

Product Description: Neptune E-Coder
 The face of the E-Coder allows you to read various types of information available. The face of the E-Coder is shown in Figure 1.

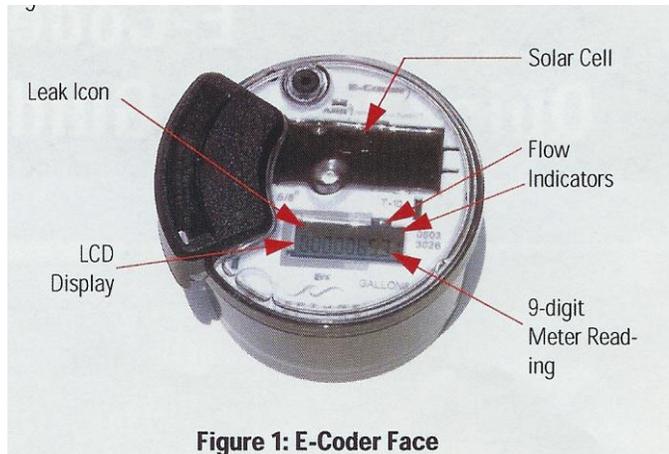


Figure 1: E-Coder Face

How To Read

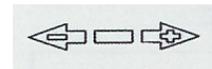
It is important to become familiar with the information available from the meter. To identify this information the following icons and displays are helpful.



Solar Cell, located at the top of the E-Coder, supplies the power for the register. It is activated by light (Sunlight or strong flashlight works best)

Flow/Leak Indicator

shows the direction of flow through the meter



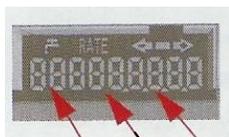
- ON** Water in use
- OFF** Water not in use
- Flashing** Water is running slowly/low flow indication



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** Continuous flow indicated
- ON** Water flowing during all 15-minute intervals in the last 24 hours.



Nine-digit LCD Display the meter reading in billing units of gallons.

Example:

1	2	3	4	5	6	7	.	8	9
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This reading = 1,234,567 gallons (1,234,567.89 gallons)

Shows decimal point to read meter to the one-tenth of a gallon.
 Meter reads up to 1,000,000 Gallons. (Meter will be billed by the 1,000 gallons)

PLEASE NOTE: The billing program doesn't round the number up to the next 1,000 gallons. It only bills for the number in the 1,000 gallons place. So if the actual meter reading is 4,999 - the reading recorded on the billing program is 4,000.

Using The Flow Rate To Tell If Water Is In Use



The best way to determine if water is being used is to check the rate of flow. The LCD Display will alternately flash between the meter reading and the rate of flow. If there is no water going through the meter the rate of flow will read 0.00. The meter will show a flow rate if there is any water going through the meter, even a slow trickle. The meter may read a number like 1.38 or .08. This indicates the gallons per minute going through the meter.

If there is a flow rate you need to determine where the water is going. It is possible to have a leak between the water meter and the main shut off valve where water enters your home. To determine if the pipe between these two points is leaking, shut off the main water supply valve at the house and check to see if the meter continues to show that water is being used. If the flow rate shows 0.00 then you will need to determine where the water is going in the house. See chart below for possible causes.

On the farm, the water lines may supply multiple buildings or water tanks. To determine if there is a leak in these lines, use the valves in your system to isolate different lines, checking the meter for usage when everything is shut off on these lines. Once you have eliminated **all possible water usage** and determined you have a leak, it time to begin looking for the leak. Check for areas where the ground feels spongy or a spot where the grass is greener than the rest of the lawn. During the winter check for areas where snow has melted faster than the ground around it. These are tell-tale signs to help locate a possible leak. Contact your plumber for additional help locating and repairing your water lines.

CAUTION: Before digging for any leak make sure you have eliminated all possible water usage such as valves not shut off completely, leaking faucets and toilets, cattle waterers, ect.

Common Causes Of Continuous Flow/Leaks

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

Possible Cause of Leak	Intermittent Leak	Continuous Leak
Outside faucet, garden or sprinkler system leaking	✓	✓
Toilet valve not sealed properly	✓	✓
Toilet running		✓
Faucet in kitchen or bathroom 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		✓

What to Do if There is a Leak

The following checklist can be helpful if the E-Coder leak indicator shows a possible leak:

- ✓ Check all faucets for possible leaks.
- ✓ Check all toilets and toilet valves.
- ✓ Check the icemaker and water dispenser
- ✓ Check the yard and surrounding grounds for a wet spot or indication of a pipe leaking.

If Continuous Flow Is Repaired

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

1. Use no water for at least 15 minutes
2. Check the  leak icon
3. If the leak is OFF, then a leak is no longer indicated

If Intermittent Flow Is Repaired

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

1. Check the  leak icon after at least 24 hours.
2. If the leak has been correctly repaired, the leak icon changes from **Flashing** to **OFF**.