

Scale Firmware Flash by Ethernet UDPflash A030

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1. Scale preparation

1.1 For 8442+/RL00+, bCom, bPro/RU, i15+ scale.

1.1.1 Check IP of scale

Press [CODE], then press [*]. Scale will print internal parameter including IP and current firmware version, etc. (Just for check, it is not a must)

1.1.2 Set IP of scale and then be into state of NET Flash

Turn on scale with [00] key pressed. IP appear, you can set new IP or keep current IP, then press [V1] until into status of “NET Flash”. (IP is totally customized)

1.1.3 Be directly into state of NET Flash

If you know IP and don't need to set, you can skip 1.1.2 and turn scale into state of NET Flash directly. Just turn on scale with [C] key pressed, screen of scale will display “NET Flash” directly.

1.2 For bTwin/RS scale.

1.2.1 Check IP of scale

Press [MODE], then press [L]. Scale will print internal parameter including IP and current firmware version, etc. (Just for check, it is not a must)

1.2.2 Set IP of scale and then be into state of NET Flash

Turn on scale with [Mode] pressed, IP appear, you can set new IP or keep current IP, then press [*] until into status of “NET Flash”. (IP is totally customized)

1.2.3 Be directly into state of NET Flash

If you know IP and don't need to set, you can skip 1.2.2 and turn scale into state of NET Flash directly. Just turn on scale with [V1] key pressed, screen of scale will display “NET Flash” directly.

2. PC running UDPflash tool preparation

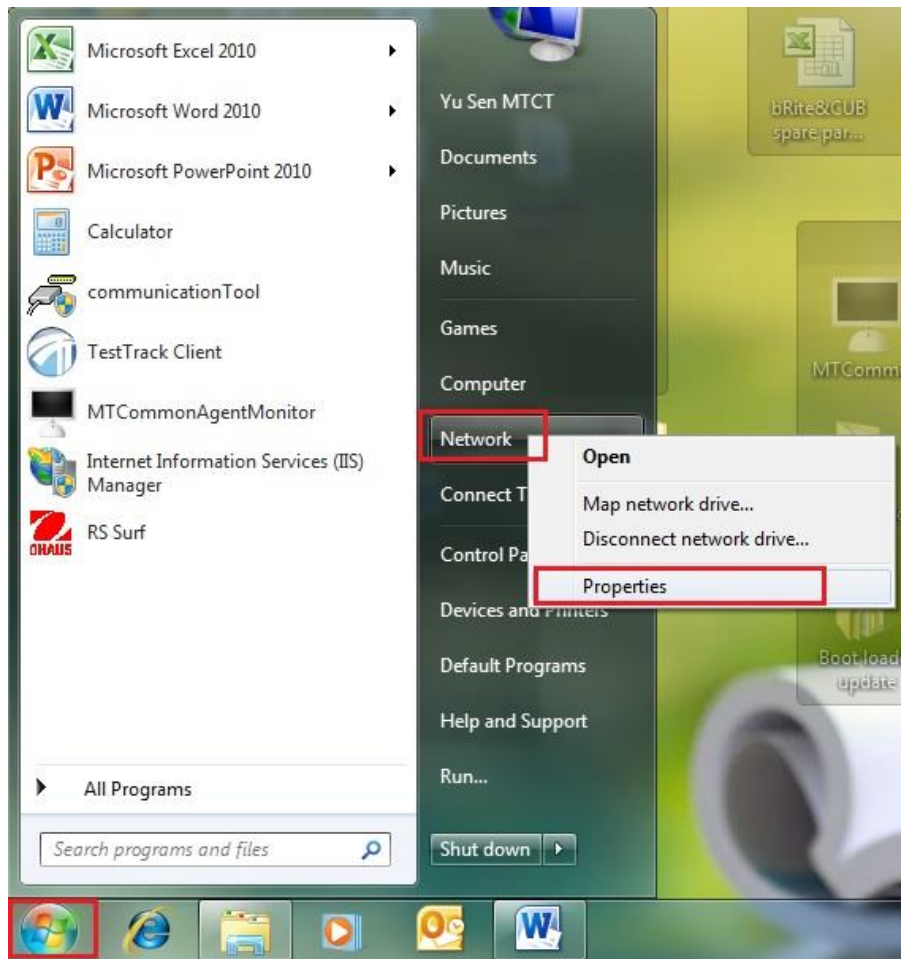


Figure 2-1

See figure 2-1, click START, right click Network, click Properties.

