



TRANSITIONING YOUR CREWS TO CORDLESS

Understanding and Managing a New Fuel Source—Simplified

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TIME IS MONEY, AND MAXIMIZING UPTIME IS CRITICAL FOR ANY SUCCESSFUL LANDSCAPING OPERATION.

Powering a professional landscaping crew (PLC) requires fueling the equipment that is used, whether it's gasoline or 2-cycle or 4-cycle fuel mix. Fueling typically takes place at the beginning of the day, whether that be at the trailer yard location or gas station, and the fuel purchased is usually enough for a single day of work

plus a little extra for unforeseen circumstances. If reserves run dry—especially during peak season when additional work is required—a quick midday trip to the gas station may be needed to top up the tanks to keep the crew running.

But as PLCs begin to transition from gas equipment to battery-operated equipment, they'll need to understand how to manage a new fuel source. Many gas-powered tools can utilize and share the same gasoline or 2-cycle fuel mix regardless of the fuel tank or equipment type, but the electrical energy contained in a battery is going to be different from one manufacturer and voltage platform to the next. This makes it critically important for PLCs to carefully evaluate and understand battery platforms as well as some key considerations before selecting and transitioning equipment.

UNDERSTANDING BATTERY POWER, BRIEFLY

In the gas world, PLCs have gotten used to associating gallons of gas with the amount of work they are able to do, and there are terms that users have grown to understand related to how powerful their equipment is. Horsepower has become a leading indicator of how much power a tool has, while the size of the fuel tank is an indicator for how long the tool will run—the bigger the tank, the longer the usage.

But these terms don't translate the same way to battery power, so different terms need to be more clearly understood. In the battery world, you'll hear terms like watts (W), watt-hours (Wh), volts (V), amps (A), and amp-hours (Ah).

It can sound overwhelming, but we're here to help break through the noise and be your guide to understanding how to compare batteries. Stick with us.

Watts is the unit of power measurement for battery equipment and the equivalent to horsepower in the gas world. Watts is calculated by multiplying Volts times Amps ($V \times A = W$). The equivalent to gas tank capacity in battery-speak is Watt-hours, the unit of energy. Watt-hours is calculated by multiplying Volts times Amp-hours ($V \times Ah = Wh$).

The greater the energy a battery can contain, the more work it can do. For example, a 12Ah battery is a battery option for several voltage platforms. But not all 12Ah batteries are created equally. Let's use a real-world example to compare 12Ah batteries on 18V and 56V platforms:

18V BATTERY: $18V \times 12AH = 216WH$
56V BATTERY: $56V \times 12AH = 672WH$

In this example, **the 56V battery is not only more powerful but also has more than three times the energy.** That means three times more 18V batteries would be needed to harness the same amount of energy.

It is strongly recommended that the PLC select a single battery platform where batteries can be shifted between all equipment, large and small. Because the more efficient PLCs can be with managing their energy, the better they can manage the associated costs and number of batteries that need to be purchased.

A TOOL TO HELP MANAGE YOUR TRANSITION TO CORDLESS

Calculating energy needs when transitioning from gas to battery can be complicated, which is why we at EGO Commercial introduced Power Manager, a web-based tool designed to help PLCs begin to answer a couple of the most important questions when converting to battery equipment:

“Where do I begin and how?”

In a few short steps based on answers about your business, including size of your crew(s), types of tools and equipment used throughout the day, average workday length, estimated trigger times, and more, the Power Manager delivers battery and charger recommendations to get you the run time needed to complete your typical workday.

CHARGING: WHEN, WHERE, HOW

PLCs can't afford downtime, but like the task of refueling tanks at the beginning, end, or middle of the day is part of the daily routine for gas-powered crew without a second thought, charging management for battery-powered crews is simply a task that needs to be incorporated into the daily workflow.

Some PLCs self-maintain a property with an onsite facility where equipment is stored and maintained, which means battery chargers can be found sitting on a shelf or installed on a wall. This makes organization and storage

of batteries and chargers relatively easy because wall space is often readily available. It also offers the convenience of being close to both tool inventory and charging equipment. While these landscapers often opt to charge batteries overnight, they can also simply return to the facility during the day if a new battery is needed and continue with their work.

More often, however, crews load equipment into a vehicle or trailer at a common business site and then transport it from one customer property to another with the energy needs for the day. Battery charging in this scenario is usually done in one of two ways:

- 1 business owners will install battery chargers inside the business home base to charge at the end of the day, which means the batteries need to be removed from the vehicle or trailer and mobilized to the chargers; or
- 2 owners will find a way to electrify their vehicles or trailers so that chargers can be plugged in and mounted.

At the end of the workday, the vehicle or trailer can be plugged into grid power, and batteries can be charged without leaving the vehicle or trailer. This saves time and effort from having to load and unload batteries at the beginning and end of the workday. But in some cases, access to grid power is not possible because of how or where the trailers are parked when not in use, or because the site lacks the proper electrical infrastructure.

In either an onsite building or trailer solution, many batteries need to be charged either overnight, during the day, or both. Without a simple, dedicated solution to address this, many chargers can end up getting plugged into a circuit and overloading it, which can trip a breaker and stop charging, leading to lost productivity.

EGO COMMERCIAL DELIVERS A SIMPLE CHARGING SOLUTION

Turnkey solutions to make charging easier are limited. After conducting hundreds of consumer interviews and extensive research, our development team at EGO Commercial has leveraged these insights to develop simple, yet effective solutions to solve for this. Whether a small landscaping company starting to transition with a small number of batteries or a large company with many batteries to charge, the EGO Commercial's PGX™ Commercial Charging system is designed for simplicity, flexibility, and scalability.

With the PGX™ Commercial Charging 1600W Hub, one standard 15-amp circuit is all you need—no expensive electrical upgrades are required. It's also flexible: the 1600W Hub can be mounted in a garage, vehicle, or mobile trailer to connect to any standard 120V outlet. And it's scalable: each 1600W Hub connects to PGX™ Commercial Charging 3-Port Docks to charge up to three batteries at the same time, and as many as 24 3-Port Docks can be connected to charge up to 70 2.5Ah batteries overnight from one 15-amp circuit. Lastly, it's economical: unlike other chargers



PGX™

COMMERCIAL CHARGING

that require extensive electrical system upgrades and expensive hardware, 3-Port Dock is designed to be simple and much less expensive. So as a professional landscaper scales their PGX™ system, they can do it for a much lower cost than the competition.

Further, to solve for those instances where energy is depleted that in the gas world would require a quick stop at the gas station to top up fuel tanks, EGO Commercial has designed a solution for recharging batteries off the grid with the PGX™ Commercial Charging Power Bank. The Power Bank uses a 2.2kWh (40Ah) High-Capacity battery to recharge handheld batteries off the grid and in the field, no cables or special connections required. With the Power Bank and one High-

Capacity battery, you could recharge up to eight 5.0Ah batteries, and you can recharge two in just 30 minutes.

While the transition to a battery-powered solution may seem daunting, EGO Commercial is positioned to provide the first ever viable replacement for gas with solutions like the PGX™ Commercial Charging System that are simple, flexible, scalable, and economical.

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