

APPLICATION Note

TELECOM SOLUTIONS FOR THE 21ST CENTURY

EWP

Enhanced Weather Protection

April 21, 2009

Enhanced Weather Protection Now Available on Selected Viking Products



Standard practice for manufacturing emergency or entry phones is to provide them with standard uncoated circuit boards (like the ones in your PC). A few manufacturers, including Viking, spray the circuit boards with a water resistant material such as acrylic conformal coating to protect them.

Some emergency or entry phone applications demand extra protection. Phones that are mounted outside exposed to the elements in salty air near the ocean, exposed to a corrosive atmosphere or vehicle exhaust all need an extra measure of weather and corrosion resistance. See "Does my installation require Enhanced Weather Protection" below.

Our EWP (Enhanced Weather Protection) phones are designed with total reliability in mind. First, we use weather-sealed push button switches, trim pots and DIP switches so you can adjust microphone and speaker volumes and set programming features right at the installation site.

Then we hand seal the connections at the push button switch, microphone, and "Call Connected" LED using a special non-corrosive silicone sealant. We use a special microphone boot that acts as a shield against water penetration. A mylar speaker is used with rubber mounting gasket. Closed cell foam gasketing is used behind front panels to prevent water penetration.

Finally we "Pot" the entire board in a clear flexible urethane encapsulating material leaving the internally sealed field-adjustable trim pots and DIP switches accessible. Our flexible urethane sealant allows the circuit board and it's components to expand and contract, while maintaining weather resistance. To protect the tip and ring connections, we include connectors filled with anti-corrosive sealing gel.



Features -

- · Urethane potting for:
 - Maintaining flexibility at low temperatures
 - Excellent electrical insulation
 - Low stress on sensitive components
 - Unaffected by moisture at high temperatures
 - Thermal cycling ability
 - Hydrolytic stability
 - No shrinkage
- Internally sealed push button switch, dip switches and volume control pots
- · All wire connections are watertight sealed
- Mylar speaker with weather-proof rubber gasket
- · Closed cell foam gasketing to prevent water penetration
- · Weatherproof connectors filled with anti-corrosive sealing gel
- Back side of push button switch, LED and microphone are encapsulated in watertight sealant
- · Self-draining microphone boot

Does my installation require Enhanced Weather Protection?



If you answer "**yes**" to one or more of the following statements, we recommend a Viking emergency or entry phone with EWP (Enhanced Weather Protection).

- 1. The product is located outside near the ocean.
- The product is mounted to a gooseneck pedestal with full weather exposure.
- 3. The product is mounted in a parking garage with vehicle exhaust.
- **4.** The product is mounted near a swimming pool.
- **5.** The product is mounted outside on a boat, dock or pier.
- The products wire runs use conduit which could funnel warm inside air to the product mounted outside, causing condensation on the circuit board.
- The product is mounted in a location with a known corrosive atmosphere.
- **8.** The product is mounted outside with the wire entering the top of the chassis without a wire drip loop.
- 9. The temperature of the product can get below the dew point.

Applications

- Exposure to harsh elements (outdoor emergency phones)
- Exposure to a salty atmosphere near the ocean (beach, boardwalk or lifeguard emergency phones)
- · High-humidity environments (tropical environments and areas where it gets very hot and humid)
- Corrosive-atmosphere environments
- · High-pollution environments
- · High-vehicle exhaust environments (roadside assistance and emergency phones)

EWP Models

Model	Fax Back #	Description
BLK-3-EWP	653	Line Status Strobe Light Kit
E-10A-EWP	210	Flush Mount Speaker Phone
E-20B-EWP	210	Surface Mount Speaker Phone
E-1600A-EWP	215	Red ADA Compliant Handsfree Emergency Phone
E-1600-03B-EWP	215	Stainless Steel ADA Compliant Handsfree Emergency Phone
E-1600-20A-EWP	215	Two-Button ADA Compliant Handsfree Emergency Phone
E-1600-30A-EWP	215	Stainless Steel ADA Compliant Handsfree Emergency Phone
E-1600-40A-EWP	215	ADA Compliant Handsfree Emergency Phone
E-1600-45A-EWP	215	Yellow ADA Compliant Handsfree Emergency Phone
E-1600-50A-EWP	215	No-Chassis ADA Compliant Emergency Phone Kit
E-1600-52A-EWP	215	No-Chassis Two-Button ADA Compliant Emergency Phone Kit
E-1600-55A-EWP	215	Universal Emergency Phone Kit
E-1600-60A-EWP	215	Blue ADA Compliant Handsfree Emergency Phone
E-1600A-BLT-EWP	217	Yellow Emergency Tower Phone with Strobe Light
E-1600A-BLT2-EWP	217	Two-Button Emergency Tower Phone with Strobe Light
E-30-EWP	212	Stainless Steel Handsfree Phone
E-30-PT-EWP	214	Stainless Steel Handsfree Phone with Push-To-Talk Button
E-35-EWP	178	Stainless Steel Handsfree Video Speaker Phone
E-40-Series	187	Compact Entry Phones in 5 Finishes
E-50-Series	191	Compact Video Entry Phones in 5 Finishes
E-60 Series	206	Double Gang Entry Phones in 5 Finishes
E-65 Series	203	Double Gang Video Entry Phones in 5 Finishes
E-70 Series	207	Double Gang Entry Phones with Prox Card Reader
E-75 Series	208	Double Gang Video Entry Phones with Prox Card Reader
K-1200-EWP	182	12 Button Apartment Entry Phone
K-1205-EWP	183	12 Button Apartment Entry Phone with Camera
K-1700-3-EWP	157	Stainless Steel Handsfree Phone with Keypad
K-1705-3-EWP	159	Stainless Steel Video Entry Phone with Keypad
K-1900-7-EWP	360	Stainless Steel Hot-Line Phone
K-1900-8-EWP	362	Stainless Steel Hot-Line Phone with Keypad
W-1000-EWP	170	Flush Mount Handsfree Doorbox
W-2000A-EWP	170	Surface Mount Handsfree Doorbox
W-3000-EWP	180	Vandal-Resistant Stainless Steel Doorbox
W-3005-EWP	181	Vandal-Resistant Handsfree Video Doorbox

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