



|                           |  |  |
|---------------------------|--|--|
| • Power On Function       | <i>BUTTON ONLY</i>   | Uses the power button to power up the system.  |
| • Onboard FDC Controller  | <i>Password Enabled Disabled</i>                             | Enables the Keyboard Password Power-On.<br>Onboard floppy disk controller is enabled.<br>Onboard floppy disk controller is disabled.   |
| • Onboard Serial Port 1/2 | <i>3F8/IRQ4, 2F8/IRQ3, 3E8/IRQ4, 2E8/IRQ3, Auto Disabled</i> | Defines the onboard serial port address and required interrupt number.<br>Onboard serial port address and IRQ are automatically assigned.<br>Onboard serial port is disabled.  |
| • UART Mode Select        | <i>Normal</i>  | This option is used to configure UART Mode.  |
| • Onboard Parallel Port   | <i>378/IRQ7, 278/IRQ5, 3BC/IRQ7 Disabled</i>                 | Defines onboard parallel port address and IRQ channel.<br>Onboard parallel port is disabled.   |
| • Parallel Port Mode      | <i>SPP EPP ECP ECP+EPP</i>                                   | Defines the parallel port mode as standard Parallel Port (SPP), Enhanced Parallel Port (EPP), or Extended Capabilities Port (ECP).   |
| • PWRONAfter PWR-Fail     | <i>OFF ON Former-Sts</i>                                     | The system remains OFF when the AC power supply resumes.<br>The system will be powered up when the AC power supply resumes.<br>Whatever the system status is before the AC power supply cuts off, the system resumes in the previous status (ON/OFF) when the AC power supply resumes. |
| • GamePort Address        | <i>Disabled 201 209</i>                                      | This option is used to configure Game Port Address.  |
| • Midi Port Address       | <i>Disabled 300 330</i>                                      | This option is used to configure Midi Port Address.  |



## PC Health Status

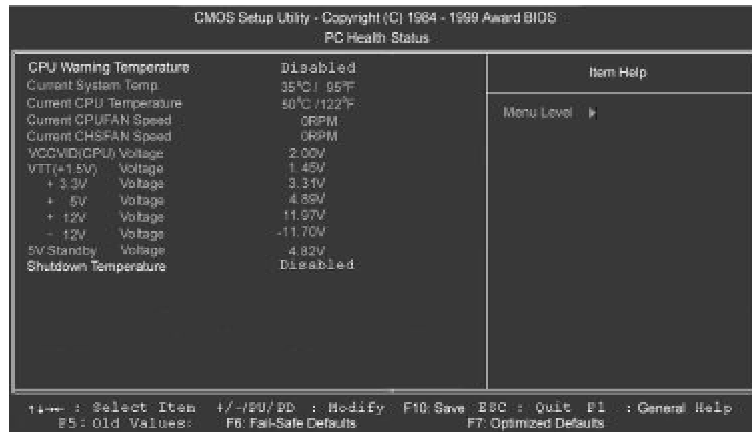


Figure-9 PC Health Status Menu

The following indicates the options for each item and describes their meaning.

| Item   | Option   | Description  |
|--|--|--|
| • CPU Warning Temperature                      | 50°C/122°F<br>53°C/127°F<br>56°C/133°F<br>60°C/140°F<br>63°C/145°F<br>66°C/151°F<br>70°C/158°F<br>Disabled | An alarm will beep when the CPU temperature reaches the previous setting, 50°C/122°F, 53°C/127°F, 56°C/133°F, 60°C/140°F, 63°C/145°F, 66°C/151°F, 70°C/158°F.<br><br>No alarm beep.  |
| • Current System Temp.                         |  | The temperature inside the chassis.  |
| • Current CPU Temperature                      |  | The temperature near CPU.  |
| • Current CPUFAN Speed<br>Current CHSFAN Speed |  | RPM (Revolution Per Minute) Speed of fan which is connected to the fan header, CPUFAN or CHSFAN. Fan speed value is based on an assumption that tachometer signal is two pulses per revolution. In other cases, you should regard it relatively. |
| • VCCVID(CPU) Voltage,<br>VTT(+1.5V) Voltage,  |  | Displays current voltage value including all significant voltages of the mainboard.<br>+3.3V, +5V, +12V, -12V are voltages from the ATX power supply, VTT(+1.5) Voltage is GTL   |



## BIOS Description

+3.3V,  
+5 V,  
+12 V,  
-12 V,  
5V Standby Voltage

- Shutdown Temperature

*60°C/140°F*  
*65°C/149°F*  
*70°C/158°F*  
*75°C/167°F*  
*Disabled*

Termination voltage from the on board regulator and VCCVID (CPU) Voltage is the CPU core voltage from the on board switching Power Supply.

