



# Dynatel™

## 2210E Cable Locator



1

The 3M™ Dynatel™ 2210E Cable Locator pinpoints the exact path of underground cables and conductors. Lightweight and easy to use, the Dynatel 2210E cable locator quickly and accurately:

- Locates cable path
- Measures and displays cable and sonde depth with the push of a button
- Measures relative signal current in the target cable
- Locates power cable with direct readout of cable depth
- Detects 50/60 Hz power (user-selectable) without the transmitter

The cable locator is simple to operate and interpret and is suitable for most locating tasks. The locator incorporates an improved peak locating mode which provides a sharp peak response, allowing easy discrimination between adjacent cables. The unit estimates cable depth quickly and simply, giving a digital readout in centimeters, inches, or feet and inches (user-selectable).

The unit consists of two basic components:

- Transmitter with built-in circuit continuity tester, frequency and output level selections
- One-piece hand-held receiver

The cable locator operates using two different active frequencies: 577 Hz and 33 kHz. The 577 Hz tone is applied by direct metallic connection and is used for extended distance locating. The 33 kHz tone is useful for precise cable



2

locating over medium distances and is applied by direct connection or induction using either a Dyna-Coupler or the unit's internal antenna.

The locator provides passive locating without the transmitter using the Power signal (50 Hz) or the VLF signal (15 kHz to 30 kHz) from low frequency broadcast transmitters in the area. The 2210E also has an accessory jack that allows the user to identify cables and cable pairs using a Dyna-Coupler or probe connected to the jack.

Additionally, when used in conjunction with the 3M™ Dynatel™ 2205/2206 EMS Marker Locating Accessory, the locator can:

- Pinpoint the exact location of buried EMS markers
- Trace a cable path while simultaneously finding buried markers along the way.

The locator features an easy-to-read bar graph on the receiver to indicate received signal and proximity to the cable. The unit is powered by readily available alkaline batteries.

All components are constructed of tough and rugged materials designed to withstand typical field use.

### Standard Dynatel accessories

- Direct-Connect Transmitter Cable
- Ground Rod; stainless steel

### Optional Dynatel accessories

- 3019 Dyna-Coupler Kit, consists of 3" Dyna-Coupler for use on cables up to 3" (7.6 cm), Coupler Extension Cable, and Pouch
- 3005 1" Dyna-Coupler; for use on cables up to 1" (2.5 cm) in diameter
- 1196 6" Dyna-Coupler; for use on cables up to 6.9" (17.5 cm) in diameter
- 3011 Inductive Probe; for pair identification
- 9011 Coupler Extension Cable
- 9023 Probe Cable
- 9043 Ground Extension Cable
- 3229 Active Duct Probe

# 3M™ Dynatel™ 2210E Cable Locator

## Physical specifications

<b>Size</b>	
Transmitter	17.2 cm H x 28.6 cm W x 19.7 cm D (6.75" x 11.25" x 7.75")
Receiver	64.8 cm H x 9.5 cm W x 27.3 cm D (25.5" x 3.75" x 10.75")
<b>Weight</b>	
Transmitter	2.4 kg (5.2 lbs.)
Receiver	1.8 kg (3.9 lbs.)
Shipping	7.1 kg (15.7 lbs.)
<b>Temperature</b>	
Operating	-20° to 50°C (-4° to 122°F)
Storage	-40° to 70°C (-40° to 122°F) (without batteries)

## Electrical specifications

<b>Receiver</b>	
Frequency	
Active	577 Hz, 33 kHz
Passive	50/60 Hz (Power) 22 kHz (VLF)
Depth	
Range	0 to 4.5 m (0 to 15 ft.)
Accuracy	±10% ± 1 digit, 0 to 1.5 m; ±15%, 1.5 to 4.5 m
Power	Six alkaline LR6 batteries
Typical battery life	50 hours (normal audio level)
<b>Transmitter</b>	
Trace frequency	One of two user-selectable frequencies: 577 Hz, 33 kHz
Output power	Normal setting: 100 milliwatts High setting: 3 Watts
Power	Six alkaline LR 14 cells
Typical battery life	50 hours (normal output level); 10 hours (high output level)

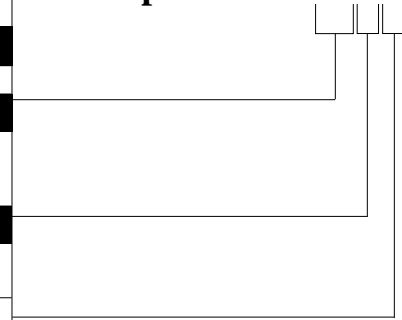
## Ordering Information

To order, specify the appropriate Dynatel 2210E Cable Locator using the table below.

Generic product number: 2210E-XYZ

Market	Receiver	Transmitter	Code X
International	50 Hz/centimeters	3 Watt	E3
Typical Use	Direct connect cable configuration		Code Y
Telephone	5 foot cable with telco style direct connection clips		T
Power	10 foot cable with large alligator direct connection clips		P
CATV	10 foot cable with telco style direct connection clips		C
Coupler Kit			Code Z
No coupler kit			N
3" coupler kit			3
Example:	2210E-E3P3 translates to a 2210E Locator for the International market, used by a power utility and includes a 3" Dyna-Coupler, Coupler cable and pouch		

### Example 2210E- XYZ



## Important Notice

All statements, technical information, and recommendations related to Seller's products are based on information believed to be reliable, but the accuracy or completeness thereof is not guaranteed. Before utilizing the product, the user should determine the suitability of the product for its intended use. The user assumes all risks and liability whatsoever in connection with such use.

Any statements or recommendations of the Seller which are not contained in the Seller's current publications shall have no force or effect unless contained in an agreement signed by an authorized officer of Seller. The statements contained herein are made in lieu of

all warranties, expressed or implied, including but not limited to the implied warranties of merchantability and fitness for a particular purpose which warranties are hereby expressly disclaimed.

SELLER SHALL NOT BE LIABLE TO THE USER OR ANY OTHER PERSON UNDER ANY LEGAL THEORY, INCLUDING BUT NOT LIMITED TO NEGLIGENCE OR STRICT LIABILITY, FOR ANY INJURY OR FOR ANY DIRECT OR CONSEQUENTIAL DAMAGES SUSTAINED OR INCURRED BY REASON OF THE USE OF ANY OF THE SELLER'S PRODUCTS THAT WERE DEFECTIVE.



### Telecom Systems Division

6801 River Place Blvd.  
Austin, TX 78726-9000  
800/426 8688  
FAX 800/626 0326



Recycled paper  
40% pre-consumer  
10% post-consumer

Litho in USA.

© 3M 1996 80-6109-3027-5(0765)XX-1