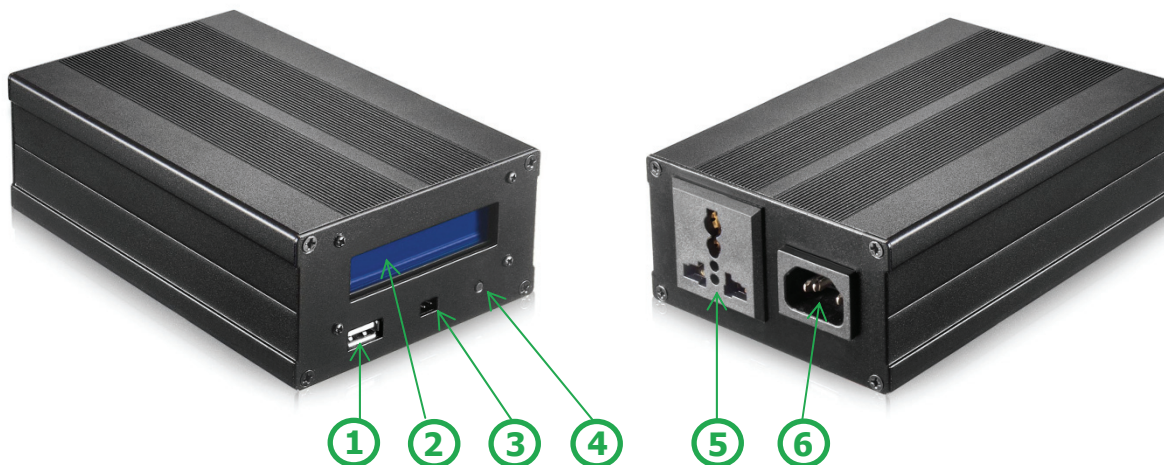


AC/DC Power Cycle Box

User Manual

● Main Specifications:



- ① USB port: Connect to host.
- ② LCD: Display cycle status.
- ③ Power button header: Connect to host(Optional).
- ④ Cycle counter clear button: Just clear control box only.
- ⑤ Power outlet socket
- ⑥ Power inlet socket