The system will shut down automatically when the CPU temperature reaches the previous setting, 60°C/140°F, 65°C/149°F, 70°C/158°F, 75°C/167°F.

The system remains on regardless of how much the CPU temperature is.



## Password Setting

Supervisor Password has higher priority than User Password. You can use Supervisor Password when booting the system or entering BIOS Setup to modify all settings. Also you can use User Password when booting the system or entering BIOS Setup but can not modify any setting if Supervisor Password is enabled.

When User/Supervisor password setting is selected, the following message appears at the center of the screen to assist you in creating a password,

### ***ENTER PASSWORD***

Type the password, up to eight characters, and press <Enter>. The password typed now will clear any previously entered password from CMOS memory. You will be asked to confirm the password, type the password again and press <Enter>. You may also press <Esc> to abort the selection.

To disable password, just press <Enter> when you are prompted to enter password, a message will confirm the password being disabled. Once the password is disabled, the system will boot and you can enter BIOS Setup freely.

### ***PASSWORD DISABLED***

If you have selected “**System**” in “Security Option” of “BIOS Features Setup” menu, you will be prompted for the password every time the system reboots or any time you try to enter BIOS Setup.

If you have selected “**Setup**” at “Security Option” from “BIOS Features Setup” menu, you will be prompted for the password only when you enter BIOS Setup.

## Boot with BIOS Defaults

If you have made all the changes to CMOS values and the system can not boot with the CMOS values selected in setup, clear CMOS after power-down, then power on again. System will boot with BIOS default settings.



## Appendix A

### QDI Mainboard Utility CD-ROM

A QDI Motherboard Utility CD-ROM is supplied with each motherboard. The contents used for this motherboard are:

#### 1. Intel® 810 Chipset Drivers

A. INF Files for Intel 810 Chipset

Contained in the directory \ChipDrv\Intel\Whitney\inf for Windows 95/98.

B. INF Utility Files for Intel 810 Chipset

Contained in the directory \ChipDrv\Intel\Whitney\inf utility for Windows 95/98.

C. VGA Drivers

Contained in the directory \ChipDrv\Intel\Whitney\display for Windows 9x, Windows 2000 and Windows NT4.0 respectively.

#### 2. Sound Drivers

Contained in the directory \DevDrv\Codec\ad1881 for Windows 95, Windows 98 and Windows NT 4.0 respectively.

#### 3. PC-cillin 98 Anti-Virus software:

Contained in the directory \Pccillin\Win9x for Windows 95/98 English version.

Contained in the directory \Pccillin\PWin9x for Windows 95/98 Chinese version.

Contained in the directory \Pccillin\WinNT4.0 for Windows NT 4.0.

#### 4. QDI ManageEasy V2.0:

Contained in the directory \QME2.

#### 5. QDI Mainboard Utilities:

AWDFLASH.EXE

CBLOGO.EXE

LFEXE

Please refer to the online help for information on how to use these utilities.

#### 6. Documents

The files included in the directory \Doc are:

Adobe Acrobat Reader V3.0 —ar32e301.exe

QDI ManageEasy (V1.2) Manual —QMEV12.PDF.



## RecoveryEasy

### Introduction:

RecoveryEasy™, the latest QDI innovation, is able to protect the system from being destroyed, by creating a so-called “mirror partition” for a current hard disk partition and backuping all the data to the mirror area. This ideal utility provides disk partition, disk data backup/recovery, CMOS settings backup/recovery and multi-boot functions. RecoveryEasy is also able to prevent the system from being attacked by different kinds of boot virus or other severe virus such as CIH. In case the system is ruined either by mistake or virus, the system can be recovered from the mirror partition. It applies the build-in BIOS technology that does not occupy either the hard disk space or the system memory. It's the best choice for both corporations and PC users.

### Operation Process:

There are two hotkeys –Ctrl+Bksp and F12 for RecoveryEasy to enter “Partition” and “Recovery” user interfaces accordingly during BIOS booting up. If two or more hard disks are installed, use F5 key to choose the hard disk.

#### 1. Partition Interface (see figure-1)

Users can create and delete partitions/mirror partitions, activate partitions, and uninstall RecoveryEasy in Partition User Interface.

