

PoINT Software & Systems GmbH

PoINT Publisher 7.0 SP3 System Requirements

Minimum System Requirements

The following hardware and software is basically required:

- PC with Intel Pentium processor or any compatible processor.
- A CD-ROM drive for installation.
- Microsoft Windows 2000 with Service Pack 3 or above, or Windows Server 2003, or Windows XP with Service Pack 1 or above, or Windows Vista.
- Required SCSI adapters shall be PCI bus-master adapters like Adaptec AHA-2940.
- On Microsoft Windows 2000, Windows Server 2003, or Windows XP, the recorders may be connected via a FireWire (IEEE 1394) link or an USB 2.0 link instead of SCSI.
- A supported autoloader, with or without CD/DVD printer or a number of supported single CD/DVD recorders (tower), preferably of the same type and with the same firmware revision.

Please note:

Running other CD and DVD recording software in parallel to PoINT Publisher may cause initialisation and recording errors. In some cases, other CD and DVD recording software replace standard system components by incompatible versions at installation time. This may cause permanent failures of PoINT Publisher.

Modern recorders support BURN-Proof technology (Buffer UnderRun), i.e. they are able to write perfect discs even if they must interrupt recording because they are not supplied with data in time. Such interruptions lead to longer total recording times.

If BURN-Proof mode is switched off, PoINT Publisher - Server uses a conservative algorithm based on the performance measurements (performance profile) to determine how many recorders may operate simultaneously without buffer underrun. If the system's performance is not sufficient this can cause some recorders to wait until busy recorders get idle ("hard disk overload").

IMPORTANT:

When operating more than one autoloader you should NOT switch off the Burn-Proof mode, because the throughput monitoring is not done across the instances of PoINT Publisher - Server.

The primary limiting factor is the speed of the hard disks from which the data are transferred to the recorders, but also the transfer speed of data in main memory determined by RAM and processor (CPU).

If the recorders are operated in BURN-Proof mode and if occasional buffer underruns are tolerated, the values of the table below can be used to define the properties of the required system.

The table shows approximate values for recording one disc image on several recorders. In practice the throughput requirement may be 10% less. If different disc images are written, the throughput values may be 20% higher than the indicated values.

In case of recording speeds above CD32X and DVD8X, the recorders do no more write without interrupts. Therefore, the effective average speed is 10% lower. So, with such configurations, when using BURN-Proof mode, the hard disk throughput may be 10% lower than specified.

Notice that though recording on low performance systems is possible with BURN-Proof mode, it is not very efficient to have more recorders working in parallel than the rest of the computer is able to provide data for. So, to save time by writing on several recorders in parallel your system components should approximately fulfil the indicated values even when using BURN-Proof recorders.

The table shows the requirements for processor, RAM, and hard disks related to various recording speeds and different numbers of recorders working simultaneously. For hard disks, maximum average seek time and minimum sequential throughput are specified.

For configurations with up to 5 recorders writing DVD 12x, or up to 4 recorders writing DVD 16x, EDO RAM is sufficient, for 6 recorders writing DVD 12x or 5 recorders writing at DVD 16x or above, a 3.2 GHz CPU and DDR SDRAM is required.

Hard disk average seek time : 9.0 ms			
Speed	Number of recorders	Processor / RAM	Hard disk throughput
CD 32x	2	400 MHz / EDO	7500 KB/sec.
CD 32x	4	466 MHz / EDO	15000 KB/sec.
CD 32x	6	600 MHz / EDO	22700 KB/sec.
CD 32x	8	744 MHz / EDO	30600 KB/sec
CD 40x	2	400 MHz / EDO	9300 KB/sec.
CD 40x	4	533 MHz / EDO	18900 KB/sec.
CD 40x	6	733 MHz / EDO	28600 KB/sec.
CD 40x	8	1.0 GHz / EDO	38600 KB/sec.
CD 48x	2	400 MHz / EDO	11200 KB/sec.
CD 48x	4	600 MHz / EDO	22700 KB/sec.
CD 48x	6	800 MHz / EDO	34600 KB/sec.
CD 48x	8	1.0 GHz / EDO	46800 KB/sec.
CD 52x	2	400 MHz / EDO	12200 KB/sec.
CD 52x	4	733 MHz / EDO	24700 KB/sec.
CD 52x	6	1.0 GHz / EDO	37600 KB/sec.
CD 52x	8	1.2 GHz / EDO	51000 KB/sec.