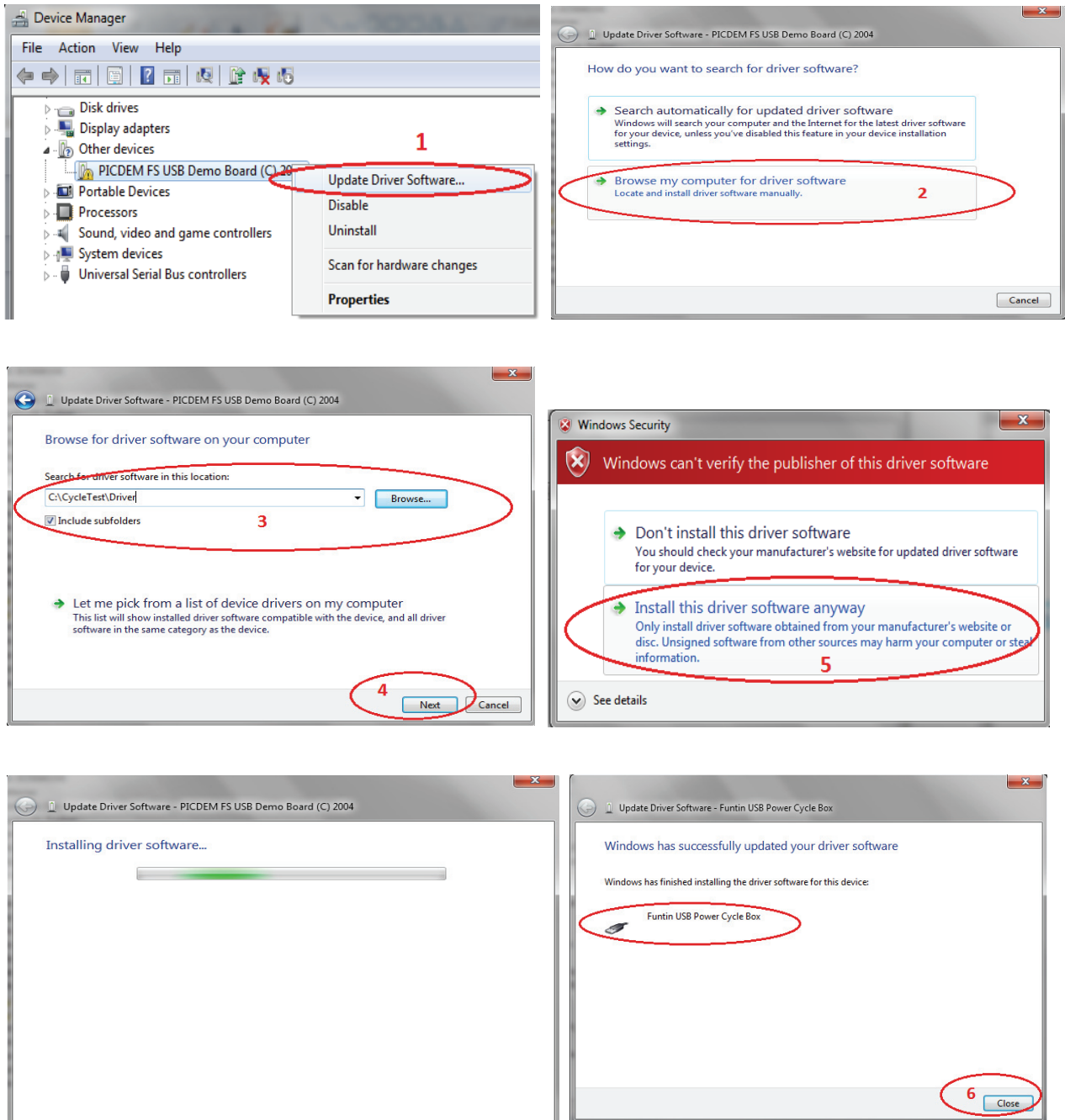
Overall Dimensions:	160mm * 105mm *55mm
Input:	AC 100-240V
Output:	AC 100-240V, Max 10A
Supported OS	Linux: 32bit, 64bit Windows: 32bit, 64bit

● User Manual Description(Windows):

1. Unzip CycleTest and then copy the full folder "CycleTest" into system disk C:\ root directory.

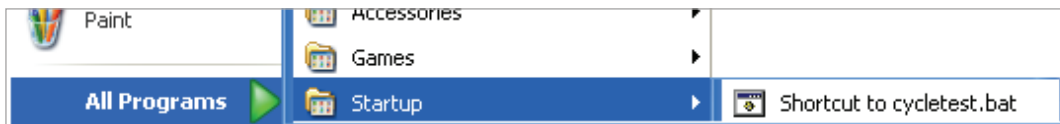
2. Install USB Driver(Win7 for example):

If the OS of DUT is Windows server 2012 or up, you need press "F8" key before OS boot up, and then choose "Disable Driver Signature Enforcement" into OS to install USB driver.



