

3M™ Dynatel™ Advanced Pipe/Cable Locator 2220M

A new addition to the 3M™ Dynatel™ Locators 2200M series, the 2220M locator is designed to provide a simple and accurate solution to locate buried pipes, cables and Sondes in even the most challenging field conditions. The rugged, highly sensitive receiver uses two active trace frequencies and provides a bar graph, signal strength and direction indication to the pipe/cable. In addition, the receiver is designed to detect passive power and auxiliary frequencies that do not require the use of a transmitter.

A Reputation of Excellence

When you choose a quality 3M Dynatel locator, you get outstanding performance and reliability, along with a 24/7 technical support and a service center dedicated to excellence. Our service center provides calibration, repair, upgrades and modifications for safety, performance and reliability.

Product Features
Two active frequencies (8 KHz, 82 KHz)
Dual frequency output
Passive power, Sonde locating
Single and dual peak modes with direction
Product Applications
Locates pipes, cables and tracer wire
Detects power signals
Locates Sondes and pipeline inspection cameras



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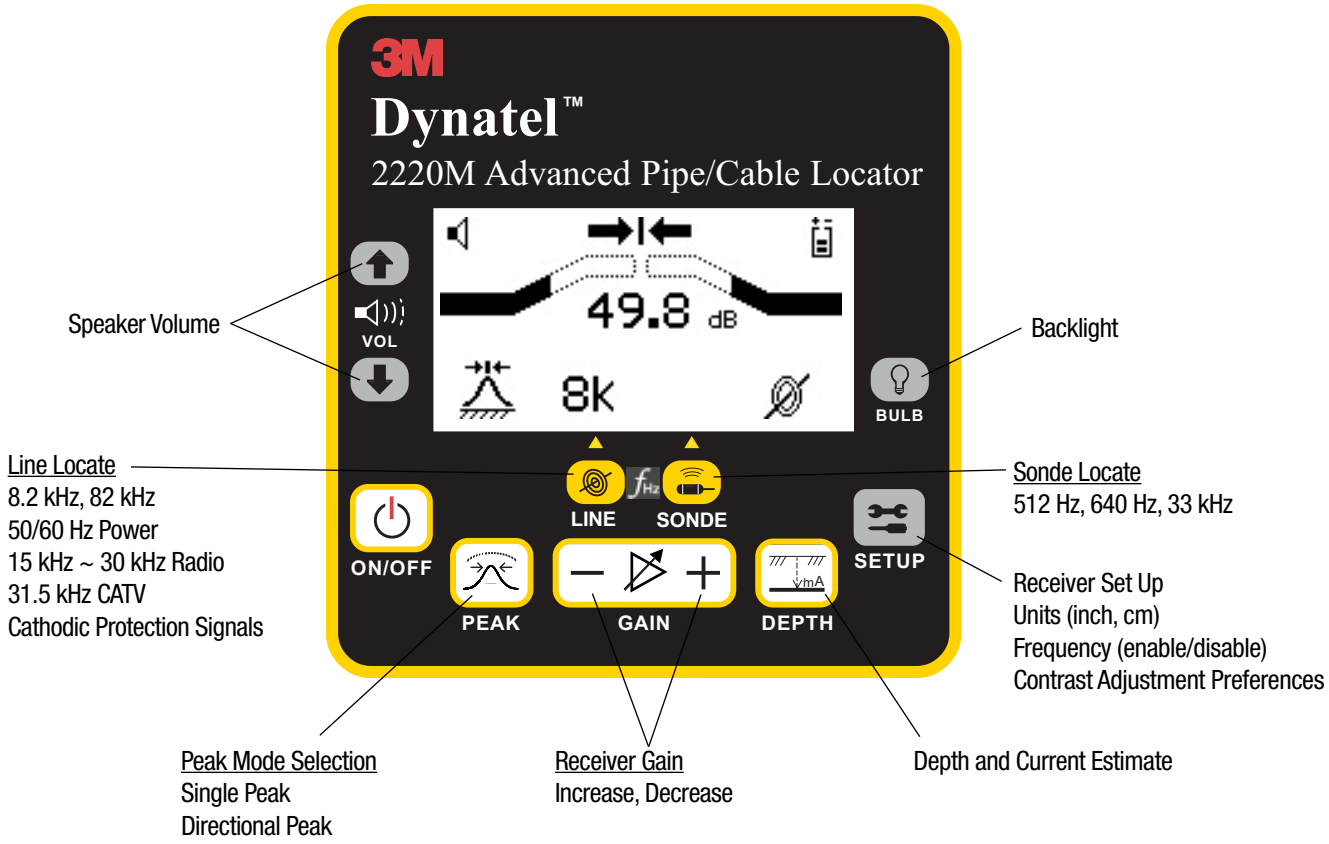

