BORIN *Manufacturing, Inc., 5741 Buckingham Parkway, Unit B, Culver City, California 90230, USA*
Telephone +1-310-822-1000, Facsimile +1-338-3434, email borin@borin.com, web-site www.borin.com

Date of Submittal: *Thursday, October 20, 2005* ***Revision Date:*** *September 12, 2013*

Subject: Obtaining IR Free On and Off Potential Readings using the Stelth 7® IR Free Probe with the Bullet Box® IR Free Interrupter (Available in Cu-$CuSo_4$, Ag-AgCl, Zn-$ZnSO_4$)

BENEFITS

1. Eliminates expensive interrupters and the tedious procedure of synchronizing a series of interrupters when trying to coordinate the synchronized interruption of multiple rectifiers.

2. Allows you to take **IR Free off-potential readings** in systems that have high amperage output rectifiers, for which frequent cycling of the rectifier is not recommended because the **Stelth 7® IR Free probe** allows you to leave your **rectifier system ON** and still take your off potential readings.

3. Off Potential measurements can now be taken with total disregard for any and all outside influences - **Your own rectifier - other rectifiers - electric transmission lines - anode beds,** trains & subways - steel in concrete - etceteras.

4. With the use of the **Bullet Box® IR Free interrupter** that comes with the **Stelth 7® IR Free probe**, you can not only **read the on and off potential**, but you can **read the average potential** of your structure and **read the protection current** of your system as well.

5. In high density utility corridors and urban areas where uncontrollable foreign influences make it impossible to obtain valid potential readings, the **Stelth 7® IR Free probe** will block out all of this alien activity and provide you with true IR Free on and off potential readings.

6. Large concrete structures and large diameter (120' to 165')(37 m to 50 m) ground storage tanks can now be monitored without having to employ an excess of reference electrodes. The **Stelth 7® IR Free Rocket** handles this application with ease minimizing the amount of reference cells needed.

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BACKGROUND

Over the last thirty years the cathodic protection industry worldwide has embraced the off-potential method, as defined in **DIN 30676**, as being the most positive method of obtaining IR Free structure to potential readings. At the same time corrosion engineers realized that limitations still existed in using this approach. The following delineates these limitations for the purposes of this discussion.

Also, for the purposes of this discussion the **"Single Most Unfavorable Potential Reading"** on the structure will be referred to as the **"Worst Potential"** and conversely the **"Single Best Potential Reading"** will be referred to as the **"Best Potential"**.

First, the off-potential of a protected structure that has several holidays (which is what you are collectively measuring) is only an average of the potential readings of these holidays. Therefore this off-potential reading is an approximation of all the actual potentials being read on the structure.

Second, from this we can conclude, that it is impossible to determine what is the potential on the structure, as we are using only an average of the potentials and have no way of looking at the single worst potential.

Third, if we cannot determine the worst potential on the structure then we would have to question the applicability of the established criterion that an average reading of -.850 milli volts indicates that adequate protection exists for all of the structure being measured.

This fact has been well known for a long time but was generally ignored. The only alternative was to maintain more negative potentials overall in the hope of compensating for this phenomenon. This practice of course always resulted in higher energy costs and the distinct possibility of causing coating disbondment through hydrogen buildup. Technology has advanced in the early 1980's to give the industry a method to measure the single actual worst potential on the structure.

A technology developed and patented recently in Europe and applied for in the United States by a research team in Germany (now licensed to Borin Manufacturing) , was quickly put to the trials of scrutiny and intensive testing.

This testing was conducted in Europe by the largest gas companies, pipeline companies and engineering companies. This resulted in a technology, previously defined in **DIN 50925**, that brings a simple and economical solution for you to obtain true on-potential and off-potential readings of the single worst potential on the structure. The results of this extensive fifteen year research, testing and analysis program was the development of the ***Stelth 7® IR Free*** and ***Stelth 7® IR Free Rocket*** reference electrode probes.

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THE DESIGN GOAL

A. The design goal was to develop a probe system that would be able to take readings, measuring only, the single worst potential that exists on that structure. Knowing that if the worst reading was -.850 mV for aCu-$CuSO_4$ or lower, then all of the structure is under cathodic protection.

B. This probe must be used without having to shut down or turn off any interference systems such as your own system rectifier, other rectifiers in the area, electric operated trains and subways, electrical transmission lines, etceteras.

C. The probe must have a minimum design life of thirty (30) years with an indefinite shelf life.

D. The probe must maintain a stability of 10 milli Volt with a 3 micro Ampere load over 30 years while operating at a temperature range from -18° to 58° Celsius (0° to 135° Fahrenheit).

E. Artificial Holiday (coupon) must have the same granular orientation as the structure.

F. The probe must employ the use of modern Moisture Retention Membrane technology to control the inner environment of the reference electrode chemistry and shield the probe from external chemical influences.

G. The probe must employ the use of an "Advanced Chloride and Hydrogen Sulfide" trapping technology on Cu-CuSO4 and Zn-ZnSO4 reference electrodes. This trapping material must neutralize chloride and H_2S ions to prevent contamination of the Cu-CuSO4 and Zn-ZnSO4 reference electrodes internal chemistry.

H. The probe selection must be impervious to all ranges of soil and water conditions from dehydrated (desert dry soils) to hydrated (flood zones, swamps, sea and fresh water environments). Available in Cu-$CuSo_4$, Ag-AgCl, Zn-$ZnSO_4$

I. Installers must be able to attach the cable from the probe with no special tools or skills required.

J. The probe must be able to be reused (taken in and out of service) as many times as desired without affecting the operating performance of the probe.

K. The probe must not require the use of any special backfills such as bentonite or gypsum casting plaster which would not only alter the environmental balance of the structure and probe balance, but would increase the weight by six to ten times and increase the freight costs by a factor of six.

L. The probe must not be freight sensitive. Total shipping weight must be under three (3) pounds including carton and excelsior and packaged to gain maximum advantage of weight/volume ratios for air and international shipments.

