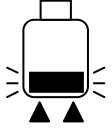
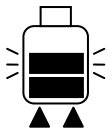
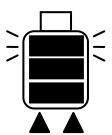

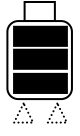


## LSK112: NiMH Battery 12 Channel Charger Tray Control IC Brief Specification

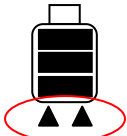
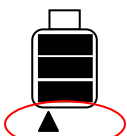
- A. Application: Using 1/2/3/4 pcs of IC to build 12/24/36/48 Channels NiMH Battery Charger Tray.
- B. Input Power: 3V/7A (or 5V/5V, or 12V/2.5A with Voltage drop circuit to 3V power)
- C. Battery Type: 12 Channels for 12 pcs of NiMH battery  
(And using Mechanical spring for both AA or AAA type of battery ).
- D. Charge control flow (Independent control, 1 Channel control 1 pcs battery)
- 1.) measuring battery Internal Resistor for judging battery's life status for user's reference.
  - 2.) Charge current range: 420 ~ 580mA with simplify peripheral components.
  - 3.) Charge Full Detection by:  $-\Delta V$  &  $0 \Delta V$ .
  - 4.) Over Battery Voltage Protection : 1.60V
  - 5.) Charge Time Protection: AA type= 6.0hr; AAA type= 3.0hr.
- E. LCD display indication for charge status for each channel:

Status category	Detail status	Icon
During Charge	Capacity <30% Stripe 1, Flash	
	30% < Capacity <60% Stripe 1: On Stripe 2: Flash	
	60% < Capacity <99% Stripe 1,2: On Stripe 3: Flash	
Charge Full	Capacity =~100% Stripe 1,2,3: On Outside frame: On	
Over Voltage Defects	double triangle: Flash	

F. LCD display indication for Battery's internal Resistance (R-int):

Battery's internal Resistance, R-int (which can be referred as Battery's age status), will be measured when battery plug-in Slot.

Remark: R-int data is rough classification as simple reference only

Item	Category *	R-int	Available battery capacity	LCD Icon (within Red circle)
A	Normal battery	$R\text{-int} < 200\text{m}\Omega$	70% ~ 90%	
B	Old age battery	$200\text{m}\Omega < R\text{-int} < 500\text{m}\Omega$	50% ~ 70%	
C	Eliminated battery	$R\text{-int} > 500\text{m}\Omega$	< 50%	