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Key Features	Benefits
Transmitter	
Super Induction Mode	Maximum induction for challenging locates
Two operator-selectable frequencies	Optimizes unit performance in varying conditions
Dual frequency mode	Allows user to select optimum frequency from receiver
Output signal level indication	Operator can distinguish between target pipe and other pipes in congested areas
Auto load matching	Automatic adjustment of output voltage to maximize signal
High and normal output level	Two output levels for long distance locates and other varying pipe conditions
Output protected up to 240 Vac	Prevents inadvertent damage to unit; operates while attached to live circuits
Receiver	
Single and Dual Peak Modes with Direction	Verify cable location and indicates direction to pipe
Backlit Graphic Display	Allows operation in low-light conditions
Push-button digital depth readout (of pipe or Sonde) in inches and feet/inches or centimeters	Easy, quick and accurate depth measurements
Measures signal current in cable	Helps identify target cable regardless of depth or in congested areas
Visual and audible pipe/cable locates	Provides accuracy under varying field conditions
50/60 Hz frequency settings	Optimized for primary or secondary
100/120 Hz CPS	Detects cathodic protection signals
31.5 kHz Auxillary frequency	For locating CATV cables
512 Hz, 640 Hz, 33 kHz Sonde frequencies	Detects frequencies from Sondes and remote transmitters
RS232 Port	Allows for downloading software updates from website

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Products

Product Description	Included In Package
2220M-U3W Advanced Pipe/Cable Locator Util W/bag	2220M Receiver, 3 Watt Transmitter, Large Style Direct Connect Cable, Carrying Bag, Ground Rod and Operating Manual
2220M-C3W-Cplr Advanced Pipe/Cable Locator Comm W/3" Cplr and Bag	2220M Receiver, 3 Watt Transmitter, Small Style Direct Connect Cable, 3" Inductive Coupler, Coupler Cable, Carrying Bag, Ground Rod and Operating Manual

3M Dynatel Accessories

Product Number	Description
3001	Dyna-Coupler, 3 in.
1196	Dyna-Coupler, 6 in.
9011	Dyna-Coupler cable 12 ft.
8006	Ground Rod
2876	Direct-Connect Transmitter Cable, 10 ft. (3 m) in length (large clips 5/8")
9012	Direct-Connect Transmitter Cable, 5 ft. (1.5 m) in length (small clips 1/4")
2892	Direct-Connect Transmitter Cable, 10 ft (3 m) in length (small clips 1/4")
9043	Ground Extension Cable
2200M	Soft Carrying Bag

General Specifications

Receiver:		
Locating Modes	Special (Single) Peak, Dual Peak w/Direction, Depth & Current	
Gain Adjustment	Semi-Automatic with Manual override	
Frequencies		
Active	8 kHz, 82 kHz	
Passive Power	50 Hz or 60 Hz	
Passive LF	VLF 15 k ~ 30 kHz Broadband	
Passive CATV	31.5 kHz	
Cathodic Protection	100 Hz or 120 Hz	
Sonde/Auxiliary (Receive only)	512 Hz, 640 Hz, 33 kHz	
Display Resolution	0.1 dB	
Depth Display Range	0 to 30 ft. (9 m)	
Depth Units	inch and ft-in, cm	
Depth Accuracy**	+/- 2% +/- 3 in. (5 cm) +/- 6% +/- 3 in. (5 cm) +/-10% +/- 3 in. (5 cm)	0 to 60 in. (1.5 m) 61 to 120 in. (1.5 m to 3 m) 121 to 180 in. (3 to 4.5 m)
Cable Current Display	0.01 mA resolution Units: mA	
Battery Type	8 AA size, Alkaline	
Typical Battery Life	30 hrs	
Display	Large Graphic high-contrast LCD with backlight	

* American NTSC, television set on
** Locators are tested in model field conditions with no adjacent signals. Actual operating conditions may result in decreased depth accuracy due to outside signal disruptions.

General Specifications (continued)

Receiver (continued):	
Speaker	0.25 W
Headphone Jack	Standard Mini Jack
Serial Port	Standard RS232 serial with DB9 connector
Transmitter:	
Output frequencies Trace mode Induction mode	 8 kHz, 82 kHz 82 kHz
Output voltage (maximum) Trace	 60 Vrms
Output power	Normal setting: Limited to 0.5 W High setting: Limited to 3 W @ 8 KHz, 1 W @ 82 KHz
Output protection	240 Vrms
Battery Type	Six C size, alkaline (LR14) cells;
Typical battery life	Normal output level: 45 hrs. High output level: 7 hrs.
Environmental:	
Operating Temperature	-4°F to 122°F (-20°C to 50°C)
Storage Temperature	-4°F to 158° F (-20°C to 70°C)
Standard	IP54
Regulatory	CE

Physical Specifications:		
	Size (H X W X D) in. (cm)	**Weight (Including Batteries)**
Transmitter	6.75 x 11.25 x 7.75 (17.2 x 28.6 x 19.7)	5.2 lb. (2.4 kg)
Receiver	10.25 x 10.5 x 30 (26.7 x 26.1 x 76.2)	4.05 lb. (1.9 kg)
Shipping	N/A	17 lb. (7.9 kg)

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