

VIKING

APPLICATION Note

TELECOM SOLUTIONS FOR THE 21ST CENTURY

EWP
**Enhanced Weather
Protection**

March 3, 2004

Enhanced Weather Protection Now Available on Selected Viking Products



you can adjust microphone and speaker volumes and set programming features right at the installation site.

Then, we hand solder all wires to eliminate the kind of corrosion that can occur in ordinary electrical connectors. We also 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 weather sealed field-adjustable trim pots and DIP switches accessible. Our flexible polyurethane sealant allows the circuit board and it's components to expand and contract, while maintaining weather resistance. To protect tip and ring connections, we include connectors filled with anti-corrosive sealing gel.

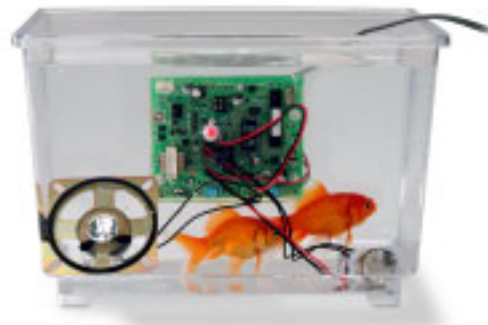
Features

- 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
- Sealed switch, LED, trim pots, push button and microphone connections
- All wires are hand soldered
- Mylar speaker with special weather-proof boot
- Field adjustable trim pots and DIP switches
- Closed cell foam gasketing to prevent water penetration
- Weatherproof connectors filled with anti-corrosive sealing gel

Standard practice for manufacturing emergency 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 conformed coating to protect them.

Some emergency phone applications demand extra protection. Phones that are mounted outside exposed to the elements in salty air near the ocean, in high humidity, exposed to a corrosive atmosphere or vehicle exhaust all need an extra measure of weather and corrosion resistance.

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



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)

Model	Fax Back #	Description
BLK-3-EWP	653	Line Status Strobe Light Kit
E-10/20A-EWP	210	Speaker Phones
E-1600A-EWP	215	ADA Compliant Handsfree Emergency Phone
E-1600-03A-EWP	215	ADA Compliant Handsfree Emergency Phone
E-1600-20A-EWP	215	ADA Compliant Handsfree Emergency Phone
E-1600-45A-EWP	215	ADA Compliant Handsfree Emergency Phone
E-1600-50A-EWP	215	ADA Compliant Emergency Phone Kit
E-1600-52A-EWP	215	ADA Compliant Emergency Phone Kit
E-1600-55A-EWP	215	Universal Emergency Phone Kit
E-1600A-BLT-EWP	217	Emergency Tower Phone with Strobe Light
E-30-EWP	212	Stainless Steel Handsfree Phone
K-1700-3-EWP	157	Stainless Steel Handsfree Phone with Keypad
W-1000/2000A-EWP	170	Handsfree Doorboxes
W-3000-EWP	180	Vandal-Resistant Stainless Steel Doorbox

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