



## NH-310C HPNA3.1 Ethernet over Coaxial Cable Endpoint Engineering Tool Procedure

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**Warnings**

Due to technical requirements components may contain dangerous substances. For information on the types in question please contact your nearest Netsys Distributor.

## 1. Configuration Diagram.



## 2. Install a WinPcap.

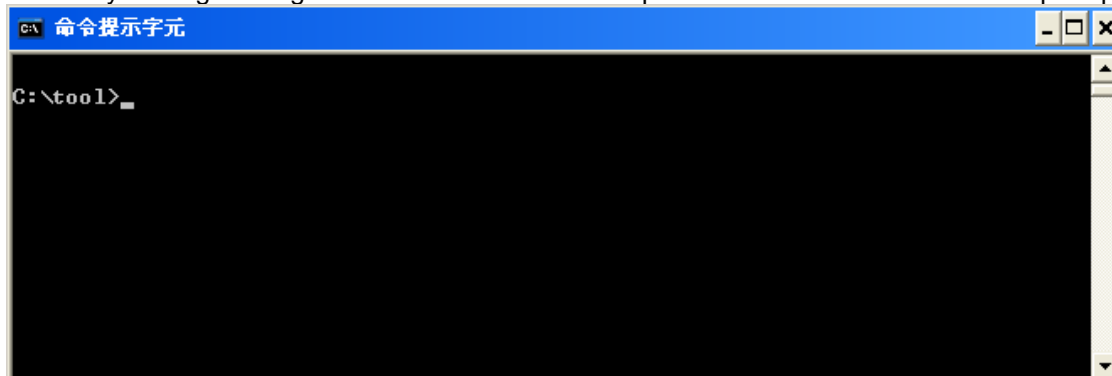
Run WinPcap installer . WinPcap is the industry-standard tool for link layer network access in Windows environment.

## 3. Install a Visual C++

Please download visual C++ for Microsoft download web page, Please refers to the download page is as follow: <http://www.microsoft.com/en-us/download/details.aspx?id=40784>

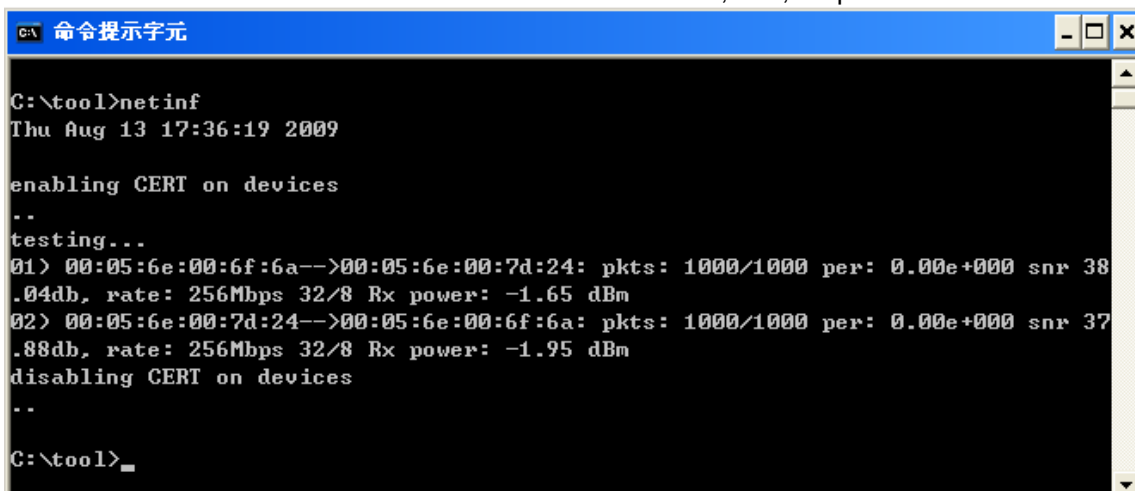
## 4. Open a command prompt.

Make sure that your engineering tool files are located in the specified location of the command prompt.

