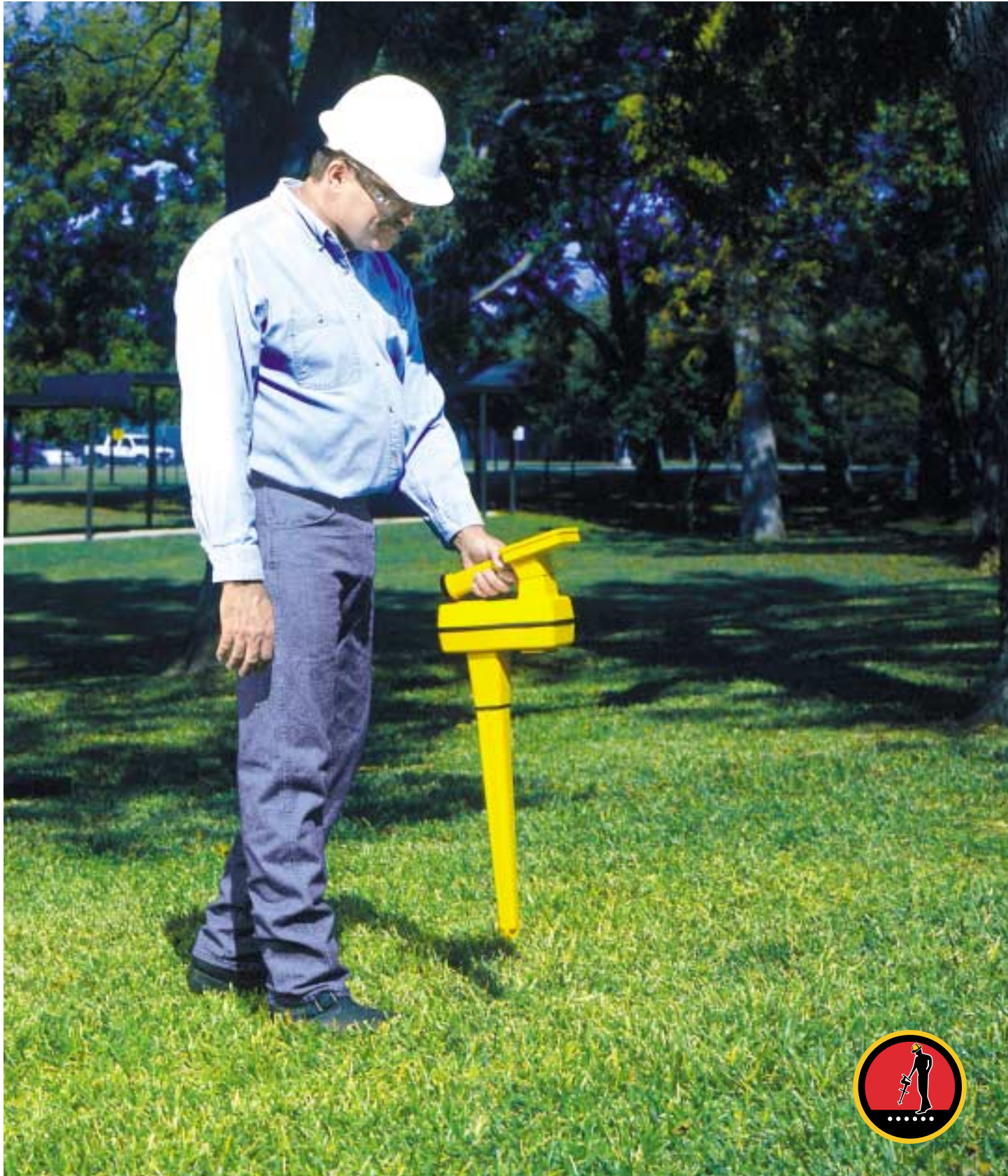


3M

Dynatel™

1420-iD Electronic Marker System Marker Locators

1420E-iD Electronic Marker System Marker Locators





New-to-the-world technology for locating underground utilities without any doubt. 3M™ Dynatel™ 1420/1420E-iD Electronic Marker System (EMS) Marker Locators are microprocessor-based systems that incorporate advanced digital signal processing techniques to quickly and efficiently locate underground facilities – even years after construction or maintenance.

