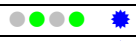
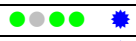
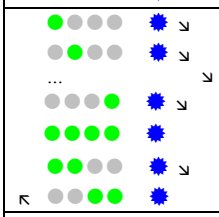
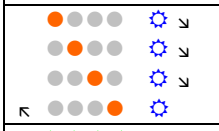
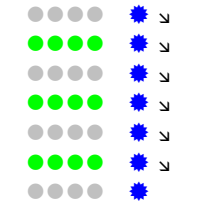
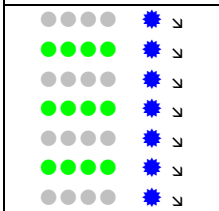
ReadyNAS LED Language (*)

(*) Applies to Rev A ReadyNAS X6/600/1000S

Legend:

- LED off
- LED on
- Power LED fast blinking
- Power or disk LED slow blinking
- Power LED pulsating
- Disk LED blinking occasionally or constantly

Pattern	Description
	Only fan spinning, BIOS fails to boot, re-seat EPROM if it is seated in a socket
	Normal BIOS boot, this stage should not last for longer than 1 minute. Otherwise, try re-seat DIMM or replace DIMM. If it still does not work, Raw-write OS image to CF (When Raw-write CF, please note that older than 2.00c1-p5 images and newer than 2.00c1-p6 images are not compatible)
	DIMM fails SPD check, re-seat DIMM or replace DIMM
	DIMM fails memory access test, re-seat DIMM or replace DIMM
	Boot loader fails to locate valid RAIDiator image, Raw-write CF shall solve the problem, otherwise, CF socket and DIMM are in question.
	TFTP boot request, Server should be at 192.168.125.1 and provide kernel_conf and initrd_conf. (For Rev A systems, Raw-write is more straightforward way for recovery, although they can boot off TFTP server, they can not use same TFTP package as Rev B systems)
	TFTP boot request, Server should be at 192.168.125.1 and provide kernel_init and initrd_init.
	Ethernet PHY fails to link, please double check network cable and switches/Routers are good.
	Memory test ongoing, Disk LEDs indicate pattern number is under testing. Memory test is triggered by press Power switch for 25 seconds(5th all disk LED blink) Memory test finishes without error, press power button to reboot or re-do test again if needed. Memory test failed, Re-seat memory or replace memory.
	ReadyNAS OS is booting, this stage should not last for more than 3 minutes. Otherwise, one of disk may be bad or incompatible. SATA backplane/Cable is the next to be questioned, and then DIMM.
	ReadyNAS OS continues to boot, RAID engine successfully started. Disk LED shall blink frequently in this stage, otherwise, there may be something wrong with disks. This stage lasts for about 2 minutes if volume scan is not invoked. Volume scan may take up to hours. (Disk LEDs are not necessary to blink at same time)
	RAIDiator image does not match NAS platform, contact tech support to convert OEM NAS to ReadyNAS.
	No disks detected, please choose disks from hardware compatible list.
	Corrupted, do not mix used disks and cold boot up. In most cases, problem may be solved by OS reinstall with optional CF recovery. Contact tech support before taking actions.
	OS image on CF is corrupted, please Raw-write CF
	[FIXME: Rev A Expansion pattern?] Volume expansion ongoing, it takes from less than half hour up to half day depends on existing volume and new volume size. ACT LED should be blinking often during expansion, if no ACT LED blinking for long period, there might be something wrong with disks.
	Boot finishes, normal operating mode. Disk LEDs indicate corresponding disk is being accessed. (Disk LEDs are not necessary to blink at same time, sometimes, they are all off which indicates system is in idle state)
	Disk 2 is bad or under resync. [FIXME: Power LED blinks?]
	Factory switch pressed while power on 1st Blink at 5th second: OS reinstall (All blinks below actually last for 2 seconds so you will not miss it) Release switch as soon as you see 1st blink for OS reinstall 2nd Blink at 30th second: Factory Reset All data will be wiped out! 3rd Blink at 50th second: TFTP recovery(System will start to boot at 53rd second even you keep pressing factory switch) Setup TFTP server at 192.168.125.1 with kernel_init, initrd_init and recovery images
	Power switch pressed while power on 1st Blink at 5th second: Factory boot option, do not use 2nd Blink at 10th second: TFTP Boot Setup TFTP server at 192.168.125.1 with kernel_conf, initrd_conf and service files 3rd Blink at 15th second: Factory boot option, do not use(Please press front power button to gracefully shutdown and reboot NAS if you run into it by mistake) 4th Blink at 20th second: USB Boot Use Raw-writer service images from tech support. 5th Blink at 25th second: Memory test See above memory test LED patterns for test progress and result readings. 6th Blink at 50th second: TFTP recovery (System will start to boot at 53rd second even you keep pressing power switch) Setup TFTP server at 192.168.125.1 with kernel_init, initrd_init and recovery images