

# KENWOOD

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RAPID CHARGER

# KSC-25

## SERVICE MANUAL

REVISED II

# KENWOOD

Kenwood Corporation

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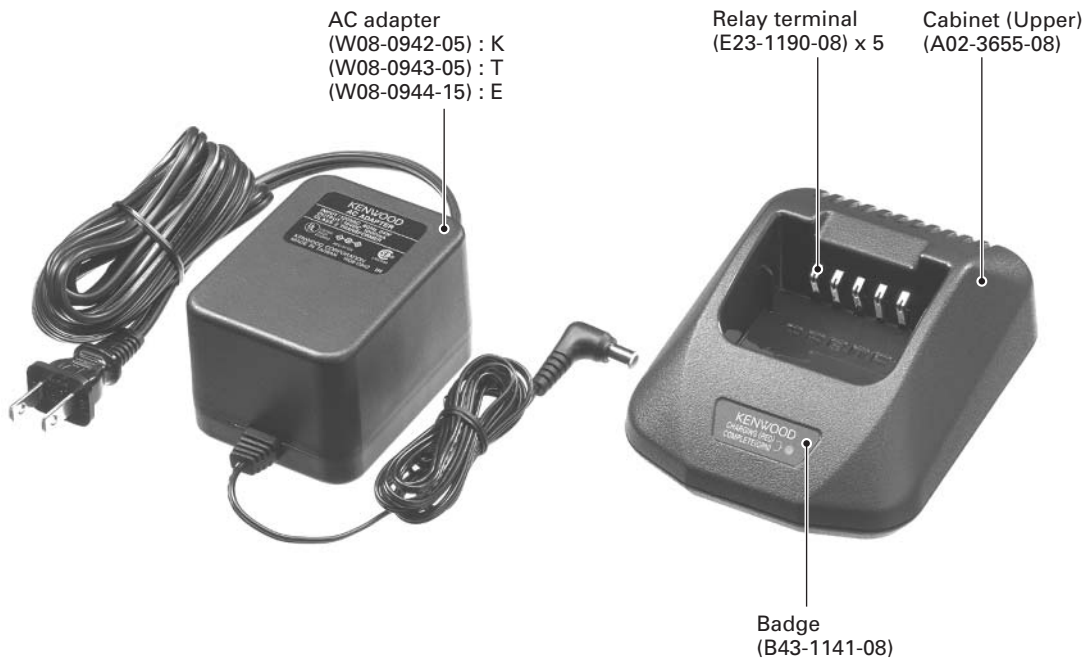


Photo is K type.

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# KSC-25

## SPECIFICATIONS

Charging Current ..... KNB-25A, KNB-26N : 1080mA±5%  
 KNB-24L, KNB-35L : 945mA±5%

Charging Time ..... KNB-24L : Approx. 150 minutes  
 KNB-25A : Approx. 70 minutes  
 KNB-26N : Approx. 120 minutes  
 KNB-35L : Approx. 170 minutes

Dimensions (Charger only) ..... 2-11/64 in (55 mm) H x 4-1/8 in (105 mm) W x 5-5/16 in (135 mm) D

