

# 3M™ Dynatel™ Locators 7000 Series

## Marker Tape/Locator 7420

Based on existing Dynatel technology platform, the new 7420 locator will allow the user to locate EMS Caution Tape and existing electronic markers (balls, near-surface, full range, etc.). In addition, the locator will read/write to 3M ID markers. It is as easy as selecting “path” marker locating for EMS Caution Tape or “ID/EMS” for point marker locating. The push of one button will provide the depth to any of the underground marking solutions.

## Pipe/Cable/EMS Locators 7550-ID

## Pipe/Cable/Fault/EMS Locators 7573-ID

3M™ Dynatel™ locators 7500 series offer a broad feature set with advanced digital processing and simple interfaces with precision locating capabilities. The new 7500 series locators will allow the user to locate EMS Caution Tape and existing electronic markers (balls, near-surface, full range, etc.). In addition, all 7500 series locators will read/write to 3M ID markers. All 7500 series locators offer six active frequencies and transmitter output options in 3, 5 or 12 watts providing a solution for virtually all challenging applications encountered in the field.

As with all 3M Dynatel Cable/Pipe Locators, the 7500 series provides accurate pipe, cable, or Sonde depth measurements, giving a digital readout in feet and inches, or centimeters (user-selectable). All 7500 series locators and fault finders are also compatible with select GPS/GIS field mapping instruments for real time mapping of electronic markers or pipe and cable facilities. Other user friendly features include the ability to enable or disable receiver frequencies and the ability to select audio sounds in the simple menu driven interface.

## A Reputation of Excellence

When you choose a quality 3M™ Dynatel™ Locator, you get outstanding performance and reliability, along with toll-free technical phone support and a service center dedicated to excellence. Our service center provides calibration, repair, upgrades and modifications for safety, performance and reliability.



3M™ Dynatel™ Cable/Pipe/Fault/EMS Locator 7500 Series



3M™ Dynatel™ Cable/Pipe/Fault/EMS Locator 7500 Series

## Product Features

- 6 active frequencies for direct connect
- 4 induction frequencies with maximum allowed output power
- Trace view mapping display
- Push button depth to all underground markers (passive and ID)
- Receiver rechargeable battery kit
- All frequency mode in direct connect (4 simultaneously)
- Automatic impedance matching
- Ohm meter with high voltage detection
- Rugged, industrial temperature range
- 240VAC output protection

New features in the 3M™ Dynatel™ 7500 Series Locators include EMS Caution Tape Locating and EMS alert which allows the user to locate EMS Caution Tape and at the same time be alerted to electronic markers of the same utility.



## Optional/Replacement Accessories

Stock Number	Product Number	Product Description
80610074686	3001	Dyna-Coupler 3-Inch
80610764716	3019	Cable Locator Coupler Accessory Kit 3"
80611325830	4001	Dyna-Coupler 4.5 Inch
80611335201	4519	Locator Coupler Accessory Kit - 4.5"
80610411185	1196	6" Dyna-Coupler W/Pouch
80611312499	1196/C	6" Dyna-Coupler W/Pouch & 9011 Coupler Cable
80610598130	2876	Large Clip Direct-Connect Trnsmr Cable for Cable/Fault Locators
80610598668	2892	Small Clip Direct-Connect Trnsmr Cable for Cable/Fault Locators
80610074850	9012	Direct Connect, 5-Foot Transmitter Cable, Telephone
80610074843	9011	Coupler Cable
80610126833	9043	Ground Extension Cable 12'
80611330368	2200M-USB	USB To RS232 Converter For 2200M/1420 Locators
80610074777	3014	Earth Contact Frame
80610074942	9026	Earth Contact Frame Cable
80611146715	2200M/7000	Soft Carrying Bag For 2200M/2500/7000 Series
80611306517	2200/7000RB	Rechargeable Battery for 5W & 12W Units Non-Spillable
80630002535	7000RB	Rechargeable Battery Pack for 7000 Series Rcvr
80610126841	8006	Ground Rod
80610757785	3229	ADP 33 kHz Sonde for Use w/Cable/Fault Locators

# 3M™ Dynatel™ EMS Marker/Tape Locator 7420/7420E Product Specifications

## Physical Specifications:

Locator	Size (H x W x D) IN (CM) 30" x 6.5" x 10.5" (76 x 17 x 27)	Weight (including batteries) 5 lb. (2.25 kg)
Shipping Box	Size (L x W x H) IN (CM) 33" x 17" x 12.5" (84 x 43 x 32)	7 lb. (3.2 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	7420 (FCC Part 15), 7420E (CE)
Environmental Standard	IP54

## Compatibility:

3M EMS/ID Markers	All 3M markers (telephone, gas, communication, power, water, wastewater and general purpose)
3M EMS 7600 Series Caution Tape	All 3M path marking caution tape (telephone, gas, wastewater)

## Range/Depth:

### Write Range 3M ID Markers:

Near-Surface	6 in. (15 cm)
Ball Marker	12 in. (30 cm)
Full-Range	24 in. (61 cm)

### 7420 Read Range 3M ID Markers: (Telephone, Power, Gas, Water, Wastewater, Communications (CATV), General Purpose)<sup>1</sup>

Near-Surface	3 ft. (0.9 m)
Ball Marker	5 ft. (1.5 m)
Full-Range	8 ft. (2.4 m)

### 7420E Read 3M ID Markers: (Telephone, Gas, Wastewater, Water, Communications (CATV), General Purpose)\*

Near-Surface	90 cm (36 in.)
Ball Marker	1.5 m (60 in.)
Full-Range	2.4 m (94 in.)

\* Some countries do not allow all marker operating frequencies. Refer to the Operator's Manual for more information.

## Detection Depth 3M Passive Markers (no ID):

Near-Surface	3 ft. (0.9 m)
Ball Marker	6 ft. (1.8 m)
Mid-Range	7 ft. (2.1 m)
Full-Range	9 ft. (2.75 m)

## Maximum Burial Depth

7600 Series Caution Tape	2.0 ft. (.61 m)
Depth measurement accuracy	+/- (10% + 5 cm) or +/- (10% + 2 in.) up to specified depth of marker or caution tape (Depth accuracy susceptible to high ambient noise conditions)

## ID Marker Memory Storage:

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

## Electrical Specifications:

Power	Rechargeable battery pack (12V2R4A) <sup>2</sup>
Battery life:	8 hours typical <sup>3</sup>
Charging time	2.5 hours, with 90~240V AC adapter
Display	Large graphic high-contrast LCD with backlight
Speaker	0.25 W
Headphone jack	Standard mini phone jack
Serial port	Standard RS232 serial with DB9 connector(RS232 to USB adapter cable included)

## Notes:

<sup>1</sup>Some countries do not allow all marker operating frequencies. Refer to configuration section for 7420E instruction manual (Section 4A).

<sup>2</sup>It's recommended to use the rechargeable battery pack. However, a battery holder is provided for using 8-AA size Alkaline batteries for backup, which would have reduced battery life.

<sup>3</sup>The battery life is measured for the 12V2R4 rechargeable battery pack at 73°F/23°C, with 10% usage of the backlight and audio volume at medium level.