this equipment not expressly approved by Wang Laboratories, Inc., could void the user's authority to operate this equipment.

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Preface

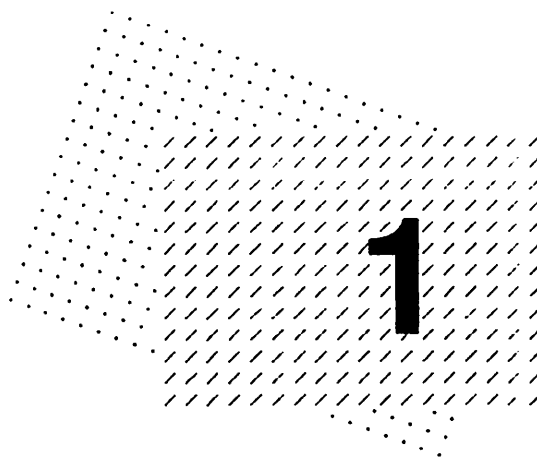
This document summarizes Release 1.2 of the Wang Multiuser BASIC-2/Turbo Operating System.

Intended for all users, this release notice is organized as follows:

- Chapter 1 lists Release 1.2's features, and explains what hardware and software you need.
- Chapter 2 describes the enhancements to the Wang Multiuser BASIC-2/Turbo Operating System.
- Chapter 3 describes the media you can install.

The following documents provide additional information:

- *CS-DIN, CS/386, and CS/Turbo User's Guide (715-2364A)*
- *BASIC-2 Utilities Reference Manual (715-3949)*
- *Multiuser BASIC-2 Language Reference Manual (700-4080F)*



Introduction

Summary of Features

The Wang Multiuser BASIC-2/Turbo Operating System is designed for interactive programming and ease of use. Release 1.2 is a general release.

The following command calls have been added:

```
$SCSI INQUIRY T/Dxxx  
$SCSI FORMAT T/Dxxx, (ID)  
$SCSI ID T/Dxxx, (ID)A$()  
$SCSI READ T/Dxxx, (ID)A$()  
$SCSI WRITE T/Dxxx, (ID)A$()  
$CONFIG T/Dxxx, A$()  
$CLEAR xxx  
SCSI BACKUP  
SCSI RESTORE
```

The following command calls or utilities have been changed or modified:

```
BACKUP UTILITY  
RESTORE UTILITY  
DISK UTILITY
```

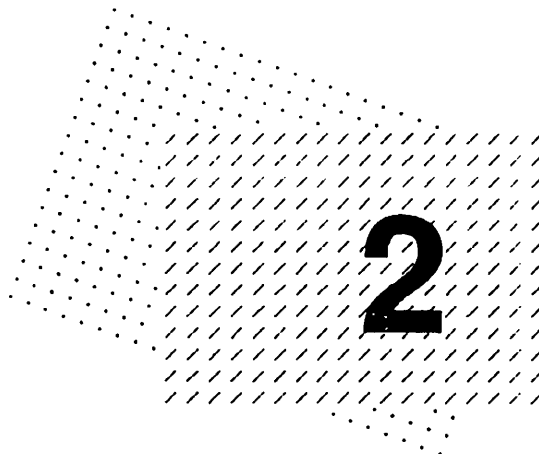
System Requirements

Hardware

- Wang CS/386-D/N, CS-D, or Micro VP with a CS/Turbo CPU board
- 2200 terminal
- 5 1/4-inch diskette drive
- MXF 16 Port Terminal Controller
- 22C11 HS Printer/Disk Controller
- 22C11 SS SCSI Printer/Disk Controller

Software

You need the BASIC-2/Turbo Operating System Release 1.2. Follow the instructions in your user manual to install it.



Enhancements

Enhancements to Release 1.2

This section describes the latest enhancements to Release 1.2. (For more details, refer to the *Multiuser BASIC-2 Language Reference Manual*.)

Command Calls

\$SCSI INQUIRY

\$SCSI INQUIRY T/Dxx — where Dxx is the SCSI Controller Address (310, 320, or 330).

This command allows you to inquiry all SCSI drive IDs of the controller and rebuilds the Configuration Table.

\$SCSI FORMAT

\$SCSI FORMAT T/Dxx (ID) — where Dxx is the SCSI Controller Address and ID is the SCSI Drive ID (from 0 to 7).

This command formats a SCSI drive by its ID and sets block length to 512 Byte/Sector format.

\$SCSI ID

\$SCSI ID T/Dxx, A\$() — where Dxx is the SCSI Controller Address and A\$() is a 512 byte alpha string for reading and writing.

This command allows you to identify what SCSI ID the controller is set to.

\$SCSI READ

\$SCSI READ T/Dxx, (ID) A\$() — where Dxx is the SCSI Controller Address, ID is the SCSI Drive Address (ID), and A\$() is a 512 byte alpha string.

This command reads the platter configuration table from the SCSI drive by ID address.

\$SCSI WRITE

\$SCSI WRITE T/Dxx, (ID) A\$() — where Dxx is the SCSI Controller Address, ID is the SCSI Drive ID and A\$() is a 512 byte string.

This command writes the platter configuration table onto each drive by ID Address.

