



Introducing the LCD®-7 Aerial Snow Controller

The revolutionary new patent pending LCD®-7 Aerial Snow Melting Control will begin shipping in August at the exceptionally low list price of \$99.50.

This new member of the Snow Switch® product family offers pioneering new snow detection and control techniques for greater energy savings, simpler installation and improved reliability. The UL Listed (pending) LCD®-7 is physically and electrically interchangeable with the LCD®-1UL that it replaces.

The LCD®-7 is intended for small areas including sidewalks, steps, wheel-chair ramps, entrance ways and similar applications where reliability and low cost are important considerations.

The LCD®-7 senses snow and activates heaters only when required thus allowing substantial savings in operating costs. Heating usually must continue after snow stops to finish clearing water and slush. The Melt Track™ feature estimates melting completion which reduces the continued operation to only one hour to further decrease operating costs.

The Sno-Test™ feature provides installation and service personnel with an operational check immediately after power is applied to the snow melting system. Observing the check requires no special tools.

The LCD®-7's design life exceeds fifteen years. This is longer than the life of the pavement in most applications.

Channel discounts apply to the \$99.50 list price which is FOB South Bend. *For more product information, call us at 1-800-234-4239, or write us at helpdesk@networketi.com.*



Seasonal Product Availability

We try to keep all products in stock for immediate delivery. This goal will be more difficult to attain this season. The slowdown in commercial and industrial construction combined with erratic winter weather last year made production planning less accurate this season. Please order as early as you can if timing is critical. We can schedule your order for future delivery if cash flow is an issue.

New Pricing

Work on updating the pricing system continues with completion scheduled soon. Check with Customer Service for the new pricing which will go into effect in mid-July. This is a complete pricing system overhaul, not simply a price increase. Expect many price reductions.

Change in Repair Policies

We are overhauling after-sale product support. Although most changes are internal to ETI, some will affect customers directly. For example, more than eighty percent of the LCD-1UL and LCD-1CSA Snow Switches

SCANNING THE ISSUE

- Introducing the LCD®-7
- Seasonal Product Availability
- New Pricing
- Change in Repair Policies
- Sno-Talk
- Code Corner
- The Interface Schedule

returned for repair or replacement test good. In the future, we will emphasize field testing to eliminate returns. Customer Service has been trained to assist field service personnel with these tasks.

Field returns are subjected to complete parametric tests in precision environmental test chambers by skilled technicians. Thus, if no fault is found, we find it necessary to make a charge of \$25 or \$32.50 depending upon product complexity. Not returning good products eliminates the need for these charges.

It will take several months to finish the overhaul. The goal is to provide quicker and more efficient service.

SNO-TALK

Why Efficient Energy Management for Deicing is Essential

The most reliable deicing method is to operate the heating system continuously during the winter months. This mode of operation does the best deicing job, but it does so at the highest possible energy cost. This brief article calculates the worst case seasonal energy cost for a sample deicing system.

Consider deicing 1,000 square feet of pavement. Assume a power density of 50 watts per square foot. Thus, the heaters require 50

kilowatts during deicing. If electricity costs 10 cents per kilowatt-hour, deicing costs \$5 per hour. This figure may not sound like much. But do a few more calculations and this modest hourly cost balloons to \$120 per 24 hour day or \$840 per 7 day week. If a typical winter lasts 18 weeks, energy costs \$15,120 per season!

Uncontrolled deicing is far too costly for all but the highest priority applications. Thus, an effective energy management is a necessity rather than a luxury.

The objective of the energy management system or automatic deicing control is to minimize costs while providing the same melting and clearing effectiveness as continuous heater operation at the specified power density. For a variety of reasons, this objective can be approached, but never attained. The most important limitation is the initial expense of the deicing system which increases overall installation cost. It also limits heater technology choices. Thus, efficiency is always a tradeoff between initial and operating costs.

The formulas from which the worst case operating cost can be calculated are available from Customer Service at no charge. Two sets of formulas are included: one in kilowatts/kilowatt-

hours for electric applications and another in BTUs per hour/BTUs for hydronic applications.

CODECORNER

Heating Cable and Ground-fault Protection

250.4 General Requirements for Grounding and Bonding. Grounded Systems.

(4) Bonding of Electrically Conductive Materials and Other Equipment.

Electrically conductive materials that are likely to become energized shall be connected together and to the electrical supply source in a manner that establishes an effective ground-fault current path.

A gutter installed on a building or dwelling is generally constructed of an electrically conductive material. Under normal circumstances, the gutter and downspout are not likely to become energized. However, introduce a heating cable to the gutter and add

the presence of water, snow and ice, and you could have a potential hazard. Sunlight, wildlife and environmental conditions can bring wear and tear on the heat cable. And if the cable fails, will the fault current circuit through the cable grounding shield? If not, the critical issue of bonding needs to be addressed. Grounding and bonding must be circuited back to the electrical source. The equipment grounding conductor of the heater branch circuit is used for purposes of grounding the gutter and downspout. Follow the Code guidelines, and remember: *Article 90.1 Purpose (A) Practical Safeguarding. The purpose of this Code is the practical safeguarding of persons and property from hazards arising from the use of electricity.*

Interface Schedule

Normally, The Interface is published at least six times per year. Timing depends on a number of factors including newsworthy events at ETI and our industry we like to pass on to you, our readers. For example, the July issue was delayed to bring you news of our ultra low cost LCD®-7 Snow Switch.



We Manage Heat®

ENVIRONMENTAL TECHNOLOGY, INC.

1302 High Street • South Bend, IN 46601 USA

574-233-1202 • Fax 574-233-2152

Toll Free 800-234-4239 • Toll Free Fax 888-234-4238

www.networketi.com • e-mail: helpdesk@networketi.com

Disclaimer Environmental Technology, Inc. makes no representations or warranties, either expressed or implied, with respect to the contents of this publication or the products that it describes, and specifically disclaims any implied warranties of merchantability or fitness for any particular purpose. Environmental Technology, Inc. reserves the right to revise this publication, and to make changes and improvements to the products described in this publication, without the obligation of Environmental Technology, Inc. to notify any person or organization of such revisions, changes or improvements.

The ETI logo, GIT, APS, CIT, EUR, ZSC, HFD, SIT, SC, RCU, and We Manage Heat are Environmental Technology, Inc. trademarks. © 2003 Environmental Technology, Inc. All Rights Reserved.