

Title:	DS-PWA64 How to Upgrade AX PRO Wireless Control Panel by RS232 Cable	Version:	v1.0	Date:	11/08/2021
Product:	AX Series Wireless Security Control Panel			Page:	1 of 8

Preparation

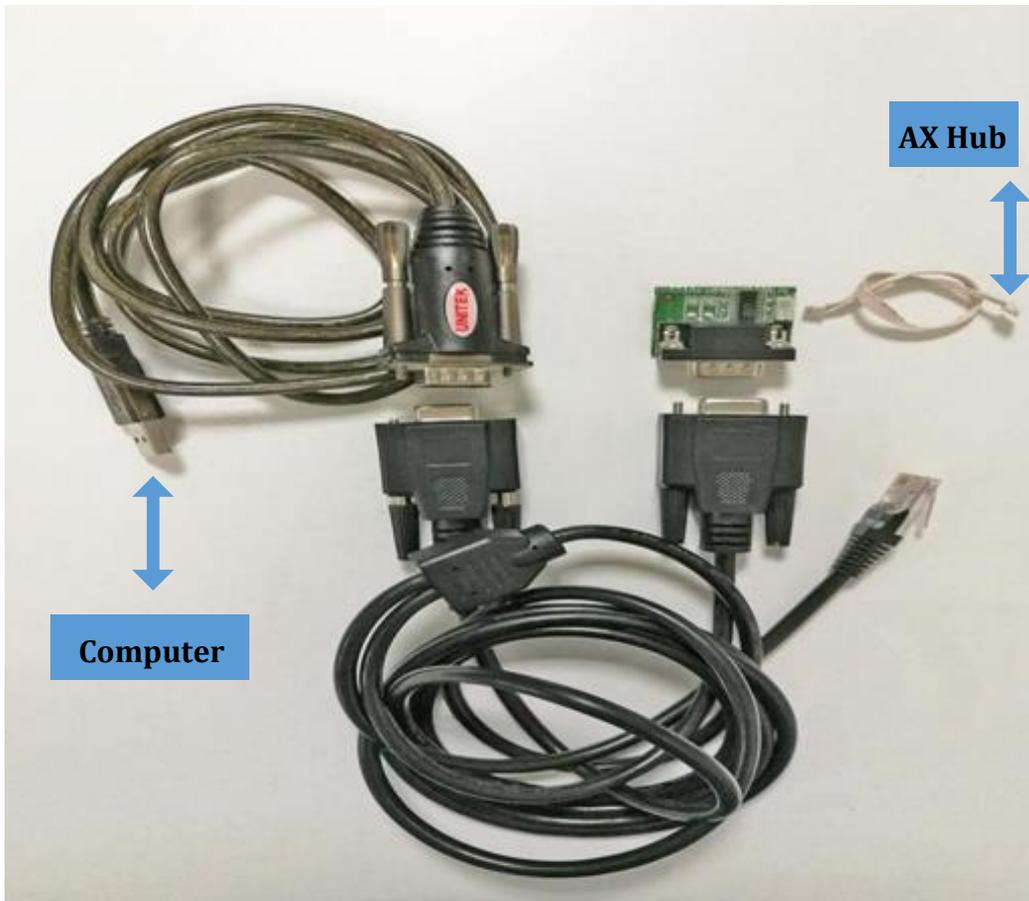
1. AX PRO Wireless Control Panel
2. RS232 serial port cable and Ethernet cable
3. Software SecureCRT and TFTP (/20 Alarm/Hikvision/11 Installation&How to/Tool/)

How to Upgrade AX PRO Wireless Control Panel by RS232 Cable

When AX PRO Wireless Control Panel can't be searched in SADP, can't ping IP successfully or the device is crashed. In this situation, AX PRO Wireless Control Panel need to be upgraded by RS232 cable.

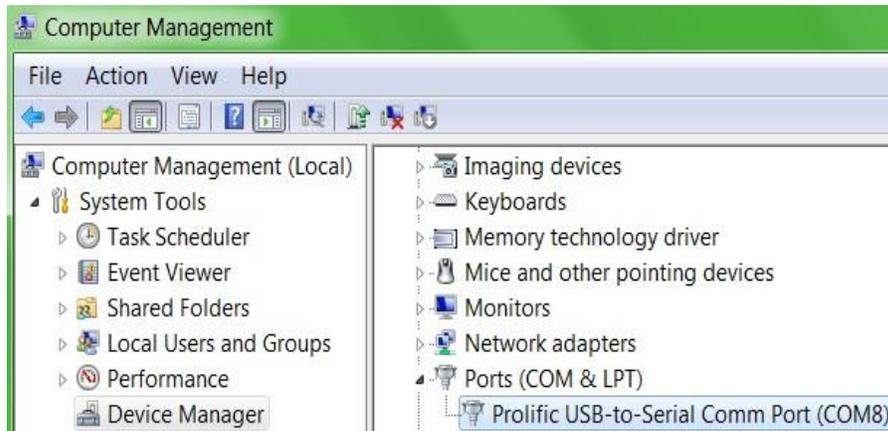
Important Note: Computer must close the firewall.

