

Date: [January 14, 2004](#)  
To: T10 Technical Committee  
From: Alvin Cox (alvin.cox@seagate.com)  
Subject: SAS 1.1 READY LED signal behavior

The following proposed change to 10.4.1 adds information back into the READY LED pattern description that was deleted when the second behavior description was added. Devices with rotating media may not be mechanically safe for removal if the media is rotating. A statement explaining that when the READY LED MEANING bit is set to zero, the resulting READY LED signal behavior for a device with rotating media provides an indication of the device's readiness for removal when the LED will be primarily off. Reference T10/02-446r1.

#### 10.4.1 READY LED pin

*Add the following paragraph between the existing text and Table 141:*

If the target device has rotating media, the READY LED MEANING bit set to zero results in a READY LED signal behavior that provides an indication of the device's readiness for removal. A target device with rotating media that is not in a state for safe removal shall either flash the LED at a significant rate during spin up / spin down / format, or have the LED on. When removal is safe from a mechanical standpoint, the LED shall be off.

Update proposal-

Add in left mode bit = 0 column, "standby or stopped" row, add:

**~~After the LED signal has been negated a vendor specific amount of time in this state, SAS target device with rotating media may be removed with minimum minimizing the risk with no danger of mechanical or electrical damage.~~**