



MCU Lead-Acid Battery Charger of Intelligent 3 stage distinct operating mode

1. Specifications: :

Hardware :

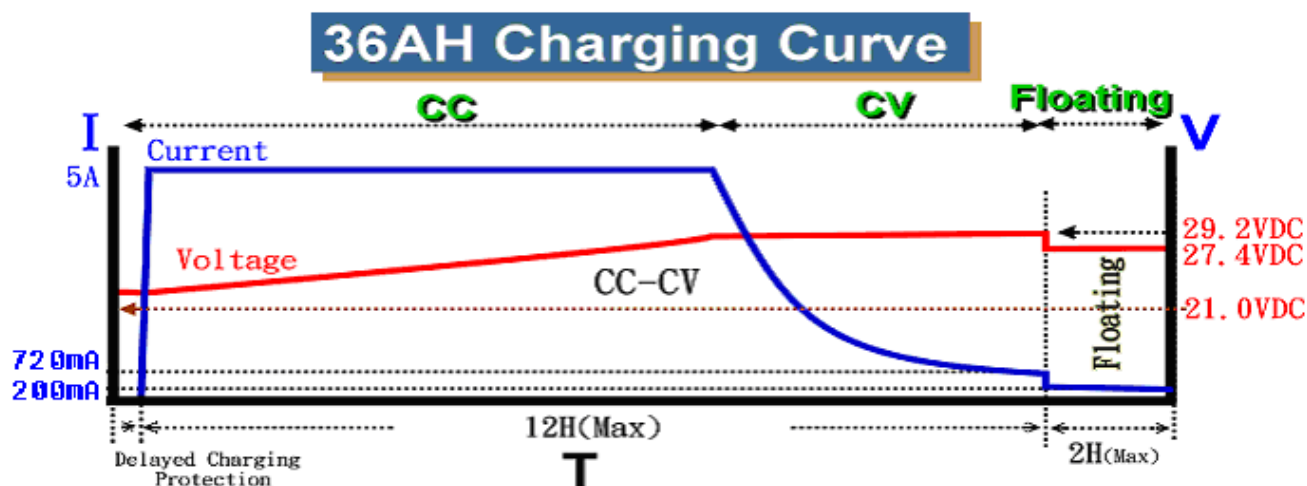
- **Model** : SC1150A-30
- **MCU** : PIC16F685
- **Power Transfer** : AC/DC Switching Power Supply
- **Input Voltage** : 100~240VAC 50/60HZ
- **Output Current** : 5A(Max)
- **Output Voltage** : 21~29.2V
- **DC-cord Jack** : Microphone Head
- **Storage Temperature** : -20~85°C
- **Operating Humidity** : 20%~80%RH
- **Operating Temperature** : 0~40°C
- **Heat dispersion** : By Fan in CC-CV Mode
- **Dimension** : 180*95*51 mm
- **Weight** : 1000g
- **Certification** : UL、TUV、JQA、SAA

Protection :

- **Battery Over Voltage Protection** :
 - Charge-inhibition as battery voltage abnormal high
- **Battery Low Voltage Protection** :
 - Charge-inhibition as battery voltage abnormal low
- **Over Load Protection** :
 - Charge-inhibition
- **Over Temperature Protection** :
 - Charge-inhibition as fan breakdown or other abnormal
 - Fan starts if floating charge temperature abnormal high
- **Short-Circuit Protection** :
 - Charge-inhibition
- **Max charging time protection** :
 - Max CC-CV charging time 12 hours
 - Max Floating charging time 2 hours
- **No Output Protection** :
 - As no battery connection
- **Reverse Polarity Protection** :
 - staying in standby mode, no charge action
- **Delayed Charging Protection** :
 - 3 seconds delay to start charging after charger connects to batteries.
- **Auto-identify Battery Capacity Protection** :
 - Capacity > 36AH, auto-extend max time protection
 - Capacity < 36AH, auto-decrease CC charging current

Charging Control Instruction :

- **Charging Mode** :
 - CC, CV and floating charge 3 stages
- **LED Indicator status** :
 - Stand-by、Charging、Floating charging、Temperature Stand-by、Finish、NG



2. Operating Instruction :

- (1). Make sure the input voltage is 100V~240VAC .
- (2). Make sure LED Indicator is in stand-by mode: (Green Lights up constantly) .
- (3). Make sure if 12V * 2 pcs Lead-Acid battery (36AH is standard or follow supplier's proposal)
- (4). Batteries should be placed levelly as the Picture , and avoid a big angle slope or upside down placing.
- (5). Make sure the output plug of charger connecting to batteries' compactly.

3. LED Indicator Description :

Green	Orange	Status description	Max Range
		Stand-by model	Until battery connected the charger
		In charging Over Temperature Protection	Max charging time depends on the Battery capacity Until temperature return to normal
		Full charged	Until battery disconnected the charger
		Charging-inhibition	Until battery disconnected the charger
 : LED off		 : Led blink (1Sec)	

4. Troubles Shooting :

- (1). If no stand-by (Green) light indicates :
 - Make sure the AC power source is normal, and plug in the charger .
- (2). If no charging (Orange) light indicates :
 - To check Battery polarities are connected correctly and the connection of Plug is compactly.
- (3). If charging-inhibition (Orange) light is blinking :
 - To obviate the status as protection specification, maybe batteries are damaged or out of life.

5. Caution :

- (1). Avoid charging in a high-temperature or hermetical environment, over 45°C .
- (2). If any cracking of Battery housing, please do not use it.(charge or discharge)
- (3). Do not expose Charger to water, wet, dusty environment or close to inflammable stuff.

Appearance :



