# SPY® PORTABLE HOLIDAY DETECTORS



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## MODELS 780 • 785 • 790

SPY INSPECTION EQUIPMENT offers three Portable SPY® Model Holiday Detectors that combine leading-edge circuitry in combination with our field proven accessories and electrode configurations for accurate, reliable inspection of any small/large coated surface over a metal substrate such as storage tanks, pipes, bridges, wind turbines, ect.

INFINITE VOLTAGE SETTING allows you to set the voltage exactly to the level you desire for the coating you are inspecting. Not six settings, not twenty... any setting you desire over the complete range of each detector model. Whatever the pipe size, two inches through sixty inches, whatever the coating – somastic, tar, asphalt, extruded coats and tapes or thin film epoxy coatings – you have at your control the exact voltage setting required. AUTO REGULATED VOLTAGE keeps your voltage constant! Over a range of two inch through sixty inch pipe the detector output voltage automatically adjusts under the working load to the voltage levels you set. Now you can forget compensations for pipe size, or moisture on the pipe – the detectors automatically make these adjustments.

OUICK RELEASE BATTERY easily slips into position with a snap that announces positive contact and a secure lock in position. Two batteries and a universal charger are part of the package. For continuous service, one battery is kept charging (approx. 8 hours) while the other powers the unit.

### SPECIFICATIONS

MODEL	780	785	790
Voltage Type	DC	Pulse DC	Pulse DC
Voltage Range (kV)	1-5kV	1-15 kV	5-35 kV
Voltage Output Accuracy	±5%	±5%	±5%
Coating Range (Min-Max)	4-50 mils	4-150 mils	50-750 mils
Pulse Repetition Rate	N/A	28 Hz	28 Hz
Operating Temperature	–20°F to 148°F	–20°F to 148°F	–20°F to 148°F
Internal Volt Meter	YES-User Adjustable	YES-User Adjustable	YES-User Adjustable
Display Type	LCD	LCD	LCD
Holiday Indicator Type	Audible/Visual	Audible/Visual	Audible/Visual
Power Type	12V Rechargeable Battery	12V Rechargeable Battery	12V Rechargeable Battery
Quick Release Battery*	YES	YES	YES
Battery charge time	Approx. 8 Hours	Approx. 8 Hours	Approx. 8 Hours
Unit Weight (w/ battery only)	7.45 lb	7.45 lb	7.45 lb
Unit Dimensions (w/o battery) Unit Dimensions (w/ battery)	21.5" × 5" × 5.5" (L × W × H) 21.5" × 5" × 8" (L × W × H)	21.5" × 5" × 5.5" (L × W × H) 21.5" × 5" × 8" (L × W × H)	21.5" × 5" × 5.5" (L × W × H) 21.5" × 5" × 8" (L × W × H
Domestic/International Standards Unit Complies With	AS 3894.1, ANSI/AWWA C203, ANSI/ AWWA C214, ASTM D4787, ASTM D5162, NACE RP0274, NACE SP0188, NACE SP0490, NACE TM0186, NACE TM0384	AS 3894.1, ANSI/AWWA C203, ANSI/ AWWA C214, ASTM D4787, ASTM D5162, NACE RP0274, NACE SP0188, NACE SP0490, NACE TM0186, NACE TM0384	AS 3894.1, ANSI/AWWA C203, ANSI/ AWWA C214, ASTM D4787, ASTM D5162, NACE RP0274, NACE SP0188, NACE SP0490, NACE TM0186, NACE TM0384

\*Battery life is dependent upon selected voltage and load applied. Typical battery life 8 hours.

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Tough, Reliable and Dependable, for decades SPY<sup>®</sup> Holiday Detectors have been built to handle the most EXTREME environments!

#### **IMPROVED CONTROL**

- Horn and light for holiday indication.
- Easy carry top handle.
- Comfortable ergonomic rear handle.
- Infinitely adjustable voltage.
- Output voltage automatically regulated.
- Quick and easy battery installation.

#### FAST SETUP. INTELLIGENT OPERATIONS.

- Integral Voltmeter to verify voltage setting.
- Indicator light cycles off to indicate holiday is present.
- Loud audible alarm for heavy equipment environments.

#### PROVEN RELIABILITY

- Lightweight and durable construction with proven leading edge circuitry.
- Infinite specific voltage adjustments on the fly.
- Automatic compensation for moisture (780 only).

