



Badger Meter

How to Read an Encoder

HR | E LCD Encoder and
E-Series® Meters with High Resolution Protocol

The HR-E LCD encoder has a 9-digit Liquid Crystal Display (LCD) to show consumption, flow and alarm information. The display automatically toggles between 9-digit and 6-digit consumption, rate of flow and meter model.

VISUAL READING DISPLAYS

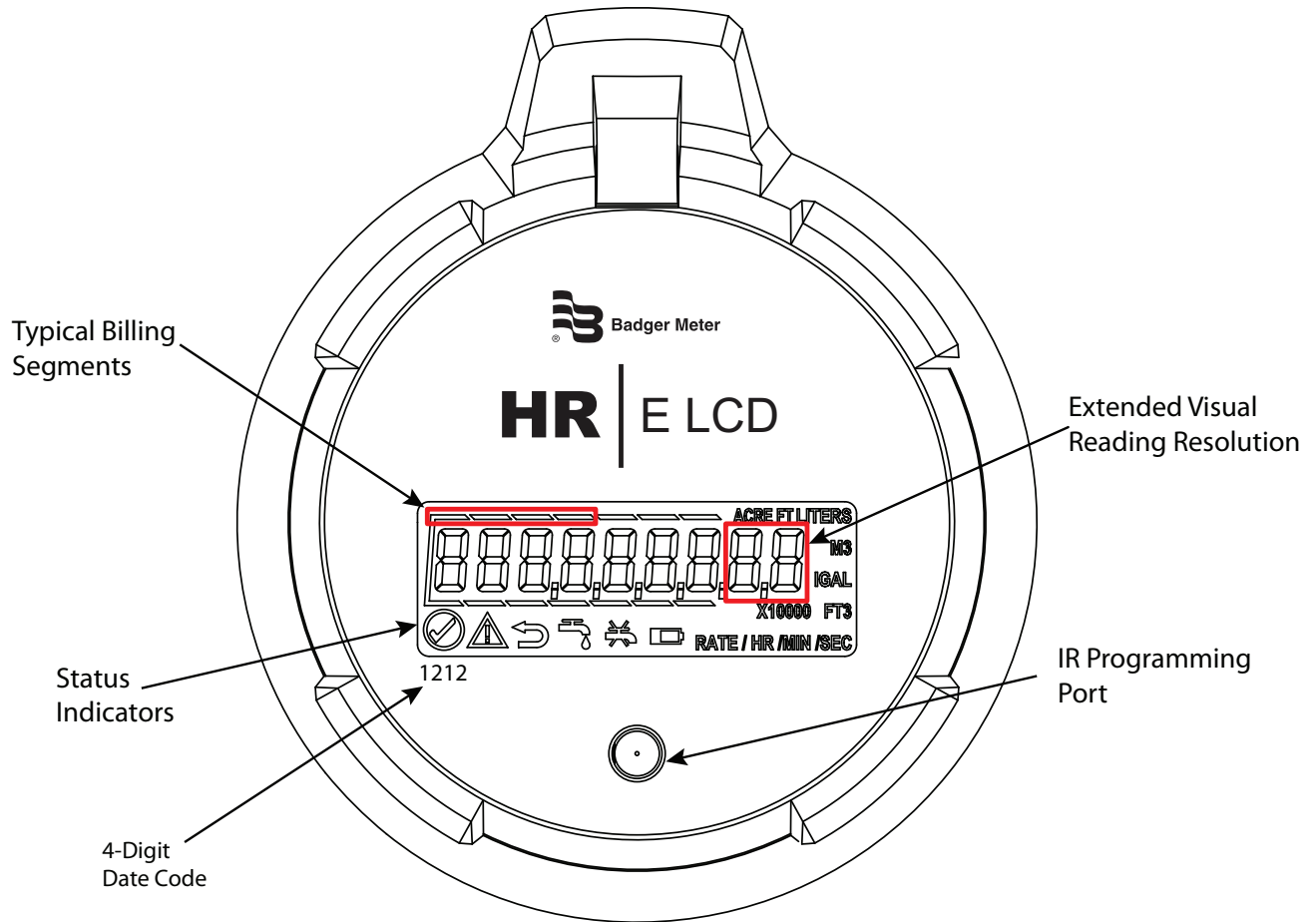
- The 9-digit display provides your utility with the finest reading resolution.
- The 6-digit display represents the equivalent of the moveable number wheels on a 6-dial mechanical encoder.