Designed to be more accurate, faster and more integrated than ever before, the 3M Dynatel EMS iD Marker Locators allow you to accurately and easily:

- Locate, read and write to ID markers
- Pin-point the exact depth and location of all existing models of properly installed underground passive EMS markers
- Direct depth reading of ID markers
- Locate two different marker frequencies simultaneously

Advanced features detect more information about underground utilities. A new feature exclusive to the 3M Dynatel EMS iD Marker Locators is the ability to read, write and lock programmed information into the new 3M 1400 Series EMS iD Ball Markers. Information such as a pre-programmed unique identification number, facility data, owner information, application type, placement date and other details from up to 100 ID markers can all be read, stored with date/time stamp and transmitted back to your PC through a standard RS232 serial port for enhanced resource management.



Accurate even in congested areas. 3M Dynatel EMS iD Marker Locators are unaffected by metal conduit or pipe, metallic conductors, fences, AC power or electronic markers for other utilities. Multiple ID markers located at close proximity can be read individually using the new system.

A simple, easy-to-use system. Lightweight and compact, the 3M Dynatel EMS iD Marker Locators are rugged, ergonomic and require very little operator training. A large backlit digital liquid crystal display (LCD) screen and soft-key operation make them easy to understand and use for more precise locates. A “memory” feature remembers operator set-up from previous use. A standard RS232 communications port allows interfacing to an external computer for uploading/downloading of data, unit configuration and remote software upgrades. The system can run over 25 hours on eight AA alkaline batteries.



Features of 3M™ Dynatel™ 1420/1420E-iD EMS Marker Locators

LOCATOR	
Large backlit, high resolution graphic display	Marker-Link and Locator PC tools software
PC interface via standard RS232 serial port	ID marker read/write capability
User-configurable features and interface	Dual marker frequency search-simultaneous
Detects all seven EMS marker frequencies	Marker depth estimation

Specifications of 3M Dynatel 1420/1420E-iD EMS Marker Locators

PHYSICAL SPECIFICATIONS	SIZE H x W x D IN. (CM)	WEIGHT (INCLUDING BATTERIES)
Receiver	10.25 x 4.7 x 30 (26.7 x 11.8 x 76.2)	4 lb. (1.9 kg)
Shipping	N/A	11.5 lb. (5.3 kg)

ENVIRONMENTAL SPECIFICATIONS	
Operating Temperature	-4° F to 122° F (-20° C to 50° C)
Storage temperature	-4° F to 158° F (-20° C to 70° C)
Regulatory	CE
Standard	IP54

ELECTRICAL SPECIFICATIONS	
Marker compatibility	All 3M markers (telephone, gas, CATV, power, water, wastewater and general purpose)
Dual marker mode	Any two marker frequencies simultaneously
Detection range	Exceeds maximum marker depth specifications
Marker read range	5 ft. (1.5 m) to all ID ball markers 4 ft. (1.2 m) to water and power markers on 1420E version only
Marker write range	1 ft. (30 cm)
Marker depth measurement accuracy	+/- 10% +/- 2 in. (5 cm) up to marker depth specifications
Display type	Backlit graphic liquid crystal display (LCD) screen
Memory storage with date/time stamp	Read marker records 100 Written marker records 100 User defined ID templates 32
Marker depth memory storage	Five with date/time stamp
Power	Battery type: eight AA size, alkaline Typical battery life: 25 hours
Display	Large graphic high-contrast LCD with backlight
Speaker	0.25 W
Headphone jack	Standard mini-jack
Serial port	Standard RS232 serial with DB9 connector

Ordering for 3M™ Dynatel™ 1420/1420E-iD EMS Marker Locators

ORDERING INFORMATION

To order, select the 1420 or 1420E EMS-iD Marker Locator.
For further information, contact your 3M sales representative.

PRODUCT NUMBER	DESCRIPTION
1420	EMS-iD Marker Locator with iD Read/Write
1420E	EMS-iD Marker Locator with iD Read/Write (OUS)



A CENTURY
of INNOVATION

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 product 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.



Telecom Access Products Division 3M Telecommunications

6801 River Place Blvd.
Austin, TX 78726-9000
800/426 8688
Fax 800/626 0329
www.3M.com/telecom



Warranty; Limited Remedy; Limited Liability.

This product will be free from defects in material and manufacture for a period of 12 months from the date of purchase. **3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. **Except where prohibited by law, 3M will not be liable for any loss or damage arising from this 3M product, whether direct, indirect, special, incidental or consequential regardless of the legal theory asserted.**

3M and Dynatel are trademarks of 3M.



10% Post-consumer waste paper

Litho in USA.

© 3M 2002 80-6111-3140-2 (5025.0) K/CSI-1