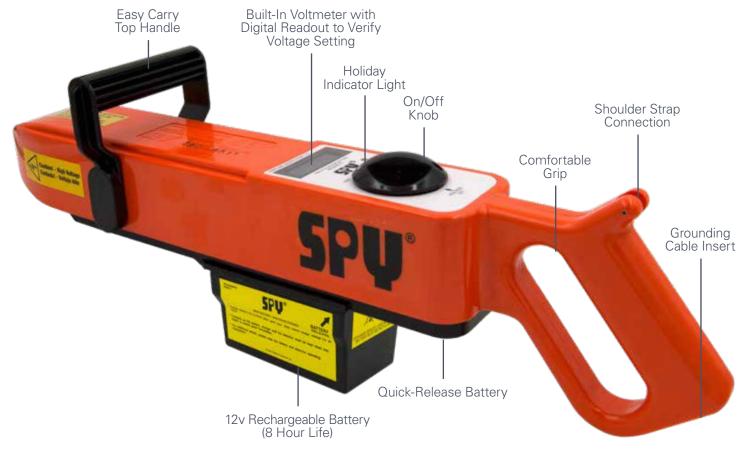
MODEL 780 DC 1-5 kV range (thin film only). 4 – 50 mils.

MODEL 785 PULSE DC 1-15 kV range (thin film only). 4 – 150 mils.

#### MODEL 790 PULSE DC 5-35 kV range. 50 – 750 mils.

CARRYING / SHIPPING CASE Injection molded waterproof cases constructed of ultra high-strength polypropylene copolymer resin. Case is waterproof and dust tight with a submersible design (IP67) that is resistant to corrosion and impact damage. Its molded-in hinge, patented "trigger release" latch system, comfortable, snap-down rubber overmolded cushion grip handle, secure stacking, and automatic ambient pressure equalization valve. Resistant to UV, solvents, corrosion, and fungus.

WEIGHT Average domestic shipping weight (dependent on electrode size): 35 lbs. Export air shipping weight: about 40 lbs.



## 780 • 785 • 790 KITS



### 780/785/790 KIT INCLUDES:

- 2 12V Rechargeable Batteries
- 1 12V Charger
- 1 DC Paddle
- 1 50 FT Ground Cable
- 1 Electrode Wand with Spring Connector
- 1 Shoulder Strap
- 1 Brush Adapter Kit

- 1 SPY<sup>®</sup> Screwdriver
- 1 Quick Connect Ground Clamp

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- 1 Shipping/Carrying Case (Case Dimensions: 26" x 24" x 8")
- 1 Operating Instructions
- 1 Certificate of Calibration
- 1 Clip for Shoulder Strap

## ELECTRODE TYPES

FOR SPRING ELECTRODES the connector has a sealed ball bearing in the end to allow the electrode to roll freely.

FOR BRUSH & OTHER TYPE ELECTRODES the connection is a simple wing nut.



Custom size electrodes are always available. Contact our sales staff to discuss your specific electrode needs.



- \* Sizes above 12" are built with wheels for support.
- \*\* Sizes above 15" are built with support wheels, sizes 12"-14" are built with Teflon guides.
- \*\*\* Springs 54" and above are recommended to use a pusher wand due to potential spring sag (Part #11935)

# ACCESSORIES

SPY<sup>®</sup> has all of the optional hardware and equipment you need to get the best results from your portable holiday detector.



ADAPTER FOR ELCOMETER SPRING ITEM #13996



BRUSH ADAPTER KIT ITEM #11934



ADAPTER FOR TINKER & RASOR SPRING ITEM #13995



GROUND CABLE (50 – 600 FT) ITEMS: 12884 (50'), 11925 (100'), 13422 (160'), 13874 (200'), 13587 (300'), 13849 (400'), 13870 (500'), 13588 (600')



DC PADDLE ITEM #11994



GROUND PAD (FOR USE WITH 790 ONLY) ITEMS: 12239 (3' x 1.5'), 13419 (6' x 3')



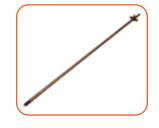
SPRING SUPPORT / PUSHER WAND (18"-72") ITEM #11935



GROUNDING COLLAR (FOR USE WITH 790 ONLY) ITEMS: 14188 (4" - 8"), 14189 (10" - 18"), 14190 (20" - 30"), 14191 (32" - 42"), 14192 (48" - 60")



FLEX-WAND (36"-72") ITEM #13203



GROUNDING ROD ITEM #14196



SPRING/BRUSH WAND ELECTRODE (36"-72") ITEM #11932



SHOULDER MOUNT BATTERY ADAPTER ITEM #14262

# JEEP METERS

In order to assure the highest accuracy and performance of your holiday detector, SPY® offers a selection of Jeep meters (high voltage meters) designed to accurately measure the high voltage output of SPY® holiday detectors.



## DC / PULSE DC VOLTAGE METER MODEL JM

FOR USE WILL ALL DC AND PULSE DC DETECTORS



### PULSE DC ONLY VOLTAGE METER MODEL PJM FOR USE WITH 785 & 790 ONLY



DC ONLY VOLTAGE METER MODEL DCPJM FOR USE WITH 780 ONLY



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