

Control of a ONVIF PTZ camera, using Pelco D command on a PTZ joystick with "Address ID", via ANT-36000

Contents

Control of a ONVIF PTZ camera, using Pelco D command on a PTZ joystick with "Address ID", vi ANT-36000	
1. ANT-36000 setup	
1.1. Code version	
1.2. To install this code:	
1.3. Camera setup2	
1.4. Camera Control	
1.5. PTZ setup	
2. Connection between ANT-36000 and camera controller	
2.1. 2 wire RS-4854	
2.2. 4 wire RS-4855	
3. PTZ controller setup	



1. ANT-36000 setup

1.1. Code version

The ANT-36000 required the code **V4.810B02_T913**. The currently installed version can be found Web page -> Setup (top right of "live" page) -> System (bottom left of "setup" page) -> Information, then look at the "version", see Figure 1.

System Information Video&Audio + Network + Model ANT-36000 (3003) Event + Version V4.810B03 T913 Record + OpenSSL Version OpenSSL 1.0.2j 26 Sep 2016 Device MAC Address 00:1C:63:BE:06:29 + 🚣 PTZ Current IP 192.168.0.133 + User Current Domain Not RegisteredB System Information Upgrade&Reboot

Figure 1: ANT-36000 Version

The required code can be found using the dropbox link:

https://www.dropbox.com/s/8uf7bw8bc1z0bfr/ANT36000.V4.810B03-102417.tus?dl=0

The file at this link is "ANT36000.V4.810B03-10241 $\overline{7}$.tus \cdot 41.51 MB" Download this file to a location on your PC.

1.2. To install this code:

Web page -> Setup (top right of "live" page) -> System (bottom left of "setup" page) -> Upgrade&Reboot

In the "Firmware" section, Browse to the location of "ANT36000.V4.810B02-100215.tus" and then select "Firmware upgrade"

1.3. Camera setup

Web page -> Setup (top right of "live" page) -> Network (middle left of "setup" page) -> Remote , see Figure 2. Table 1 shows the parameter and values for use in this web page.

Value Comments Parameter Remote type **ONVIF TCP** Media Protocol Address 192.168.0.163 this is used for the example 2000 the example connection has the "port ONVIF" set at 2000, you Port will need to confirm this value with the camera you as using ID admin username for camera password for camera Password

Table 1 : Camera Setup

Once the first 6 have been inputted click "get profile list" to access the camera and get the profile list. This will appear in the "profile". In this example "MainStream Token" was selected then "Apply" selected.



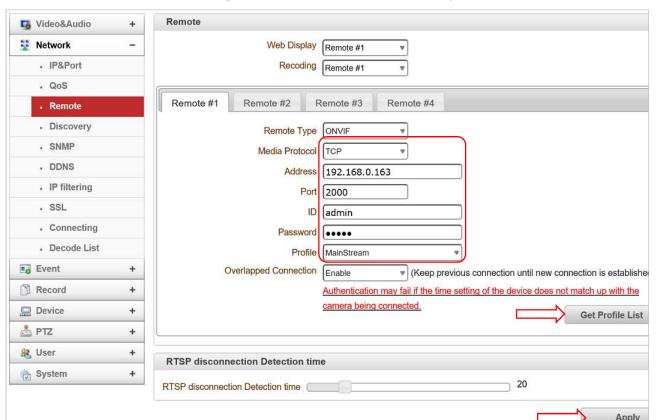


Figure 2 : ANT-36000 Camera setup

If you have a HDMI monitor connected to get the image a fully screen go to Web page -> Setup (top right of "live" page) -> Video&Audio (top left of "setup" page) -> Output , in "Display mode" for HDMI select "Channel 1" then Apply

1.4. Camera Control

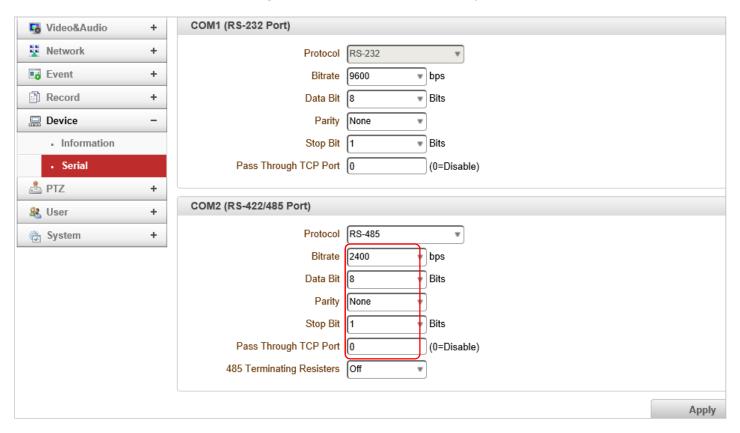
To confirm the ANT-36000 can control the PTZ camera go to Web page and use the "PTZ Control", on the left side of the web page, confirm the "joystick" and function buttons control the camera. This confirms that the ANT-36000 can control the camera.

1.5. PTZ setup

The baud rate (and other serial parameters) for the PTZ controller (you need to get this from the controller user guide) are required and are put in .. Web page -> Setup (top right of "live" page) -> Device (left of "setup" page) -> Serial -> COM2 (RS-422/485 Port). The example shown in Figure 3 the baud rate is 2400, the other setting of Data bit, Parity and stop bit are fairly standard. Once the values have been selected click apply.