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CONDITIONS FOR SUCCESSFUL OPERATIONS

The overall intent of the ***Stelth 7® IR Free probe*** is to provide an uncontaminated reading of both the "on and off potential" conditions of a structure in its working environment. To achieve this end it has been determined that all conditions, which exist in this environment, must not be altered from their normal operating status. Therefore the following must be observed to achieve a true IR Free reading:

1. The rectifier system protecting the structure you are testing **must not** be shut off.

2. Other rectifier systems in the area producing stray currents **must not** be shut off.

3. Other stray current producing systems such as electric rail systems, subways and electric transmission lines must be allowed to function as normal and not be shut down.

4. Other forms of interference such as sacrificial anode beds should be ignored.

5. *Current generated from other objects in the environment such as rebar in concrete or steel objects abandoned or placed in the environment should be ignored.*

6. Induced DC current from intermittent machinery, such as motors from elevators should be ignored.

DESIGN THEORY

The ***Stelth 7® IR Free probe*** has a control element (coupon) made of a metal that matches the structure being monitored (carbon steel, stainless steel, cast iron, ductile iron, etceteras), which is in fact, an Artificial Holiday that must be sized to be larger than any other holiday in the area of influence, 82' (25 m) from each side of the reference cells location, 164' (50 m) overall. If the Artificial Holiday is determined to be under cathodic protection then you can be assured that all smaller holidays in that area of influence will be protected as well.

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FUNDAMENTAL PRINCIPLES THAT MAKE IT WORK

- The ***Stelth 7® IR Free probe*** must be installed in the same environment as the structure. This can be soil, sand, fresh water, sea water or various backfills used in the industry. The only requirement is that it must be the same for both structure and probe, and you should select the right chemistry for the corresponding environment.

- The Artificial Holiday (coupon) on the ***Stelth 7® IR Free probe*** must be larger in surface area than any single holiday present over a range of 82' (25 m) in either direction, (that is 164' or 50 m combined), from the installation point of the "Stelth7" IR Free probe. Table 1 illustrates a rather easy approach in determining the coupon size.

- After the initial installation, the ***Stelth 7® IR Free probe*** must be allowed to remain dormant (not connected to the structure or cathodic protection system) for a period of approximately thirty (30) days for wet or moist environments and ninety (90) days for dry environments. This provides the opportunity for the Artificial Holiday (coupon) to stabilize and arrive at its natural corrosion state (free corrosion potential) in its environment, matching the corrosion state (free corrosion potential) of the holidays that already exist on the structure.

- After remaining dormant for thirty (30) to ninety (90) days the Artificial Holiday (coupon) is connected to the cathodic protection system. This is done by placing a properly sized shunt (see Table 2), between the terminals which connect the wire coming from the structure and the wire coming from the Artificial Holiday (coupon), see page twelve (12). The ***Bullet Box® IR Free interrupter*** provides all of the shunts necessary to make this connection and comes with the ***Stelth 7®*** as part of the probe package. There is nothing else that is required for you to purchase.

The ***Stelth 7® IR Free*** & ***Stelth 7® IR Free Rocket*** probes were primarily developed for those applications where stray current conditions were so severe that it was impossible to obtain measurements that had any validity. But after 15 years of extensive field service and one government study after another showing irrefutable results all of which culminated in the establishment of DIN standard 50925 and NACE RP 0104-2004, the usage has expanded to embrace almost any application where a reference electrode would be used.

The ***Stelth 7® IR Free*** & ***Stelth 7® IR Free Rocket*** probes are tools that are being used on the largest pipeline systems in Europe, Saudi Arabia, Kuwait, United Arab Emirates, Argentina, Chile, Venezuela, Russia, Poland, Japan, Korea, etceteras. They are being used for ground storage tanks, sea walls, service stations and piping systems in Lake Maracaibo, where extraordinary interference problems exist, refineries and production fields, where again interference problems plague the operators, and of course in typical gas distribution systems everywhere.

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Method for Determining the Size of Shunt and Artificial Holiday (coupon)

The following illustrates the Four Easy Steps to determine the size of the shunt and Coupon.

1 - **Calculate the current density**.

In order to calculate the current density, two values must be known.
a. - Total current consumption - this can be acquired by using a shunt.
b. - Structure surface area.
c. - Current density then is calculated as follows:

$$\text{Current Density} = \frac{\text{Total Amperage}}{\text{Surface Area}}$$

Example: 1. Assume you have a structure (pipeline) that has 1,000 square meters.

2. Assume that it would require a potential of 1.5 Volt (1,500 mV) for protection and that it would require 1 Amp (1,000 mA) to achieve this.
3. Now, let's calculate the current density, referred to 1 square centimeter (cm2):

$$\text{Current Density} = \frac{1{,}000\ \text{mA}}{1{,}000\ \text{m2}} = \frac{1\ \text{mA}}{1\ \text{m2}} = \frac{1\ \text{mA}}{10{,}000\ \text{cm2}} = \frac{1\ \text{micro Amp}}{10\ \text{cm2}} =$$

$$\frac{1}{10}\ \frac{\text{micro Amp}}{\text{cm}^2} = 0.1\ \frac{\text{micro Amp}}{\text{cm}^2} = 100\ \frac{\text{nano Amp}}{\text{cm}^2}$$

2 - **Look up the size of the coupon**

Go to Table 3 , Coupon Polarization Current Requirements, and look down the right hand column. Here you can determine the appropriate size for the artificial holiday.

In the Example: A 1 cm2 would be required.

3 - **Look up the size of the shunt**

To determine the right shunt size, go to Table 2, Shunt Sizing will show the correspondence.

In the Example: The shunt needs to be set to 100 Ohms.

4 - Calculate and verify the current density at each location

To calculate the current drawn at each location, simply use Ohm's law as follows:

$$I = \frac{U}{R}$$

Example: The Voltage measured at a certain location over the 100 Ohms would be 10 mV (0.01 V).
The appropriate current through the artificial holiday (coupon) at this site would be:

$$I = \frac{0.01V}{100\ Ohms} = 0.1\ mA$$

This can easily be verified using Table 1 (Artificial Holiday Sizing) in the column for the 100 Ohm shunt.