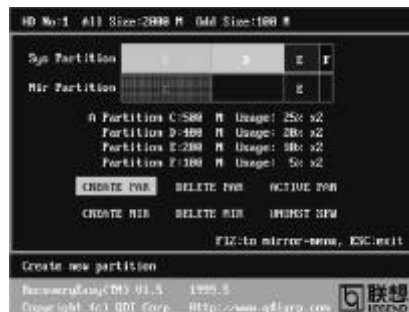


figure-1 Partition Interface

#### 1.0 Install RecoveryEasy for the first time

- a. The utility checks the previous disk partition at first, and displays the status of the first four partitions. If there are more than four disk partitions, users will be asked to delete the redundant disk partitions, since only four partitions that can be activated are allowed to exist. However, if there're only four or fewer partitions, users can follow the system prompt and choose to install RecoveryEasy based on the previous disk partitions. In this way, the original extension partitions will be changed to normal ones, and probably the sequence of the partitions will be changed also, but the contents contained in each partition will remain the same.



- b. If choosing to install RecoveryEasy on an absolutely clear disk, the utility will delete all the previous partitions.
- c. The password is set as default setting “qdiqdi” after installing RecoveryEasy.

## 1.1 CREATE PAR

**Function** : Creates a new partition.

**Limitation**: When no disk space remains or 4 partitions already exist, this button is disabled.

**Steps** : After pressing the “CREATE PAR” button.

- a. The system will prompt whether users want to create a mirror partition for it or not.
- b. If answering “Y”, input the new partition size in Megabyte. Notice that the maximum partition size that can be assigned is half of the left disk space, which is also displayed in the status line. Another half is for the mirror partition. If answering “N”, the whole disk space left can be assigned. See figure-2.

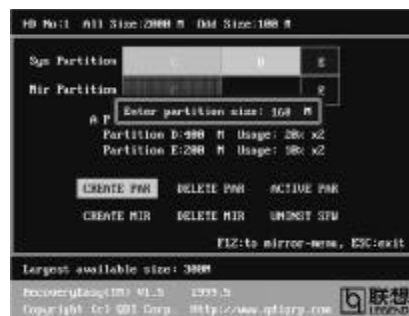


figure-2 Create Partition

### Note:

- a. The system will prompt “Insert system floppy, then reset” when the first partition on the first hard disk is created.
- b. After using DOS6.xx boot disk to format C partition, the system should be reset in order to access the partition.
- c. In Windows system 1,048,576 bytes equal 1 Megabyte, while in RecoveryEasy 1,000,000 bytes equal 1 Megabyte, therefore a smaller size will be displayed in Windows system compared with the size displayed in RecoveryEasy.

## 1.2 DELETE PAR

**Function** : Deletes the last partition and its mirror partition.

**Limitation**: When no partition exists, this button is disabled.

**Steps** : After choosing this function, only the final partition can be deleted in order to keep the continuous disk space. If the warning message is confirmed, the partition will be deleted. By pressing “N” or “ESC” key, the system quits.



### 1.3 ACTIVE PAR

**Function** : Implements multi-boot function by activating one of the partitions.

**Limitation**: When no partition exists, this button is disabled.

**Steps** : If there're two or more partitions, choose one of them by pressing F5 key.

**Note** : After setting active partition, a letter "A" will be shown in front of this partition.

### 1.4 CREATE MIR

**Function** : Adds mirror partition for the disk partition that has no mirror.

**Limitation**: This function should be performed by order, for example, from partition 1 to 4. If no disk space remains or the last partition has its mirror partition already, this button is disabled.

**Steps** : After pressing the "CREATE MIR" button, use F5 key to choose the partition to create mirror. The partition of which the size is bigger than the left disk space will be ignored.

### 1.5 DELETE MIR

**Function** : Deletes the mirror partition.

**Limitation**: If there is no mirror partition, this button is disabled. This function should be performed in reverse order, for example, from partition 4 to 1.

**Steps** : After pressing the "DELETE MIR" button, only the final mirror partition can be deleted in order to keep the continuous disk space. If the warning message is confirmed, the mirror partition will be deleted. By pressing "N" or "ESC" key, the system quits.

### 1.6 UNINST SFW

**Function** : Uninstall RecoveryEasy.

**Limitation**: None.

**Steps** : After pressing the "UNINST SFW" button and the warning message is confirmed, RecoveryEasy will be uninstalled. By answering "N", the system quits.

**Note** : After RecoveryEasy is uninstalled, all the mirror areas have been disconnected with the relate partitions. If no partition is deleted or changed in size, or no other partition is created, users have chance to "Recover existing RecoveryEasy settings" when next time entering RecoveryEasy partition interface, meanwhile the password will be set as default setting "qdiqdi".

