

# Buffalo LS-WVL

Buffalo LS-WVL

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# LS-WVL ?? Debian12

????

- initrd.buffalo
- ulmage.buffalo
- acp\_commander.jar

## 1.acp\_commander??

■■■■■■■■■■ Buffalo ■ LS WVL■■

■ initrd.buffalo ■ ulmage.buffalo■■■ acp\_commander.jar■■■

■■■■■■■■ IP

```
java -jar acp_commander.jar -f
```

■■■■■■■■

```
java -jar acp_commander.jar -t <device ip address> -pw <your admin password> -xfer  
initrd.buffalo -xferto /boot/  
java -jar acp_commander.jar -t <device ip address> -pw <your admin password> -xfer  
uImage.buffalo -xferto /boot/
```

■■■■

```
java -jar acp_commander.jar -t <device ip address> -pw <your admin password> -c reboot
```

## 2.????

■■■■ Linux■■■■■■■■

```
$parted /dev/sdb  
  
(parted) mklabel gpt  
  
(parted) mkpart boot 2048s 1024MiB  
  
(parted) mkpart root 1024MiB 6144MiB
```

```
(parted)quit
```

```
$mkfs.ext3 /dev/sdb1
```

```
$mount /dev/sdb1 /mnt
```

```
cp /mnt/
```

```
$umount /mnt
```

##### **NAS**#####

????

##### **IP**##### **SSH**##### ##### **installer**##### **install**

```
ssh installer@IP
```

??**RAID 1**

##### **1(RIAD)**##### **2(RAID)**##### **3 SWAP**

##### **SoftRAID**##### **shell**

##### **/boot**##### **metadata=0.90**#####

```
# mdadm --create /dev/md0 --level=1 --raid-devices=2 \
--metadata=0 /dev/sda1 /dev/sdb1
```

##### **GUI**#####

**RAID1 #1**##### **ext3**##### **/boot**

**RAID1 #2**##### **ext4**##### **/**

**SWAP**##### **RAID 1**

##### **RAID**##### **Debian**#####

```
# echo 100 > /sys/block/md{1,2,3}/md/sync_speed_max
```

#####

mdadm

01:00 array scrubbing

```
jason@LS-WVL885:~$ cat /usr/lib/systemd/system/mdcheck_start.timer
```

```
[Unit]
```

```
Description=MD array scrubbing
```

```
[Timer]
```

```
OnCalendar=Sun *-*-1..7 1:00:00
```

```
[Install]
```

```
WantedBy= mdmonitor.service
```

```
Also= mdcheck_continue.timer
```

**[https://github.com/1000001101000/Debian\\_on\\_Buffalo](https://github.com/1000001101000/Debian_on_Buffalo)**

# LS-WVL Debian ?????

## Triggerhappy ??

```
apt install triggerhappy
```

■■■

```
thd --dump /dev/input/event*
```

■■■■■

```
echo "SW_LID 0 poweroff" > /etc/triggerhappy/triggers.d/gpf.conf
```

```
■ /lib/systemd/system/triggerhappy.service ■ ExecStart user■ nobody■ root
■■■■■■■ poweroff
```

```
ExecStart=/usr/sbin/thd --triggers /etc/triggerhappy/triggers.d/ --socket /run/thd.socket --
user root --deviceglob /dev/input/event*
```

■■■■■

```
systemctl daemon-reload
systemctl restart triggerhappy
```

■■■■■■■

## ????

```
■■■ /sys/class/thermal/cooling_device0/cur_state
```

```
CPU■ /sys/class/thermal/thermal_zone0/temp
```

```
■ smartmontools
```

```
apt install smartmontools
```

```
■■■ /usr/sbin/smartctl -a -d ata /dev/sda | grep -m 1 Temperature | awk '{print $10}'
```