Weight (Charger only) ..... Approx. 180g / 6.3oz

## PARTS LIST

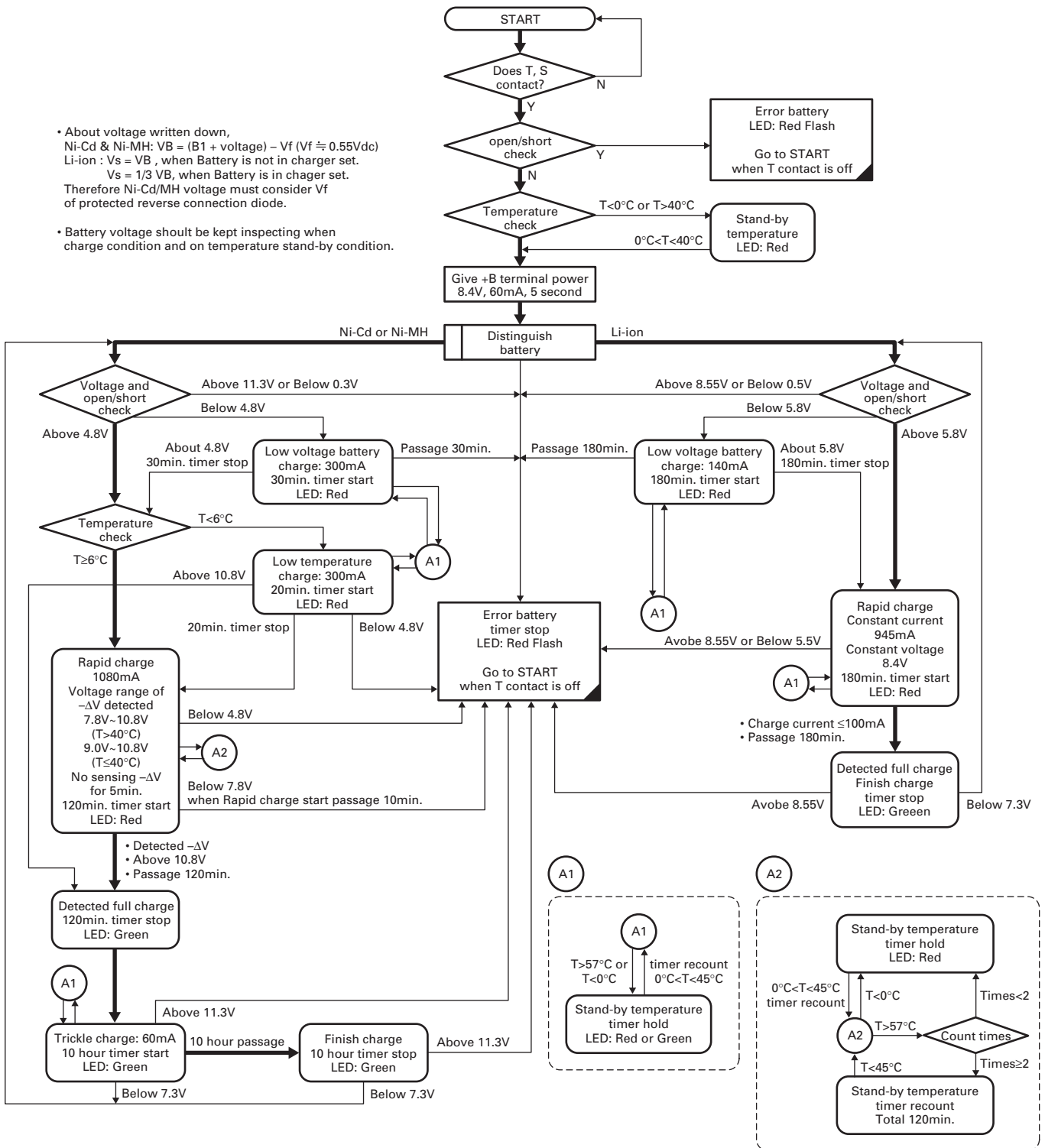
**KSC-25 (Y56-513X-XX)** \* New Parts  
 △ Safety critical components

Ref. No.	Address	New parts	Parts No.	Description	Destination
			A02-3655-08	Cabinet Upper	
			A02-3656-08	Cabinet Bottom	
			B43-1141-08	Badge	
		*	B62-1607-30	Instruction manual	K,T
		*	B62-1608-20	Instruction manual	E
			E03-0200-08	DC jack	
			E23-1190-08	Relay terminal	
			G13-1547-08	Cushion	
			N83-2610-45	Screw	
△			W08-0942-05	AC adapter 120VAC 60Hz	K
△			W08-0943-05	AC adapter 230VAC 50Hz	T
△		*	W08-0944-15	AC adapter 230VAC 50Hz	E

## CHARGER FLOW CHART

• About voltage written down,  
 Ni-Cd & Ni-MH:  $V_B = (B1 + \text{voltage}) - V_f$  ( $V_f \approx 0.55V_{dc}$ )  
 Li-ion :  $V_s = V_B$ , when Battery is not in charger set.  
 $V_s = 1/3 V_B$ , when Battery is in charger set.  
 Therefore Ni-Cd/MH voltage must consider  $V_f$   
 of protected reverse connection diode.