Notes:

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Table One - Artificial Holiday (Coupon) Sizing

Calculation: Voltage on the Coupon is measured over the shunt. The current is determined by dividing the shunt value (resistance) into the Voltage value.

1 CM^2	100 OHMS Shunt
Voltage < 1 mV	0.001 V / 100 Ohms = 0.00001 Amperes (10 micro-Amperes)
Voltage < 10 mV	0.01 V / 100 Ohms = 0.0001 Amperes (100 micro-Amperes)
Voltage < 1 V	1 V / 100 Ohms = 0.01 Amperes (10 milli-Amperes)

10 CM^2	30 OHMS Shunt
Voltage < 1 mV	0.001 V / 30 Ohms = 0.000033 Amperes (33 micro-Amperes)
Voltage < 10 mV	0.01 V / 30 Ohms = 0.00033 Amperes (333 micro-Amperes)
Voltage < 1 V	1 V / 30 Ohms = 0.033 Amperes (33 milli-Amperes)

100 CM^2	10 OHMS Shunt
Voltage < 1 mV	0.001 V / 10 Ohms = 0.0001 Amperes (100 micro-Amperes)
Voltage < 10 mV	0.01 V / 10 Ohms = 0.001 Amperes (1 milli-Amperes)
Voltage < 1 V	1 V / 10 Ohms = 0.1 Amperes (100 milli-Amperes)

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***Date of Submittal**: Thursday, October 20, 2005 **Revision Date**: September 12, 2013*

Table Two - Shunt Sizing

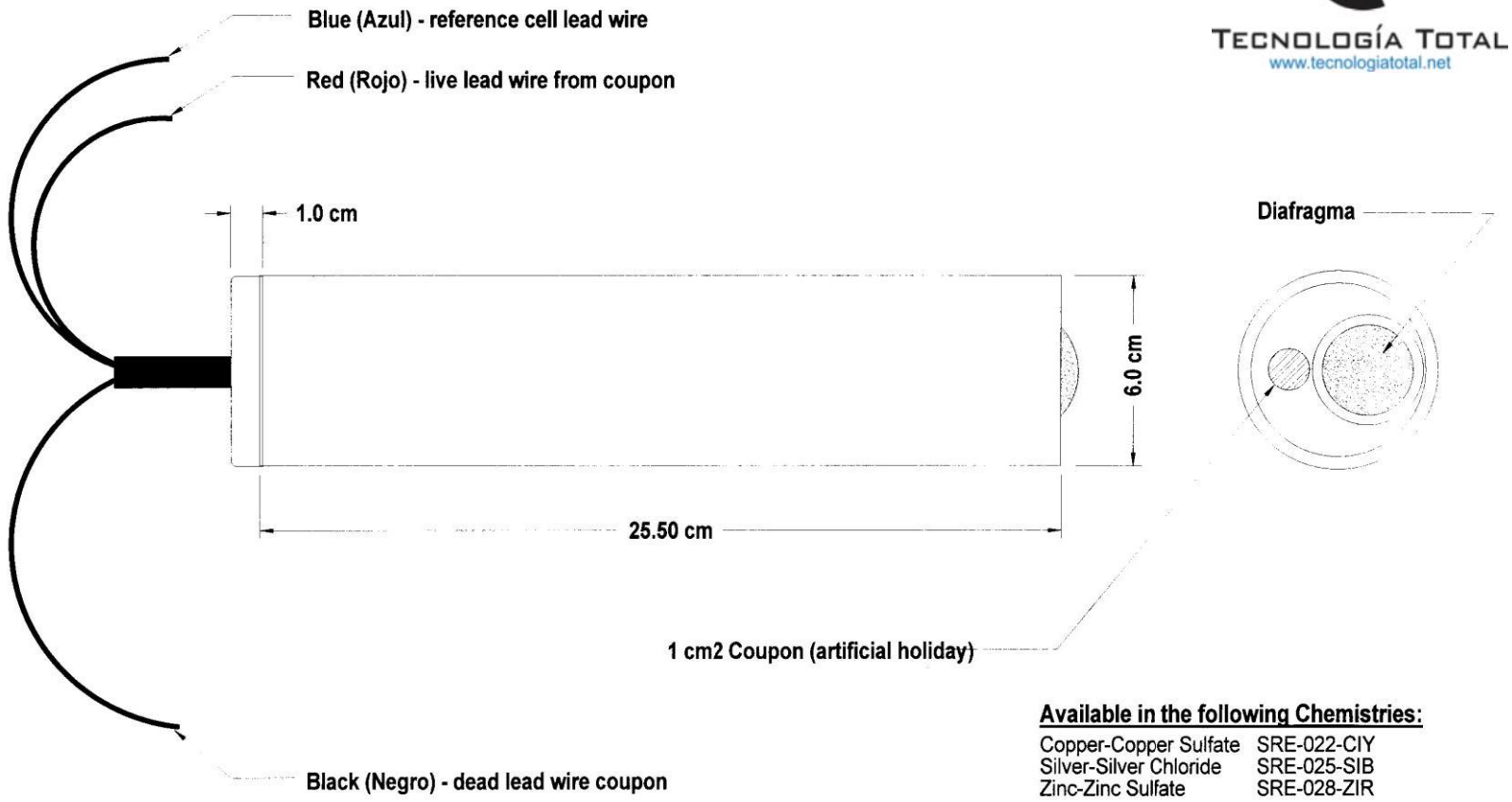
The following shunt capacities are used for the different "Artificial Holiday" (coupon) sizes:

Artificial Holiday (coupon)	Shunt Size
1 Square centimeter (0.155 Square inch)	100 Ohms
10 Square centimeter (1.55 Square inch)	30 Ohms
100 Square centimeter (15.5 Square inch)	10 Ohms

