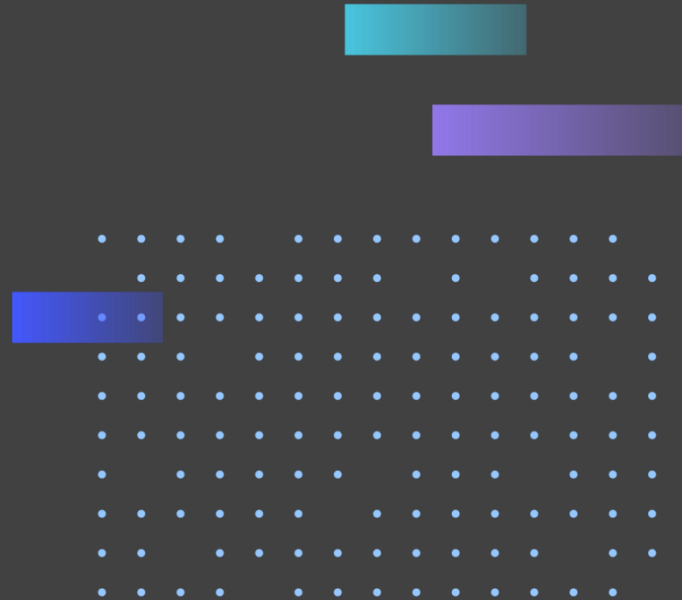


# VIVOTEK Wiegand Converter

A0-20W Firmware\_Update\_SOP

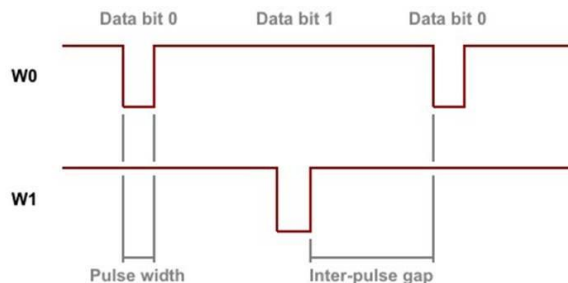
Release Date: September 10, 2021

**VIVOTEK**  
A Delta Group Company





# Firmware Version



For the unstable WIEGAND reading issue, we suspect that it's caused by un-real time access control controller (OS-based device, Not MCU). For this circumstance, VIVOTEK provide 4 modified WIEGAND signal pattern for securing the reading success. They are different in two setting, "Pulse Width" & "Inter-pulse gap".

※ User can test from 1 to 4 in order.

	Version	Pulse Width	Inter-pulse Gap
Default	<b>[Current Setting]</b> APX727i3__V0501 8i4o WG Converter vivotek 1m100us	100 $\mu$ s	1 ms
1	APX727i3__V0501 8i4o WG Converter vivotek 1m200us	200 $\mu$ s	1 ms
2	APX727i3__V0501 8i4o WG Converter vivotek 2m100us	100 $\mu$ s	2ms
3	APX727i3__V0501 8i4o WG Converter vivotek 2m200us	200 $\mu$ s	2 ms
4	APX727i3__V0501 8i4o WG Converter vivotek 2m500us	500 $\mu$ s	2 ms

# FW Update SOP 1/4

Controller update tool (Ver 3.02)

NET Adapter: 10.42.2.87, 1c-69-7a-30-ea-37, (Intel(R) Ethernet Connection (7) I219-LM)

Firmware: 0x0000 Load F/W Update F/W

LCD Font Load Font Update Font

Idle Image Load Image Update Image

727CM-IO Test Sub IP Range: 127 ~ 130 Range Scan Exit

Update Path

Ethernet IP 10.42.2.46 Port 1604 Node 1

Serial Node (COM) 1 COM1

Serial Port (COM) BAUD

115200  57600  38400

19200  9600  4800

Select Device

727iV3

331E/327E/721Ev2/725Ev2/727Ev5/881E/821Ev5/837E/EF

...

...

...

...

...

10.42.2.87

New IP: 10.42.2.46 New Gateway: 10.42.2.1

New Netmask: 255.255.254.0 Change IP Find (Broadcast)

Default boot loader address is 192.168.1.128 (1604)

- Step 1, Unzip the “WGToolSetup.zip” and install the “WGToolSetup.exe”.
- Step 2, Start the FW update tool, “UdpUpdater.exe”
- Step 3, Set the Device IP
- Step 4, Select Device “727iV3”

# FW Update SOP 2/4

Controller update tool (Ver 3.02)

NET Adapter: 10.42.2.87; 1c-69-7a-30-aa-37; (Intel(R) Ethernet Connection (7) I219-LM)

Firmware: 0x0000 [Load F/W] [Update F/W]

LCD Font: [Load Font] [Update Font]

Idle Image: [Load Image] [Update Image]

727CM-IO Test

Sub IP Range: 127 ~ 130 [Range Scan] [Exit]

Update Path

Ethernet IP: 10.42.2.46 Port: 1604 Node: 1

Serial Node (COM): 1 COM1

Serial Port (COM) BAUD

115200  57600  38400

19200  9600  4800

Select Device

727V2

727V3

331E/327E/721Ev2/725Ev2/727Ev5/881E/821Ev5/837E/EF

...

