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Celebrating our 50th year in Service!

## 'Tis the Season for New Technology



- NEW PRODUCTS
- NEW TECHNOLOGY
- NEW SOLUTIONS



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## President's Message...

Another year is fast coming to an end.

Our team has been very busy providing value and innovation exceeding our customer's needs and expectations. Consistently engineering a stream of unique quality American made products with an expert customer service team supporting them. I am very proud to announce our latest design, the new Severe Duty Auto Eject cover with incorporated display. Available in 2 models bar-graph and digital readout for volts and amps.

As well as the low profile Auto Charge 40 PLC enhanced model. This new 40 amp charger is especially designed for Emergency Vehicles and the challenges they face relating to charging properly. This charger has many new features but one in particular is a patented technology, PLC (Parasitic Load Compensation). Almost every emergency vehicle has many parasitic loads on their systems (flashlights, gas detectors, computers, thermal imaging cameras and other items) which can trick a standard 3-step charger into over charging the batteries. Parasitic Load Compensation (PLC) allows you to input the total number of parasitic load amps on the vehicle. The charger will then shift the absorption stage set point so the battery voltage will drop to the float voltage when the desired current is reached. In short, the parasitic loads are effectively invisible to the charger. This will lead to longer battery life and no overcharging or overheating. Contact us for further information.

Thank you for all your support and I wish all a healthy and happy holiday.

*Thomas H. Nugent*

## New Auto Eject Covers



### Developed for Emergency Vehicles

- Incorporates Auto Eject and Indicator in one product
- Available in Digital Display or Bar Graph
- Extreme duty cover with lid that opens 180°
- Works with Kussmaul chargers
- Includes pre-molded rubber rear gasket
- Available in: yellow, white, red, gray, blue and black

We listened to you, our customers from Engineering, Firefighters, EMT's, EVT's and Police Departments. Based on your feedback, the redesigned and improved Auto Eject Cover lid flips up 180° allowing the user more variability to plug in the shoreline. Knowing you are ready to roll is mission critical, so we added the LED Bar Graph and Digital Amperage/Voltage status to the cover.

Available in a number of different configurations of Kussmaul chargers and Auto Ejects. Built for severe duty, these auto eject covers are sealed against the elements with a premolded rubber rear gasket. Auto Eject Covers come with a 2 year warranty.

For more information please call 800-346-0857

# Dealer Spotlight:

Firetrucks Unlimited, a pioneer in refurbishment services on Fire Apparatus and Ambulances, has been operating for 10 years in Nevada and is the spotlight of this edition.

The company was founded by Stuart Reyburn, a retired Air Force firefighter, who is described by Brian Reyburn, his oldest son and VP of Firetrucks Unlimited as "...a hustler and tremendous at interacting with people. He is a man that comes out with ideas, takes the risk to invest in them and makes them a reality".

Brian and his brother David Reyburn continue to run the business as their father started it; committed to delivering very high quality projects through upgraded technology and improved safety. Their business acumen provides benefits to the tax payer by delivering quality refurbished products at 60% cost less than a brand new unit.



The Reyburn Family- David, Brian, Cindy and Stuart

Kusssmaul Electronics is proud of being a business partner with Firetrucks Unlimited. According to Brian, "Kusssmaul is known as an industry standard. When we first got into this business, you see the brand on the trucks pre-existing. Kusssmaul has a wide variety of products that fit into many applications for all the kind of projects that we do, from fire engines to ambulances. Essentially, a Kusssmaul product makes its way into every single fire truck refurbishment that Firetrucks Unlimited does".

Firetrucks Unlimited uses Kusssmaul products in projects such as the secondary AC requirements for the Lake Travis Fire & Rescue in Austin, TX fire department. Additional power connections were supplied to their trucks by Kusssmaul's shoreline connections and chargers.

Firetrucks Unlimited is currently expanding with a second facility measuring 24,000 sq.ft. This expansion will double the capacity of their business, and create new employment opportunities within the community. The future looks bright for our friends at Firetrucks Unlimited. We wish them the best in the start of their new journey.



Lake Travis Fire Rescue Project

## Upcoming Shows

**January 18-20 2018**

**Fire Rescue East #1034**

**Ocean Center - Daytona Beach, FL**

**February 17-18 2018**

**Fire Rescue & EMS Mega Show**

**SCCC Sports & Exhibition Complex - Brentwood, NY**

**February 21-23 2018**

**EMS Today #621**

**Charlotte Convention Center - Charlotte, NC**

**March 4-8 2018**

**Fire House World #714**

**San Diego Convention Center- San Diego, CA**

**March 7-9, 2018**

**The Work Truck Show (NTEA) #5383**

**Indiana Convention Center - Indianapolis, IN**

**April 26-28 2018**

**FDIC #4310**

**Indiana Convention Center - Indianapolis, IN**

# Technology Corner

## LPC 40, GEN2

Continuous Product Improvement! Kussmaul Electronics applies this practice in our Product Development efforts on a daily basis.

This year we've focused on improving the LPC 40, our Low Profile 40 amp charger. This exercise wasn't about making the product smaller or lighter, the goal here was to significantly improve the product's technology for an ever changing industry.

The market now demands a battery charger that is flexible enough to work with various types of batteries and applications...

Let's take dimmer switches for lighting fixtures as an example, when introduced, they were designed to work with incandescent bulbs. When the compact fluorescent bulb (CFL) came along it required the user to change the dimmer in order for it to work with the CFL. When a totally new technology came to market, the LED bulb, it did not work properly with the CFL dimmer. Each time the light bulb technology changed, the user was forced to replace the dimmer. Luckily, today the light fixture industry offers a universal dimmer that is compatible with all of these light bulb technologies – hence a much needed product improvement.

Our next generation (GEN2) LPC 40 with Parasitic Load Compensation (PLC) incorporates Kussmaul's patented PLC technology. Our PLC technology delivers proper 3-Step charging of the battery while parasitic loads are present. Without this PLC technology, the charger would be tricked into thinking that the parasitic load current was charging current going to the battery instead of the load. PLC technology virtually eliminates the possibility of over-charging the battery. The amount of parasitic load on the charger is configurable on the front panel.

Additional features include: Front panel selectable Battery Type and the ability to choose between Float and 3-Step charging modes. We've retained the original chassis size and mounting-hole locations too! This simplifies replacement of older units. Also, an exciting upgrade to this unit is the new DC output connector which features spring-loaded, self-tensioning, tool-less lever clamps that eliminate loose connections.

Units are shipped defaulted to: Lead-Acid battery type and Float Charging mode.

As we can appreciate the dimmer switch, we will now appreciate the NEW LPC 40, GEN2 as it properly charges the batteries on Emergency Vehicles.

In Stock and Shipping Now!



**Philip Sgroi**  
Electrical Engineer

## Did You Know?

Multiple discharge/recharge cycles shorten any battery's life and using electronics in the vehicle while the engine is off will also deplete the battery's life faster.