1. Connect laptop USB port with Hub by RS232 cable.



2. Check the COM port in computer's device management.

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3. Open SecureCRT and configure below parameters.



4. Hold down **U when the Hub power on.**

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```
Boot 2018.1 (May 26 2018 - 09:19:57)

Check Flash Memory Controller v100 ... Found
SPI Nor(cs 0) ID: 0xef 0x40 0x18
spi_w25q256fv_solve_flash_lock_qe_enable(268): Error: Disable Quad failed! reg:0x2
Block:64KB Chip:16MB Name:"W25Q128(B/F)V"
SPI Nor total size: 16MB
*** Warning - bad CRC, using default environment

Hit any key to stop autoboot: 0

This program will upgrade software.
*****
* ATTENTION!! PLEASE READ THIS NOTICE CAREFULLY! *
* Don't reset machine,or anything that interrupt it. *
* The upgrade process must finish in 10 minutes! *
* If this program fails,machine might be unusable, *
* and you will need to reflash again. *
* If you find this too risky,power off machine now. *
*****
Now press [u/U] key to upgrade software: b
```

5. Enter **b**.

```
Now press [u/U] key to upgrade software:

This program will upgrade software.
*****
* ATTENTION!! PLEASE READ THIS NOTICE CAREFULLY! *
* Don't reset machine,or anything that interrupt it. *
* The upgrade process must finish in 10 minutes! *
* If this program fails,machine might be unusable, *
* and you will need to reflash again. *
* If you find this too risky,power off machine now. *
*****
Now press [u/U] key to upgrade software: b
```

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- Then enter **debug**, enter debug mode, you can get the debug password from the local technical engineer.

```
uu
System startup
Uncompress ok!
Boot 2019.12 (Mar 25 2020 - 19:18:06)hi3516dv200
Relocation Offset is: 1f796000
Relocating to 5ff96000, new gd at 5ff13da8, sp at 5ff13d80
SPI Nor: hifmc_ip_ver_check(44): Check Flash Memory Controller v100 ...hifmc_ip_ver_check(50): Found
hifmc_spi_nor_probe(1664): SPI Nor ID Table Version 1.0
hifmc_spi_nor_probe(1689): SPI Nor(cs 0) ID: 0xef 0x40 0x19
hifmc_spi_nor_probe(1754): Block:64KB hifmc_spi_nor_probe(1755): Chip:32MB hifmc_spi_nor_probe(1756): Name:"w25q256fv"
hifmc100_spi_nor_probe(147): SPI Nor total size: 32MB
In: serial
Out: serial
Err: serial
Net: eth0
Hit any key to stop autoboot: 0

This program will upgrade software.
*****
* ATTENTION!! PLEASE READ THIS NOTICE CAREFULLY! *
* Don't reset machine,or anything that interrupt it. *
* The upgrade process must finish in 10 minutes! *
* If this program fails,machine might be unusable, *
* and you will need to reflash again. *
* If you find this too risky,power off machine now. *
*****

Now press [u/U] key to upgrade software: b
boot# debug
BgAAAjfgow1o0+pmVQ=
password:
enter debug mode
boot#
```

- Then enter **pri**, check device start IP network environment.

```
Environment size: 525/4092 bytes
boot # pri
bootcmd=tftp 0x80400000 $(bootfile);bootm 0x80400000;
default=cramfsload 0x80400000 uImage; cramfsload 0x81000000 ramdisk.gz;
sec=tftp 0x80400000 uImage_sec;tftp 0x81000000 ramdisk.gz;bootm 0x80400000 0x81000000;
bootdelay=1
baudrate=115200
ipaddr=192.0.0.64
serverip=192.0.0.128
gatewayip=192.0.0.1
netmask=255.255.255.0
bootfile="uImage"
phyaddr=3
mdio_intf=rmii
bootargs=mem=112M console=ttyS0,115200
ethaddr=58:03:fb:b6:b6:67
stdin=serial
stdout=serial
stderr=serial
verify=n
ver=U-Boot 2010.06 (May 26 2018 - 09:19:57)
Environment size: 525/4092 bytes
boot #
```

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8. Change device IP network environment during upgrade time.(address set depend on your network environment)

```
setenv serverip 10.9.96.44;  
setenv ipaddr 10.9.96.160;  
setenv gatewayip 10.9.96.254
```

```
-- serverip :PC IP address  
-- ipaddr :Device IP address  
-- gatewayip :Gateway address
```

```
boot # setenv serverip 10.9.96.44;  
boot # setenv ipaddr 10.9.96.160;  
boot # setenv gatewayip 10.9.96.254
```

9. Enter **pri** again, check these IP address have been changed.

