

**Cserver 1180 / 1125**

**Basic Operating Manual**

**Version 1.0**

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# Cserver 1180 / 1125 Basic Operating Manual

## Before You Begin

### Check the box contents!

Cserver 1180 / 1125 package should contain the following:

- ?? Cserver 1180 Computer Unit
- ?? Cserver 1180 Basic Operating Manual
- ?? One set of “L-Bracket” for rack cabinet rear mounting.
- ?? One 110V or 220V power cord.
- ?? Software Driver CD-ROM or Disk Sets

If any of the above items are missing, please contact PCW Microsystems, Inc. ([www.rackmount.com](http://www.rackmount.com)) for replacements before continuing with the installation process.

## Hardware Requirements

Single Computer Connection – Cserver1180 requires a computer with following ports to operate:

- ?? A Standard VGA Monitor
- ?? A 6-pin mini-DIN PS/2 Keyboard
- ?? A 6-pin mini-DIN PS/2 Mouse



## **WARNING:**

***Do not turn on the power to Cserver1180/1125, if the unit shows signs of crack or damage. Some circuitry in the Cserver1180/1125 may continue to operate even though the front panel power switch is off. For your safety, never open the Cserver1180/1125 with power cord connected to the outlet. Repair service should be performed by qualified service personnel.***

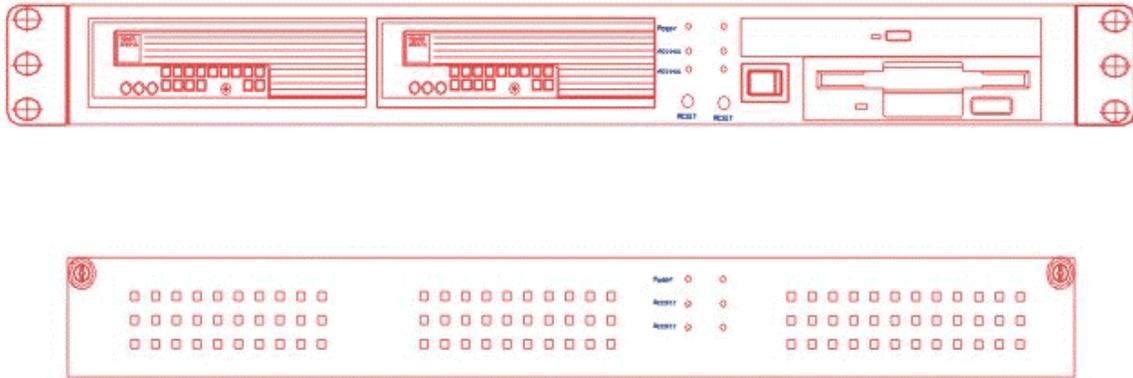
***Read and adhere to all warnings, cautions, and notices in this guide and the documentation supplied with this unit. If the instructions for the Cserver1180/1125 are inconsistent with these instructions or the instructions for accessory modules, contact PCW Microsystems, Inc ([www.rackmount.com](http://www.rackmount.com)) to find out how you can ensure that your Cserver1180/1125 unit meets safety and regulatory requirements.***

## **Basic Cserver1180/1125 Features**

Cserver 1180 / 1125 1U rackmount server offers the following features:

- ?? Operating System independent RAID-1 Hardware Controller (Disk Mirror)
- ?? Two Hot-Swap ATA-100 EIDE Harddisks
- ?? Single or Dual Pentium III Processors
- ?? On-Board Video Port
- ?? On-Board LAN Port(s) (Single or Dual)