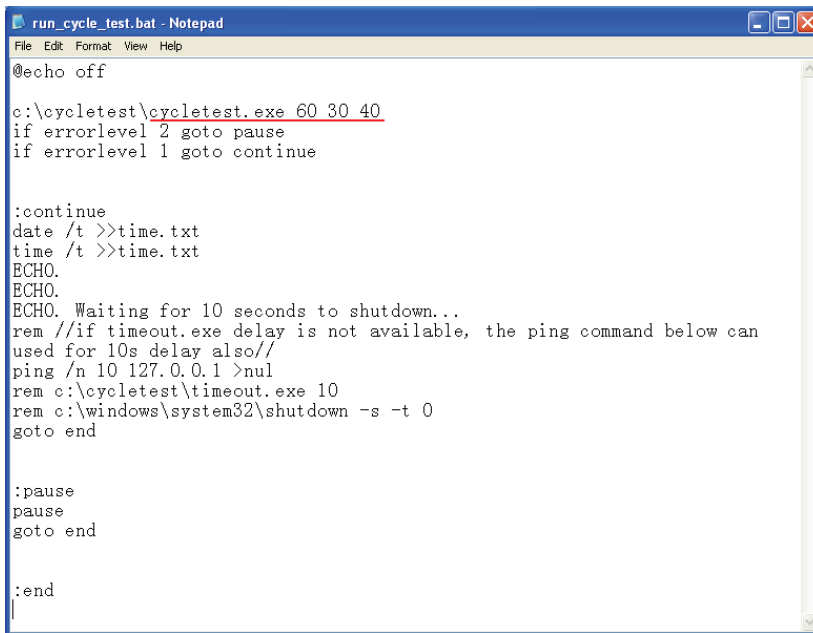
3. Set test tool auto-run when system boot into OS:

To copy C:\CycleTest\ Shortcut to cycletest.bat to Start menu\all programs\startup



4. Cycle time setting:

Open C:\cycletest\run_cycle_test.bat with notepad:



```
@echo off

c:\cycletest\cycletest.exe 60 30 40
if errorlevel 2 goto pause
if errorlevel 1 goto continue

:continue
date /t >>time.txt
time /t >>time.txt
ECHO.
ECHO.
ECHO. Waiting for 10 seconds to shutdown...
rem //if timeout.exe delay is not available, the ping command below can
used for 10s delay also//
ping /n 10 127.0.0.1 >nul
rem c:\cycletest\timeout.exe 10
rem c:\windows\system32\shutdown -s -t 0
goto end

:pause
pause
goto end

:end
```

Cycletest.exe (parameter1) (parameter2) (parameter3):

The range of time parameter is 1 – 255 seconds, and the default value is 60, 30, 40.

- **Parameter1:** Box will turn off AC power when parameter1 time out. You need set this time more than OS shutdown time.
- **Parameter2:** Box will turn on AC power when parameter2 time out.
- **Parameter3:** When parameter3 time out, Box will output a power button signal through power button header to system. The default value is 10s when Box first power on.

Noticed:

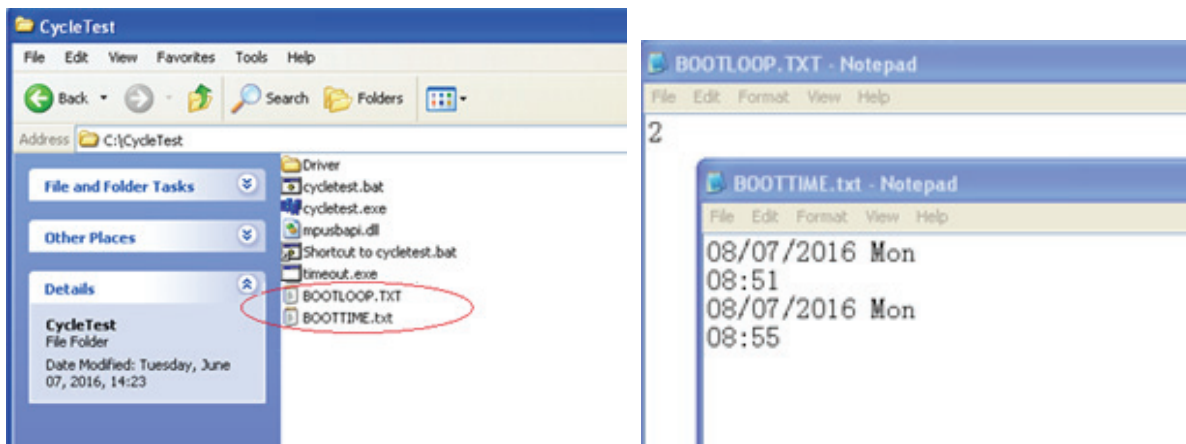
1. If system power on policy set as “Always on”, then user don’t need to install the power button cable and can be ignore Parameter 3.
2. You can change the batch file to meet your test requirement. Example system HDD device cycle test, system PCIE adapter present cycle test, etc...

