

## Model(s) covered by this Safety Notices Manual:

• 720A, Intrinsically Safe Bond Meter and Milli-Ohmmeter

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#### Notices

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#### This Manual

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Disclaimer:

Geneva, OH 44041

THIS SAFETY NOTICES MANUAL IS CONTROLLED – CHANGES MAY ONLY BE WITH APPROVAL OF THE NOTIFIED BODY.

### **Safety Notice Symbols and Terms**

Safety Notices denote hazards. They indicate an operating procedure, instruction, or practice that, if not correctly performed or followed, could result in damage to equipment, or injury or death to personnel. Do not proceed beyond a Safety Notice until all conditions and instructions are fully understood and complied with.

Safety Notice Symbols:



Indicates WARNING or AVERTISSEMENT

WARNING

Denotes an imminent hazard that could result in injury or death to personnel.

**AVERTISSEMENT** 

Indique un danger imminent pouvant entraîner des blessures ou la mort.

Tony Merolla

5/26/2021



# 2. AGENCY COMPLIANCE AND REQUIRED SAFETY WARNINGS

#### **Ex Hazardous Safety Information**

This instrument is intrinsically safe. WARNING: Substitution of components may impair intrinsic safety.

Compliance and Markings







F506162

Handheld Bond Meter for Hazardous Locations Only as to Intrinsic Safety



## 720A SAFETY NOTICES

Ex ia IIA T4 Ga Class I, Division 1, Group D, T4 Class I, Zone 0 AEx ia IIA T4 Ga Zone 0 Ex ia IIA T4 Ga

UL 21 ATEX 2549
IECEX UL 21.0038
-10 °C  $\leq$  Ta  $\leq$  +55 °C

Operation Manual, 720A-900, contains safety information and warnings that must be observed for safe operation under the conditions described. Failure to information comply with the and instructions can have serious consequences. Read the Operation Manual, 720A-900, in its entirety before using the instrument.



### WARNING – EXPLOSION HAZARD

To reduce the ignition risk of a flammable or explosive atmosphere, batteries must be changed in a location known to be non-hazardous.

### AVERTISSEMENT - RISQUE D'EXPLOSION

Afin de réduire le risque d'allumage dans une atmosphère inflammable ou explosive, les batteries doivent être remplacées dans un endroit connu pour être non dangereux.



### WARNING – EXPLOSION HAZARD

Batteries are part of the intrinsically safe system. Use only the specific battery type, manufacturer, and manufacturer's part listed in the Manual. Use of other batteries could impair intrinsic safety. Batteries may not be mixed.

AVERTISSEMENT - RISQUE D'EXPLOSION Les batteries font partie du système de sécurité intrinsèque. Utiliser uniquement le type et le modèle spécifique de batterie et les pièces du fabricant mentionnées dans le manuel. L'utilisation d'autres batteries pourrait affecter la sécurité intrinsèque.



WARNING -EXPLOSION HAZARD Use only the probe types as listed in the manual. Use of other probe types could impair intrinsic safety.

AVERTISSEMENT - RISQUE D'EXPLOSION

Utiliser uniquement les types de sondes spécifiés dans le manuel. L'utilisation d'autres types de sondes pourrait affecter la sécurité intrinsèque.



These warnings must be observed and are noted on the instrument's battery cover as shown.

⚠ WARNING
DO NOT OPEN BATTERY COMPARTMENT
IN POTENTIALLY HAZARDOUS
ENVIRONMENT, DISCONNECT PROBES
BEFORE OPENING.

ADVERTISSEMENT

NE OUVREZ PAS LE COMPARTIMENT

DE LA PILE DANS UN ENVIRONNEMENT

POTENTIELLEMENT DANGEREUSE.

DÉCONNECTEZ LES CORDONS

D'ESSAI AVANT D'OUVRIR LE

COMPARTIMENT Á PILE.