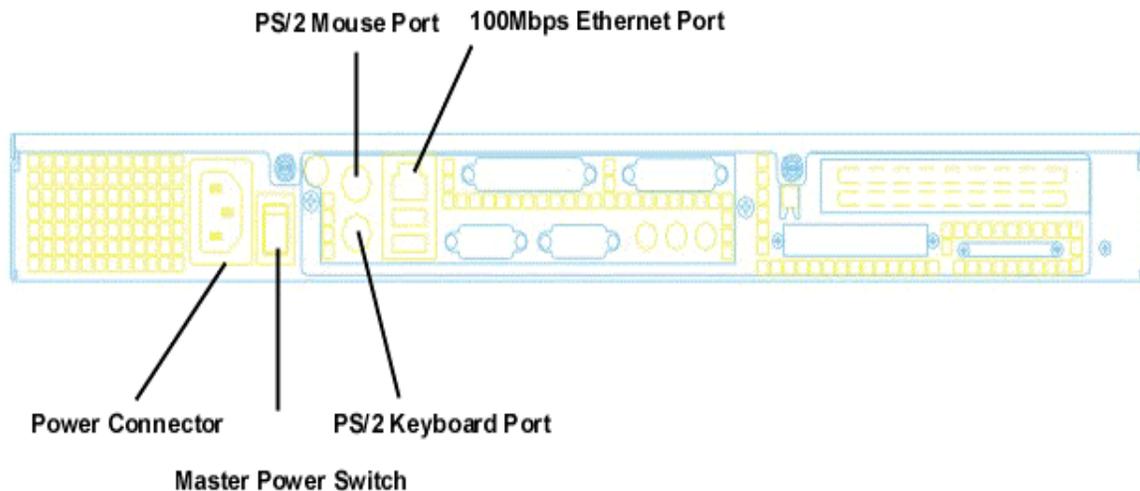
## System Diagram



Cserver1180 / 1125 consist of two removable EIDE hard disk trays, a 24x CDROM reader and a 1.44MB floppy drive. The removable EIDE hard disk tray can be pullout during power-on operation. This feature is called hot-swap. There are two reset-switches below the HDD1 and HDD2 label. The reset-switches are for RAID-1 controller's hard disk failure alarm and system reset. There is a server on/off switch control located on the front panel of the unit. Please keep in mind that the front on/off switch is useless, if the rear "master power switch" is not turned on.

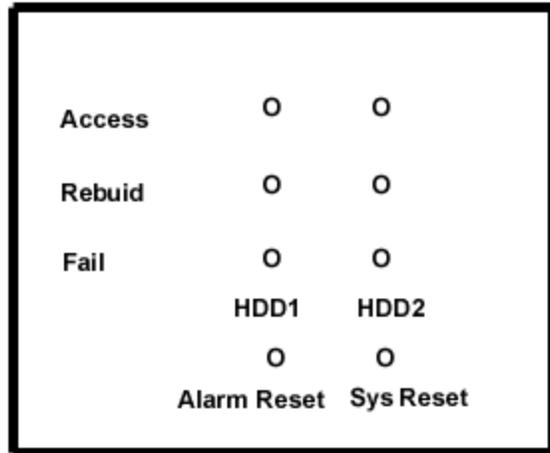
At the back (rear) of the unit, there is a master power switch for the power supply unit. In addition, there are PS2/mouse, PS/2 keyboard, 100Mbps Ethernet and video ports located at the back of the server unit.

## Cserver 1125 Rear View



## Cserver 1180 / 1125 Front Indicate Lights

### C1180 / 1125



**Access** – The system hard disk HDD1 or HDD2 is accessing data (Reading/Writing)

**Rebuild**– Initial disk rebuild process. The rebuild light shows that either a brand new hard disk has been inserted or the data stored in HDD1 or HDD2 is inconsistent.

**Fail** – The fail light indicates that the RAID-1 controller has marked one of the hard disk as “bad” or “failed”. However, this does not necessary indicate a “bad” or “failed” hard disk. If this happens, you will need to use hard disk low-level formatting software supplied by the hard disk manufacturer(s) to wipe out the “bad/failed disk” information written on the outer sector of the disk.

**HDD1 / HDD2** – Shows the status of hard disk trays.

**Alarm Reset**– The alarm reset button turn-off the internal RAID-1 alarm when one of the hard disk failed.

**Sys Reset**– This is the system-reset button.

## Basic Operation

Cserver1180/1125 has a built-in hardware RAID-1 controller. After powering on the unit, the RAID-1 controller will automatically mirror both DISK 1 and DISK 2 hard disks and checking for data consistency. The mirroring process will take few hours depending on the size of the installed IDE hard disks. During the initial disk mirroring (initial disk rebuild) process, you may install any of your favorite operating system. You will see the “Rebuild” indicator lights up during the initial disk mirroring process.