### 1.7 OTHERS

**F12** : Switches to Recovery User Interface.

**ESC** : Exits from the Partition User Interface. If users made some mistakes, for example, wrongly delete a partition, do not press the "ESC" key, press the reset button on your system at once, in this way users can save their system.



**F5:**

- a. When two or more than two hard disks are installed on the system, use F5 key to choose the hard disk. Every time users use F5 key to switch the hard disk, the operation result for the previous hard disk is saved. When processing a certain hard disk, F5 key can be used to choose the partition.
- b. In addition, when two or more than two hard disks are installed, the sign of partitions will be changed from C, D, E, F to 1, 2, 3, 4 accordingly.

**2. Recovery Interface (see figure-3)**

Users can backup the partition to its mirror area, and recover the partition from its mirror area from Recovery User Interface. This interface also provides users with CMOS settings backup or recovery, and changing password functions.



figure-3 Recovery User Interface

**2.1 BACKUP PAR**

**Function :** Backups the content of the partition to its mirror area.

**Limitation:** If no mirror partition exists, this button is disabled.

**Steps:**

- a. Use F5 key to choose the partition with mirror area existed.
- b. If the partition chosen has been backuped before, a warning message will be shown, and the time when last backup was done will be displayed in the status line. After confirming the warning message, the system performs the backup. By pressing "N" or "ESC" key, the system quits.

**2.2 RE-CVR PAR**

**Function :** Recovers the content from the mirror area to the relate partition.

**Limitation:** If users didn't backup any partitions before, this button is disabled.

**Steps:**

- a. Use F5 key to choose the backuped partition.
- b. The time when the latest backup was done will be displayed in the status line. After confirming the warning message, the system performs the content recovery. By pressing "N" or "ESC" key, the system quits.

**Note:**

- a. During the process of partition backup or recovery, a gauge will be shown as below, the backup or recovery speed is about 4-5Mbyte/s. See figure-4.



figure-4 Backup Partition

- b. If a disk I/O error occurs during the process of partition backup or recovery, this means there's physical damage on the hard disk, however users can ignore it and continue the process.

**2.3 ATTRIB PAR**

**Function** : Allows users to modify the properties of the partition (eg. FAT16 -> FAT32) after entering OS.

**Limitation**: None.

**Steps** : After pressing this button, turn on/off the switch.

**Note:**

- a. The switch resets to the default setting "disable" every time the system reboots.  
 b. In order to implement this function, users need to enable the switch when installing the OS or modifying the partition properties. Please note: Do not create or delete partitions or change the partition size when modifying the partition properties.

**2.4 BACKUP CMS**

**Function** : Backups all CMOS settings.

**Limitation**: None.

**Steps** : After choosing this function, the current CMOS settings will be saved.

**2.5 RE-CVR CMS**

**Function** : Recovers all CMOS settings.

**Limitation**: None.

**Steps** : After choosing this function, the latest backup of the CMOS settings will be recovered. The system needs reboot in order to validate the new CMOS settings.

**Note** : If users have never backed up the CMOS settings, a wrong message will be shown after choosing this function.



## 2.6 CHANGE PWD

**Function** : Changes the password to enter RecoveryEasy Partition or Recovery User Interface.

**Limitation**: None.

**Steps** : Follow the system prompt, input the password no more than 6 characters twice. To delete the password, follow the system prompt and press the "Enter" key twice.

**Note:**

- a. The password should be no more than 6 characters, only digital and alphabetic letters are valid.
- b. Once the password is enabled, users will be asked to input the password every time they try to enter the RecoveryEasy user interfaces, and up to 3 times try is permitted.

## 2.7 Others

**Ctrl+Bksp** : Switches to Partition User Interface.

**ESC** : Exits from the Partition User Interface.

**F5** : When two or more than two hard disks are installed on the system, use F5 key to choose the hard disk. When processing a certain hard disk, F5 key can be used to choose the partition.

## FAQ:

### 1. What does RecoveryEasy do?

RecoveryEasy creates a so-called "mirror partition" with same size for the hard disk partition on the same hard disk, and then completely backups all the data sector by sector to the mirror area. This mirror partition is reserved to OS. When the OS ruins either by mistakes or virus, users can recover the partition from its mirror.

### 2. Does RecoveryEasy occupy the system resources?

Although some hard disk data protection applications can automatically protect the disk data in runtime, it lowers the system performance. Unlike these applications, RecoveryEasy need users to backup or restore data manually when needed, but it DOES NOT lower the system performance when the system is running. It does not occupy either hard disk space or system memory, additional floppy disk or ISA/PCI cards are unnecessary.