Table Three - Coupon Polarization Current Requirements

Given that one square meter of exposed steel or 12.916 square feet (1550 square inches) would require 150 micro Amperes of current to polarize. Then the following current is needed for the polarization of the ***Stelth 7® IR Free probe*** Artificial Holiday" (coupon) sizes:

Artificial Holiday (coupon)	Polarization Current Required
1 Square centimeter (0.155 Square inch)	15 nano Amperes
10 Square centimeter (1.55 Square inch)	150 nano Amperes
100 Square centimeter (15.5 Square inch)	1.5 micro Amperes



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Available in the following Chemistries:

Copper-Copper Sulfate	SRE-022-CIY
Silver-Silver Chloride	SRE-025-SIB
Zinc-Zinc Sulfate	SRE-028-ZIR

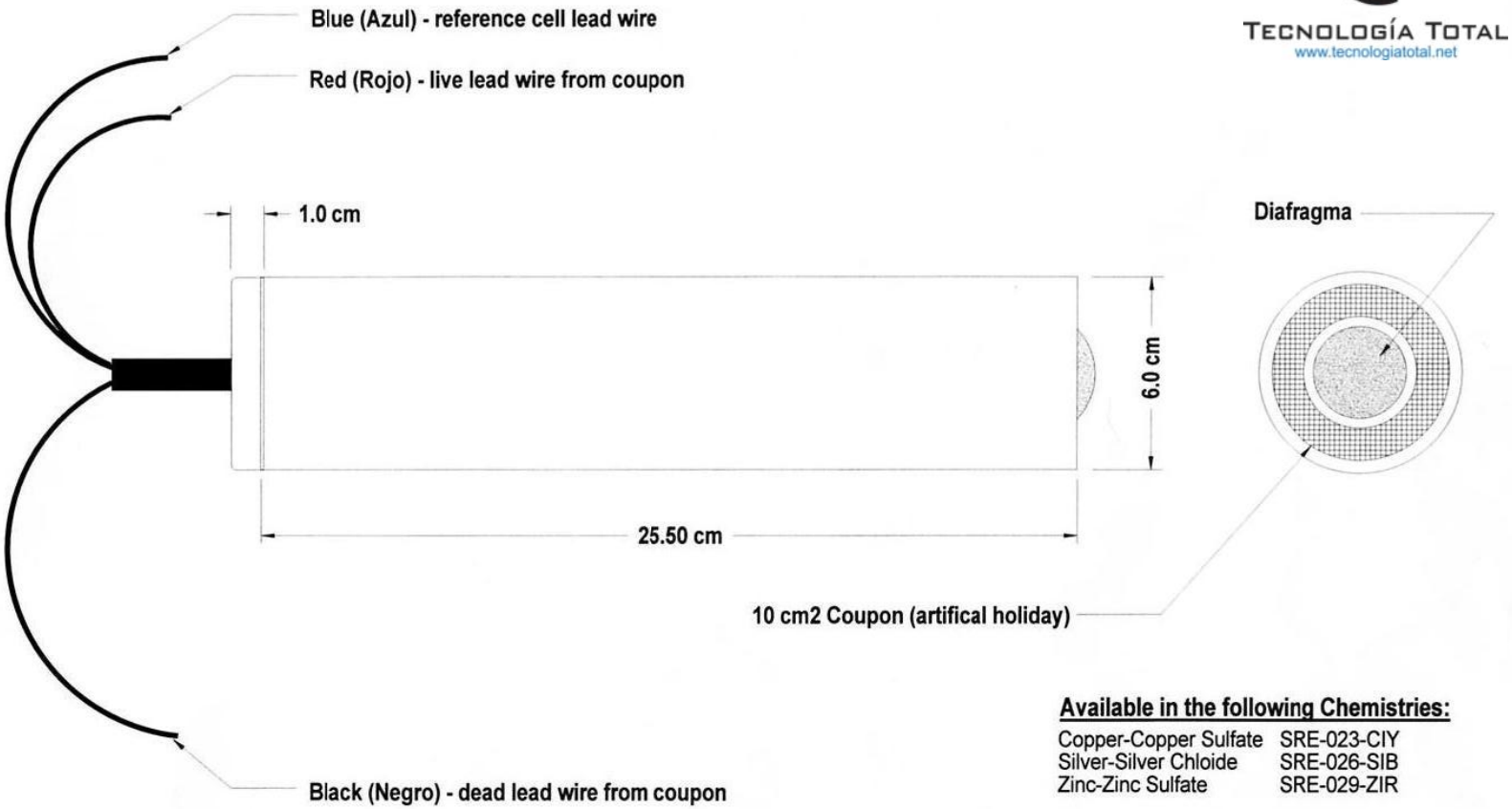
COLOR CODE: Yellow = CuSO4, Blue = AgCl, Red = ZnSO4		WARRANTY:	30 years	
Sensor = Cu, Ag or Zn 99.99% pure	Ion Trapper #1 = Hydrogen Sulfide	PART NUMBER:	See Above	
Media = CuSO4, AgCl or ZnSO4	Ion Trapper #2 = Chlorides (Sulfates only)	FINISHED GOODS:	See Above	DATE
Diafragma = Medical Grade Ceramic	Coupon = Mild Carbon Steel	DESIGNED BY:	Wilhelm H. Pruess	2/25/1995
Cable = #14 RHH-RHW Tray Cable	Membrane = Moisture Retention	RE-DRAWN BY:	Frank Piña	2/29/2000
Housing= High Impact Plastic	Indicators = Hydrogen Sulfide	RE-CHECKED BY:	Thomas Mierau	2/29/2000

BORIN Manufacturing LLC

TITLE: **Stelth 7 IR Free Probe 1cm2**

SIZE	REVISION	DRAWING NUMBER
A	1.2	Technical Bulletin TB-0006

SCALE	DATE	SHEET
1.0" = 2.0"	February 29, 2000	10 of 15



TECNOLOGÍA TOTAL
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Available in the following Chemistries:

