Successful Installation and Operation



Successful EIPR Installation and Operation

This document contains information on common issues that may arise in the installation and operation of EIPR routers. This content is especially helpful to those with little experience with such equipment. Helpful information in other documents include the **examples** in our *Application Guide* and a **searchable** version of the EIPR onboard help screens in a document named *Help Screens*. These can be accessed at:

www.ccontrols.com/support/eipr.htm

Gateway Setting of LAN-Side Devices

The most commonly overlooked issue in EIPR commissioning is the setup of LAN-side devices. Each LAN-side device **MUST ALWAYS** have its **gateway** IP address setting **match** the EIPR LAN-side IP address — **regardless of whether the EIPR firewall is disabled or enabled**. If this is not done, a LAN-side device can never respond to messages coming from the WAN-side of the EIPR — and **pings** from a WAN-side device to a LAN-side device **will always fail**.

Pinging the EIPR WAN-side port

The WAN-side IP port of the EIPR can be pinged *if the firewall is disabled*. But if the firewall is *enabled*, the port *cannot be pinged — unless remote access is enabled*.

NOTE: Remote access requires a *port number*. If your web browser address field displays no port number when accessing the EIPR, it suggests that *the firewall is disabled*.

If the EIPR firewall is enabled:

When the firewall is enabled, the EIPR acts a bit like a *proxy* for LAN-side devices*. Configure the EIPR NAT table accordingly and note:

- The WAN-side device must target the **NAT proxy address** to contact the LAN-side device that is represented by the EIPR.
- If the WAN-side device targets the actual IP address of the LAN-side device (instead of the NAT proxy address), communication will fail.
- So, to *ping* a LAN-side device, the WAN-side device must *target the NAT proxy address* for the LAN-side device. Pings to the actual IP address of the LAN-side device will fail.
- The gateway setting of the WAN-side device is *irrelevant* for its communication through the EIPR to LAN-side devices.
- * NAT and proxy servers differ. NAT is *transparent* to both WAN and LAN traffic a proxy server is not.



If the EIPR firewall is disabled:

- The WAN-side device must target the actual IP address of the LAN-side device.
- If the WAN-side device targets the NAT proxy address of the LAN-side device, communication will fail. (**NAT is off** with the firewall disabled.)
- To ping a LAN-side device, the WAN-side device must target the actual IP address of the LAN-side device.
- The WAN-side device gateway setting is crucial and must match the IP address of the EIPR WAN-side port — or communication will fail to reach LAN-side devices.

Wireless adapter considerations

EIPR wireless communication can be either Wi-Fi for LAN traffic — or **cellular** for WAN traffic

The *EIPR-E* supports Wi-Fi. The *EIPR-V* supports **both** Wi-Fi and cellular — but not at the same time. Wi-Fi and cellular adapters are not the same. You must use only the type that you need.

The mounting of a wireless adapter affects its performance. A right-angle swivel allows you to orient the adapter for the best signal. But you may also need to mount the adapter some distance from the EIPR. Our accessories can help.*

Wi-Fi considerations

(EIPR-E and EIPR-V)

Wi-Fi is only a LAN-side communication. With an approved USB adapter installed*, the EIPR can function as an access point for other Wi-Fi devices. It cannot be used to subscribe to another access point. All devices using EIPR Wi-Fi must be on the same subnet as the EIPR wired LAN ports (this is automatic when using DHCP).

Cellular considerations

(EIPR-V only)

Cellular communication is a WAN-side activity. The EIPR-V may have two physical WAN ports, but they *cannot be used at the same time*. With an approved USB adapter installed**, the RJ-45 WAN port is automatically disabled and all WAN-side activity occurs only through the cellular adapter.

BAScloudVPN considerations (EIPR-V only)

BAScloudVPN can use its RJ-45 WAN port or a cellular connection (with an approved USB cellular adapter**). Also, you must set the current time on the EIPR-V — or BAScloudVPN functionality will fail. If using **OpenVPN client** in Windows[®] 7 or 8, launch it with the **Run as administrator** option.

* See Accessories under Ordering Information at: www.ccontrols.com/ctrlink/eipr.htm

** Contemporary Controls does not sell cellular adapters, but we have tested and approved several. Our list is at:

www.ccontrols.com/support/cellularadapters.htm

CONTEMPORARY

United States Contemporary Control Systems, Inc. 2431 Curtiss Street Downers Grove, IL 60515 USA	China Contemporary Controls (Suzhou) Co. Ltd 11 Huoju Road Science & Technology Industrial Park New District, Suzhou PR China 215009	United Kingdom Contemporary Controls Ltd 14 Bow Court Fletchworth Gate Coventry CV5 6SP United Kingdom	Germany Contemporary Controls GmbH Fuggerstraße 1 B 04158 Leipzig Germany
Tel: +1 630 963 7070	Tel: +86 512 68095866	Tel: +44 (0)24 7641 3786	Tel: +49 341 520359 0
Fax:+1 630 963 0109	Fax: +86 512 68093760	Fax:+44 (0)24 7641 3923	Fax: +49 341 520359 16
info@ccontrols.com	info@ccontrols.com.cn	info@ccontrols.co.uk	info@ccontrols.de
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