

# THIS PRODUCT MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE INSTALLATION CODE BY A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE PRODUCT AND THE HAZARDS INVOLVED

CE PRODUIT DOIT ÊTRE INSTALLÉ SELON LE CODE D'INSTALLATION PERTINENT, PAR UNE PERSONNE QUI CONNAÎT BIEN LES PRODUIT ET SON FONCTIONNEMENT AINSI QUE LES RISQUES INHÉRENTS

#### I. Introduction

This manual is for a Power Charging System designed to provide power during the day to a Talk-A-Phone Co. Emergency Phone System that receives power every night. At night, while the batteries are being charged, the Power Charging System will continue to power the system.

The PCS-42-6 is specifically designed to provide power to a Talk-A-Phone tower enclosure (ETP-MT/R-PCS, ETP-MT/R-PCS-WP, ETP-MTE-W, ETP-MTE-WP, WEBS-MT/R) or surface mount enclosure (ETP-SMW). The batteries are sized to accommodate a cellular interface (ETP-CI) in a tower or surface mount, or a VoIP Phone (VOIP-500 Series) and wireless IP interface (VOIP-RF-FM-1100) in a surface mount enclosure only (no LED Blue Light).

#### II. Contents

Before beginning installation, make sure you have all the included components. Each **PCS-42-6** package consists of the following bill of materials as summarized below:

Qty.	Part Number	Description
1	86383	Battery Charger - 12VDC, 6A
1	68594	Battery - 42Ah
6	67524	Battery Terminal Connectors – Ring, 1/4in, Crimp
4	4247	Screw - #8-32 x 0.5 L, Binder Head, Slotted
4	4248	Nut - #8-32, Hex, Machine
4	42767	Washer - External Tooth Lock Washer, # 10

# III. Communication System Installation

All connections must meet National, Regional and Local Electrical Codes. Installation should only be performed by qualified professional personnel. Step down transformer and DC-DC converters, if included, have connections for multiple input and output voltages. Be sure to make your connections to the terminals labeled with the voltage that you require. As a safety precaution, it is recommended that you make all connections while the 120VAC (or other high-voltage) is turned off. The battery may need one charge cycle before the system will function completely. It may be convenient to charge the battery in advance.

Make all electrical connections according to the wiring schematic in **Figure1** as well as any instructions included with the individual electrical components:

- 1. Use battery terminal crimp-on connectors to connect the LED Blue Light and LED panel light assembly directly to the battery.
- 2. If using an optional **ETP-CI**, connect the 12VDC side of the DC/DC Converter to the Battery, and plug the barrel connector into the **ETP-CI** Cellular Interface.
- 3. If using a **VOIP-500** Series Phone, connect the device directly to the battery. Make sure the phone is set to accept 12VDC by adjusting the jumpers on the PCB. Refer to the phone installation instructions for further information.
- 4. If using an optional **VOIP-RF-FM-1100**, connect the PoE injector (model **VOIP-RF-FM-POE**) directly to the battery.
- 5. Connect the battery charger to the battery.
- 6. If 120VAC is available, connect the battery charger to the incoming 120V. If a **PCS-SD** Series step down transformer is used to step down a higher incoming voltage, connect the 120V side of the Battery Charger to the 120V side of the transformer, and connect the incoming high voltage to the high voltage side of the transformer.
- 7. Phones and Cellular/Wireless IP Interfaces require additional programming as described in their own manuals.



Figure 1. Wiring Schematic for a typical Power Charging System

# IV. Physical Installation

The Power Charging System can mount into a model **ETP-BOX/PCS** enclosure, a Talk-A-Phone tower enclosure (**ETP-MT/R-PCS, ETP-MT/R-PCS-WP, ETP-MTE-W, ETP-MTE-WP and WEBS-MT/R**) or surface mount enclosure (**ETP-SMW**), or can be installed into a customer supplied enclosure.

# A. Installing inside a Box Enclosure (ETP-BOX/PCS)

1) The mounting panel of the **ETP-BOX/PCS** is aluminum to allow for the installer to mount the **PCS-SD** Series Step-down transformer (sold separately) and the battery charger where desired.

- 2) The DC/DC Converter for the **ETP-CI** device should be affixed to the back panel using the included dual lock strips. The battery should be placed in this enclosure as well.
- 3) If a cellular interface (model **ETP-CI**) or a wireless IP interface (**VOIP-RF-FM-1100**) models are included in this installation, it may be convenient to place this equipment in the same enclosure depending on the phone mount chosen.

# B. Installing inside a Tower Enclosure (ETP-MTE-W / ETP-MTE-WP / ETP-MT/R-PCS / ETP-MT/R-PCS-WP, WEBS-MT/R)

- 1) The battery charger, DC/DC Converter and optional step down transformer mount on to the aluminum mounting panel provided inside the tower.
- The ETP-CI device can either be mounted on the mounting panel provided inside the tower (ETP-MTE-W / ETP-MTE-WP) or the weld studs provided behind the emergency phone (ETP-MT/R-PCS / ETP-MT/R-PCS-WP).
- 3) Mount the antenna on to the tower top cap plate by removing the plug covering the hole.

#### C. Installing inside a Wireless Surface Mount Enclosure (ETP-SMW)

- 1) The battery charger, DC/DC Converter, cellular interface (**ETP-CI**) and optional step down transformer mount on to the aluminum perforated mounting panel provided inside the enclosure.
- 2) Pass the antenna cable through the hole/knockout on bottom or back for conduit in the case of mounting the antenna remotely.



**Figure 2.** Typical installation of **ETP-MT/R-PCS**, exploded and fully assembled with 1) battery charger, 2) mounting panel, 3) cellular interface, 4) DC/DC converter, 5) battery shelf, 6) battery, 7) step-down transformer