

DICOM Correction Item

Correction Number	CP-641
Log Summary: Revise add support for 80 min CD-R (CP 547)	
Type of Modification	Name of Standard
Correction	PS 3.12 – 2004 + CP 547
Rationale for Correction	
<p>CP 547 introduced the larger format (80m – 700MB) CD-R format. It was assuming that the capacity was increased by using a different, less reliable sector format (Mode 2 Form 2).</p> <p>In fact the capacity is not enlarged by a different record format but the size of the pregrooved spiral track provided by the manufacturer of the empty medium.</p> <p>The Mode 2 Form 2 sector format is not required and can be removed, leaving a note explaining the low reliability of this format.</p> <p>A new note that explains the different sizes is added.</p>	
Sections of documents affected	
PS 3.12 Section F.2.1.1	
Correction Wording:	

F.2.1.1 SECTOR FORMAT

All DICOM files and all data that comprise the ISO 9660 file system of the DICOM CD-R disc shall be stored either:

- within Mode 1 sectors, or
- within Mode 2, Form 1 ~~or 2~~ sectors with CD-ROM-XA File Number = 0, Channel Number = 0 and Coding Information Byte = 0.

Notes 1. The physical storage capacity of a CD-R disc can be 74 minutes (630 MB) or 80 minutes (700 MB) when using the Mode 1 or Mode 2 Form 1 format. The capacity is fixed by the pregrooved spiral track present on a blank CD-R. Some older CD players will not be able to read the 80 min capacity CD-R discs.

Note: ~~Earlier versions of t2. The DICOM standard prohibiteds the use of Mode 2 Form 2 sectors. These sectors are used to record data on CD-Rs that exceed 74 minute capacity (approximately 630MB) and can also be used for smaller capacity CD-Rs. Some very old equipment may be unable to read CD-Rs recorded with Mode 2, Form 2 sectors. The ability to read this format is determined by both the hardware in the CDROM reader itself and the operating system device drivers. CD-ROM-XA Mode 2 Form 2 sectors do not have sector level error correction. This significantly decreases the reliability of the media and significantly increases the likelihood of data corruption.~~

It now reads (remove after review):

Notes 1. The physical storage capacity of a CD-R disc can be 74 minutes (630 MB) or 80 minutes (700 MB) when using the Mode 1 or Mode 2 Form 1 format. The capacity is fixed by the pregrooved spiral track present on a blank CD-R. Some older CD players will not be able to read the 80 min capacity CD-R discs.

2. The DICOM standard prohibits the use of Mode 2 Form 2 sectors. This format is used to record data on CD-Rs that exceed 74 minute capacity and can also be used for smaller capacity CD-Rs. CD-ROM-XA Mode 2 Form 2 sectors do not have sector level error correction. This significantly decreases the reliability of the media and significantly increases the likelihood of data corruption.