Hard disk average seek time : 9.0 ms			
Speed	Number of recorders	Processor / RAM	Hard disk throughput
DVD 4x	2	466 MHz / EDO	11100 KB/sec.
DVD 4x	4	733 MHz / EDO	22500 KB/sec.
DVD 4x	6	1.0 GHz / EDO	34300 KB/sec.
DVD 4x	8	1.2 GHz / EDO	46300 KB/sec.
DVD 8x	2	733 MHz / EDO	22500 KB/sec.
DVD 8x	4	1.2 GHz / EDO	46300 KB/sec.
DVD 8x	6	1.6 GHz / EDO	71600 KB/sec.
DVD 8x	8	2.0 GHz / EDO	98500 KB/sec.
DVD 12x	2	1.0 GHz / EDO	34300 KB/sec.
DVD 12x	4	1.6 GHz / EDO	71600 KB/sec.
DVD 12x	6	3.2 GHz / DDR	112500 KB/sec.
DVD 12x	8	3.2 GHz / DDR	157600 KB/sec.
DVD 16x	2	1.2 GHz / EDO	46300 KB/sec.
DVD 16x	4	2.0 GHz / EDO	98500 KB/sec.
DVD 16x	6	3.2 GHz / DDR	157600 KB/sec.
DVD 16x	8	3.2 GHz / DDR	225400 KB/sec.

Hard disk average seek time : 9.0 ms			
Speed	Number of recorders	Processor / RAM	Hard disk throughput
BD 1x	2	466 MHz / EDO	11100 KB/sec.
BD 1x	4	733 MHz / EDO	22500 KB/sec.
BD 1x	6	1.0 GHz / EDO	34300 KB/sec.
BD 1x	8	1.2 GHz / EDO	46300 KB/sec
BD 2x	2	733 MHz / EDO	22500 KB/sec.
BD 2x	4	1.2 GHz / EDO	46300 KB/sec.
BD 2x	6	1.6 GHz / EDO	71600 KB/sec.
BD 2x	8	2.0 GHz / EDO	98500 KB/sec.

Hard disk average seek time : 8.0 ms			
Speed	Number of recorders	Processor / RAM	Hard disk throughput
CD 32x	2	400 MHz / EDO	7500 KB/sec.
CD 32x	4	466 MHz / EDO	15000 KB/sec.
CD 32x	6	600 MHz / EDO	22700 KB/sec.
CD 32x	8	733 MHz / EDO	30500 KB/sec
CD 40x	2	400 MHz / EDO	9300 KB/sec.
CD 40x	4	533 MHz / EDO	18800 KB/sec.
CD 40x	6	733 MHz / EDO	28500 KB/sec.
CD 40x	8	1.0 GHz / EDO	38500 KB/sec.
CD 48x	2	400 MHz / EDO	11200 KB/sec.
CD 48x	4	600 MHz / EDO	22700 KB/sec.
CD 48x	6	800 MHz / EDO	34500 KB/sec.
CD 48x	8	1.0 GHz / EDO	46600 KB/sec.
CD 52x	2	400 MHz / EDO	12200 KB/sec.
CD 52x	4	733 MHz / EDO	24600 KB/sec.
CD 52x	6	1.0 GHz / EDO	37500 KB/sec.
CD 52x	8	1.2 GHz / EDO	50700 KB/sec.

Hard disk average seek time : 8.0 ms			
Speed	Number of recorders	Processor / RAM	Hard disk throughput
DVD 4x	2	466 MHz / EDO	11100 KB/sec.
DVD 4x	4	733 MHz / EDO	22500 KB/sec.
DVD 4x	6	1.0 GHz / EDO	34100 KB/sec.
DVD 4x	8	1.2 GHz / EDO	46100 KB/sec.
DVD 8x	2	733 MHz / EDO	22500 KB/sec.
DVD 8x	4	1.2 GHz / EDO	46100 KB/sec.
DVD 8x	6	1.6 GHz / EDO	71100 KB/sec.
DVD 8x	8	2.0 GHz / EDO	97500 KB/sec.
DVD 12x	2	1.0 GHz / EDO	34100 KB/sec.
DVD 12x	4	1.6 GHz / EDO	71100 KB/sec.
DVD 12x	6	3.2 GHz / DDR	111300 KB/sec.
DVD 12x	8	3.2 GHz / DDR	155300 KB/sec.
DVD 16x	2	1.2 GHz / EDO	46100 KB/sec.
DVD 16x	4	2.0 GHz / EDO	97500 KB/sec.
DVD 16x	6	3.2 GHz / DDR	155300 KB/sec.
DVD 16x	8	3.2 GHz / DDR	220500 KB/sec.