■■■■■■■

```
#!/bin/bash
timestamp=$(date "+%Y-%m-%d %H:%M:%S")
# CPU
cpu_temp=$(cat /sys/class/thermal/thermal_zone0/temp)
cpu_temp=$(( cpu_temp / 1000 ))

# 
hdd_temp=$(cat /usr/sbin/smartctl -a -d ata /dev/sda | grep -m 1 Temperature | awk '{print $10}')

echo "[${timestamp}] CPU Temperature: ${cpu_temp}C"
echo "[${timestamp}] HDD Temperature: ${hdd_temp}C"

# cpu
if [ "$cpu_temp" -gt 60 ]; then
    echo 0 > /sys/class/thermal/cooling_device0/cur_state
elif [ "$cpu_temp" -gt 55 ]; then
    echo 1 > /sys/class/thermal/cooling_device0/cur_state
elif [ "$cpu_temp" -gt 50 ]; then
    echo 2 > /sys/class/thermal/cooling_device0/cur_state
elif [ "$cpu_temp" -lt 50 ]; then
    echo 3 > /sys/class/thermal/cooling_device0/cur_state
fi

# HDD
if [ "$hdd_temp" -gt 45 ]; then
    echo 0 > /sys/class/thermal/cooling_device0/cur_state
elif [ "$hdd_temp" -gt 40 ]; then
    echo 1 > /sys/class/thermal/cooling_device0/cur_state
elif [ "$hdd_temp" -gt 35 ]; then
    echo 2 > /sys/class/thermal/cooling_device0/cur_state
elif [ "$hdd_temp" -lt 35 ]; then
    echo 3 > /sys/class/thermal/cooling_device0/cur_state
fi

# 
fan_state=$(cat /sys/class/thermal/cooling_device0/cur_state)
echo "[${timestamp}] FAN_State : ${fan_state}"
```

```
root@LS-WVL885:~# bash temp.sh
[2025-08-23 11:47:00] CPU Temperature: 55C
[2025-08-23 11:47:00] HDD Temperature: 37C
```

```
[2025-08-23 11:47:00] FAN_State : 2
```

```
#
```

```
0
```

```
1
```

```
2
```

```
3
```

**CRONTAB**

**LOG**

```
* * * * * /bin/bash /root/temp.sh >> /root/temp.log 2>&1
```

## LED??

**LED**

```
echo 0 > /sys/class/leds/linkstation\:blue\:power/brightness
```

**LED**

```
echo 1 > /sys/class/leds/linkstation\:blue\:power/brightness
```

# LS-WVL Linux??LSUpdater??

LSUpdater ☐ windows ☐

Linux ☐

wine ☐ [x11](#) ☐

[LSUpdater](#) ☐ 32 ☐

i386 ☐

```
dpkg --add-architecture i386
apt update
apt install wine32:i386
```

```
root@x11:~# dpkg --print-foreign-architectures
i386
```

```
wine LSUpdater.exe
```

**x11** ☐

☐ **wine** ☐

```
rm -rf ~/.wine
winecfg
```

☐ **i386** ☐

```
apt remove `dpkg --get-selections |grep :i386 |awk '{print $1}'` --allow-remove-essential -f

dpkg --remove-architecture i386

dpkg --print-foreign-architectures ☐i386
```

# LS-WVL ??NUT (Network UPS Tools)??UPS

????

- LS-WVL Debian 12

????

```
apt install -y nut
```

??

❏ `/etc/nut/nut.conf` ❏ **MODE=netclient**❏❏❏❏❏ **root nut**

**none:** Nut ❏❏

**standalone:** ❏❏❏ , ❏❏❏❏❏ **UPS** ❏❏❏❏❏ (❏❏❏❏❏ )❏❏❏❏❏ .

**netserver:** Nut Server.

**netclient:** ❏❏❏❏ , ❏❏❏ **nut-monitor**, ❏❏❏❏❏ **Nut** ❏❏ .

```
root@LS-WVL885:~# cat /etc/nut/nut.conf
...
MODE=netclient
```