```
boot # pri  
bootcmd=tftp 0x80400000 $(bootfile);bootm 0x80400000;  
default=cramfsload 0x80400000 uImage; cramfsload 0x81000000 ramdisk.gz;  
sec=tftp 0x80400000 uImage_sec;tftp 0x81000000 ramdisk.gz;bootm 0x80400000 0x81000000;  
bootdelay=1  
baudrate=115200  
netmask=255.255.255.0  
bootfile="uImage"  
phyaddr=3  
mdio_intf=rmii  
bootargs=mem=112M console=ttyS0,115200  
ethaddr=58:03:fb:b6:b6:67  
stdin=serial  
stdout=serial  
stderr=serial  
verify=n  
ver=U-Boot 2010.06 (May 26 2018 - 09:19:57)  
serverip=10.9.96.44  
ipaddr=10.9.96.160  
gatewayip=10.9.96.254  
  
Environment size: 527/4092 bytes
```

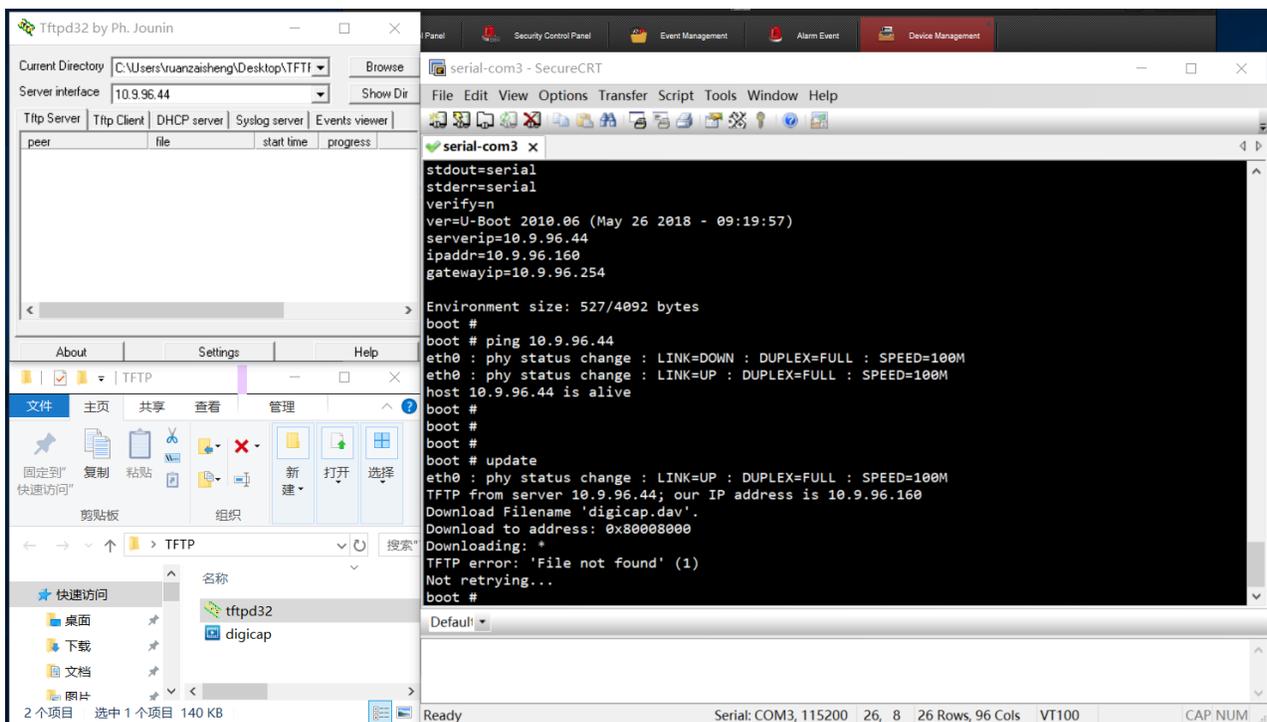
10. Enter **ping 10.9.96.44** , check device and PC is connected. Host 10.9.98.44 is alive means connection is ok.

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```
ethaddr=58:05:10:06:06:87
stdin=serial
stdout=serial
stderr=serial
verify=n
ver=U-Boot 2010.06 (May 26 2018 - 09:19:57)
serverip=10.9.96.44
ipaddr=10.9.96.160
gatewayip=10.9.96.254

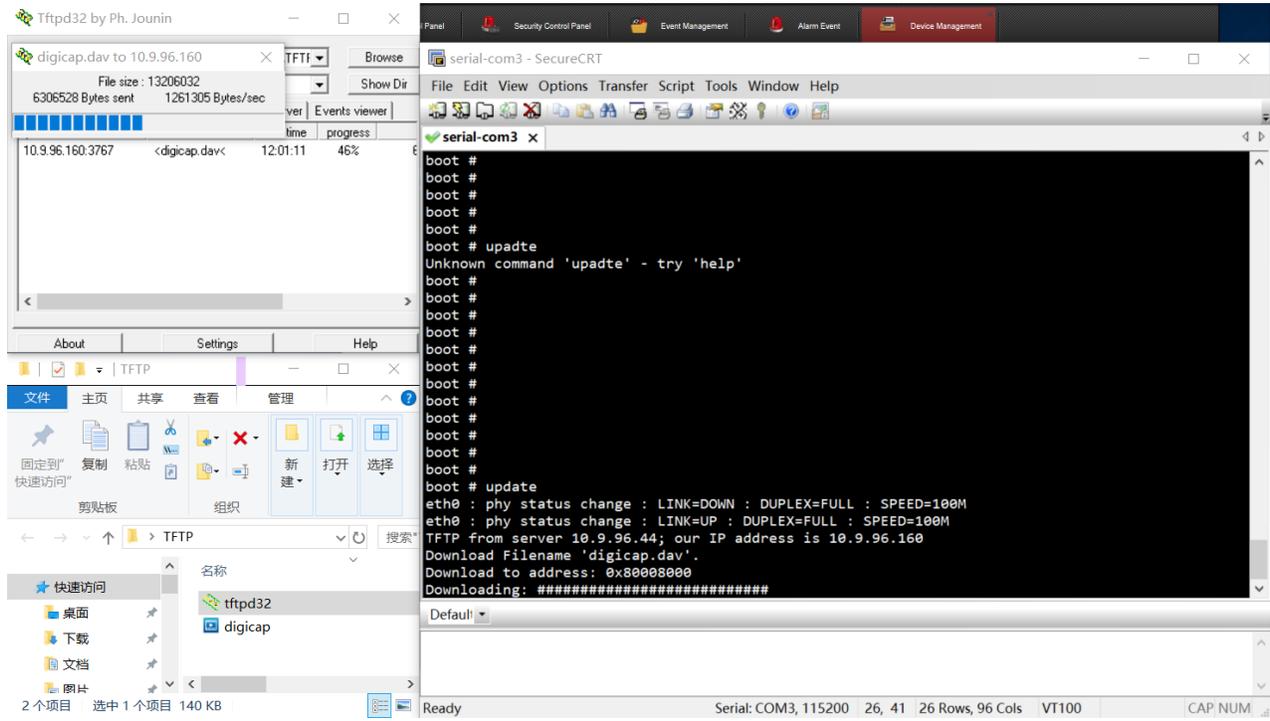
Environment size: 527/4092 bytes
boot #
boot # ping 10.9.96.44
eth0 : phy status change : LINK=DOWN : DUPLEX=FULL : SPEED=100M