...

...

...

...

...

10.42.2.87

Default boot loader address is 192.168.1.128 (1604)

New IP	10.42.2.46	New Gateway	10.42.2.1
New Netmask	255.255.254.0	Change IP	Find (Broadcast)

- Step 5, Check the “New IP” setting, the device will be set to this new address.
- If you wouldn't like to change the device IP, type the current device IP settings.

# FW Update SOP 3/4

Controller update tool (Ver 3.02)

NET Adapter: 10.42.2.87; 1c-69-7a-30-ea-37: (Intel(R) Ethernet Connection (7) I219-LM)

Firmware: E:\Case\2021\_Q2\B9387-LPR\_Weigan\_not\_trigger\_AccessControl\Soyal\_0xC0FB

LCD Font: [Empty]

Idle Image: [Empty]

727CM-IO Test

Sub IP Range: 127 ~ 130

Range Scan

Exit

Update Path

Ethernet IP: 10.42.2.46 Port: 1604 Node: 1

Serial Node (COM): 1 COM1

Serial Port (COM) BAUD

115200  57600  38400

19200  9600  4800

Select Device

727V2

727V3

331E/327E/721Ev2/725Ev2/727Ev5/881E/821Ev5/837E/EF

...

...

...

...

...

...

10.42.2.87

New IP: 10.42.2.46 New Gateway: 10.42.2.1

New Netmask: 255.255.254.0

Change IP

Find (Broadcast)

Default boot loader address is 192.168.1.128 (1604)

- Step 6, Click “Load F/W” to select the firmware.
- Step 7, Click “Update F/W” to start update.

# FW Update SOP 4/4

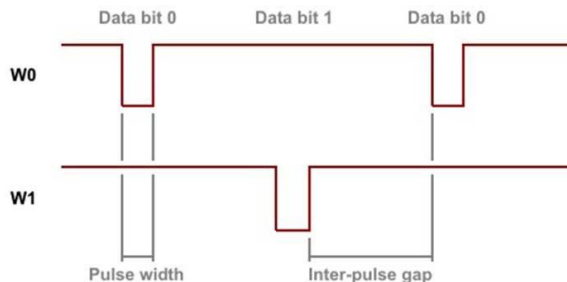
The screenshot shows the 'Controller update tool (Ver 3.02)' interface. The 'NET Adapter' is set to '10.42.2.87; 1c-69-7a-30-aa-37; (Intel(R) Ethernet Connection (7) I219-LM)'. The 'Firmware' path is 'E:\Case\2021\_Q2\IB9387-LPR\_Weigan\_not\_trigger\_AccessControl\Soyal\_0xC0C4'. The 'Update Path' is set to 'Ethernet IP' with IP '10.42.2.46', Port '1604', and Node '1'. The 'Serial Port (COM) BAUD' is set to '115200'. The 'Select Device' section has '727V3' selected. A red box highlights the message: 'S2E-Device(010.042.002.046): Firmware Update is Completed !'. At the bottom, the 'New IP' is '10.42.2.46', 'New Gateway' is '10.42.2.1', and 'New Netmask' is '255.255.254.0'. The 'Default boot loader address is 192.168.1.128 (1604)' is also visible.

Once it shows  
**“Firmware Update is Complete!”**,  
the firmware is updated  
successfully.



# Notice

If user wants to reset the firmware to factory default, please update this version “**APX727i3\_\_V0501 8i4o WG Converter vivotek 1m100us**” to back to default firmware version.



Version	Pulse Width	Inter-pulse Gap
<b>[Current Setting]</b> <b>APX727i3__V0501 8i4o WG Converter vivotek 1m100us</b>	100 $\mu$ s	1 ms
APX727i3__V0501 8i4o WG Converter vivotek 1m200us	200 $\mu$ s	1 ms
APX727i3__V0501 8i4o WG Converter vivotek 2m100us	100 $\mu$ s	2ms
APX727i3__V0501 8i4o WG Converter vivotek 2m200us	200 $\mu$ s	2 ms
APX727i3__V0501 8i4o WG Converter vivotek 2m500us	500 $\mu$ s	2 ms