⚠ ADVERTISSEMENT
Utilisez uniquement
des piles dans le
manuel d'instruction manuel d'instruction

#### 3. ADDITIONAL SAFETY NOTICES AND INFORMATION

To prevent personal injury while in Ex Hazardous areas, follow the guidelines below:

- NEVER SERVICE THIS UNIT IN AN Ex HAZARDOUS AREA.
- Batteries are part of the intrinsically safe system. Use only the specific battery type and
  manufacturers listed in the Operation Manual. Use of other batteries could impair intrinsic
  safety. Do not mix batteries of different manufactures. Do not mix fresh batteries with old
  batteries.
- Do not take spare batteries into an Ex Hazardous area.
- To reduce the risk of ignition of a flammable or explosive atmosphere, batteries must be changed only in a location known to be Non-Hazardous.
- Never open the instrument while in an Ex Hazardous area.
- Never store the instrument with batteries installed in an Ex Hazardous area.
- Never use the instrument with the battery cover off.
- Do not put batteries into bags designed to protect parts from electrostatic discharge (ESD).
   These bags are specially designed with metal shielding which can short circuit a battery.
- Use only approved accessories with this product in Ex Hazardous areas.
- Use this product only as specified or protection provided by the instrument could be compromised.
- Never touch the probe(s) to a voltage source.
- Check the integrity of the case prior to using the instrument in an Ex Hazardous area. Look for any compromises like cracks or missing plastic.
- Always comply with all safety codes.





DO NOT ATTEMPT TO SERVICE THIS UNIT UNLESS YOU ARE QUALIFIED TO DO SO.

#### WARNING - SHOCK HAZARD

**Disconnect probes from DUT and turn the unit off before removing the battery cover.** Internal circuits can present a shock hazard if leads are connected to a source of elevated potential.

When operated in a potentially explosive atmosphere, this unit may not be used if capacitance, inductance, or other circuitry is connected to the bond or structure under test.

Do not use this instrument if the housing, probe wiring, probe, or probe handle are damaged or distorted. Housings and wire insulation are part of the personnel protection system, and if damaged could expose users to elevated potentials.

#### WARNING - EXPLOSION HAZARD

Never change batteries, in an environment where explosive or flammable vapors or dust suspensions may exist.

Do not attempt to recharge alkaline batteries.

Do not put batteries into bags designed to protect parts from electrostatic discharge (ESD). These bags are specially designed with metal shielding which can short circuit a battery.

**Do not expose batteries to extreme heat or fire.** Observe all regional laws and regulations when disposing batteries.

**Batteries are part of the intrinsically safe system.** Use only the specific battery type and manufacturers listed. Use of other batteries could impair intrinsic safety.

#### 4. USE OF CERTIFIED PROBES

Use only TEGAM intrinsically safe rated probes with the 720A in potentially hazardous locations. Use of any other combination probe and cable invalidates the type certification, which may cause auto ignition in an explosive hazardous location.

#### 5. BATTERY INSTALLATION AND REPLACEMENT

Three (3) AA  $1.5\ V$  batteries are used with the instrument. Observe the following when installing or removing the batteries.



Always change the product's batteries outside Ex Hazardous areas.



Always turn the instrument off and disconnect any input connections before replacing the batteries. Re-install the battery compartment cover before resuming use of the instrument.



The battery compartment is sealed with a rubber gasket. Use care to not damage the gasket when removing or installing the battery compartment cover.



Remove the batteries when storing the instrument for an extended period or in a high temperature environment to prevent battery leakage and possible damage to the instrument.





Use only Zinc-Manganese Dioxide or Alkaline-Manganese Dioxide AA cells that have been tested by a nationally recognized laboratory to meet the requirements of UL 60079-11, Sixth Edition.

Use of any other battery will invalidate the Type Certificate and create a hazardous condition. The only batteries that TEGAM, Inc. has secured such testing, which are approved for use in the 720A, are listed on the Type Certificate. They are:

- Energizer E91
- Duracell MN1500



Observe proper polarity when installing batteries.

Refer to the Operation Manual, 720A-900, for battery installation detail.

TEGAM INC. 10 TEGAM WAY GENEVA, OHIO 44041

CAGE Code: 49374