❏ `/etc/nut/upsmon.conf` ❏❏❏❏❏❏ **UPS**❏❏❏❏❏❏ **upssched**❏❏❏❏❏❏❏❏❏

**root nut**

```
#❏❏❏UPS IP ❏❏❏❏❏❏❏❏❏slave
MONITOR ups@192.168.1.1 1 monuser secret slave

#❏❏❏❏❏❏❏❏ UPS ❏❏❏❏❏ UPS ❏❏❏1
MINSUPPLIES 1

#❏❏❏❏❏❏❏❏ UPS ❏❏❏❏FSD❏❏❏❏upsmon ❏❏❏❏❏
SHUTDOWNCMD "/sbin/shutdown -h +0"

#❏❏❏❏❏❏ UPS ❏❏
POLLFREQ 5
```

```
#ONBATTONBATT
POLLFREQALERT 5

HOSTSYNC 15
# 15 UPS UPS
DEADTIME 15

#UPS daemon UPS
POWERDOWNFLAG /etc/killpower

RBWARNTIME 43200

# 300 UPS
NOCOMMWARNTIME 300

#
FINALDELAY 5

#NUT
NOTIFYCMD /sbin/upssched

#UPS
NOTIFYFLAG ONBATT EXEC
NOTIFYFLAG ONLINE EXEC

#UPS
NOTIFYFLAG COMMOK EXEC
NOTIFYFLAG NOCOMM EXEC
```

**upssched**

**/etc/nut/upssched.conf**

**root nut**

```
#
CMDSCRIPT /bin/upssched-cmd

#
PIPEFN /var/run/nut/upssched.pipe
LOCKFN /var/run/nut/upssched.lock

#UPS
AT ONBATT * EXECUTE onbatt
```

```
AT ONLINE * EXECUTE onpower
AT NOCOMM * EXECUTE lost
AT COMMOK * EXECUTE connect
```

```
#UPS shutdown 120
AT ONBATT * START-TIMER shutdown 120
```

```
#UPS
AT ONLINE * CANCEL-TIMER shutdown
```

```
 /bin/upssched-cmd root nut chmod +x log
shutdown 120 UPS
```

```
#!/bin/sh
case $1 in
  shutdown)
    echo "$(date): AC Power not restored after 120s, shutting down system." >> /var/log/ups-
shutdown.log
    sleep 3
    sudo /sbin/shutdown -h +0
    ;;
  onbatt)
    echo "$(date): AC Power outage, on battery" >> /var/log/ups-shutdown.log
    ;;
  onpower)
    echo "$(date): AC Power restored" >> /var/log/ups-
shutdown.log
    ;;
  connect)
    echo "$(date): Communications with UPS established" >> /var/log/ups-
shutdown.log
    ;;
  lost)
    echo "$(date): Communications with UPS lost" >> /var/log/ups-
shutdown.log
    ;;
  *)
    logger -t upssched-cmd "Unrecognized command: $1"
    ;;
esac
```

visudo nut shutdown

```
root@LS-WVL885:~# visudo

...

nut ALL=(ALL) NOPASSWD: /sbin/shutdown
```

nut log

```
touch /var/log/ups-shutdown.log

chown root:nut /var/log/ups-shutdown.log

chmod 664 /var/log/ups-shutdown.log
```

```
systemctl enable nut-monitor
```

  

```
systemctl start nut-monitor
```

??

UPS

```
root@LS-WVL885:~# upsc ups@192.168.1.1
Init SSL without certificate database
battery.charge: 96
battery.charge.low: 10
battery.charge.warning: 50
battery.date: 2001/09/25
battery.mfr.date: 2023/08/10
battery.runtime: 2636
ups.status: OL CHRG
ups.test.result: No test initiated
ups.timer.reboot: 0
ups.timer.shutdown: -1
ups.vendorid: 051d
```

**UPS** **120** **log**

```
root@LS-WVL885:~# cat /var/log/ups-shutdown.log
Mon Sep  1 01:11:06 AM CST 2025: AC not restored after 120s, shutting down system.
Mon Oct 20 01:14:56 AM CST 2025: AC Power outage, on battery
Mon Oct 20 01:15:11 AM CST 2025: AC Power restored
```