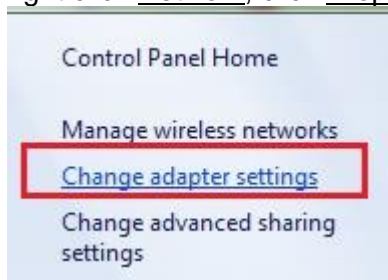


Figure 2-2

Appear figure 2-2, click Change adapter settings. Find Local Area Connection, right click it and then click Properties.

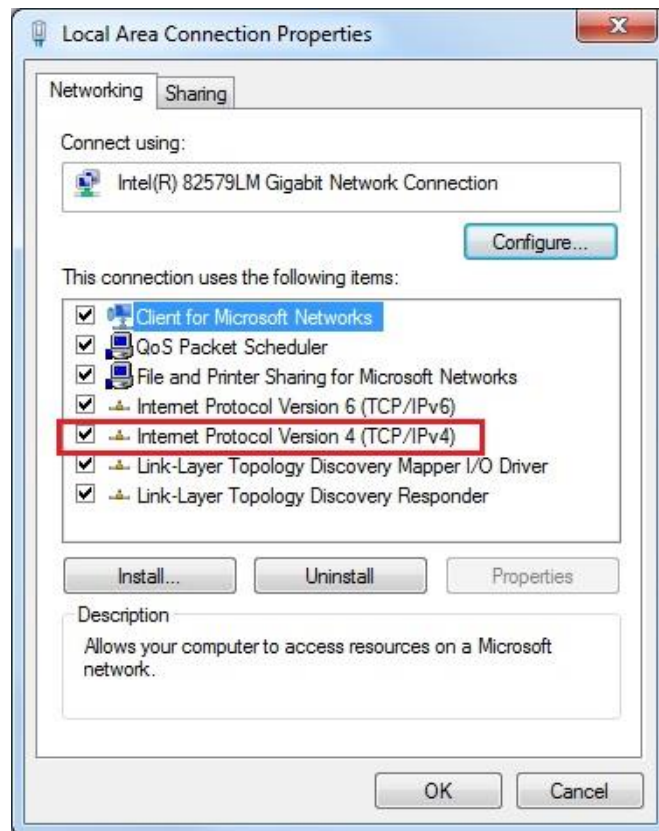


Figure 2-3

Appear figure 2-3, double click Internet Protol Version 4 (TCP/IPv4).

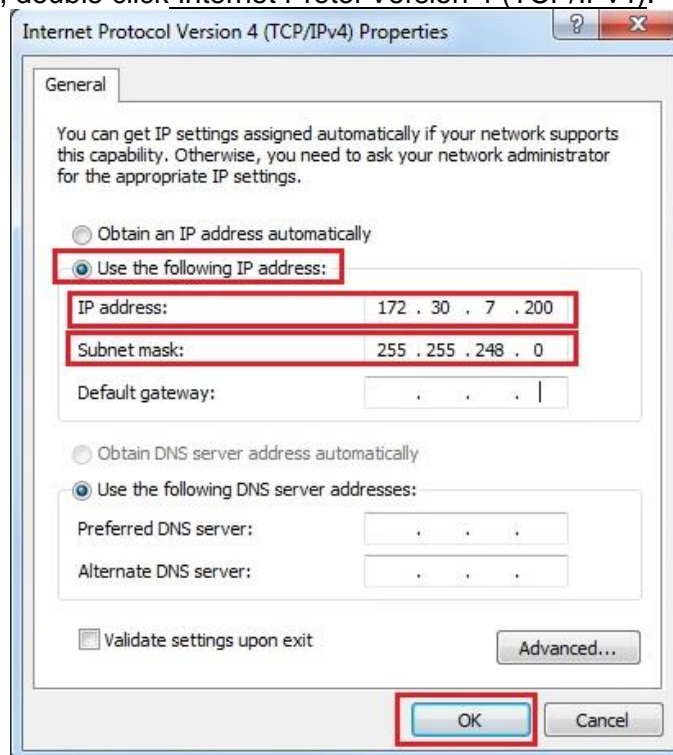


Figure 2-4

Appear figure 2-4, set IP and Subnet mask of PC. Then click OK.