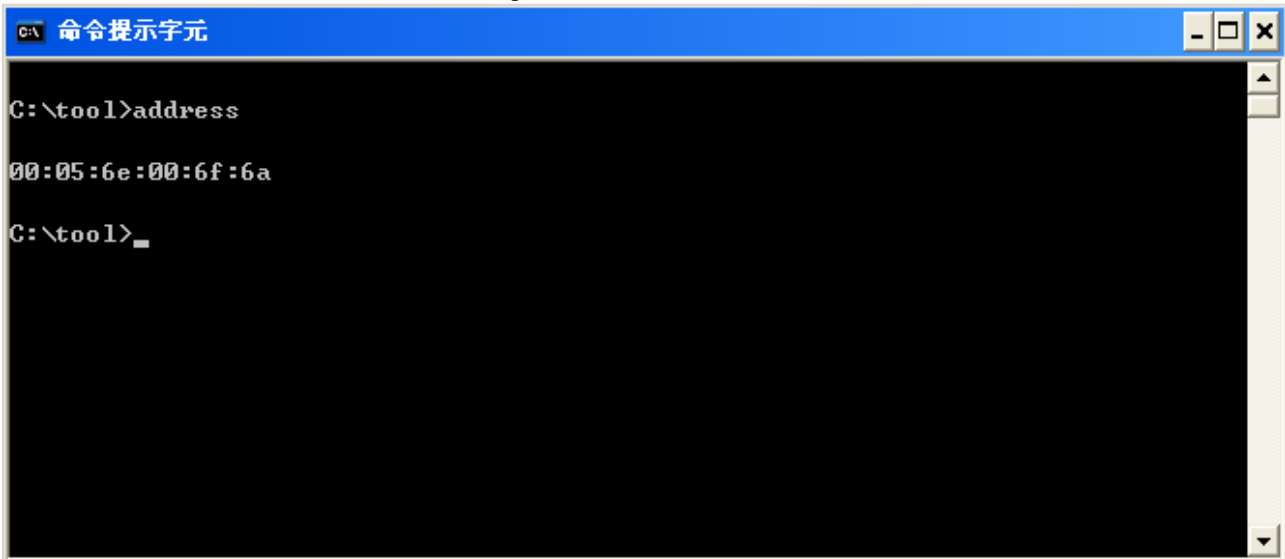


## 5. List of commands for firmware update, view network or device information and reset.

5.1. **netinf**: is command for network information such as SNR, rate, Rx power and etc.



5.2. **address**: is command for showing MAC address information of its device.



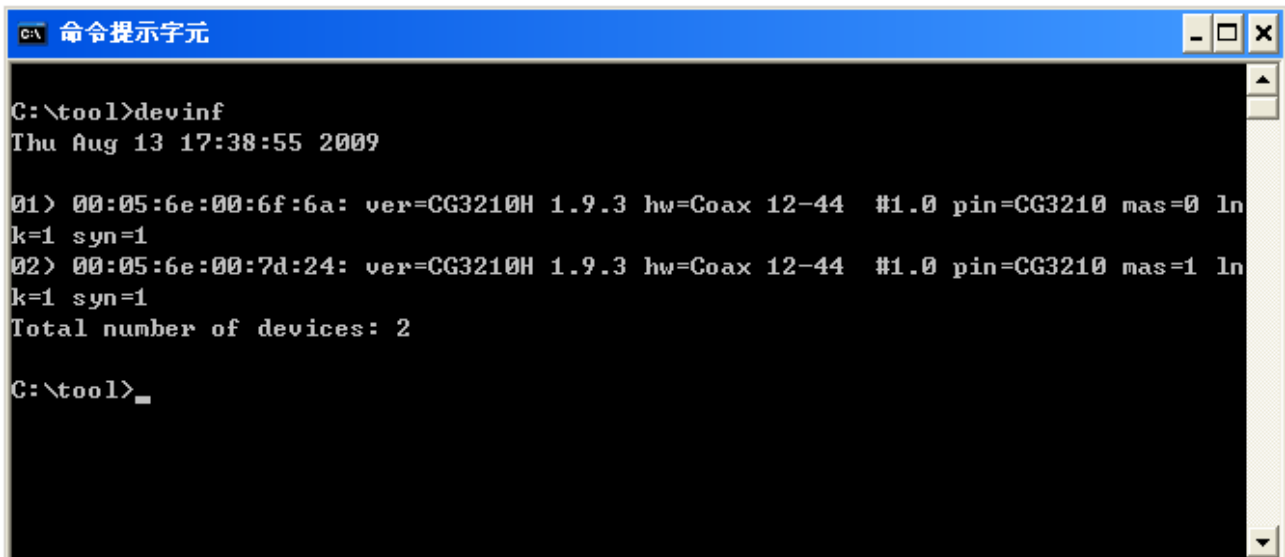
```

C:\tool>address

00:05:6e:00:6f:6a

C:\tool>_
  