Copper-Copper Sulfate	SRE-023-CIY
Silver-Silver Chloide	SRE-026-SIB
Zinc-Zinc Sulfate	SRE-029-ZIR

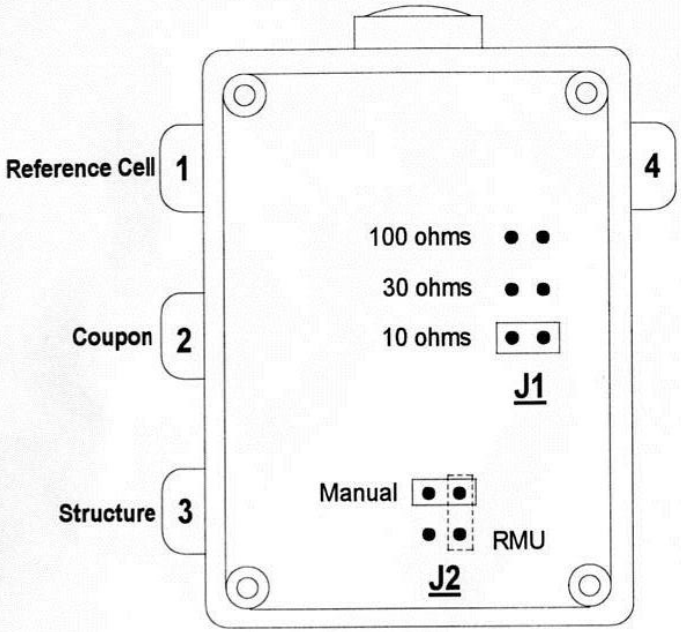
COLOR CODE: Yellow = CuSO4, Blue = AgCl, Red = ZnSO4		WARRANTY:	30 years	
Sensor = Cu, Ag or Zn 99.99% pure	Ion trapper #1 = hydrogen sulfide	PART NUMBER:	See Above	
Media = CuSO4, AgCl or ZnSO4	Ion trapper #2 = chlorides (sulfates only)	FINISHED GOODS:	See Above	DATE
Diafragma = medical grade ceramic	Coupon = mild carbon steel	DESIGNED BY:	William H. Pruess	2/25/1995
Wire = #14 RHH-RHW Tray Cable	Membrane = Moisture retention	RE-DRAWN BY:	Frank Piña	2/29/2000
Housing = High Impact Plastic	Indicators = hydrogen sulfide	RE-CHECKED BY:	Thomas Mierau	2/29/2000

BORIN Manufacturing LLC

TITLE: **"Stelth 7" IR Free Probe 10cm2**

SIZE	REVISION	DRAWING NUMBER	
A	1.2	Technical Bulletin TB-0006	
SCALE		DATE	SHEET
1.0" = 2.0"		February 29, 2000	11 of 15

WIRING & SETUP INSTRUCTIONS



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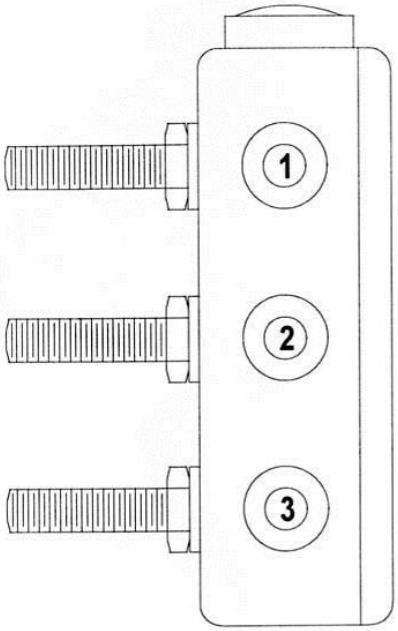
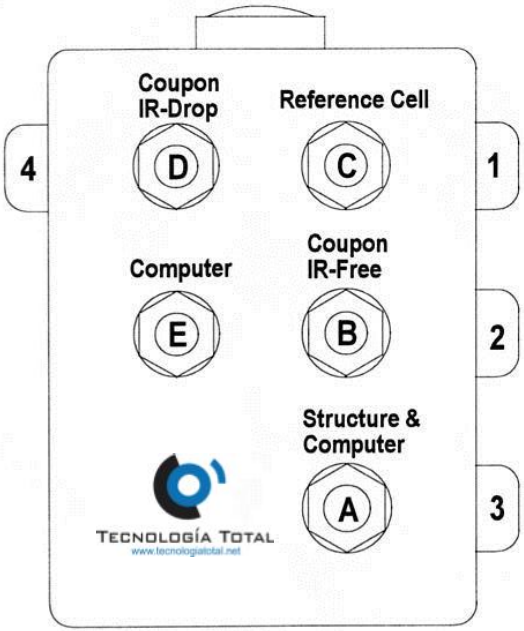


Side View



Rear View

INSTRUCTIONS: Wire connections for manual operation.

1 - Mount "Bullet Box" in an enclosure (test point, junction box, etc).
2 - Attach the structure wire to terminal "A" on the "Bullet Box".
3 - For "Stelth 7" Rocket (2 - 50cm2 coupons) or the "Stelth 7" (2 - 5 cm2 coupons), attach yellow reference cell wire to terminal "C".
4 - For "Stelth 7" Rocket (2 - 50cm2 coupons) or the "Stelth 7" (2 - 5 cm2 coupons), attach blue and black (dead lead) wires to terminal "B".
5 - For "Stelth 7" Rocket (2 - 50cm2 coupons) or the "Stelth 7" (2 - 5 cm2 coupons), attach red and orange (live lead) wires to terminal "D".
6 - For "Stelth 7" Rocket (2 - 50cm2 coupons) or the "Stelth 7" (2 - 5 cm2 coupons) make final jumper connection "J2" after 30 to 90 days to activate IR-Free system.