During the initial disk rebuild process, you may:

- ?? Install operating system(s)
- ?? Install software drivers for your O.S.
- ?? Format the disk (you will only see one hard disk in your formatting utility)
- ?? Reset or soft reboot the server during the software installation

During the initial disk rebuild process, you may not:

- ?? Pull-out any of the removable hard disk tray from the server bay
- ?? Shut-down the server unit



### **WARNING:**

Note: Shut-down the server unit during the initial disk build process will force the RAID-1 controller to mark the system disks as “bad” or “failed” units. If this happens, you will need to use the hard disk low-level formatting software supplied by the hard disk manufacturer(s) to wipe out the “bad/failed disk” data written on the outer sector of the disk.

After the unit successfully synchronized (sync) both IDE hard disks, you may:

- ?? Only pullout ONE of the removable hard disk trays from the server bay. After pulling out the removable hard disk trays and re-insert the removable hard disk trays into the bay, the “Rebuilt” indicate light will turn on. You must wait few hours until the “Rebuilt” light is off, before pullout any of the hard disk trays from the server bays.
- ?? Re-install Operation System
- ?? Powering down the unit



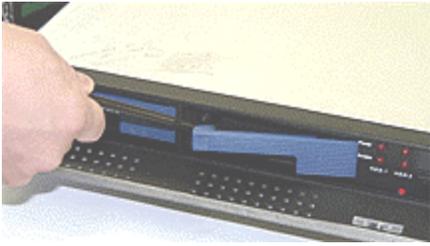
### **WARNING:**

Note: Pulling-out any of the removable hard disk trays from the server bay will force the RAID-1 controller to rebuild the disk (Mirroring) on the tray. At this point, if attempt to pull-out a second hard disk tray from the server bay, the entire server will crash and render both disks as “failed” or “bad” disks. If this happens, you will need to use the hard disk low-level formatting software supplied by the hard disk manufacturer(s) to wipe out the “bad/failed disk” data written on the outer sector of the disk.

## Removing hard disk tray from the server drive bay



1. Use a pen to pullout (fish-out) the disk tray handle bar.



2. Slowly lift the handle bar out of the drive bay.



3. Grab the disk tray handle bar and pullout the disk unit out of the drive bay. Done.

## Insert hard disk tray into the server bay



1. Slowly slide the hard disk tray into the server's drive bay. Grab the handle bar and slowly insert the hard disk tray unit into the server drive bay.



2. Use thumb to push the handle bar into the bay until the tray is firmly seated.



3. Done

## Basic Troubleshooting

The following guide is for reference purpose only. Contact a PCW Technical Support Representative for additional help.

Symptoms	Possible Cause(s)	Solution
Both HDD1 / HDD2 "Fail" indicate lights are on and the server unit is beeping.	You might have accidentally pullout both HDD1 tray and HDD2 tray, without given adequate time for the RAID-1 controller to rebuild the disk(s).	You will need hard disk low-level formatting software supplied by the hard disk manufacturer(s) to wipe out the "bad/failed disk" data written on the outer sectors of the disk.
One of the hard disk's "Fail" indicates light is on and the server unit is beeping.	One of the hard disk might have failed.	Replace the defective hard disk with a brand new hard disk. The size of the new hard disk must be equal or larger than the original hard disk size.
The "Rebuild" indicates light is always on for hours.	One of the hard disk is not synchronized with the other due to recent hard disk tray pullout or server power outages.	Wait for up to 24 hours for the server to rebuild the hard disks.
The server cannot detect the hard disk.	The hard disk removable tray(s) might not have been firmly inserted into the drive bay.	Push the hard disk removable tray back into the drive bay again until it is firmly secured.
One of the server hard disk showed "Fail". Is this really a defective drive?	You might have accidentally pullout the hard disk tray repeatedly from the drive bay while the server was under the "Rebuild" mode.	You need to download software such as IBM's Drive Fitness Test (Version 3.0) or Disk Manager to wipe out the data on the hard disk. <a href="http://www.ibm.com">http://www.ibm.com</a> or <a href="http://www.wdc.com">http://www.wdc.com</a>
I installed a new IBM IDE hard disk, but the server cannot detect the hard disk(s).	One of the hard disk is not properly setup as the "default master".	Please set up both hard disks on the removable trays to "factory default master" setting.
I powered up the server. But, after few minutes the unit rebooted for no reason.	The power supply's 115V/220V switch located inside the unit was incorrectly set.	Need to call PCW Microsystems for support.