```

5.3. **devinf**: is command for device information such as number of endpoints, MAC address, H/W version and etc.



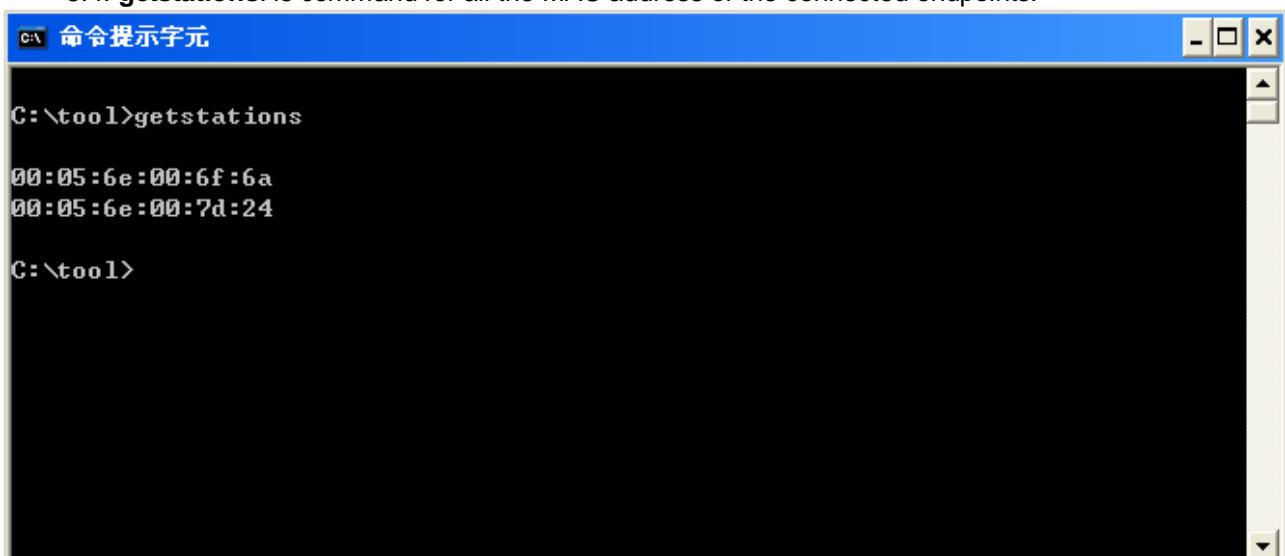
```

C:\tool>devinf
Thu Aug 13 17:38:55 2009

01> 00:05:6e:00:6f:6a: ver=CG3210H 1.9.3 hw=Coax 12-44 #1.0 pin=CG3210 mas=0 ln
k=1 syn=1
02> 00:05:6e:00:7d:24: ver=CG3210H 1.9.3 hw=Coax 12-44 #1.0 pin=CG3210 mas=1 ln
k=1 syn=1
Total number of devices: 2

C:\tool>_
  
```

5.4. **getstations**: is command for all the MAC address of the connected endpoints.



