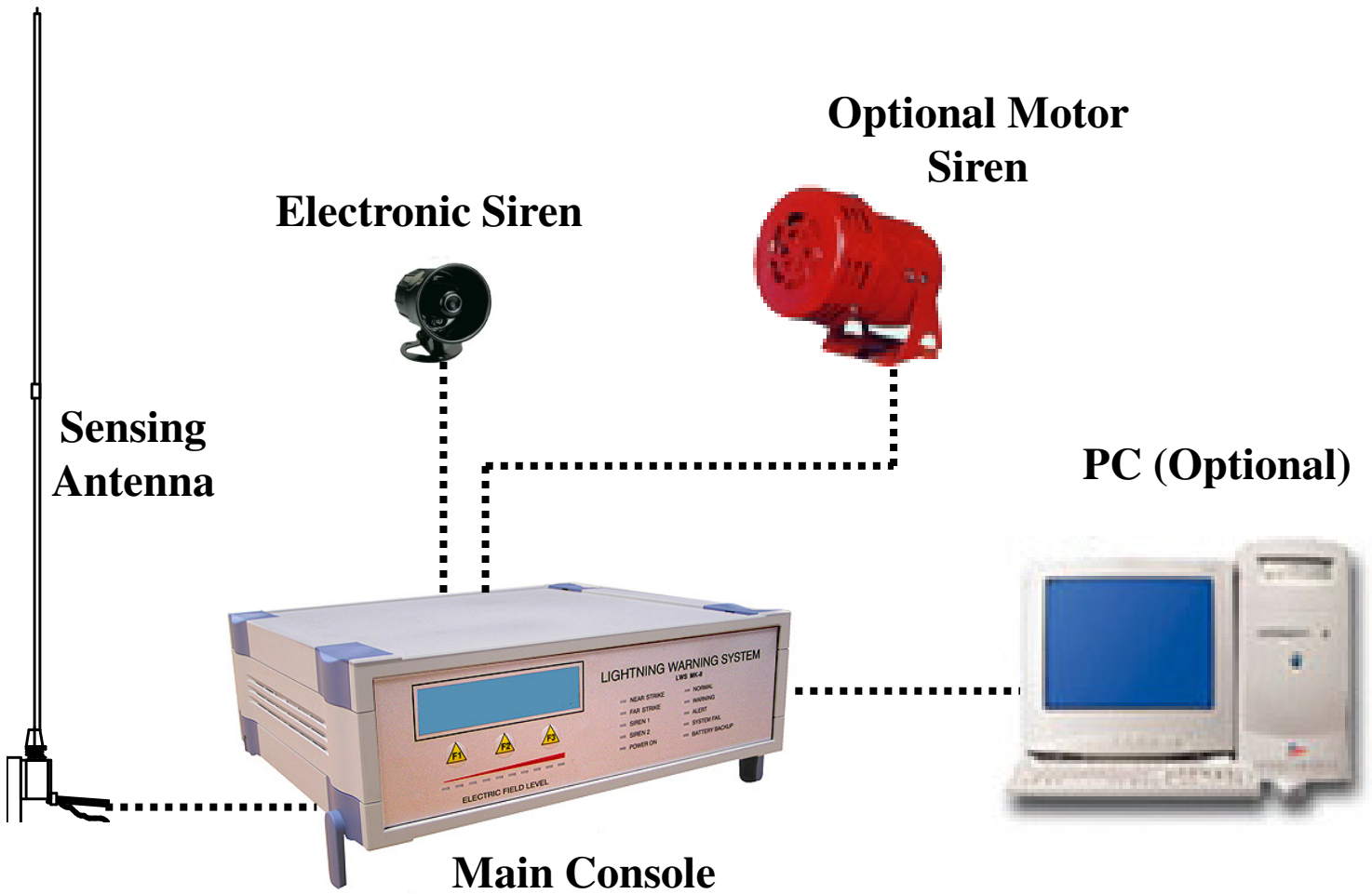
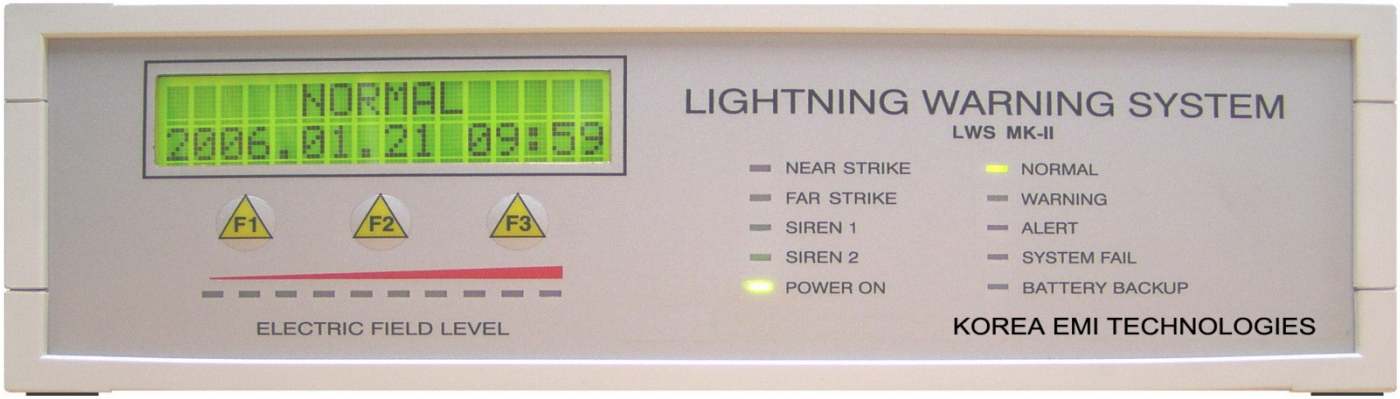
Lightning Warning System:
LWS MK-II