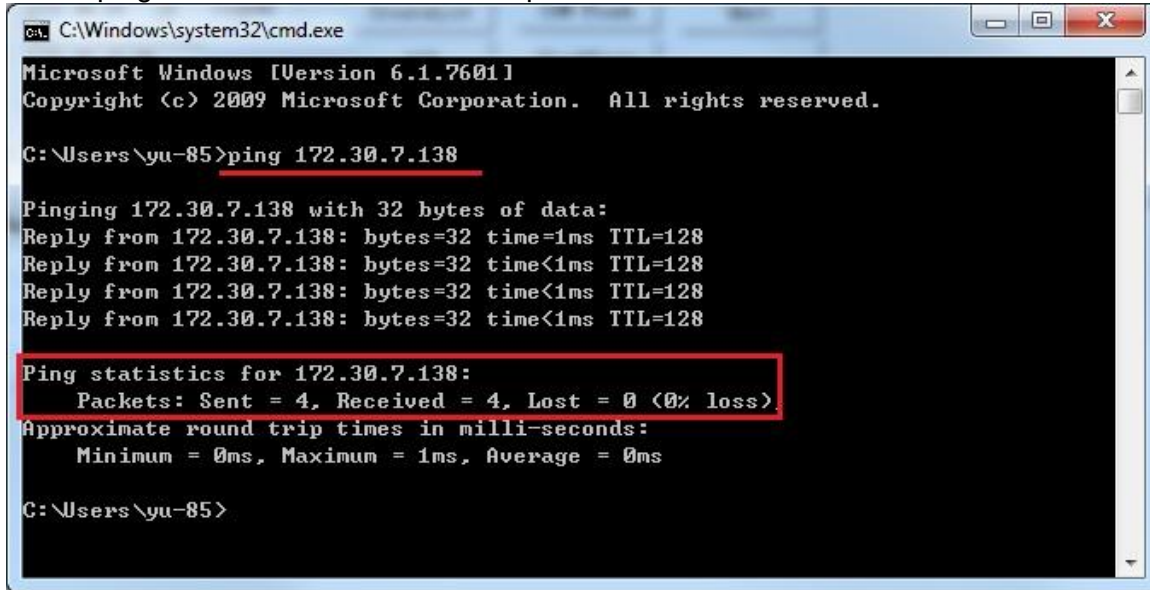
Note: IP of scale and PC should be in same network segment. For instance, the IP of scale is 172.30.7.138, then the IP of PC should be 172.30.7.x. Just the end number is different.

3. Establish connection between PC and scale

Use Ethernet cable to connect a scale to PC directly. Or you can connect PC and scales to a switch to establish communication network.

For check network state, you can ping scales in PC first before flash. See figure 3-1, enter command: ping IP of scale, then press [Enter] key of PC keyboard.

Check ping statistics then. Each sent of packets can be received means network is OK.

A screenshot of a Windows command prompt window titled "C:\Windows\system32\cmd.exe". The window shows the output of a ping command. The text is as follows:

```
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\yu-85>ping 172.30.7.138

Pinging 172.30.7.138 with 32 bytes of data:
Reply from 172.30.7.138: bytes=32 time=1ms TTL=128
Reply from 172.30.7.138: bytes=32 time<1ms TTL=128
Reply from 172.30.7.138: bytes=32 time<1ms TTL=128
Reply from 172.30.7.138: bytes=32 time<1ms TTL=128

Ping statistics for 172.30.7.138:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\Users\yu-85>
```

The "Ping statistics" section is highlighted with a red rectangle.

Figure 3-1

4. Using UDPflash A030

Find in “C:\Windows\MTCN_UDPFLASH” the file config.ini, delete it.
Note: this is for delete historical Port record. If it is the first time you run UDPflash, please skip.

Whole process will be: Choose firmware->Create scale list->Set TCP Port->Check state of scales->Start to flash. Please refer to 4.1~4.5.

Open the tool folder, you will see figure 4-1.

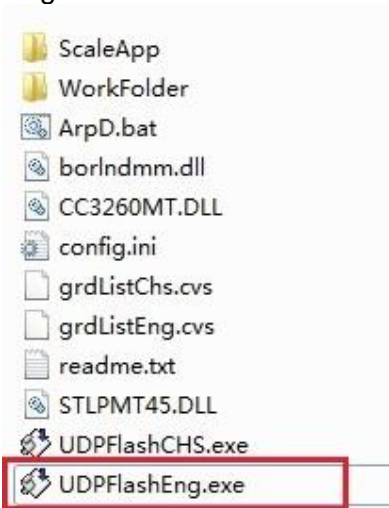


Figure 4-1

Find UDPFlashEng.exe, right click it, and then click Run as administrator (it is a must).