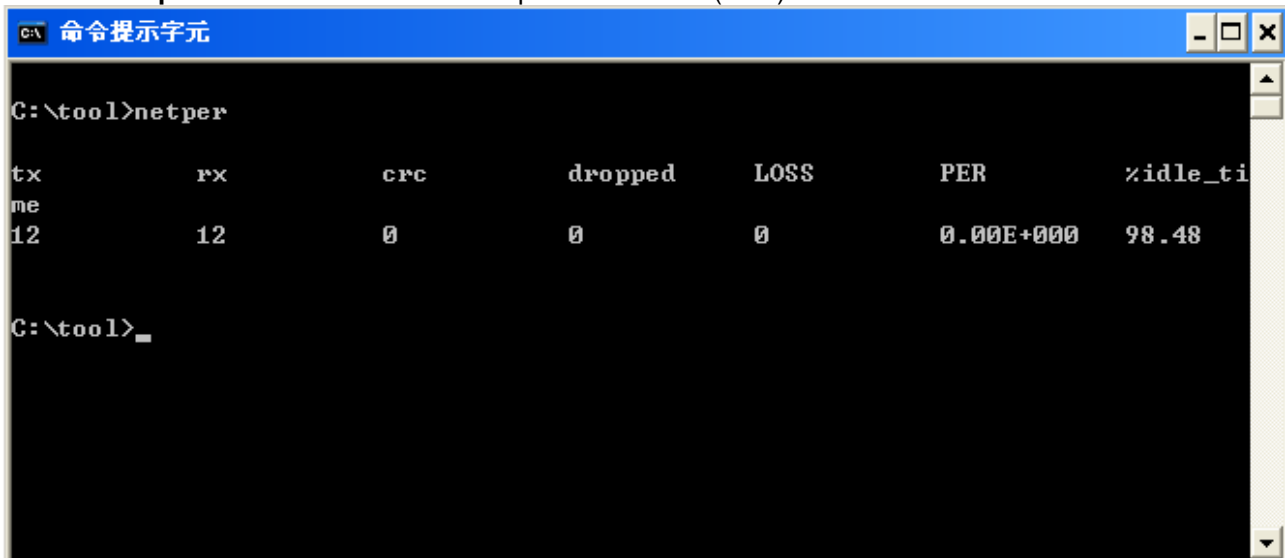
```

C:\tool>getstations

00:05:6e:00:6f:6a
00:05:6e:00:7d:24

C:\tool>
  
```

5.5. **netper**: is command for networks packet error rate(PER).



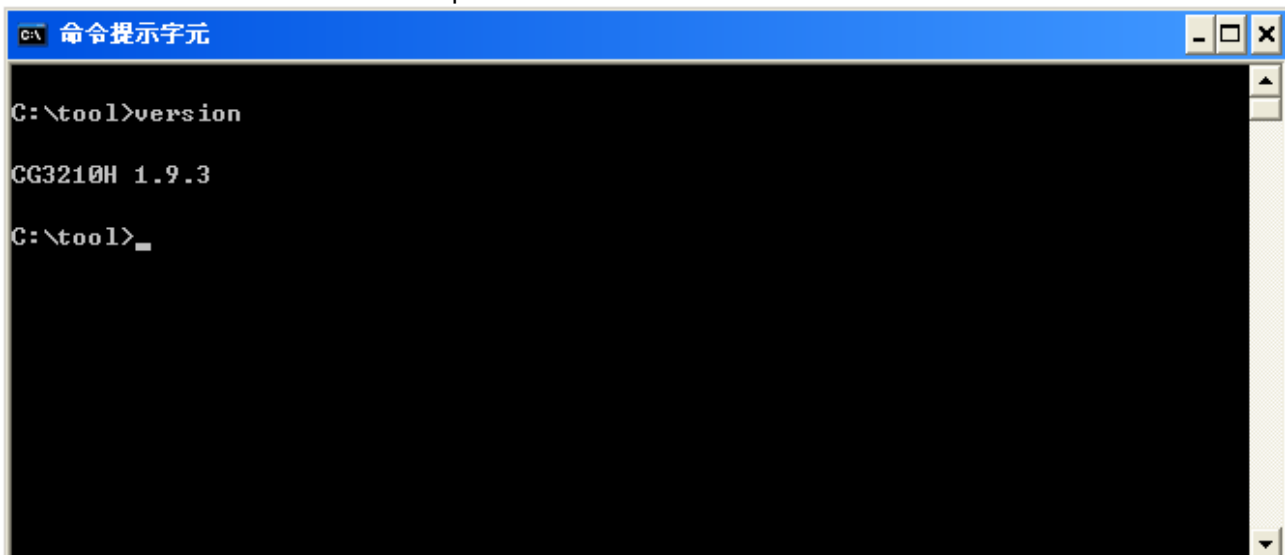
```
C:\>命令提示字元

C:\>netper

tx          rx          crc          dropped      LOSS          PER          %idle_ti
me
12          12          0            0            0            0.00E+000    98.48

C:\>
```