Hard disk average seek time : 8.0 ms			
Speed	Number of recorders	Processor / RAM	Hard disk throughput
BD 1x	2	466 MHz / EDO	11100 KB/sec.
BD 1x	4	733 MHz / EDO	22500 KB/sec.
BD 1x	6	1.0 GHz / EDO	34100 KB/sec.
BD 1x	8	1.2 GHz / EDO	46100 KB/sec
BD 2x	2	733 MHz / EDO	22500 KB/sec.
BD 2x	4	1.2 GHz / EDO	46100 KB/sec.
BD 2x	6	1.6 GHz / EDO	71100 KB/sec.
BD 2x	8	2.0 GHz / EDO	97500 KB/sec.

Hard disk average seek time : 5.0 ms			
Speed	Number of recorders	Processor / RAM	Hard disk throughput
CD 32x	2	400 MHz / EDO	7500 KB/sec.
CD 32x	4	466 MHz / EDO	14900 KB/sec.
CD 32x	6	600 MHz / EDO	22500 KB/sec.
CD 32x	8	733 MHz / EDO	30100 KB/sec
CD 40x	2	400 MHz / EDO	9300 KB/sec.
CD 40x	4	533 MHz / EDO	18700 KB/sec.
CD 40x	6	733 MHz / EDO	28200 KB/sec.
CD 40x	8	1.0 GHz / EDO	37900 KB/sec.
CD 48x	2	400 MHz / EDO	11200 KB/sec.
CD 48x	4	600 MHz / EDO	22500 KB/sec.
CD 48x	6	800 MHz / EDO	34000 KB/sec.
CD 48x	8	1.0 GHz / EDO	45700 KB/sec.
CD 52x	2	400 MHz / EDO	12100 KB/sec.
CD 52x	4	733 MHz / EDO	24400 KB/sec.
CD 52x	6	1.0 GHz / EDO	36900 KB/sec.
CD 52x	8	1.2 GHz / EDO	49700 KB/sec.

Hard disk average seek time : 5.0 ms			
Speed	Number of recorders	Processor / RAM	Hard disk throughput
DVD 4x	2	466 MHz / EDO	11100 KB/sec.
DVD 4x	4	733 MHz / EDO	22300 KB/sec.
DVD 4x	6	1.0 GHz / EDO	33700 KB/sec.
DVD 4x	8	1.2 GHz / EDO	45300 KB/sec.
DVD 8x	2	733 MHz / EDO	22300 KB/sec.
DVD 8x	4	1.2 GHz / EDO	45300 KB/sec.
DVD 8x	6	1.6 GHz / EDO	69100 KB/sec.
DVD 8x	8	2.0 GHz / EDO	93800 KB/sec.
DVD 12x	2	1.0 GHz / EDO	33700 KB/sec.
DVD 12x	4	1.6 GHz / EDO	69100 KB/sec.
DVD 12x	6	3.2 GHz / DDR	106500 KB/sec.
DVD 12x	8	3.2 GHz / DDR	146000 KB/sec.
DVD 16x	2	1.2 GHz / EDO	45300 KB/sec.
DVD 16x	4	2.0 GHz / EDO	93800 KB/sec.
DVD 16x	6	3.2 GHz / DDR	146000 KB/sec.
DVD 16x	8	3.2 GHz / DDR	202400 KB/sec.

Hard disk average seek time : 5.0 ms			
Speed	Number of recorders	Processor / RAM	Hard disk throughput
BD 1x	2	466 MHz / EDO	11100 KB/sec.
BD 1x	4	733 MHz / EDO	22300 KB/sec.
BD 1x	6	1.0 GHz / EDO	33700 KB/sec.
BD 1x	8	1.2 GHz / EDO	45300 KB/sec
BD 2x	2	733 MHz / EDO	22300 KB/sec.
BD 2x	4	1.2 GHz / EDO	45300 KB/sec.
BD 2x	6	1.6 GHz / EDO	69100 KB/sec.
BD 2x	8	2.0 GHz / EDO	93800 KB/sec.