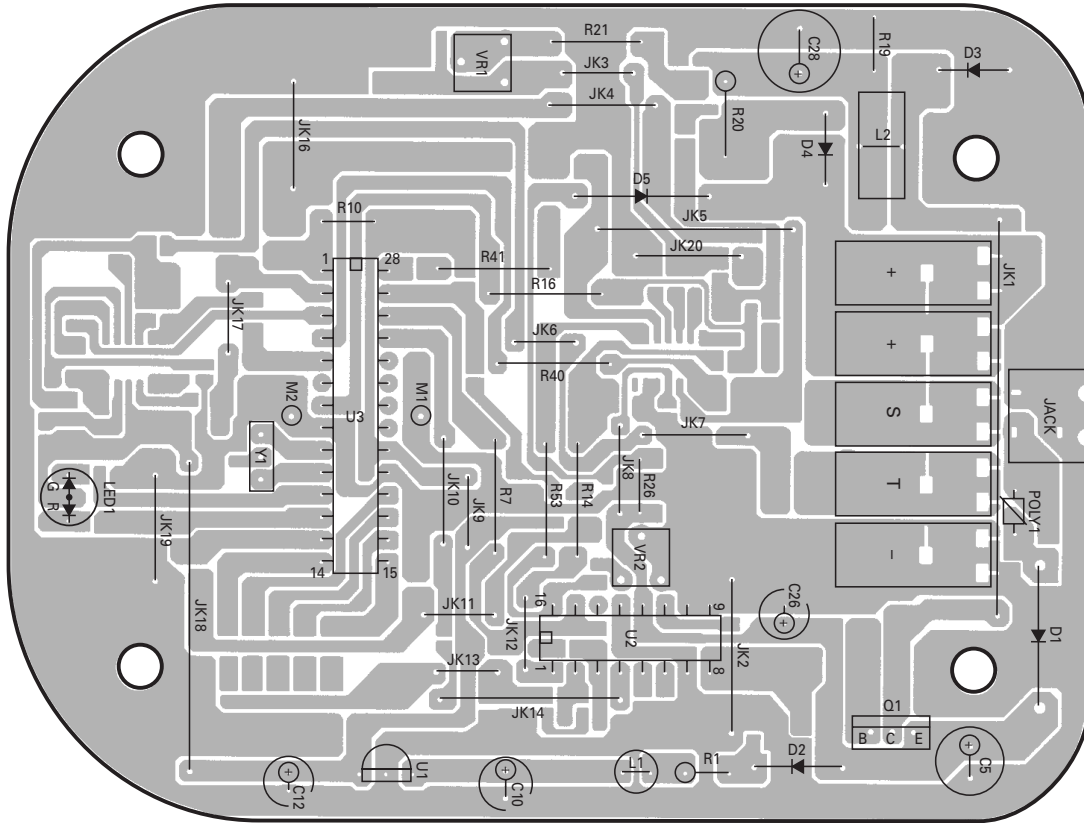
• Battery voltage should be kept inspecting when  
 charge condition and on temperature stand-by condition.