5.6. **version**: is command for chipset version information.



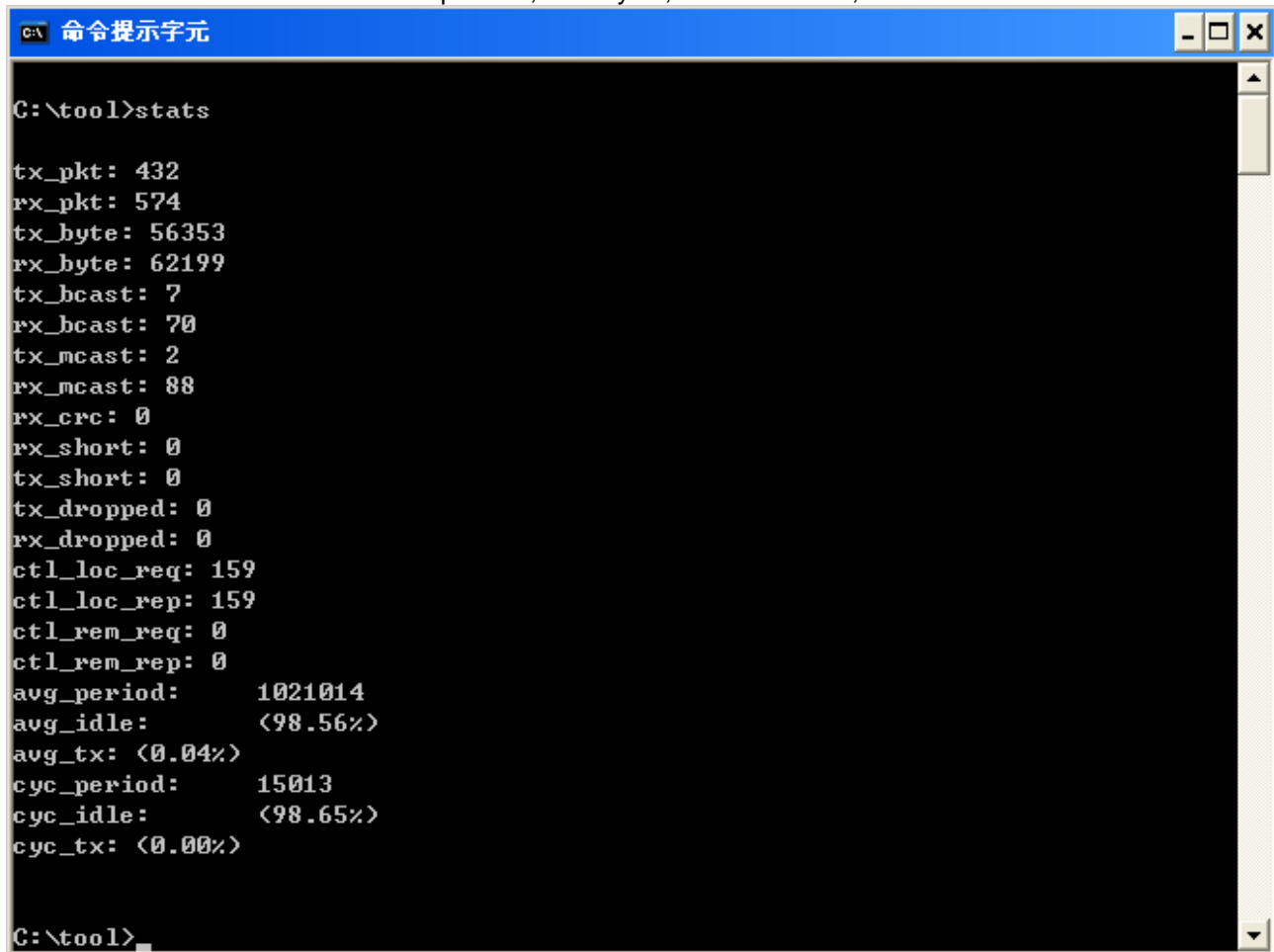
```
C:\>命令提示字元

C:\>version

CG3210H 1.9.3

C:\>
```