5. Test event log file:

BOOTLOOP.txt : save cycle count.

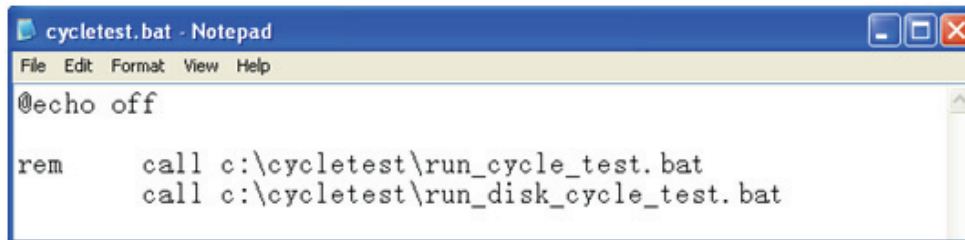
BOOTTIME.txt : save cycle time.

If you want to clear test log, just to delete these two log file before you do a new cycle test.



6. Example for add disk device checking:

1. Change file "C:\CycleTest\cycletest.bat" as below to run the disk device cycle test:



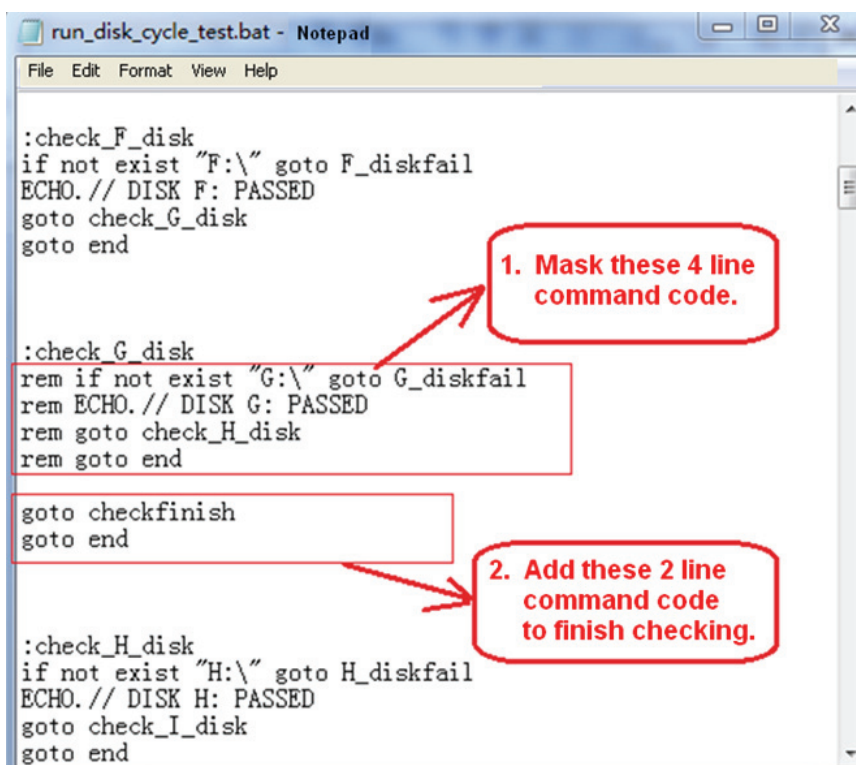
```
cycletest.bat - Notepad
File Edit Format View Help
@echo off

rem    call c:\cycletest\run_cycle_test.bat
rem    call c:\cycletest\run_disk_cycle_test.bat
```

2. According to quantity of disk device to modify file "C:\CycleTest\run_disk_cycle_test.bat":

For example, system support four disk, and there are four driver(partition) under OS which are C, D, E, F.