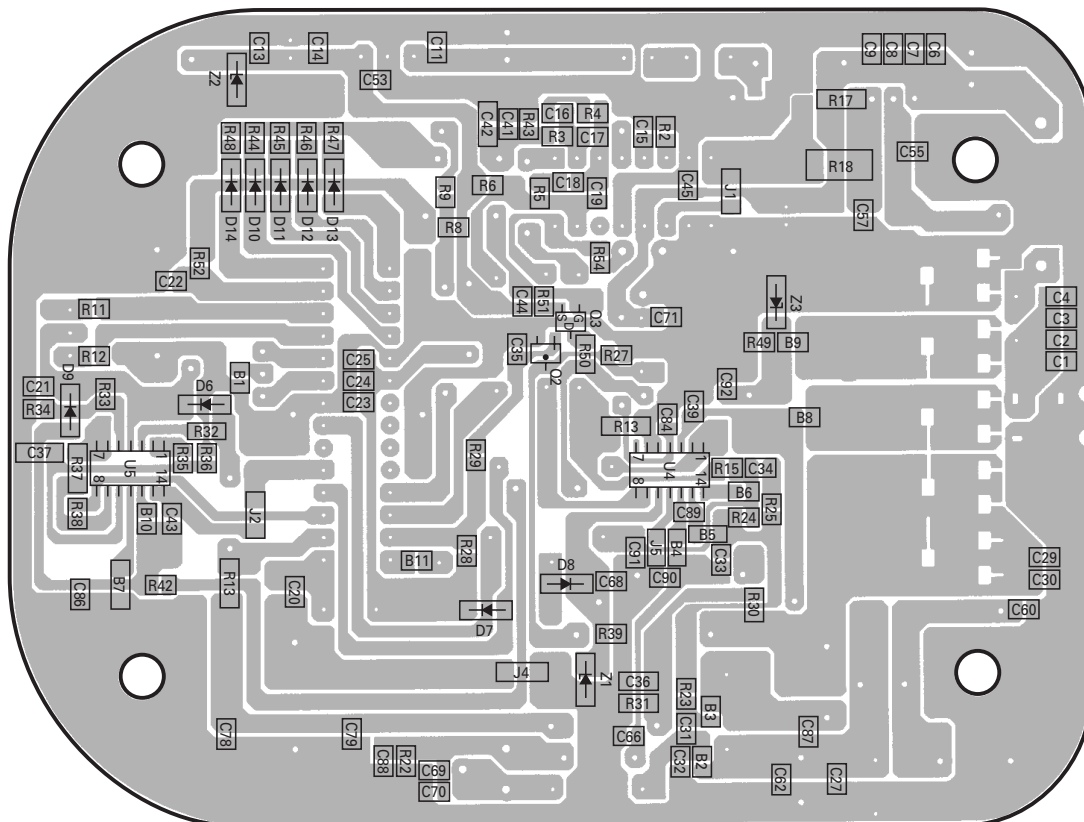
# KSC-25

## PC BOARD

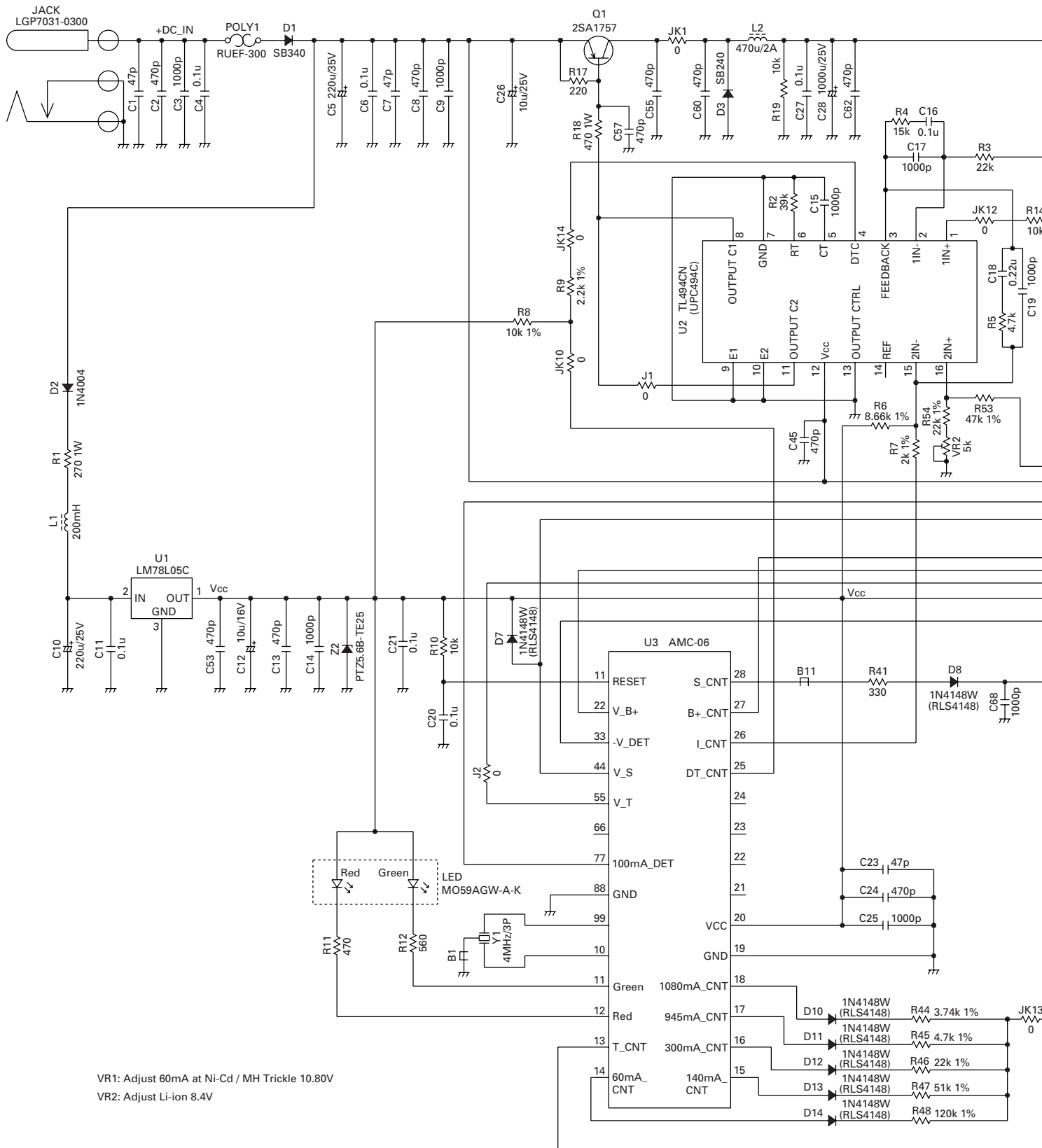
CHARGER UNIT Component side view



CHARGER UNIT Foil side view

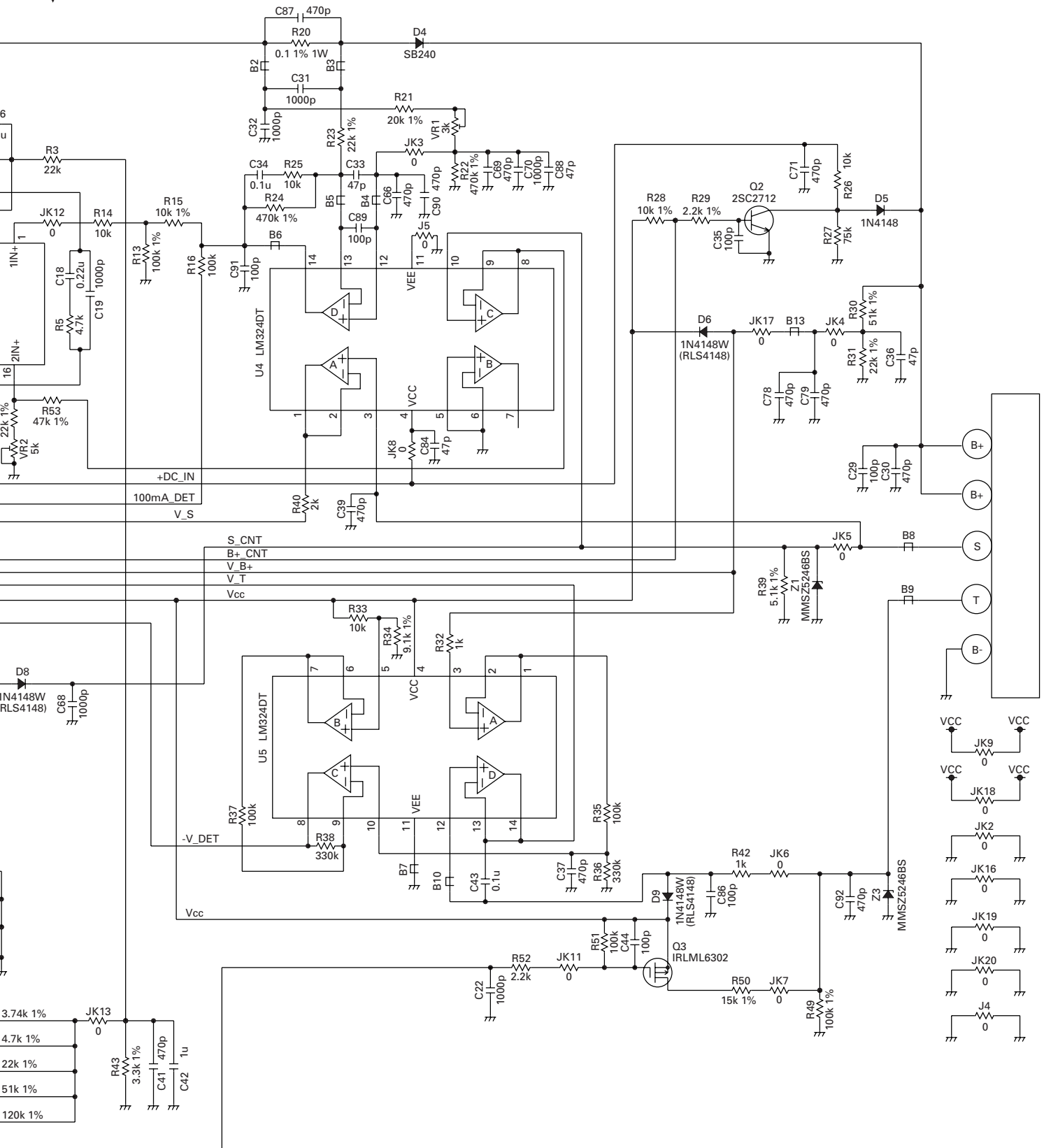


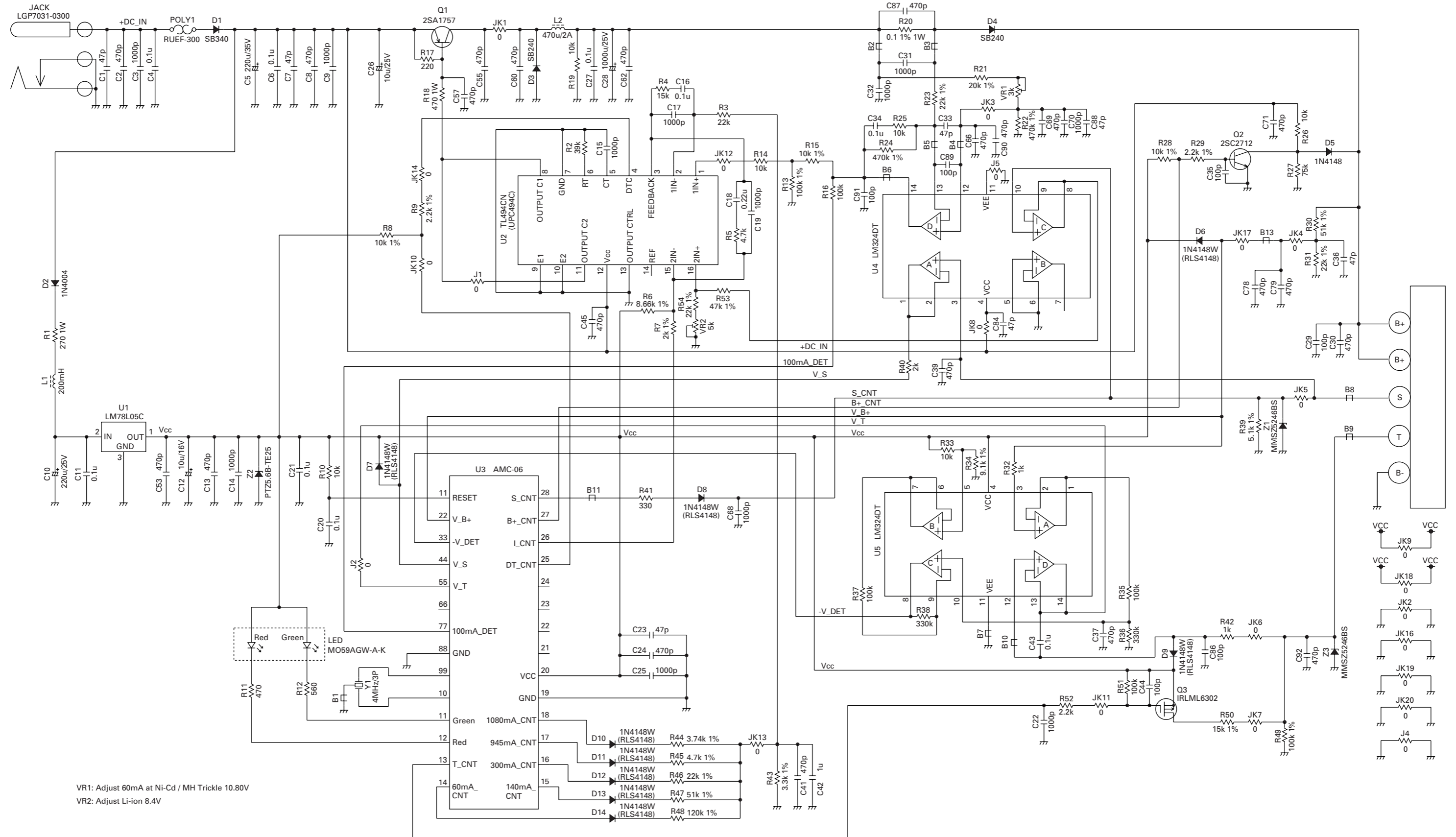