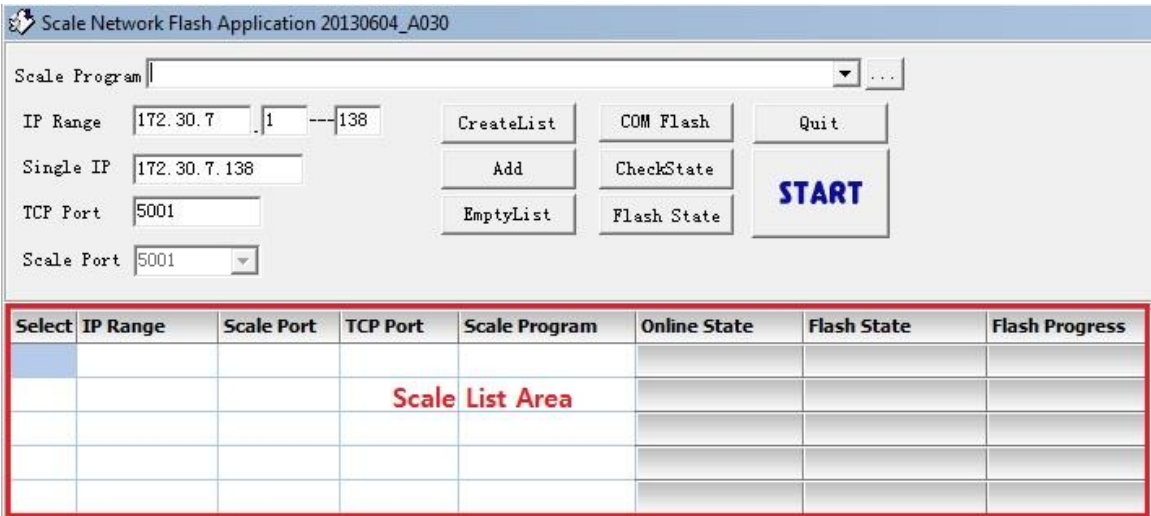


Figure 4-2

Appear figure 4-2.


4.1 Choose firmware

There are 2 methods to choose firmware file. Refer to 4.1.1 and 4.1.2.

4.1.1 Firmware selected will apply to all scale created in scale list

Select	IP Range	Scale Port	TCP Port	Scale Program	Online State	Flash State	Flash Progress
<input type="checkbox"/>							
<input type="checkbox"/>							
<input type="checkbox"/>							
<input type="checkbox"/>							
<input type="checkbox"/>							
<input type="checkbox"/>							

Figure 4-3

In figure 4-3, Scale Program, When click  button. Appear figure 4-4.


Scale's Program File Manage

File list

Add New File Delete From File List Return

Figure 4-4

Click Add New File button to add firmware file from PC to the software File list. Then close the window.

In figure 4-3, click  button, select firmware from dropdown list (firmware in the list are same as ones added in Figure 4-4). If select firmware in Scale Program first, then click CreateList button (create scales with IP Range) or Add button (Create scale with Single IP). Then, firmware selected will apply to all scales created in scale list (See figure 4-4).

Scale Program: C:\Users\yu-85\Desktop\72250797E.dat

IP Range: 172.30.7.1 --- 138 CreateList COM Flash Quit

Single IP: 172.30.7.138 Add CheckState

TCP Port: 5001 EmptyList Flash State START

Scale Port: 5001

The firmware selected applied to all scales created.

Select	IP Range	Scale Port	TCP Port	Scale Program	Online State	Flash State	Flash Progress
<input checked="" type="checkbox"/>	172.30.7.1	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input checked="" type="checkbox"/>	172.30.7.2	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input checked="" type="checkbox"/>	172.30.7.3	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input checked="" type="checkbox"/>	172.30.7.4	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input checked="" type="checkbox"/>	172.30.7.5	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input checked="" type="checkbox"/>	172.30.7.6	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input checked="" type="checkbox"/>	172.30.7.7	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input checked="" type="checkbox"/>	172.30.7.8	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input checked="" type="checkbox"/>	172.30.7.9	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input checked="" type="checkbox"/>	172.30.7.10	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input checked="" type="checkbox"/>	172.30.7.11	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input checked="" type="checkbox"/>	172.30.7.12	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input checked="" type="checkbox"/>	172.30.7.13	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input checked="" type="checkbox"/>	172.30.7.14	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input checked="" type="checkbox"/>	172.30.7.15	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%

Figure 4-4

See figure 4-4, for instance, we first choose firmware 72250797E.dat, then **CreateList** with IP range 172.30.7.1~172.30.7.138, the firmware will apply to all scales created in scale list.