We just need to change the command at " :check_G_disk", refer to below picture for detail:



```
run_disk_cycle_test.bat - Notepad
File Edit Format View Help

:check_F_disk
if not exist "F:\" goto F_diskfail
ECHO.// DISK F: PASSED
goto check_G_disk
goto end

:check_G_disk
rem if not exist "G:\" goto G_diskfail
rem ECHO.// DISK G: PASSED
rem goto check_H_disk
rem goto end

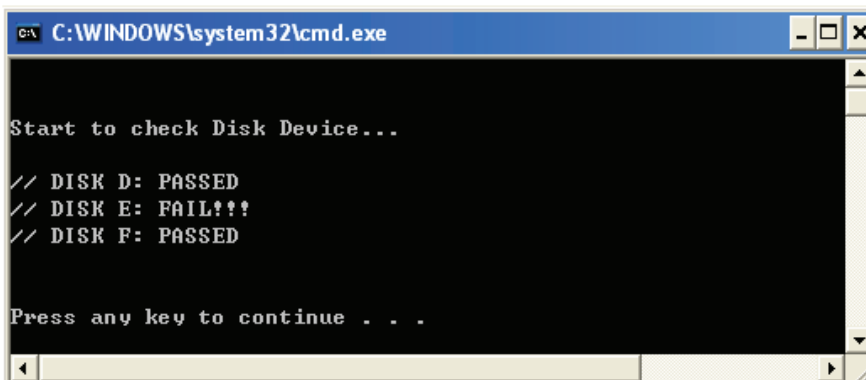
goto checkfinish
goto end

:check_H_disk
if not exist "H:\" goto H_diskfail
ECHO.// DISK H: PASSED
goto check_I_disk
goto end
```

1. Mask these 4 line command code.

2. Add these 2 line command code to finish checking.

When detect any disk device lost, the testing will be pause. The command window will show the failure disk, and also will generate log "diskfaillog.txt" into C:\cycletest\diskfaillog.txt