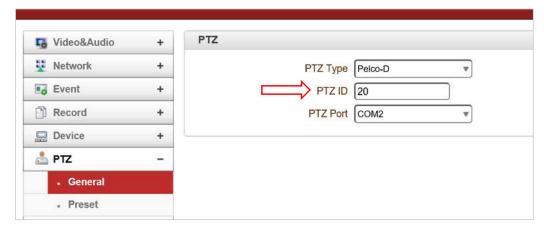


Figure 3: ANT-36000 serial setup



The 4.810 code has RS-485 'Address ID' functionality, to access this Web page -> Setup (top right of "live" page) -> PTZ (middle left of "setup" page) -> General, see Figure 4

Figure 4: RS-485 Address ID



2. Connection between ANT-36000 and camera controller

2.1. 2 wire RS-485

In the example shown the wire used has the colours and function as described in Table 3



Table 2 : Serial data cable

PTZ	Wire colour	ANT-36000	ANT-36000 'Alternative'
Tx+	Green	Rx+	Tx+
Tx-	White / Green	Rx-	Tx-

In ANT-36000 'Alternative' it is noted that that the PTZ controller Tx+/- can be connected to the ANT-36000 Rx+/- or Tx+/-, and in both cases the PTZ controller will control the PTZ camera. In Figure 5 and Figure 6 the wiring and cable colour for the RS-485 serial connection between the ANT-36000 and PTZ controller.

Figure 5: 2 wire RS-485 serial wiring on ANT-36000

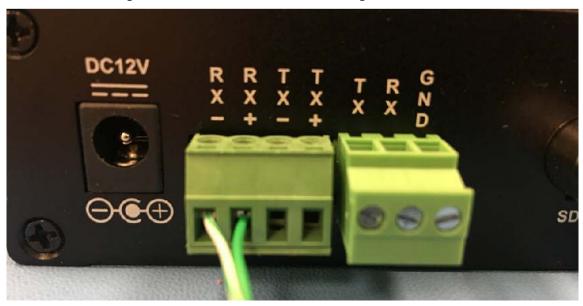
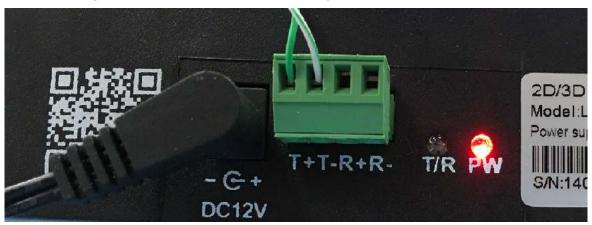


Figure 6: 2 wire RS-485 serial wiring on PTZ Camera controller



2.2. 4 wire RS-485

In the example shown the wire used has the colours and function as described in Table 3

Table 3: Serial data cable

Function	Wire colour
Tx+	Black
Tx-	Red
Rx+	Green
Rx-	Yellow

In Figure 7 and Figure 8 the wiring and cable colour for the RS-485 serial connection between the ANT-36000 and PTZ controller



Figure 7: 4 wire RS-485 serial wiring on ANT-36000

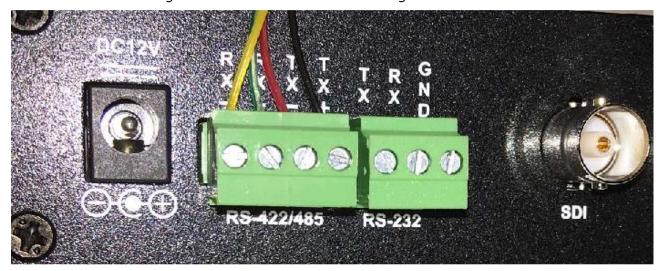


Figure 8: 4 wire RS-485 serial wiring on PTZ Camera controller



3. PTZ controller setup

The controller needs communicate with camera ID, as set up in Figure 4, and the baud rate as setup in Figure 3 using Pelco D protocol.



Document information

Version	date	Author	Comments
1.0	15-Jan-18	David M	first draft with code V4.703B03
2.0	16-Nov-18	David M	Updated for V4.810B02, which has device ID functionality
2.1	21-Jan-19	David M	Added Doc info
3.0	19-Mar-19	David M	Updated for ANT36000.V4.810B03-102417.tus which has better control for HikVision

 $\frac{\text{https://www.dropbox.com/s/eh0201whdk0iohy/ANT36000.V4.703B03-033110.tus?dl=0}{\text{The file at this link is "ANT36000.V4.703B03-033110.tus \cdot 42.46 MB"}}$

 $\frac{\text{https://www.dropbox.com/s/ldr8mnvrdlt4t6h/ANT36000.V4.810B02-100215.tus?dl=0}{\text{The file at this link is "ANT36000.V4.810B02-100215.tus \cdot 41.5 MB"}}$

 $\frac{\text{https://www.dropbox.com/s/8uf7bw8bc1z0bfr/ANT36000.V4.810B03-102417.tus?dl=0}{\text{The file at this link is "ANT36000.V4.810B03-102417.tus} \cdot 41.51 \text{ MB}''}$