SYSTEM CONFIGULATION



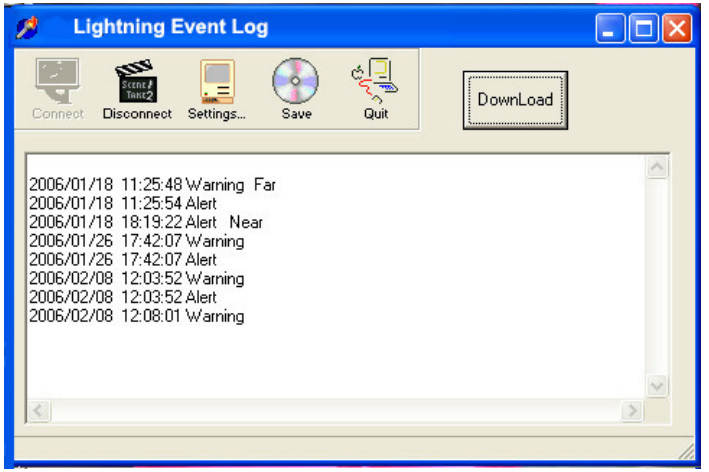
Lightning Warning System: LWS MK-II

- Analysis prevailing weather conditions and alerts personnel of the approach of an electrical storm
- Alarms indicate Warning, Alert and All-Clear signal when danger has passed
- Automatically runs internal test upon startup
- LCD window display operating condition
- User setup function for local time, siren time and activation time



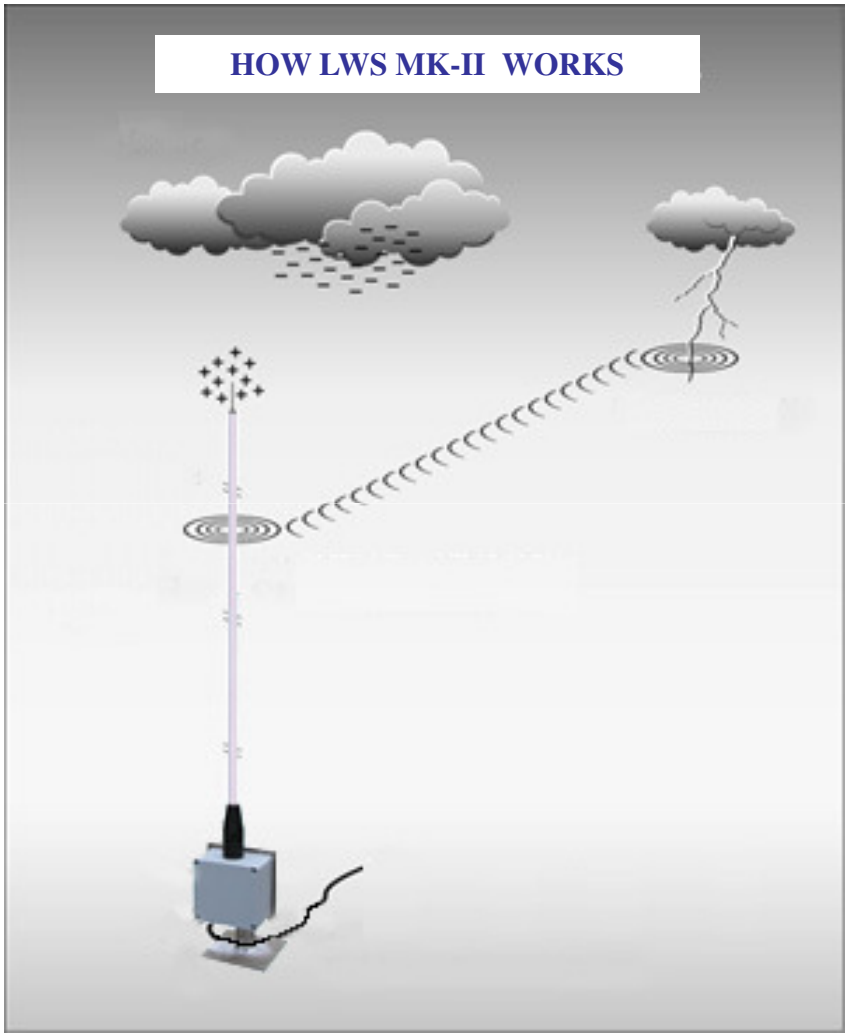
Lightning Warning System: LWS MK-II

- New sensor has a sharp point that produces corona currents
- Measurement of Corona current indicates strength of ambient electric field (near field)
- Antenna detects the electrical burst from a lightning strike (far field)
- Strength of electrical burst indicates distance of strike from sensing point
- Event log can be downloaded using personal PC



HOW LWS MK-II WORKS

LWS DUAL SENSOR LIGHTNING WARNING SYSTEM



WHIP ANTENNA DETECTS E-FIELD CHANGES DUE TO DISTANT LIGHTNING

CORONA POINT MEASURES ABIENT ELECTRICAL FIELD OF OVERHEAD STORM CELL BY USING A VIBRATING CAPACITOR, THUS
a) ESTABLISHES STORM APPROACHING
b) STORM CELL OVERHEAD

Lightning Warning System: LWS MK-II

- Various E-field measuring techniques investigated
- Research conducted at,
  - Seoul, Korea
  - Korea National Maritime Univ, Pusan, Korea
- Field trials continue in Korea and Australia

LWS APPLICATIONS

- Ideal for
  - Explosive environments
  - Golf Courses
  - Recreational areas
  - Schools
  - Defense
  - Aviation
  - Where work is done outdoors