\$SCSI CONFIG

\$SCSI CONFIG T/Dxx, A\$() — where Dxx is the SCSI Controller Address and A\$() is a 512 byte string.

This command allows you to get the SCSI System Configuration Table.

SCSI BACKUP

This is a new backup program that allows you to back up any CS disk drive on the system to a SCSI Tape Drive.

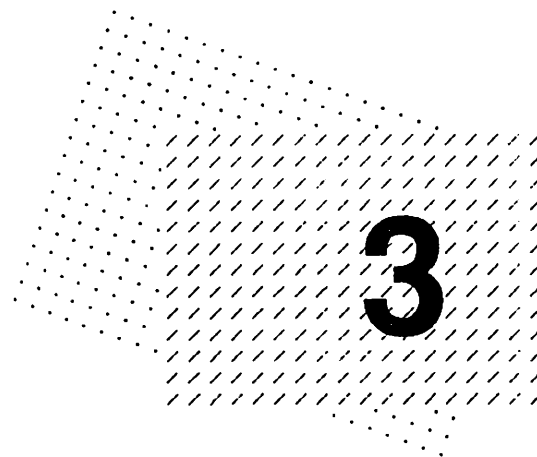
SCSI RESTORE

This is a new restore program that allows you to restore a CS disk platter from a SCSI tape that was backed up by the SCSI BACKUP Utility.

\$ CLEAR

\$ CLEAR xxx — where xxx is a printer address on the 22C11SS controller.

This command allows you to clear the printer buffer by printer address.



Media Contents

Media Contents of Release 1.2

Release 1.2 contains the following diskettes:

Part Number	Number of Diskettes	Description
291-1001	3	5 1/4-inch double-sided double-density 2275/ DS diskettes
	1	5 1/4-inch 1.2MB double-sided double-density DS diskettes

These diskettes contain the following files:

FileName	Type	Function
@BACKUP	Program	BACKUP utility
@BOOT	Program	Menu for bootstrap
@CLOC	Program	Initialize date and time
@DAVFU	Program	Vertical Format Control utility
@FORMAT	Program	Format disk platter
@GENPART ^a	Program	Partition generator
@INSTALL ^a	Program	System install
@MENU	Program	System menu program
@MODSYSF ^a	Program	Convert system configuration file
@MOVE1	Program	Overlay for @MOVEFIL and @INSTALL
@MOVEFIL	Program	Move file
@PSTAT ^a	Program	Partition status
@RECOVER	Program	Recover from backup

FileName	Type	Function
@SYSMVPB	Program	Menu for System Utilities
@TO.CREF	Program	Create reference file
@TO.CREO	Program	Load or create a reference file
@TO.DISK	Program	Copy to disk
@TO.SUBS	Program	Overlay for @TO.DISK/IMAGE
@TOIMAGE	Program	Copy to disk image
@.STARTD	Data	System menu support
@@	Data	MVP system menu
@DATE	Data	Date file
@DM50/V0	Data	Printer driver
@LASRV1	Data	Printer driver
@MVP ^a	Data	MVP microcode
@MXE0	Data	MXE microcode
@PM010V2	Data	Printer driver
@PM016V3	Data	Printer driver
@PM017V3	Data	Printer driver
@PM018V3	Data	Printer driver
@PM060V0	Data	Printer driver
@SYSFILE ^a	Data	MVP configuration file
@DG2 ^a	Program	Menu for system diagnostics
@MRTIAN ^a	Program	Game
@DSCFIG ^a	Program	DS configuration
@DSCFIGP ^a	Program	Protect/unprotect DS surfaces
@RAMDISK ^a	Program	RAMdisk allocation
@HITRATE ^a	Program	Cache usage
@DSTAPEB ^a	Program	Backup to tape
@DSTAPER ^a	Program	Restore from tape
@DOSFORM ^a	Program	Format program
@DOSHELP ^a	Program	Help menu
@DOSSET ^a	Program	Setup program
@DOSCOPY ^a	Program	Copy
@DOS.HLP ^a	Data	Data file
@DOSDCPY ^a	Program	Disk copy program
@DOSTYPE ^a	Program	Disk type program
@DOS ^a	Program	Start program
@DOSEXIT ^a	Program	Exit DOS
@FMT1 ^a	Data	Data file
@FMT2 ^a	Data	Data file
@CFIG ^a	Data	Data file

FileName	Type	Function
@DOSDIRP ^a	Program	Directory program
@DOSSTRT ^a	Program	Start module
@DOSDIRW ^a	Program	Directory program
@DOSTYLP ^a	Program	Disk type program
@DOSDEL ^a	Program	Delete program
@DOSREN ^a	Program	Rename program
@DOSCYCS ^a	Program	CopyCS program
@SCSICFG ^a	Program	SCSI configuration program
@SCTAPEB ^a	Program	SCSI backup program
@SCTAPER ^a	Program	SCSI restore program
@.BACKUP ^a	Program	BACKUP menu
@.RESTORE ^a	Program	RESTORE menu
@.DISK ^a	Program	DISK menu
@VERCPUB ^a	Program	Turbo Test program
@VERCPUR ^a	Program	Turbo Test program
@HQ300VO ^a	Data	HQ 300 printer driver

^a These files differ from the BASIC-2/Turbo Operating System Release 1.1.