5.7. **stats**: is command for tx/rx packets, tx/rx bytes, tx/rx broadcast, tx/rx multicast and etc.



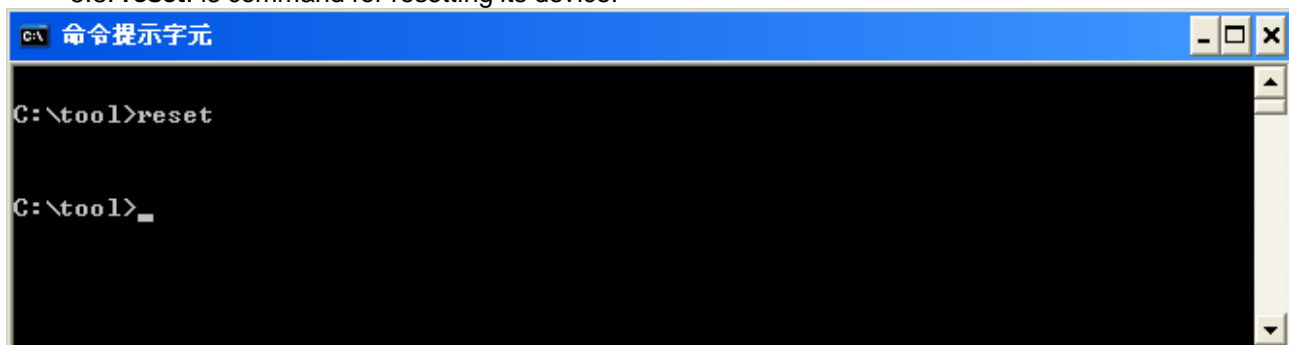
A screenshot of a Windows command prompt window titled "命令提示字元" (Command Prompt). The window shows the execution of the 'stats' command in the directory 'C:\tool'. The output displays various network statistics including tx/rx packets, bytes, broadcast, multicast, CRC errors, short frames, dropped frames, and control plane statistics. It also shows average and cycle times and idle percentages.

```
C:\tool>stats

tx_pkt: 432
rx_pkt: 574
tx_hyte: 56353
rx_hyte: 62199
tx_hcast: 7
rx_hcast: 70
tx_mcast: 2
rx_mcast: 88
rx_crc: 0
rx_short: 0
tx_short: 0
tx_dropped: 0
rx_dropped: 0
ctl_loc_req: 159
ctl_loc_rep: 159
ctl_rem_req: 0
ctl_rem_rep: 0
avg_period:      1021014
avg_idle:        <98.56%>
avg_tx: <0.04%>
cyc_period:      15013
cyc_idle:        <98.65%>
cyc_tx: <0.00%>

C:\tool>
```

5.8. **reset**: is command for resetting its device.