UTILITY BILLING STANDARDS FOR METER READING

Typical 6-wheel odometer registration is designed with white and black number wheels for local readability with the white number wheels corresponding to the “typical” utility standard meter reading units:

- Gallons – reading to the nearest 1000 gallons
- Cubic Feet – reading to the nearest 100 ft³
- Cubic Meters – reading to the nearest 10 m³

The HR-E LCD encoder is designed with segmented lines above the numeric dials. The segmented lines above the numbers on the LCD display represent what the white numbers wheels do for the mechanical encoders—the typical utility standard meter reading.



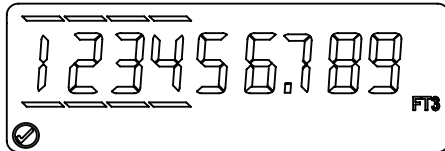
CUBIC FEET

Typical Billing Unit of 100 Cubic Feet

9-DIGIT VISUAL DISPLAY

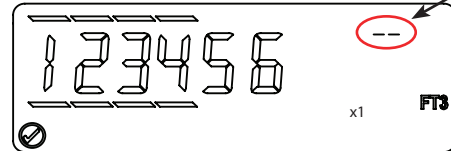
6-DIGIT VISUAL DISPLAY

Recordall Disc LP, M25, M35, M40, M55, M70, Recordall CSM 2", 3", 4", 6" Low Side, E-Series E-25, E-35, E-55 (9-digit display only)



Meter reading to the nearest? 1000th ft³ = 123456.789
 100th ft³ = 123456.78
 10th ft³ = 123456.7
 1 ft³ = 123456
 10 ft³ = 12345
 100 ft³ = 1234

Typical Billing Units →

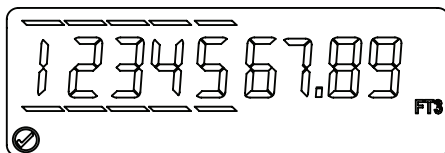


Meter reading to the nearest? 1 ft³ = 123456
 10 ft³ = 12345
 100 ft³ = 1234

Typical Billing Units →

Flow Finder in this view

Recordall Disc M120 & M170, Recordall TSM 1-1/2", 2", 3" & 4", Recordall CSM 2", 3" & 4" High Side, Recordall Combo 8" Low Side, E-Series E-1-1/2" & E-2" (9-digit display only)



Meter reading to the nearest? 100th ft³ = 1234567.89
 10th ft³ = 1234567.8
 1 ft³ = 1234567
 10 ft³ = 123456
 100 ft³ = 12345

Typical Billing Units →

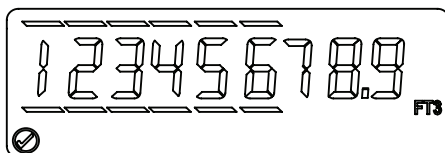


Meter reading to the nearest? 1 ft³ = 1234560
 10 ft³ = 123456
 100 ft³ = 12345

Typical Billing Units →

Flow Finder in this view

Recordall TSM 6", 8" & 10", Recordall CSM 6" High Side, Recordall Combo 8" High Side



Meter reading to the nearest? 10th ft³ = 12345678.9
 1 ft³ = 12345678
 10 ft³ = 1234567
 100 ft³ = 123456

Typical Billing Units →



Meter reading to the nearest? 1 ft³ = 12345600
 10 ft³ = 1234560
 100 ft³ = 123456

Typical Billing Units →

Flow Finder in this view

Recordall TSM 12", 16" and 20"



Meter reading to the nearest? 1 ft³ = 123456789
 10 ft³ = 12345678
 100 ft³ = 1234567

Typical Billing Units →



Meter reading to the nearest? 1 ft³ = 123456000
 10 ft³ = 12345600
 100 ft³ = 1234560

