

## **ELECTRICAL POWER BACK UP SYSTEM**

**If power goes out again today, can you operate your business, light your house? Run your office computer, fax machine or make a pot of coffee?**

To solve the above problem, a small simple system can run essential loads in the house, lights, TV, fridge, music system etc.

Trace systems automatically provide instant back up electricity from the battery bank when power from **KPLC** Company unexpectedly shuts down. You may also combine a trace inverter system with a generator for protection against longer power outages. A generator only has to run for shorter periods during longer outages to recharge the battery bank.

### **THE SYSTEM SIZE THAT YOU NEED**

Your system size depends on the number of appliances you choose to power. A Back up system powers an electric sub panel (circuit breaker panel or outlets) which in turn supplies electricity to business appliances in the event of any power disruption.

A back up system can operate almost anything, although it makes sense to be selective about the items you choose to run during a power outage.

### **ESSENTIALS**

In the house, a trace back up electrical system typically operates lighting, TV, music system, fridge and any low voltage appliances.

### **OTHER APPLIANCES**

Electronic items such as security systems and telecommunication equipment are among some of the other appliances you can run. You can operate comfortably and convenience appliances such as coffee makers, microwave ovens, and other kitchen appliances as well.

### **ITEMS TO AVOID**

Air conditioners, electric space heaters, heat pumps, and electric water heaters require large power system which will significantly increase the

initial price of the system

## **BACK UP ELECTRIC SYSTEM COMPONENTS**

### **BATTERY BANK**

A battery bank stores energy for use during a power outage. The size of the battery bank determines how long you can run your appliances during power outage without recharging. The power rating of the inverter determines how many appliances you can use at any one time. The power rating of the battery charger determines how quickly your battery bank can be recharged. We recommend deep-cycle batteries for use in these systems. However,

### **ELECTRIC PANEL**

The electrical panel is a distribution terminal for electrical wiring (also called a circuit breaker box). All the wiring in a home or office terminates at a main electrical panel and is supplied with electricity from a common source. A sub panel, a smaller secondary circuit breaker panel is typically used to isolate those circuits that will connect to a back up electric system.

### **INVERTER/CHARGER**

An inverter converts regular alternating current (AC) from your electric utility or electric generator to direct current (DC) that can be stored in batteries. During power outage, the inverter/charger converts DC power from the battery bank to clean AC power for use in your house or office. Inverters have an efficiency rating as high as 96%, are noise-free, and function as brains of your fully automatic backup electric system.

We stock both Xantrex/Trace inverter chargers and OutBack inverter/chargers. Xantrex/Trace inverter/chargers are the oldest in the market and mostly produce a modified sine wave. OutBack inverter/chargers are pure sine wave inverters that can be stacked to back up 30,000 watts of load besides being able to control a back up generator.

## MAIN TYPES OF INVERTER/CHARGERS



### **XANTREX/TRACE INVERTER/CHARGERS**

SW series: SW3024E, SW3048E, SW4548E  
DR Series: DR1512E, DR1524E, DR2424E  
CR Series: CR1012.



### **OUTBACK INVERTER/CHARGER**

FX series: FX2012ET, FX2524ET, FX2348ET  
VFX Series: VFX2612E, VFX3024E, VFX3048E