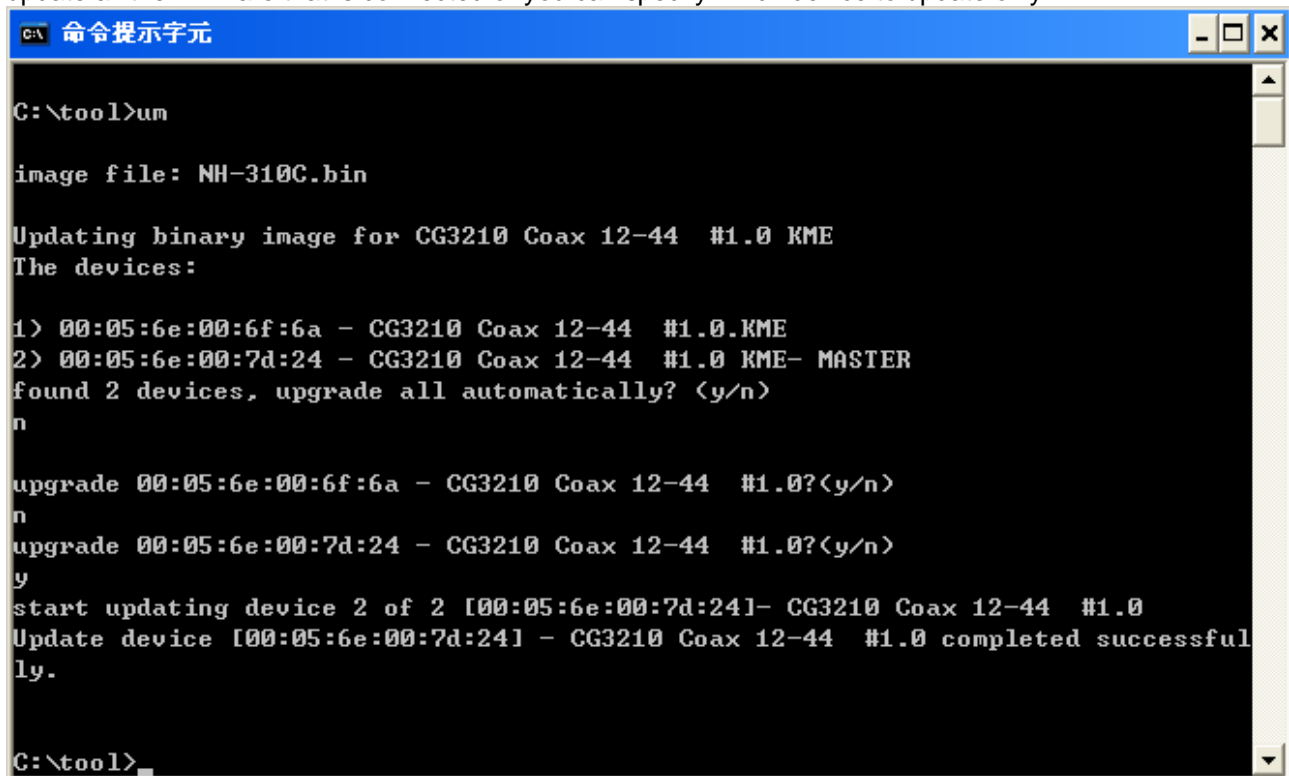


A screenshot of a Windows command prompt window titled "命令提示字元" (Command Prompt). The window shows the execution of the 'reset' command in the directory 'C:\tool'. The command is entered and the prompt returns, indicating the command was executed successfully.

```
C:\tool>reset

C:\tool>
```

5.9. **um**: is command for updating the firmware. Make sure that the firmware is “.bin” file and is located at the same location in the command prompt. After writing the file name of the firmware, it will ask you to update all the firmware that is connected or you can specify which device to update only.



```
C:\tool>um

image file: NH-310C.bin

Updating binary image for CG3210 Coax 12-44 #1.0 KME
The devices:

1> 00:05:6e:00:6f:6a - CG3210 Coax 12-44 #1.0.KME
2> 00:05:6e:00:7d:24 - CG3210 Coax 12-44 #1.0 KME- MASTER
found 2 devices, upgrade all automatically? <y/n>
n

upgrade 00:05:6e:00:6f:6a - CG3210 Coax 12-44 #1.0?<y/n>
n
upgrade 00:05:6e:00:7d:24 - CG3210 Coax 12-44 #1.0?<y/n>
y
start updating device 2 of 2 [00:05:6e:00:7d:24]- CG3210 Coax 12-44 #1.0
Update device [00:05:6e:00:7d:24] - CG3210 Coax 12-44 #1.0 completed successfully.

C:\tool>
```