

3M™ Electronic Marker System (EMS) Disk Markers (Do Not Direct Bury)

The 3M™ Disk Marker provides an easy and accurate method of precisely locating flush-mounted facilities, which become covered by backfill. The four-inch disk marker is easily fastened to the underside of non-metallic lids or covers over flush-mounted facilities, such as hand holes, manholes and other grade-level enclosures during construction and maintenance. Disk Markers are not intended for direct burial.

The addition of the new 3M-iD markers provides additional functionality by enabling facility data to be stored in the marker. The pre-programmed unique serial number integrates with back office mapping and GIS systems when used for mapping new and legacy assets.

Disk markers are easily and accurately located using a 3M™ Dynatel™ Locator. The locator transmits a signal to the buried marker. The marker returns the signal to the locator, indicating the marker's exact position. The compact electronic locator gives both a visual reading and an audible tone.
















3M™ Electronic Marker System (EMS)
Disk Markers

Features	Benefits
Accurate even in congested areas	Helps eliminate mislocates
Underground marker	Protected from damage from above-ground environment
Durable	Long-lasting passive antenna encased in waterproof shell helps identify underground facilities for years to come
Frequency- and color-coded	Helps identify specific utility
Easy to Use	Minimal training
RFID capability	Positive identification using facility information
Physical Specifications	
Size	4" diameter x 0.7" deep
Weight	Net: 1.4 oz. (39.7 g)/ Shipping: 5 lb. (2.3 kg)
Packaging	210 per carton
3M iD Markers Read Range	With a 'U' model (U.S.) locator: 5 ft (1.5 m) With a 'E' model (Export, CE) locator: 1.2 m (Tel, Gas, WW, Comm)/1.0 m (Pwr, Wtr)
3M Passive Markers Detection Range	5 ft (1.5 m)
Environmental Specifications	
Operating Temperature	-4°F to 122°F (-20°C to 50°C)
Storage Temperature	-40°F to 158°F (-40°C to 70°C)



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Image	Product	Application	Stock Number
	3M™ EMS Disk Marker 1411-XR	Telecommunications industry	80611161185
	3M™ iD Disk Marker 1411-XR/iD	Telecommunications industry	80611303514
	3M™ EMS Disk Marker 1412-XR	Power industry	80611161193
	3M™ iD Disk Marker 1412-XR/iD	Power industry	80611303522
	3M™ EMS Disk Marker 1413-XR	Water industry	80630000265
	3M™ iD Disk Marker 1413-XR/iD	Water industry	80611303530
	3M™ EMS Disk Marker 1414-XR	Wastewater industry	80630000273
	3M™ iD Disk Marker 1414-XR/iD	Wastewater industry	80611303548
	3M™ EMS Disk Marker 1415-XR	Gas industry	80630000281
	3M™ iD Disk Marker 1415-XR/iD	Gas industry	80611303555
	3M™ EMS Disk Marker 1417-XR	Cable TV and communications	80611167091
	3M™ EMS Disk Marker 1418-XR	General purpose and reclaimed water	80611169238
	3M™ iD Disk Marker 1418-XR/iD	General purpose and reclaimed water	80611303563

Important Notice

All statements, technical information, and recommendations related to 3M's products are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use. Any statements related to the products which are not contained in 3M's current publications, or any contrary statements contained on your purchase order shall have no force or effect unless expressly agreed upon, in writing, by an authorized officer of 3M.

Conditional Limited Warranty

3M provides the following Conditional Limited Warranty for its iD Electronic Marker Products: When installed in accordance with 3M's installation instructions, 3M warrants iD Electronic Markers for a period of ten (10) years from the date of purchase of the product, to be free from defects in material and manufacture, provided iD Electronic Markers are located with 3M™ Dynatel™ Locators or other brand locators as may be designated by 3M in writing. This warranty does not extend to iD Electronic Markers that have been subjected to misuse or improper application or that have been repaired or altered by others. **3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE.** If the iD Marker is found to be defective within the warranty period, your exclusive remedy shall be, at 3M's options, to repair or replace the iD Markers or refund the purchase price. **Except where prohibited by law, 3M will not be liable for any indirect, special, incidental or consequential loss or damage arising from this 3M product, regardless of the legal theory asserted.**

Conditional Lifetime Warranty

3M provides the following Conditional Limited Warranty for its Electronic Marker Products (non-iD versions only): When installed in accordance with 3M's installation instructions, 3M warrants Electronic Markers for the lifetime of the product, to be free from defects in material and manufacture, provided the Electronic Markers are located with 3M™ Dynatel™ Locators or other brand locators as may be designated by 3M in writing. This warranty does not extend to Electronic Markers that have been subjected to misuse or improper application or that have been repaired or altered by others. **3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE.** If the Electronic Marker is found to be defective during the normal lifetime of the product, your exclusive remedy shall be, at 3M's options, to repair or replace the Electronic Markers or refund the purchase price. **Except where prohibited by law, 3M will not be liable for any indirect, special, incidental or consequential loss or damage arising from this 3M product, regardless of the legal theory asserted.**



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