eth0 : phy status change : LINK=UP : DUPLEX=FULL : SPEED=100M
host 10.9.96.44 is alive
boot #
boot #
boot #
boot #
```

11. Copy firmware to the TFTP catalog, then open tftp



12. Enter **update**.

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13. Upgrade successful.

```
boot # update
eth0 : phy status change : LINK=DOWN : DUPLEX=FULL : SPEED=100M
eth0 : phy status change : LINK=UP : DUPLEX=FULL : SPEED=100M
TFTP from server 10.9.96.44; our IP address is 10.9.96.160
Download Filename 'digicap.dav'.
Download to address: 0x80008000
Downloading: #####
done
Bytes transferred = 13206032 (c98210 hex)
alloc 16292 bytes persist memory.
alloc 10184 bytes scratch memory.
cry lib created successfully, LIB VERSION 0.8.0, DATE 15.6.12
file header error; header chsum:0x8100874c[0x32c4], len:3097705136[108], filenum:3619483013
Can not find correct packet, try to decrypt..
result is: PASS!          decoding, please wait.
firm file decode ok
checking hash, please wait.
hash check ok.
cramfs.img checkSum ok !
Erasing SPI flash...done
Writing SPI flash...done
Upgrade check .....done
Erasing devcfg...done
boot #
```



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