## UPS log

```
root@test:~# cat /var/log/ups-shutdown.log
Sun Nov 16 04:52:15 PM CST 2025: Communications with UPS lost
Sun Nov 16 04:52:25 PM CST 2025: Communications with UPS established
```

# LS-WVL ??Synology???? SMART??????

LS Debian

mail

synology

LS Debian

bash

mail

## LS-WVL??

S.M.A.R.T.( ) mdadm(RAID )

```
apt install smartmontools mdadm -y
```

RAID

```
root@LS-WVL885:~# cat /home/user/raid_check.sh
#!/bin/bash
timestamp=$(date "+%Y-%m-%d %H:%M:%S")

md0_state=$(sudo /usr/sbin/mdadm -D /dev/md0 |grep -e "Raid Level" -e "State :" -e "Active
Devices" -e "Working Devices" -e "Failed Devices")
md1_state=$(sudo /usr/sbin/mdadm -D /dev/md1 |grep -e "Raid Level" -e "State :" -e "Active
Devices" -e "Working Devices" -e "Failed Devices")
echo "Device : /dev/md0"
echo "${md0_state}"
echo " "
echo "Device : /dev/md1"
echo "${md1_state}"
echo " "
cat /proc/mdstat
echo " "
echo "Hard Disk : /dev/sda"
sudo /usr/sbin/smartctl -H -l selftest /dev/sda
echo "Hard Disk : /dev/sdb"
sudo /usr/sbin/smartctl -H -l selftest /dev/sdb
```

visudo mdadm smartctl

```
root@LS-WVL885:~# visudo

...
user ALL=(ALL) NOPASSWD: /usr/sbin/mdadm -D *, /usr/sbin/smartctl -H * ,/usr/sbin/smartctl -l
*
```

```
chmod +x /home/user/raid_check.sh
```

**user**

```
user@LS-WVL885:~$ sh raid_check.sh
Device : /dev/md0
    Raid Level : raid1
    State : clean
    Active Devices : 2
    Working Devices : 2
    Failed Devices : 0

Device : /dev/md1
    Raid Level : raid1
    State : clean
    Active Devices : 2
    Working Devices : 2
    Failed Devices : 0

...
Hard Disk : /dev/sda
smartctl 7.3 2022-02-28 r5338 [armv5tel-linux-6.1.0-38-marvell] (local build)
Copyright (C) 2002-22, Bruce Allen, Christian Franke, www.smartmontools.org

=== START OF READ SMART DATA SECTION ===
SMART overall-health self-assessment test result: PASSED
Please note the following marginal Attributes:
ID# ATTRIBUTE_NAME          FLAG      VALUE WORST THRESH TYPE      UPDATED  WHEN_FAILED
RAW_VALUE
190 Airflow_Temperature_Cel 0x0022    059    041    045    Old_age  Always    In_the_past 41
(Min/Max 40/41 #7471)

SMART Self-test log structure revision number 1
Num  Test_Description        Status                 Remaining  LifeTime(hours)  LBA_of_first_error
# 1  Short offline          Completed without error       00%        45817             -
```

# Synology??

SSH KEY

synology

ssh

LS WVL

mail

```
ssh user@192.168.1.1 "sh /home/user/raid_check.sh"
```

[synology] 任務排程表已完成排程任務 收件匣 x

**synology - Synology NAS**  
寄給我

任務排程表已完成排程任務。

任務：LS-WVL RAID\_Check  
開始時間：Mon, 01 Sep 2025 08:00:01 GMT  
停止時間：Mon, 01 Sep 2025 08:00:06 GMT  
目前狀態：0 (正常)  
標準輸出 / 錯誤：  
Device : /dev/md0  
Raid Level : raid1  
State : clean  
Active Devices : 2  
Working Devices : 2  
Failed Devices : 0  
  
Device : /dev/md1  
Raid Level : raid1  
State : clean  
Active Devices : 2  
Working Devices : 2  
Failed Devices : 0