

VIKING

APPLICATION Note

TELECOM SOLUTIONS FOR THE 21ST CENTURY

EWP
**Enhanced Weather
Protection**

January 12, 2012

Enhanced Weather Protection Now Available on Select Viking Products



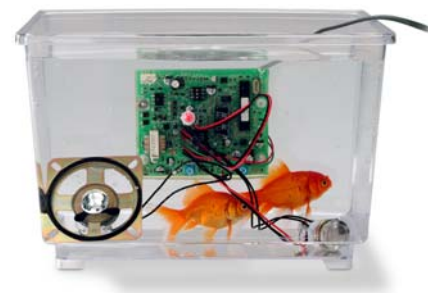
Standard practice for manufacturing emergency or entry phones is to provide them with standard uncoated circuit boards (like the ones in your PC). A few manufacturers, including Viking, spray the circuit boards with a water resistant material such as acrylic conformal coating to protect them.

Some emergency or entry phone applications demand extra protection. Phones that are mounted outside exposed to precipitation, condensation, 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 internally-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 LED using a special non-corrosive sealant. We use a special microphone boot that acts as a shield against water penetration. A mylar speaker is used with foam 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 or amber thermoplastic encapsulating material leaving the internally sealed field-adjustable trim pots and DIP switches accessible. Our potting material allows the circuit board and its 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.



**E-1600A Series PCB shown
fully functional under water**

Features

- Urethane or thermoplastic potting material 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
- EWP products are designed to meet an Ingress Protection Rating of IP66
- Internally sealed push button switch, dip switches and volume control pots
- All wire connections are watertight sealed
- Mylar speaker with weather-proof foam rubber gasket
- Closed cell foam gasketing to prevent water penetration
- Weatherproof connectors filled with anti-corrosive sealing gel
- Back side of LED and microphone are encapsulated in watertight sealant

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 where it is exposed to precipitation or condensation.
2. The product is mounted near an indoor swimming pool or spa.
3. The products wire runs use conduit which could funnel warm inside air to the product mounted outside, causing condensation on the circuit board.
4. The product is mounted in a location with a known corrosive atmosphere.
5. The product is mounted in a parking garage with vehicle exhaust.
6. The temperature of the product can get below the dew point.

Phone...715.386.8861

EWP Models

Model	DOD #	Description
BLK-3-EWP	653	Line Status Strobe Light Kit
BLK-4-EWP	654	LED Strobe Light Kit with Steady-On Feature
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-1600-02A-EWP	215	Stainless Steel 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-1600A-TP-EWP	215	Replacement Phone for Talk-A-Phone Applications
E-1600A-TP2-EWP	215	Two Button Replacement Phone for Talk-A-Phone Applications
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
HID-2	199	Wiegand Keypad
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
PROX-1	221	Proximity Card Reader
PROX-2	219	Keypad with Proximity Card Reader
PROX-3	228	Medium Range Proximity Card Reader
VCAM-1/IR	190	Replacement cameras
VCAM-2	190	Single Gang Color Video Camera Kit
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

www.vikingelectronics.com

info@vikingelectronics.com

Due to the dynamic nature of the product design, the information contained in this document is subject to change without notice. Viking Electronics, and its affiliates and/or subsidiaries assume no responsibility for errors and omissions contained in this information. Revisions of this document or new editions of it may be issued to incorporate such changes.