Add Single IP is similar.

4.1.2 Select firmware for specific scale

Scale Program: C:\Users\yu-85\Desktop\72250797E.dat

IP Range: 172.30.7.1 --- 138 CreateList COM Flash Quit

Single IP: 172.30.7.138 Add CheckState

TCP Port: 5001 EmptyList Flash State START

Scale Port: 5001

Select	IP Range	Scale Port	TCP Port	Scale Program	Online State	Flash State	Flash Progress
<input checked="" type="checkbox"/>	172.30.7.138	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat ...	-	-	0%
Double click program area							

Figure 4-5

See figure 4-5, in scale list, double click program area of specific scale. Appear ..., click it to browse firmware from PC.

4.2 Create scale list

Scale Program: C:\Users\yu-85\Desktop\72250797E.dat

IP Range: 172.30.7.1 --- 138

Single IP: 172.30.7.138

TCP Port: 5001

Scale Port: 5001

Buttons: CreateList, Add, EmptyList, COM Flash, CheckState, Flash State, Quit, START

Select	IP Range	Scale Port	TCP Port	Scale Program	Online State	Flash State	Flash Progress
<input checked="" type="checkbox"/>	172.30.7.1	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input checked="" type="checkbox"/>	172.30.7.2	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input checked="" type="checkbox"/>	172.30.7.3	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input checked="" type="checkbox"/>	172.30.7.4	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input checked="" type="checkbox"/>	172.30.7.5	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input checked="" type="checkbox"/>	172.30.7.6	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input checked="" type="checkbox"/>	172.30.7.7	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input checked="" type="checkbox"/>	172.30.7.8	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input checked="" type="checkbox"/>	172.30.7.9	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input checked="" type="checkbox"/>	172.30.7.10	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input checked="" type="checkbox"/>	172.30.7.11	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input checked="" type="checkbox"/>	172.30.7.12	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input checked="" type="checkbox"/>	172.30.7.13	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input checked="" type="checkbox"/>	172.30.7.14	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input checked="" type="checkbox"/>	172.30.7.15	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input checked="" type="checkbox"/>	172.30.7.16	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%

Figure 4-6

Flash for many scales with continuous IP, see figure 4-6, fill start and end IP in IP Range, then click CreateList button. EmptyList button is for clear all in scale list.

Scale Program: C:\Users\yu-85\Desktop\72250797E.dat

IP Range: 172.30.7.1 --- 138

Single IP: 172.30.7.138

TCP Port: 5001

Scale Port: 5001

Buttons: CreateList, Add, EmptyList, COM Flash, CheckState, Flash State, Quit, START

Select	IP Range	Scale Port	TCP Port	Scale Program	Online State	Flash State	Flash Progress
<input checked="" type="checkbox"/>	172.30.7.138	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input type="checkbox"/>							
<input type="checkbox"/>							
<input type="checkbox"/>							
<input type="checkbox"/>							

Figure 4-7

Flash for single scale, see figure 4-7, fill IP in Single IP, then click Add button.

4.3 TCP Port and Scale port setting

See Figure 4-7, TCP Port (under Single IP) set to 5001. Scale Port, by default (5001)

4.4 Check state of scale

This is not a must. Just for check if scale state is “Net Flash”.

See figure 4-8, click Check State button, there are 2 options:

Select	IP Range	Scale Port	TCP Port	Scale Program	Online State	Flash State	Flash Progress
<input checked="" type="checkbox"/>	172.30.7.1	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input checked="" type="checkbox"/>	172.30.7.2	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input type="checkbox"/>	172.30.7.3	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input type="checkbox"/>	172.30.7.4	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input checked="" type="checkbox"/>	172.30.7.5	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input checked="" type="checkbox"/>	172.30.7.6	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input checked="" type="checkbox"/>	172.30.7.7	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input type="checkbox"/>	172.30.7.8	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input type="checkbox"/>	172.30.7.9	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%

Figure 4-8

- 1) Check all: check state of all scales in scale list.
- 2) Check selected: only check selected ☒ scales. So before click it, make sure that there are scales in scale list be selected, otherwise no scale will be checked.

For instance, in figure 4-8, click Check selected. Then, in scale list area, Online State column will show state of selected scales (see Figure 4-9).

