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Bug fix: Instructions when Switching CD Subsystem Motor Rotation Speed

It was turned out that special instructions need to be followed upon switching PlayStation CD subsystem rotation speeds(standard/double). Please make sure to follow these instructions since this problem has great possibilities to become the field complains at worst.

Symptom: Issuing the CD head move commands (CdISeekL/P, CdIReadS/N) immediately after switching the CD transfer speed may result in the head runaway and producing a strange noise.

This symptom is caused because there exist a timing where the head cannot be controlled properly after switching the transfer speed during the CD subsystem operation.

If a command related to the CD head movement is issued during this timing, at worst, the head runaways and then stops after it comes into collision with the mechanical stopper. When this symptom arises, the head control mechanism will be recovered by the CD subsystem, and thus the program will not be terminated.

When the head comes into collision with the stopper, the safety mechanism will be started, and thus the parts will not be destroyed. However, a strange noise will be produced upon starting the safety mechanism, and this may be reported as a field complaints.

Currently available CD head move functions/commands are as follows;

```
CdRead(int sectors, u_long *buf, int mode)
CdRead2(long mode)
CdSearchFile(CdIFILE *fp, char *name)
CdReadFile(char *file, u_long *addr, int nbyte)
CdReadExec(char *file)
CdPlay(int mode, int *tracks, int offset)

CdISeekP
CdISeekL
CdIReadS
CdIReadN
CdIPlay
```

When calling/issuing the above functions/commands after switching the rotation speed, make sure to follow the instructions below to avoid field complains.

Remedies: Allow more than 3 vsync spacing before issuing a CD head movement command after switching the CD transfer speed.

Example:

```
      :  
      com = CdIModeSpeed;  
      CdControl( CdISetmode, &com, 0 );  
      :  
      :  
      /* Allow more than 3 vsync spacing */  
      /* by VSync( 3 ); for example */  
      :  
      :  
      ret1 = CdControl( CdISeekL, &pos, result );  
      ret2 = CdControl( CdIReadN, &pos, result );  
      :
```

With above, the timing of improper head control can be avoided.

The same problem will be encountered when the transfer speed is switched by arguments for the function below.

Thus avoid switching the speed by arguments. Instead, allow more than 3 vsync spacing prior to changing the transfer speed.

```
CdRead(int sectors, u_long *buf, int mode)  
CdRead2(long mode)
```

NOTICE: Following functions sets the transfer speed of CD subsystem to STANDARD.

```
CdInit(void)  
CdReset(int mode)
```