### 3. RecoveryEasy utilizes Build-in BIOS skill, what is build-in BIOS?

RecoveryEasy build-in BIOS means all functions of RecoveryEasy including creating partition, backuping and restoring partition are built in BIOS. Users just need to down load the latest BIOS from our Website (<http://www.qdigrp.com>) when wanting to upgrade (It's free!).



**4. Are there any hard disk limitations of RecoveryEasy?**

RecoveryEasy supports all kinds of current IDE hard disks and has no limitation on the hard disk capacity. RecoveryEasy can not provide its function for some special hard disk types such as SCSI, but it will not affect their usage.

**5. Are there any OS limitations of RecoveryEasy?**

RecoveryEasy supports current operating systems such as DOS, Windows 95/98. However in Windows NT, Windows 2000, Unix and OS2 systems, users should notice that the disk tools bundled in the OS could change the mirror partition. On the other hand, since users can create partition with RecoveryEasy, it is unnecessary to use other disk tools.

**6. Why does the remainder size plus partitions size not match the total size shown in RecoveryEasy sometimes?**

When the location of partitions is not continuous, the above problem exists.

**7. Are there any other disk partition tools that can modify the partition table made by RecoveryEasy?**

RecoveryEasy provides a write-protect function, so the disk tools such as Fdisk, Partition Magic, BootMenu, SmartDisk and BootStar can not modify the partition table created by RecoveryEasy. Some of the applications even terminate during operation. However the disk tools bundled in the OS such as Windows NT, Windows 2000, Unix and OS2 could change the mirror partition.

**8. Why does it happen that a prompt “installation can not continue” pops up when installing Windows98 or a yellow exclamation mark shown beside IDE device in system properties?**

During Windows 98 installation, the installation program will write to MBR (Master Boot Record) which is protected by RecoveryEasy, therefore the installation will be terminated. To avoid this problem, a “ATTRIB PAR” button is provided in Recovery User Interface. Enable this switch before installing Windows 98, then the installation will be successfully completed. In order to remove the yellow question mark before IDE devices in Device Manager, enable this switch once more after system reboot.

**9. Why does the converting of FAT16->FAT32 in PQ Magic go wrong?**

MBR will be accessed when converting FAT16 to FAT32 with PQ Magic, which is protected by RecoveryEasy, therefore the conversion will be invalidate. Enabling the “ATTRIB PAR” switch from Recovery User Interface before converting can avoid this problem. It's the same situation as “FAT32 Converter” provided in Windows98.

**10. What if partitions be wrongly deleted in RecoveryEasy?**

If users delete a partition in RecoveryEasy by mistake, they can save it by pressing the Reset button on their system at once. Do not press the “ESC”



key to quit RecoveryEasy, this will save the change. Do not try to create the partition again, since creating partition will clear all the content of the partition.

**11. What is multi-boot?**

RecoveryEasy can implement the multi-boot function by activating different partition. For example on the hard disk, partition C contains DOS, partition D contains Windows 95 version, partition E contains Windows 98 version, when activating partition C in RecoveryEasy, the system enters DOS, when activating partition E, the system enters Windows 98 version. At the same time, the sequence of the partitions is adjusted accordingly, partition E becomes C:, partition C becomes D: and partition D becomes E:. This function is the same as that of fdisk.exe, but the system needs reboot in order to make the change validate for fdisk.exe.

**12. What if computer accidentally power off when backuping (recovering)?**

The partition should be completely backuped or recovered. If the computer accidentally powers off, the partition should be backuped or recovered once again.

**13. What if users lose the password?**

To make sure the security, the password is saved in the hard disk. **It's very important for users to remember the password.** If forgetting the password, contact us, clearing CMOS is useless.

**14. Does RecoveryEasy protect hard disk against CIH?**

RecoveryEasy can strongly protect the hard disk from boot-virus, as well as the attack of CIH. If the system is attacked by CIH, RecoveryEasy will automatically recover the MBR and each partition boot record before system boots up, and try to recover the FAT. In this way the system can basically boot up, then users can use some anti-virus application to kill the virus. However this depends on how CIH virus affects the system. CIH normally outbreaks on 26<sup>th</sup> every month, if the system cannot boot up that day, power off the computer instantly, and use the second safe way to recover the system, that is, recover the partition from its mirror area from Recovery User Interface. Remember to create a mirror partition and backup before virus attacks the system.



The Patent for SpeedEasy

# **Board Layout of WinneX 3 V1.0**

**P/N: 430-01017-501-00**  
**Manual WinneX 3 Ver 1.0**