There are 3 type of state:

- 1) Offline: scale is disconnected or turned off;
- 2) Net Flash: scale is connected and in state of “Net Flash”
- 3) State Error: scale is connected but not in state of “Net Flash”

Select	IP Range	Scale Port	TCP Port	Scale Program	Online State	Flash State	Flash Progress
<input checked="" type="checkbox"/>	172.30.7.1	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	Net Flash	-	0%
<input checked="" type="checkbox"/>	172.30.7.2	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	Net Flash	-	0%
<input type="checkbox"/>	172.30.7.3	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input type="checkbox"/>	172.30.7.4	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input checked="" type="checkbox"/>	172.30.7.5	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	Net Flash	-	0%
<input checked="" type="checkbox"/>	172.30.7.6	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	Net Flash	-	0%
<input checked="" type="checkbox"/>	172.30.7.7	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	Net Flash	-	0%
<input type="checkbox"/>	172.30.7.8	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%
<input type="checkbox"/>	172.30.7.9	5001	5001	C:\Users\yu-85\Desktop\72250797E.dat	-	-	0%

Figure 4-9

4.5 Start to flash

In case state of scale is Net flash. See Figure 4-10.

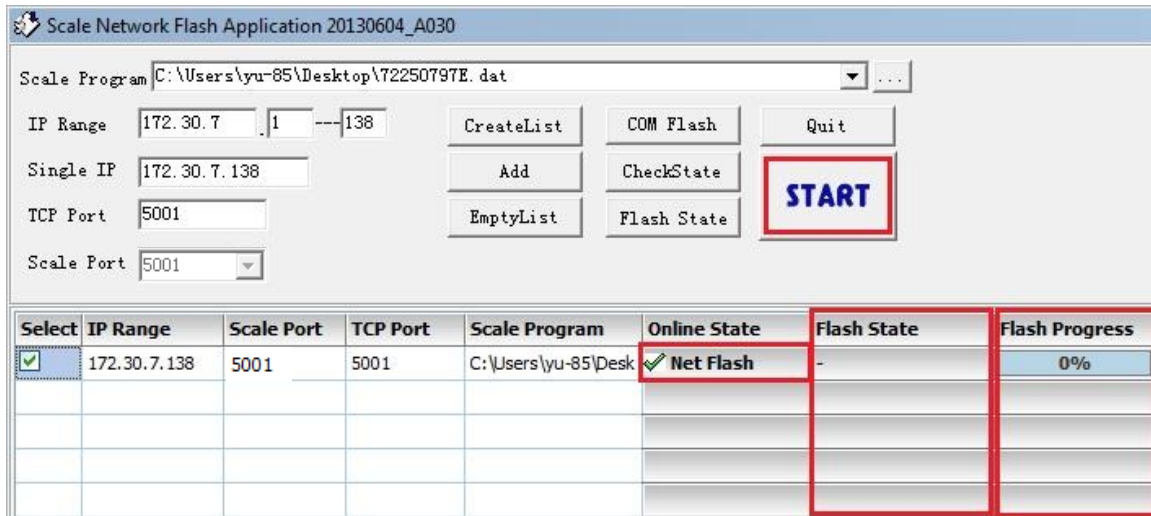


Figure 4-10

Click START button. Begin to flash selected firmware to selected ☒ scales.

Note: START only works on selected ☒ scales.

In scale list area, Flash State column shows flash states. There are 3 type of state:

- 1) Flash_Running: Flash is in progress;
- 2) Flash_Error: Not flash successfully;
- 3) Flash_Success: Flash successfully;

Flash Progress column shows progress of flash from 0%~100%.

4.6 Other functions




Figure 4-11

See figure 4-11, Flash State button can turn scale into state of “NET Flash” directly even scale is in service mode. But currently the function only works for bPro scale.


Check select	Ctrl+C
Check all	Ctrl+D
Select all	Ctrl+A
Select none	Ctrl+B
Delete current	Ctrl+Del
Delete select	Shift+Ctrl+Del


Figure 4-12

Right click anywhere of user interface of UDPflash, appear figure 4-12 window with commands as below:


Check select: Check state of selected  scales. Before click it, make sure that there are scales be selected;

Check all: Check all scales in scale list;

Select all: Select/check  all scales in scale list;

Select none: Unselect/uncheck  all scales in scale list;

Delete current: Delete specific scale that mouse clicked;

Delete select: Delete selected  scale in scale list;

Note: This manual base on Win7 OS. UDPflash A030 tool works on Windows XP also.