



CELLCOM® / FREESPEAK® CEL-FS-CHRGR  
MULTI-BAY CHARGER

INSTRUCTION MANUAL

## SUMMARY OF LED STATUS – Normal Operation

Red LED **ON**.....Fast charging  
Green LED **ON**.....Trickle charging

## SUMMARY OF LED STATUS– Fault Conditions

Red LED **Flashing**.....Short Circuit in battery pack  
Green LED **Flashing**.....Cells in pack will not charge

*Remove the battery pack and investigate.*

## OVER-TEMPERATURE

If the temperature of the battery pack exceeds approximately 60°C in fast charge mode, the charging will revert to trickle charging. The red LED turning OFF, and the green LED turning ON will indicate this.

*Excessive heating of the battery pack may be caused by not using the recommended batteries or by mixing batteries from more than one manufacturer.*

# SPECIFICATIONS

## Mains Power Supply Unit

AC input voltage	100-240VAC 50/60Hz
Output voltage	+12VDC
Output current (max load)	2.50A
Output current (min load)	0.00A
Short Circuit Protection	Yes

## Charger

Input Voltage	12.0VDC +/- 5%
Max Input Voltage	15.0VDC
Output (5 bays) battery pack.	Smart charging for 4.8V 2500mAH
Fast Charge Current	800mA
Trickle Charge Current	50mA (average)
Maximum Charge Time	360 minutes
Over-Temperature detect	60 °C
Short Circuit detect	Yes
DC connection Jack	5.5 x 2.1mm (C+)

## Batteries

Vitec Group Communications recommend that the charger should only be used with the following battery types:

PANASONIC P6P 2500mAH / 2600mAH Ni-MH 1.2V AA

## General

Operating Temperature	0 °C to 40 °C
Operating Humidity	0% to 90% R.H.
Storage Temperature for Charger and PSU.	-20 °C to 80 °C

## IMPORTANT SAFETY INSTRUCTIONS

- (1) **WARNING:** To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
  - (2) Do not use the apparatus near water.
  - (3) Clean only with a dry cloth.
  - (4) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
  - (5) Do not expose to any heat sources such as radiators, heat registers / vents, stoves, or other apparatus (including amplifiers) that produce heat.
  - (6) Protect power leads from being walked on or pinched.
  - (7) Unplug the apparatus during lightning storms or when unused for long periods of time.
  - (8) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as a power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- CAUTION:** Danger of explosion or injury if any of the batteries fitted in the belt pack battery pack are not NiMH re-chargeable types. **Do NOT use alkaline batteries.**
- Replace batteries only with manufacturer's recommended type of AA size NiMH batteries.

*Please read and follow these instructions before operating the CEL-FS-CHRGR. Keep these instructions for future reference.*

## INTRODUCTION

The **CEL-FS-CHRGR** can be used to re-charge up to five Cellcom ® or Freespeak ® beltpack battery packs in place of the beltpacks' internal charging circuit. This allows a beltpack to be used with one battery pack whilst a second battery pack is being charged. Additional battery packs and batteries can be purchased from your Clear-Com supplier.

The **CEL-FS-CHRGR** features intelligent circuitry to prevent overcharging. It optimises charging by fast charging for a period and then trickle charging.

## INSTALLATION REQUIREMENTS

The **CEL-FS-CHRGR** mains power supply requires an electrical supply of 100-240VAC 50/60Hz.

## INSTALLATION

Connect the power supply unit to the **CEL-FS-CHRGR** via the DC input on the right side of the **CEL-FS-CHRGR**. Connect the correct mains adaptor for your country to the **CEL-FS-CHRGR** mains power supply. Plug the adaptor in to the mains electricity supply.

## OPERATION

Insert a belt pack battery pack into one of the five charger bays with the electrical contacts on the battery pack facing downwards. The bays are polarized so the battery packs can only be inserted one way around. The bay's red LED should light to indicate fast charging is occurring.

After a period of approximately four hours for a set of exhausted batteries, the red LED should extinguish and the green LED should light. This indicates that fast charging is over and trickle charging has commenced. Batteries that are not fully exhausted will take less time to charge. A battery pack can be removed for use after the fast charge period is over but may not be fully charged until a period of trickle charging has occurred.

Trickle charging will continue until the battery pack is removed. The exact time period for a full charge, including trickle charge period will depend on the original charge state of the batteries in the battery pack and the number of charge- recharge cycles that the batteries have experienced.

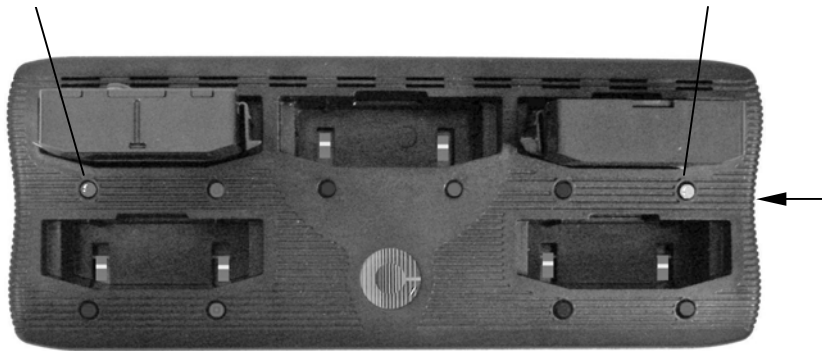
Up to five battery packs can be charged independently at one time. Packs may be inserted or removed independently of each other.

*Insert battery pack into charger bay with contacts facing down.*



*Red LED ON – Fast Charging*

*Green LED ON – Trickle Charging*



*Insert DC Power here*

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