**City of Port Colborne**
**Engineering and Operations Centre**
**1 Killaly Street West**
**Port Colborne, ON**
**L3K 6H1**
**(905) 835-2900**

# 4 Activating and Reading the E-Coder)R450*i*

## How to Activate LCD Using the Solar Panel

The solar panel is located in the center of the faceplate of the E-Coder)R450*i*, and it supplies the power for the LCD panel. It is light-activated. See Figure 4.

Solar Panel



**Figure 4   Solar Panel for E-Coder)R450*i***

The solar panel activates the LCD display when the unit is exposed to a light source. For example, a unit mounted in an inside location would turn on the LCD when the room light is turned on. A unit mounted in an outside pit would turn on the LCD when the pit lid is opened exposing the unit to daylight. If the LCD is currently off, the LCD may be reactivated by covering the dial plate with your hand for about two seconds. In bright sunlight, it may be necessary to close the cover or the pit lid momentarily. If the LCD does not reactivate as expected, try shining a flashlight on the solar panel.



**Figure 5   Activating E-Coder)R450*i***

If the LCD is able to power on, but there is insufficient light to read the ASIC, the LCD displays **LO LIGHT**. See Figure 6 on page 7.
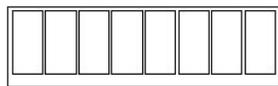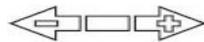
**Figure 6   LCD Displaying Lo Light**

## How to Read

It is important to become familiar with the information available from the meter. To identify this information the following icons and displays are helpful.

**Table 3  Icons and Displays**

| | |
|---|---|
|  | Solar panel, located in the center of the faceplate of the E-Coder)R450*i*, supplies the power for the LCD panel (light-activated). |

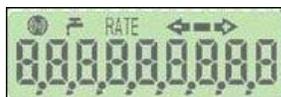| | | |
|---|---|---|
|  | Flow/Leak Indicator shows the direction of flow through the meter: | |
| | **ON** | Water in use |
| | **OFF** | Water not in use. |
| | **Flashing** | Water is running slowly/low flow indication. |

| | | |
|---|---|---|
|  | Leak indicator displays a possible leak: | |
| | **OFF** | No leak indicated. |
| | **Flashing** | Intermittent leak indicated. Water used during at least 1/2 of the 15-minute intervals in the last 24 hours (96 15-minute intervals in a 24-hour period). |
| | **Continuous ON** | Continuous leak indicated. Water used during all 15-minute intervals in the last 24 hours. |

| | |
|---|---|
|  | Nine-digit LCD displays the meter reading in billing units of measure. The number is shown in odometer style, reading left to right. |

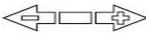| | |
|---|---|
|  | The LCD can display commas or decimals, depending on the configuration of each register, to show digits in the "tens" position, "ones" position, "tenths" position, and so forth. For example, some registers will display 1,234,567.89. Others could display 123,456.789, 12,345,678.9 or 1,234,567,89 depending on the need of the meter/ register combination. (Zeros are not shown on the screen.) |

## Common Causes of Leaks

If the leak indicator is flashing or continuously on, the E-Coder)R450*i* is indicating that a possible leak may exist. Leaks can result from various circumstances. To better help you identify a possible leak, the following table contains some common causes of leak problems that can occur.

**Table 4  Possible Leaks**

| Possible Cause of Leak | Intermit-tent Leak | Continu-ous Leak |
|---|:---:|:---:|
| Outside faucet, garden or sprinkler system leaking | ✔ | ✔ |
| Toilet valve not sealed properly | ✔ | ✔ |
| Toilet running | | ✔ |
| Faucet in kitchen or bathrooms leaking | ✔ | ✔ |
| Ice maker leaking | | ✔ |
| Soaker hose in use | | ✔ |
| Leak between the water meter and the house | | ✔ |
| Washing machine leaking | ✔ | ✔ |
| Dishwasher leaking | ✔ | ✔ |
| Hot water heater leaking | | ✔ |
| Watering yard for more than eight hours | ✔ | ✔ |
| Continuous pet feeder | | ✔ |
| Water-cooled air conditioner or heat pump | ✔ | ✔ |
| Filling a swimming pool | | ✔ |
| Any continuous use of water for 24 hours | | ✔ |

## How to Tell if Water is in Use

To determine if water is in use, complete the following steps:

1   Check the ⟨▭▭⇨ flow indicator by closely watching it for two minutes.

1   Determine the following conditions:

   •   If the arrow is flashing, then water is running very slowly.

   •   If the arrow is continuously ON, water is running.

   •   If the arrow does not flash, water is not running.

## What to Do if There is a Leak

The following checklist can be helpful if the E-Coder)R450*i* leak indicator shows a possible leak.

**Table 5  Checklist for Leaks**

✔    Check all faucets for possible leaks.

✔    Check all toilets and toilet valves.

✔    Check the ice maker and water dispenser.

✔    Check the yard and surrounding grounds for a wet spot or indication of a leaking pipe.

## If Continuous Leak is Repaired

If a continuous leak is found and repaired, complete the following steps:

1   Use no water for at least 15 minutes.

1   Check the 🚰 leak icon.

   If the leak indicator is continuous ON to flashing, then a leak is no longer indicated.

## If Intermittent Leak is Repaired

If an intermittent leak is found and repaired, complete the following steps:

Check the 🚰 leak icon after at least 24 hours.

If the leak has been correctly repaired, the leak icon changes from flashing to OFF.

## Software

A software update is required for N_SIGHT™ R450 to interpret the advanced feature data communicated from the Neptune E-Coder)R450*i*.