Typical Billing Units →

Flow Finder in this view

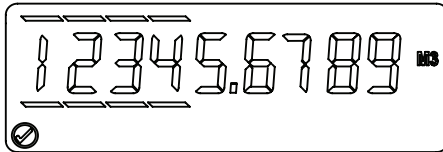
CUBIC METERS

Typical Billing Unit of 10 Cubic Meters

9-DIGIT VISUAL DISPLAY

6-DIGIT VISUAL DISPLAY

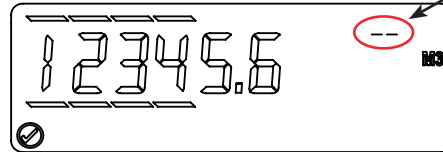
Recordall Disc LP, M25, M35, M40, M55, M70, Recordall CSM 2", 3", 4", 6" Low Side, E-Series E-25, E-35, E-55 (9-digit display only)



Meter reading to the nearest?

10000th m³ = 12345.6789
 1000th m³ = 12345.678
 100th m³ = 12345.67
 10th m³ = 12345.6
 1 m³ = 12345
 10 m³ = 1234

Typical Billing Units →

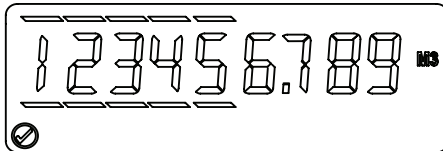


Meter reading to the nearest?

10th m³ = 123456
 1 m³ = 12345
 10 m³ = 1234

Typical Billing Units →

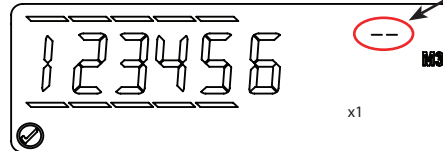
Recordall Disc M120 & M170, Recordall TSM 1-1/2", 2", 3" & 4", Recordall CSM 2", 3" & 4" High Side, Recordall Combo 8" Low Side, E-Series E-1-1/2" & E-2" (9-digit display only)



Meter reading to the nearest?

1000th m³ = 1234567.89
 100th m³ = 1234567.8
 10th m³ = 1234567
 1 m³ = 123456
 10 m³ = 12345

Typical Billing Units →

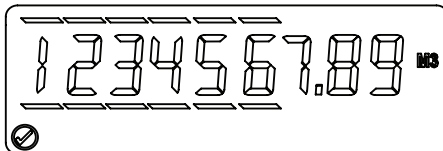


Meter reading to the nearest?

1 m³ = 123456
 10 m³ = 12345

Typical Billing Units →

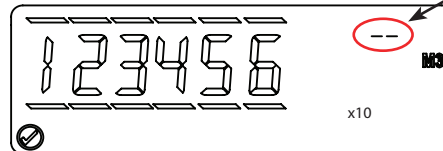
Recordall TSM 6", 8" & 10", Recordall CSM 6" High Side, Recordall Combo 8" High Side



Meter reading to the nearest?

100th m³ = 1234567.89
 10th m³ = 1234567.8
 1 m³ = 1234567
 10 m³ = 123456

Typical Billing Units →

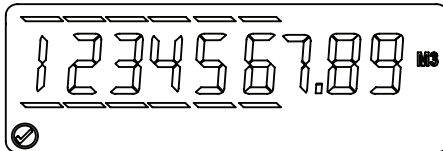


Meter reading to the nearest?

1 m³ = 1234560
 10 m³ = 123456

Typical Billing Units →

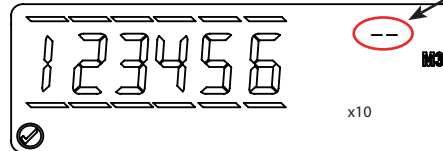
Recordall TSM 12", 16" and 20"



Meter reading to the nearest?

100th m³ = 1234567.89
 10th m³ = 1234567.8
 1 m³ = 1234567
 10 m³ = 123456

Typical Billing Units →



Meter reading to the nearest?

1 m³ = 1234560
 10 m³ = 123456

Typical Billing Units →

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