## SCHEMATIC DIAGRAM



# KSC-25

## SCHEMATIC DIAGRAM





VR1: Adjust 60mA at Ni-Cd / MH Trickle 10.80V  
 VR2: Adjust Li-ion 8.4V



## BATTERY PACK

### KNB-24L/35L (Li-ion Battery Pack)

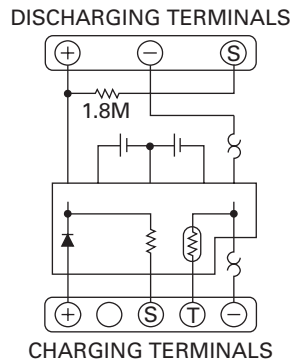
#### External View



#### Specifications

Voltage ..... 7.4V (3.7V x 2)  
 Battery capacity  
 KNB-24L ..... 1400mAh  
 KNB-35L ..... 1950mAh

#### Schematic Diagram



### KNB-26N (Ni-MH Battery Pack)

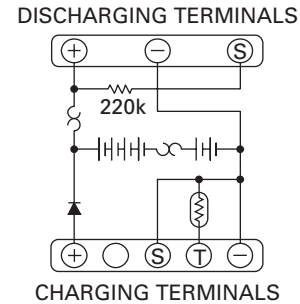
#### External View



#### Specifications

Voltage ..... 7.2V (1.2V x 6)  
 Battery capacity ..... 2000mAh

#### Schematic Diagram



### KNB-25A (Ni-Cd Battery Pack)

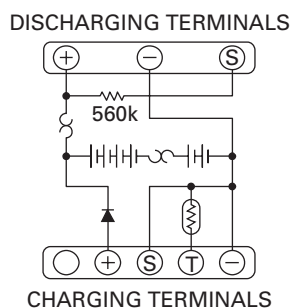
#### External View



#### Specifications

Voltage ..... 7.2V (1.2V x 6)  
 Battery capacity ..... 1200mAh

#### Schematic Diagram



# KSC-25

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