Badger Meter | IR Communication Device

The IR Communication Device (**68891-001**) can be used with ORION® Cellular endpoints* and E-Series G2® Ultrasonic meters. See general information about the device below and the instructions for use on the other side of this document.

* Refer to the *ORION Water Endpoint Installation Manual* available at *www.badgermeter.com* for a complete list of ORION Cellular endpoints.

HOW TO USE

1. Point the device toward the endpoint/meter IR communication port as shown in *Figure 1*. **Range: 1/2 to 3 inches**
2. Press a numbered button to activate. See instructions on *page 2*.

LED Indicator

- Solid **green** LED = success
- Blinking **green** LED = in process
- Blinking **red** LED = fail, error

When activated, the LED indicators next to the numbered buttons light up for 10 seconds. Another command can be issued at any time, which will clear the last command.

Figure 1: IR Communication Device

Optional Tools

- **ORION Cellular Endpoint IR Alignment Tool (68779-001**) is recommended for use with ORION endpoints. Available from Badger Meter.
- **E-Series Ultrasonic Meter IR Alignment Tool (68877-001)** is recommended for use with E-Series meters. Available from Badger Meter.
- Small (#1) Phillips screwdriver (customer supplied) to remove device back and replace CR2450 3V lithium coin battery.
- Micro B USB cable (customer supplied) to connect IR Communication Device to a computing device for file download or IR communications.

View the *IR Communication Device* video for a short step-by-step tutorial about activating an ORION Cellular endpoint. Visit *https://helpbeaconama.net/training-2/#videos* or scan the QR code to access the list of available videos on the Training page in BEACON Help.

About the IR Communication Device

- Has micro USB port for extracting data files (*Figure 1*). Requires micro B USB cable to download files.
- Not rechargeable. Uses replaceable CR2450 3V lithium coin battery. Remove back of device to replace.
- Functions with Windows®11 devices*.
  - USB IR passthrough COM device: Functions the same as IR programming cable when micro B USB cord is attached.
  - USB storage: Stores log files from network sessions. Use micro USB port to extract files. Requires micro B USB cable to download files.

    NOTE: Network logs are stored on the device and must be periodically downloaded/cleared via the micro USB port.

* Any wired versions of the Actisys IR Communication Devices shipped before 5/12/2025 are not compatible with Windows 11.

ORION® CELLULAR ENDPOINTS

IMPORTANT

For best results at time of installation, the IR Communication Device (fob) firmware should be updated prior to installing any new cellular endpoint type. Go to Utility Settings>Downloads on the BEACON website to find the latest firmware and instructions on how to update firmware on the device.

NOTE: *IR Communication Devices shipped prior to March 8, 2021 require a firmware update to support use with ORION Cellular C endpoints. Contact Badger Meter Technical Support (800-616-3837).*

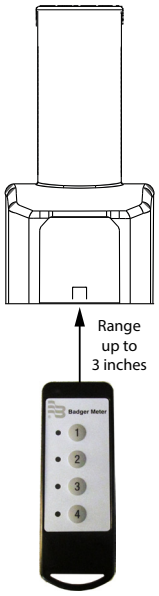

Figure 2: Using device with ORION Cellular endpoint

Button	Press Length	Command	Operation
1	SHORT*	**Start/Active/Run**	One SHORT press will START the 3-part process to activate an endpoint in Pause or Stop mode. **NOTE:** **LED 1, 3, and 4 automatically light up in sequence as process continues.** (No need to press additional buttons.) Endpoint LED flashes when process is done. **IMPORTANT**: Keep IR Communication Device aligned to endpoint IR port until process is complete. Alignment Tool recommended! Process is completed when device LEDs are no longer lit. **NOTE:** Network session generates a log file.
	LONG**	n/a	n/a
2	SHORT*	**Pause**	One SHORT press will PAUSE the endpoint radio signal.
	LONG**	**Stop/Sleep**	One LONG press will STOP the endpoint radio signal.
3	SHORT*	**Force Encoder Read**	One SHORT press checks status of the attached encoder. If error occurs (**red** blinking), press/release again after initial process is complete.
	LONG**	n/a	n/a
4	SHORT*	**Run Network Session**	One SHORT press forces endpoint to run a network session. Network session generates a log file: ICD_SerialNumber_n.log. If error occurs (**red** blinking), press/release again after initial process is complete.
	LONG**	n/a	n/a

E-SERIES G2® ULTRASONIC METERS

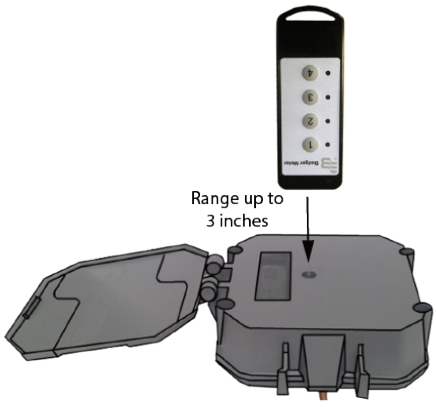

Figure 3: Using device with E-Series G2 Ultrasonic meter

Button	Press Length	Command	Operation
1	SHORT*	**Start/Active/Run**	One SHORT press sets the meter into ACTIVE mode.
	LONG**	**Storage**	One LONG press sets the meter into STORAGE mode.
2	SHORT*	**Clear All Alarms**	One SHORT press clears all alarms set for meter. Alarm icons displayed on the meter LCD are removed and replaced with the OK symbol.
	LONG**	**Download Data Profile**	One LONG press extracts the full data profile of meter and writes a log file.
3	SHORT*	**Display Next Screen**	One SHORT press displays the next available information screen on the meter LCD.
	LONG**	**Display Standard Totalizer**	One LONG press displays the information screen that contains the standard totalizer on the meter LCD.
4	SHORT*	None	n/a
	LONG**	None	n/a

** **SHORT** = Press and release ** **LONG** = Press and hold for (at least) 5 seconds*

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