Special Notes

The "Bullet Box" is preset to a shunt value that matches the size of the artifical holiday (coupon) on the "Stelth 7" IR-Free probe you have ordered. The shunt value can be changed by merely repositioning the jumper bar at J1. The "Bullet Box" can be converted to automatic operation by repositioning the jumper bar at J2 (RMU). This makes it "Remote Control Ready". See Comanche RMCS manual for complete instructions.

Taking Readings

NOTE: Computer connections are only necessary to make when using a remote monitoring and control system (i.e. Comanche RMCS System).

(1) IR-Free "On-Potential" - insert meter cables in banana jacks "1" and "2". You will be reading the most unfavorable potential of all the holidays 82' (25 M) on either side of the "Stelth 7" IR-Free probe.

(2) IR-Free "Off-Potential" - insert meter cables in banana jacks "1" and "2" and press large red button on top of the "Bullet Box" Module. You will be reading the most unfavorable potential of all the holidays 82' (25 M) on either side of the "Stelth 7" IR-Free probe.

(3) Average Potential - insert meter cables in banana jacks "1" and "3". You will be reading the average potential of all of the holidays within the sensing area of the "Stelth 7" IR-Free probe.

(4) Current Applied to the Coupon - insert meter cables in banana jacks "3" and "4". You will be measuring the current being applied to protect the most unfavorable holiday 82' (25 M) on either side of the "Stelth 7" IR-Free probe.

BORIN Manufacturing LLC

TITLE: Bullet Box IR Free Interrupter			
SIZE: A	REVISION: 1.5	DRAWING NUMBER: Technical Bulletin TB-0006	
SCALE: 1.0" = 1.0"	DATE: February 29, 2000	SHEET: 15 of 15	

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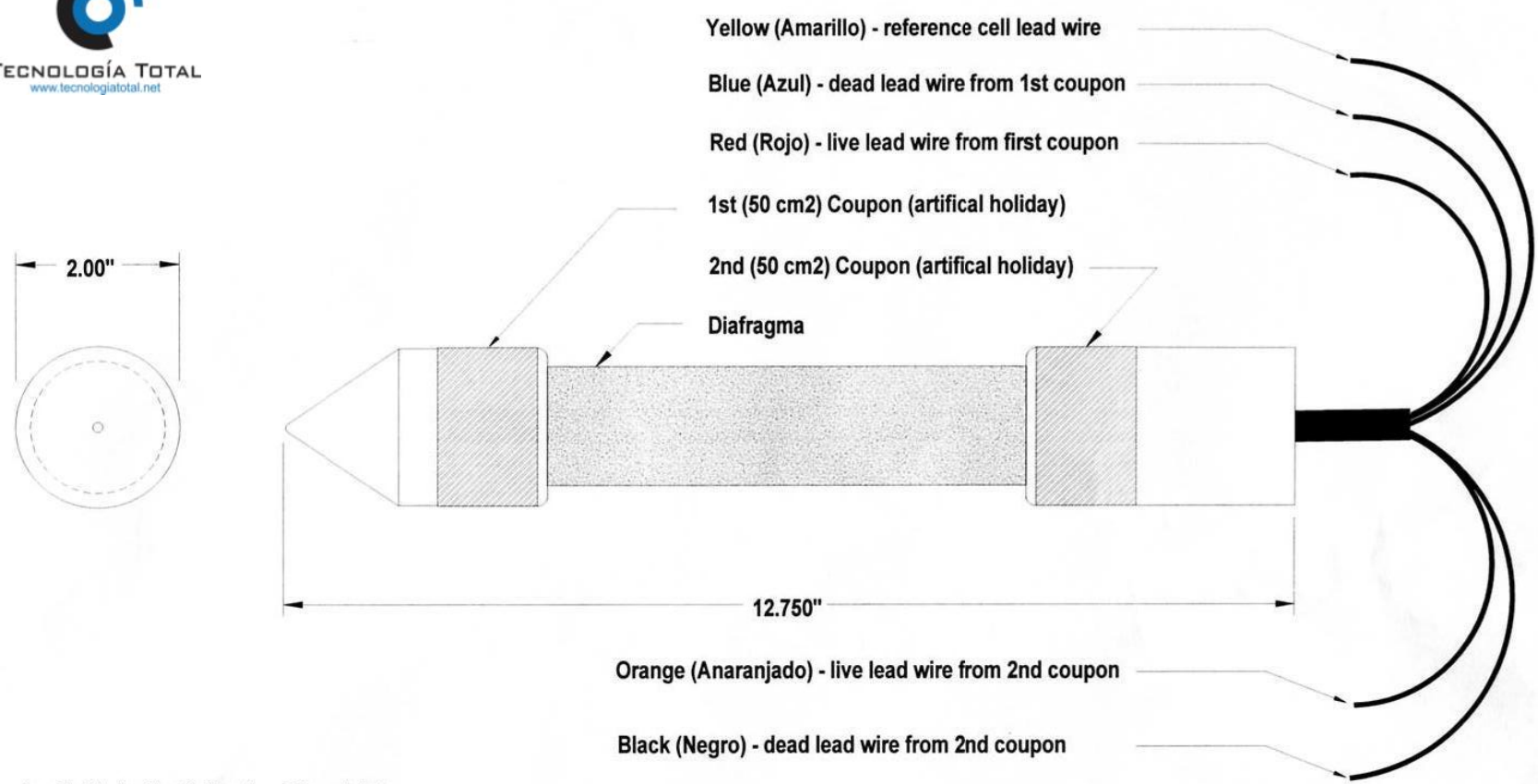


Available in the following Chemistries:

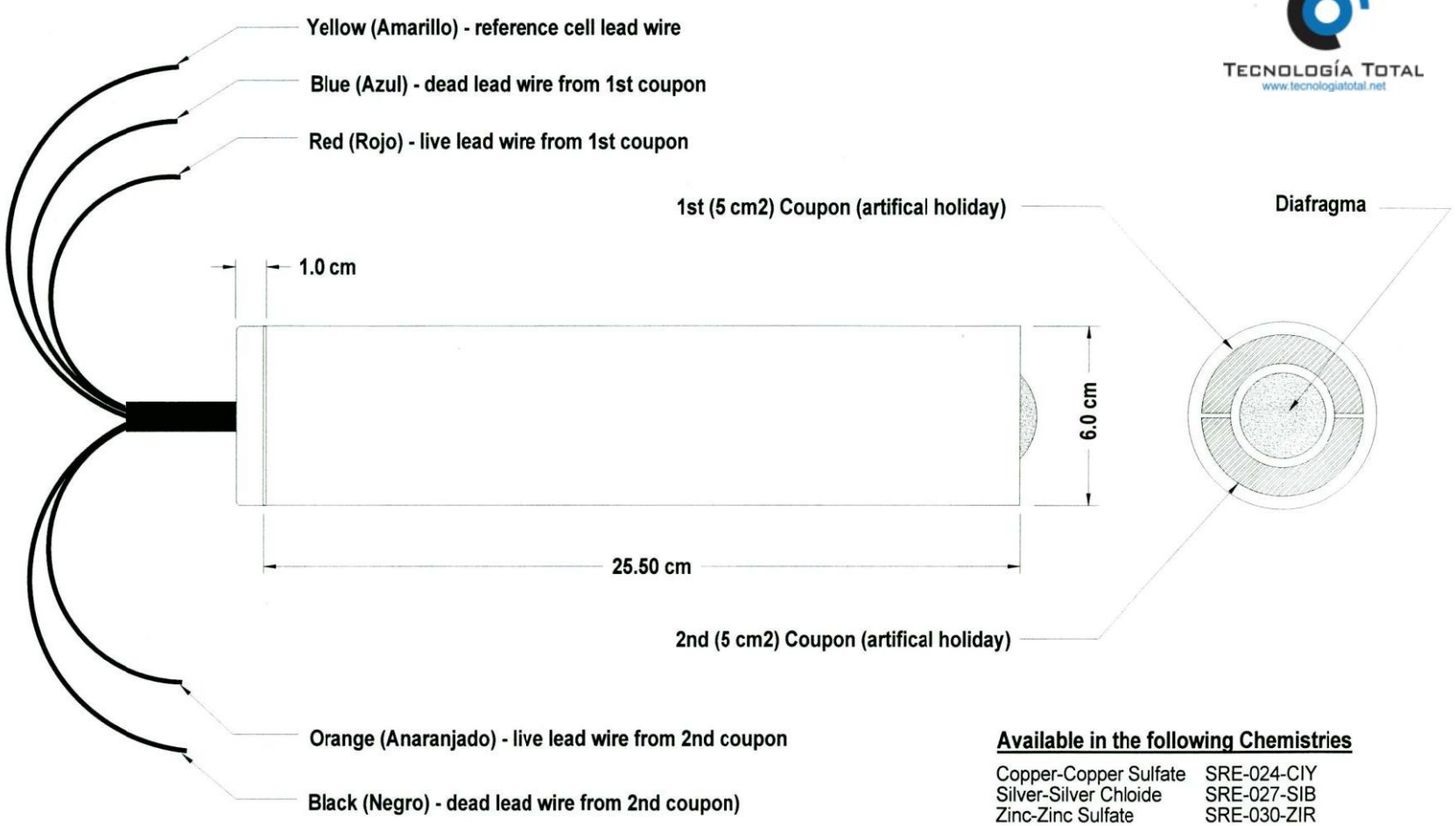
Copper-Copper Sulfate	SRE-031-CSY
Silver-Silver Chloide	SRE-032-SSB
Zinc-Zinc Sulfate	SRE-033-ZSR

COLOR CODE: Yellow = CuSO4, Blue = AgCl, Red = ZnSO4		WARRANTY:	30 years	
Sensor = Cu, Ag or Zn 99.99 % pure	Ion trapper #1 = hydrogen sulfide	PART NUMBER:	See Above	
Media = CuSO4, AgCl or ZnSO4	Ion trapper #2 = chlorides Sulfates only)	FINISHED GOODS:	See Above	DATE
Diafragma = medical grade ceramic	Coupon = mild carbon steel	DESIGNED BY:	William H. Pruess	2/25/1995
Wire = #16 RHH-RHW Tray Cable	Membrane = moisture retention	RE-DRAWN BY:	Frank Piña	2/29/2000
Housing = High-Impact Plastic	Indicators = hydrogen sulfide	RE-CHECKED BY:	Thomas Mierau	2/29/2000

BORIN Manufacturing LLC

TITLE "Stelth 7" Rocket IR Free Probe

SIZE	REVISION	DRAWING NUMBER	
A	1.2	Technical Bulletin TB-0006	
SCALE		DATE	SHEET
1.0" = 2.0"		February 29, 2000	13 of 15



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Available in the following Chemistries

Copper-Copper Sulfate	SRE-024-CIY
Silver-Silver Chloide	SRE-027-SIB
Zinc-Zinc Sulfate	SRE-030-ZIR

