



Designers and Manufacturers of Mobile Health Clinics

## ADI Technical Bulletin #1

# Shore Power Supply for ADI Mobile Clinics

The 14-50R receptacle is a common receptacle for 120/240 volt electric stoves. It should be available at any electric supply store. The 14-50R is manufactured by Leviton, A.H. Bryant, Hubbel, GE, and others (see Figure 1). It is to be mounted in a NEC / CSA UL listed enclosure with the ground UP. The enclosure should be labeled: "**Mobile Clinic Only (No GFCI)**". A wired connection to a ground is always required, particularly if the enclosure is plastic. The enclosure may need to be modified to allow the 90° angled 14-50P to seat completely in the 14-50R with the cord DOWN.

**The 14-50R should not be installed on a GFCI protected circuit.**

**Always use a volt meter to confirm that both 120-volt sides are balanced (see Figure 2), and that there is a good central neutral.**

### **IMPORTANT**

Regardless of whatever adapters are used or modifications are made to obtain shore power, **DO NOT** allow the plug on the mobile clinic power cord to be cut off. Regardless of the adaptations your electrician makes for the 14-50R receptacle you must confirm that the power being provided is both 120 and 240 power 1-phase  $\Phi$ , with a center neutral. The mobile clinic uses both 120 and 240 volts, 60 Hz and does not have full functionality on a single voltage, or a single leg. The right and left sides of the shore power must be balanced (i.e.: the same 120V). If using a single tap off a 3-phase  $\Phi$  **delta** system, see the 3 Phase addendum (attached).

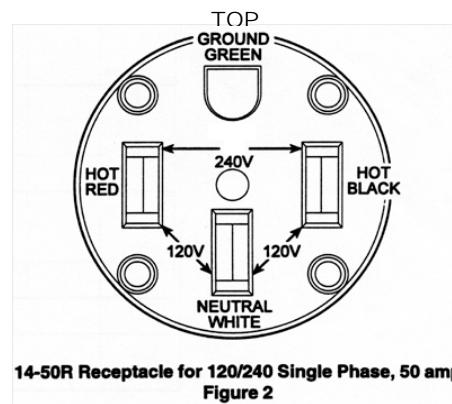
The power for the mobile clinic is exactly the same single phase as that required for a modern house. The main building breaker providing power must be at least 50 amps and not more than 60 amps. The 240-volt air compressor and vacuum pump may not function as well on 208 volts (single phase). Install a transformer if required. ADI generally installs a surge guard, such as TRC #40240, on the shore power line which provides GFCI protection.

**Always check** the 14-50R with a volt meter before plugging it in.

If there are any questions, please do not hesitate to have your electrician call ADI at (503)885-0886.



Receptacle Box Label  
Figure 1



14-50R Receptacle for 120/240 Single Phase, 50 amp  
Figure 2

### **ADI Mobile Health - FACTORY**

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