Hard disk average seek time : 3.5 ms			
Speed	Number of recorders	Processor / RAM	Hard disk throughput
CD 32x	2	400 MHz / EDO	7400 KB/sec.
CD 32x	4	466 MHz / EDO	14900 KB/sec.
CD 32x	6	600 MHz / EDO	22400 KB/sec.
CD 32x	8	733 MHz / EDO	29900 KB/sec
CD 40x	2	400 MHz / EDO	9300 KB/sec.
CD 40x	4	533 MHz / EDO	18600 KB/sec.
CD 40x	6	733 MHz / EDO	28000 KB/sec.
CD 40x	8	1.0 GHz / EDO	37500 KB/sec.
CD 48x	2	400 MHz / EDO	11100 KB/sec.
CD 48x	4	600 MHz / EDO	22400 KB/sec.
CD 48x	6	800 MHz / EDO	33700 KB/sec.
CD 48x	8	1.0 GHz / EDO	45200 KB/sec.
CD 52x	2	400 MHz / EDO	12100 KB/sec.
CD 52x	4	733 MHz / EDO	24200 KB/sec.
CD 52x	6	1.0 GHz / EDO	36600 KB/sec.
CD 52x	8	1.2 GHz / EDO	49100 KB/sec.

Hard disk average seek time : 3.5 ms			
Speed	Number of recorders	Processor / RAM	Hard disk throughput
DVD 4x	2	466 MHz / EDO	11000 KB/sec.
DVD 4x	4	733 MHz / EDO	22100 KB/sec.
DVD 4x	6	1.0 GHz / EDO	33400 KB/sec.
DVD 4x	8	1.2 GHz / EDO	44800 KB/sec.
DVD 8x	2	733 MHz / EDO	22100 KB/sec.
DVD 8x	4	1.2 GHz / EDO	44800 KB/sec.
DVD 8x	6	1.6 GHz / EDO	68000 KB/sec.
DVD 8x	8	2.0 GHz / EDO	91700 KB/sec.
DVD 12x	2	1.0 GHz / EDO	33400 KB/sec.
DVD 12x	4	1.6 GHz / EDO	68000 KB/sec.
DVD 12x	6	3.2 GHz / DDR	103800 KB/sec.
DVD 12x	8	3.2 GHz / DDR	141000 KB/sec.
DVD 16x	2	1.2 GHz / EDO	44800 KB/sec.
DVD 16x	4	2.0 GHz / EDO	91700 KB/sec.
DVD 16x	6	3.2 GHz / DDR	141000 KB/sec.
DVD 16x	8	3.2 GHz / DDR	192900 KB/sec.

Hard disk average seek time : 3.5 ms			
Speed	Number of recorders	Processor / RAM	Hard disk throughput
BD 1x	2	466 MHz / EDO	11000 KB/sec.
BD 1x	4	733 MHz / EDO	22100 KB/sec.
BD 1x	6	1.0 GHz / EDO	33400 KB/sec.
BD 1x	8	1.2 GHz / EDO	44800 KB/sec
BD 2x	2	733 MHz / EDO	22100 KB/sec.
BD 2x	4	1.2 GHz / EDO	44800 KB/sec.
BD 2x	6	1.6 GHz / EDO	68000 KB/sec.
BD 2x	8	2.0 GHz / EDO	91700 KB/sec.

Notes:

- In case that the hard disk is not exclusively used for recording (e.g. it contains the operating system), the specified value shall be increased by 800KB/sec.
- In case that hard disks are connected to PIO (in contrast to DMA) mode host adapters (e.g. IDE controllers), the minimum sequential throughput shall be twice as high as specified, and the CPU speed shall be twice as high as specified. This requirement shall be seen in addition to the note(s) above.
- In case that a high speed recording device (8x or more) is connected to a PIO (in contrast to DMA) mode host adapter (e.g. IDE controllers), the CPU speed shall be twice as high as specified. This requirement shall be seen in addition to the note(s) above.
- In case that several recording devices are connected to the PC via IDE, each device must use a separate channel and must use DMA mode. PIO mode host adapters should not be used with configurations of more than two recorders.