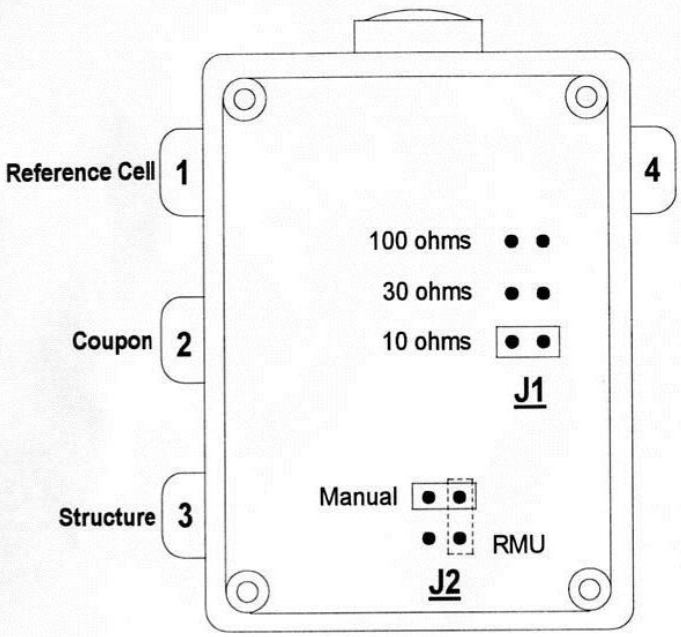
COLOR CODE: Yellow = CuSO4, Blue = AgCl, Red = ZnSO4		WARRANTY:	30 years	
Sensor = Cu, Ag or Zn 99.99 % pure	Ion trapper #1 = hydrogen sulfide	PART NUMBER:	See Above	
Electrolyte = CuSO4, AgCl or ZnSO4	Ion trapper #2 = chlorides (sulfates only)	FINISHED GOODS:	See Above	DATE
Diafragma = medical grade ceramic	Coupon = mild carbon steel	DESIGNED BY:	William H. Pruess	2/25/1995
Wire = #16 RHH-RHW Tray Cable	Membrane = moisture retention	RE-DRAWN BY:	Frank Piña	2/29/2000
Housing = High-Impact Plastic	Indicators = hydrogen sulfide	RE-CHECKED BY:	Thomas Mierau	2/29/2000

BORIN Manufacturing LLC

TITLE "Stelth 7" IR Free Probe, 2-5cm2

SIZE	REVISION	DRAWING NUMBER	
A	1.2	Technical Bulletin TB-0006	
SCALE	DATE	SHEET	
1.0" = 2.0"	February 29, 2000	14 of 15	

WIRING & SETUP INSTRUCTIONS



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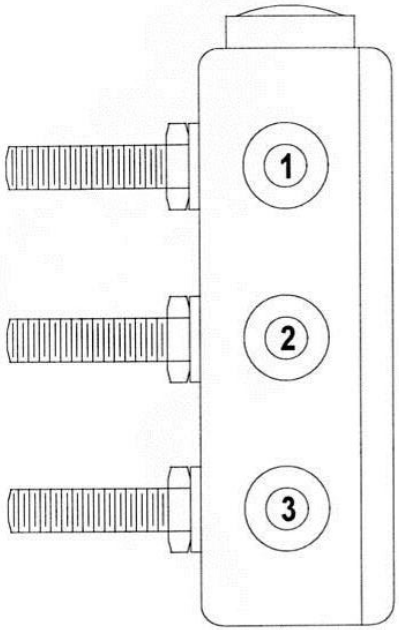
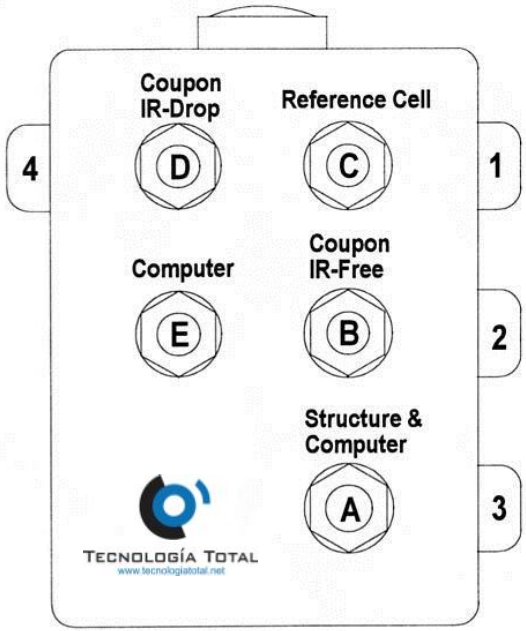


Side View



Rear View

INSTRUCTIONS: Wire connections for manual operation.

1 - Mount "Bullet Box" in an enclosure (test point, junction box, etc).
2 - Attach the structure wire to terminal "A" on the "Bullet Box".
3 - For "Stelth 7" Rocket (2 - 50cm2 coupons) or the "Stelth 7" (2 - 5 cm2 coupons), attach yellow reference cell wire to terminal "C".
4 - For "Stelth 7" Rocket (2 - 50cm2 coupons) or the "Stelth 7" (2 - 5 cm2 coupons), attach blue and black (dead lead) wires to terminal "B".
5 - For "Stelth 7" Rocket (2 - 50cm2 coupons) or the "Stelth 7" (2 - 5 cm2 coupons), attach red and orange (live lead) wires to terminal "D".
6 - For "Stelth 7" Rocket (2 - 50cm2 coupons) or the "Stelth 7" (2 - 5 cm2 coupons) make final jumper connection "J2" after 30 to 90 days to activate IR-Free system.

Special Notes

The "Bullet Box" is preset to a shunt value that matches the size of the artifical holiday (coupon) on the "Stelth 7" IR-Free probe you have ordered. The shunt value can be changed by merely repositioning the jumper bar at J1. The "Bullet Box" can be converted to automatic operation by repositioning the jumper bar at J2 (RMU). This makes it "Remote Control Ready". See Comanche RMCS manual for complete instructions.

Taking Readings

NOTE: Computer connections are only necessary to make when using a remote monitoring and control system (i.e. Comanche RMCS System).

(1) IR-Free "On-Potential" - insert meter cables in banana jacks "1" and "2". You will be reading the most unfavorable potential of all the holidays 82' (25 M) on either side of the "Stelth 7" IR-Free probe.

(2) IR-Free "Off-Potential" - insert meter cables in banana jacks "1" and "2" and press large red button on top of the "Bullet Box" Module. You will be reading the most unfavorable potential of all the holidays 82' (25 M) on either side of the "Stelth 7" IR-Free probe.

(3) Average Potential - insert meter cables in banana jacks "1" and "3". You will be reading the average potential of all of the holidays within the sensing area of the "Stelth 7" IR-Free probe.

(4) Current Applied to the Coupon - insert meter cables in banana jacks "3" and "4". You will be measuring the current being applied to protect the most unfavorable holiday 82' (25 M) on either side of the "Stelth 7" IR-Free probe.

BORIN Manufacturing LLC

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