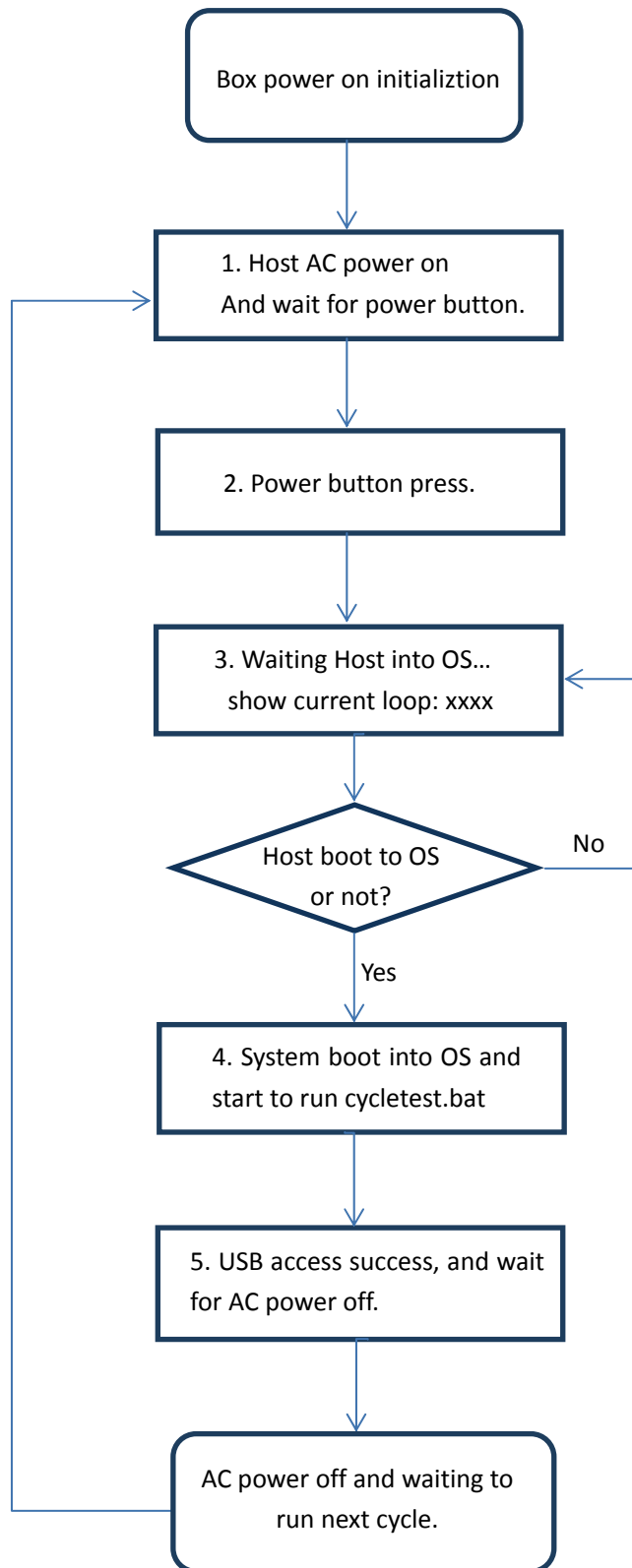
```
C:\WINDOWS\system32\cmd.exe

Start to check Disk Device...

// DISK D: PASSED
// DISK E: FAIL!!!
// DISK F: PASSED

Press any key to continue . . .
```

7. Cycle Test Flow Diagram:



● Linux Tool User Manual

1. File Description:

<code>cycletest</code>	: test tool for 32bit OS
<code>cycletest64</code>	: test tool for 64bit OS
<code>run_cycletest.sh</code>	: script example for power cycle test
<code>run_cycletest_disk.sh</code>	: script example for disk power cycle test
<code>BOOTLOOP.log</code>	: boot loop log. Please delete this log before a new cycle test.
<code>time.log</code>	: boot time log. Please delete this log before a new cycle test.
<code>disk.log</code>	: disk information log

2. Set cycle timer in script:

Default value is: 60, 30, 10

Note: need make sure this control box is running in the status of “waiting talk with HOST...” before Linux OS login, else OS may be can't find USB device sometimes.

3. HDD or SSD quantity set(if choose disk script):

Default value: `hdd_num=1`

4. make sure script and tool can be executed normally under Linux.

Note: this tool need run as root.

5. Set auto-run script after Linux boot finish, take RedHat7.4 for example:

Open `/etc/rc.d/rc.local`, add below two command scripts:

```
cd /home/username/Desktop/x64           //change path to the location of tool.  
./run_cycletest.sh                       //run script.
```

If you want to do HDD/SSD quantity check, please choose “`run_cycletest_disk.sh`”.

After modify finish, then execute “`chmod +x /etc/rc.d/rc.local`” to make the change available.

6. You can change the script to meet your Linux system or test requirement.

● Appendix 1:

Windows Server 2012 R2 OS to set auto login:

Open registry editor (Start → run → run regedit):

Windows Registry Editor Version 5.00

[HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\Winlogon]

Add below three parameter:

"AutoAdminLogon"="1"	//Value: "1"
"DefaultUserName"="Administrator"	//current management account name(user name)
"DefaultPassword"="password"	//current password

● Appendix 2:

Windows Server 2012 R2 OS to set auto run application program when into OS:

Just copy the shortcut of "cycletest.bat" to below folder:

C:\Users\Administrator\AppData\Roaming\Microsoft\Windows\Start Menu\Programs\Startup