

RAPID CHARGER

# KSC-25

## SERVICE MANUAL

REVISED III

# KENWOOD

Kenwood Corporation

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This service manual has been revised due to the modification of the AC adapter and the addition of type X.



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# KSC-25

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## 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

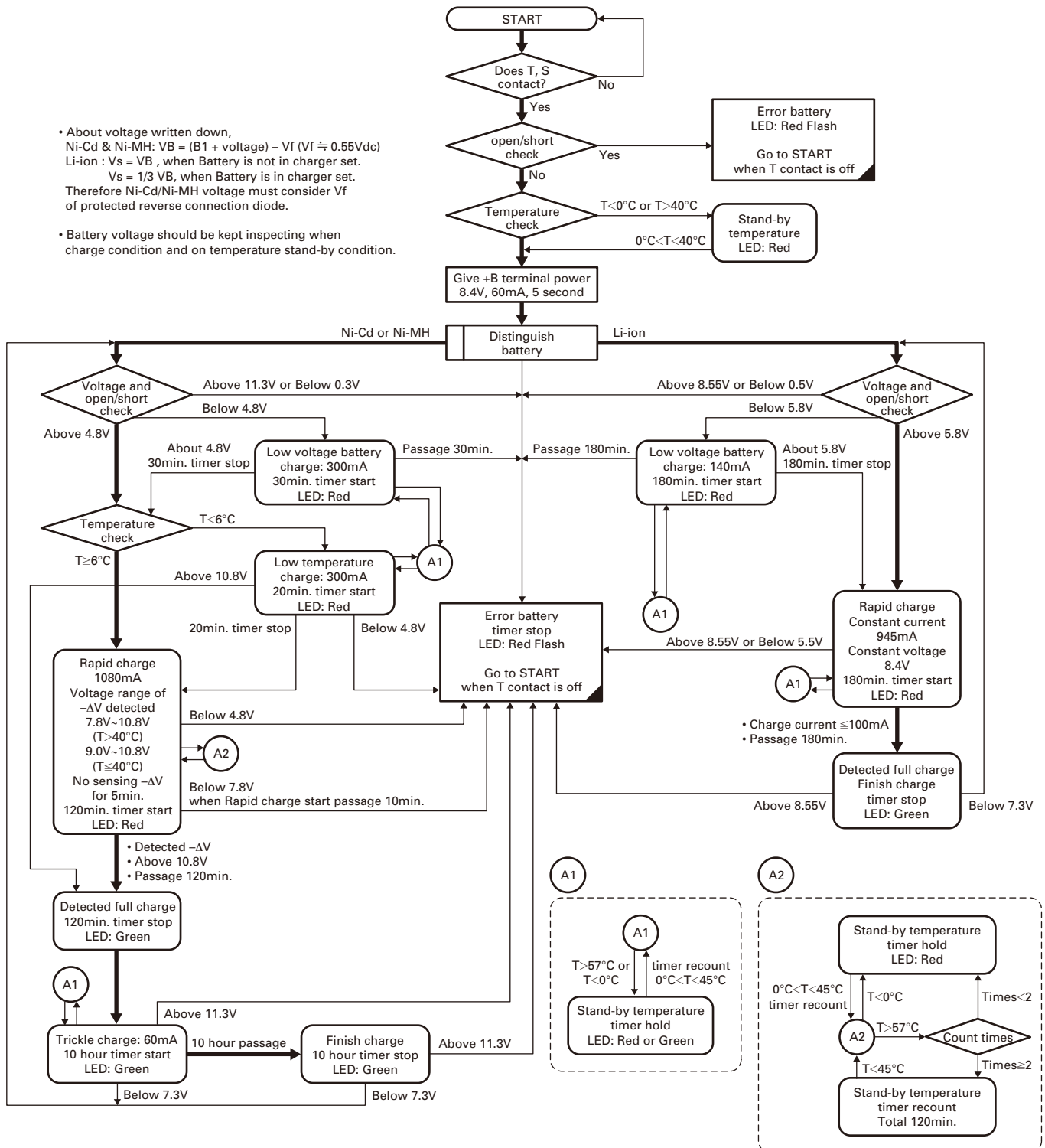
\* : New Parts

Ref. No.	Address	New parts	Parts No.	Description	Destination
<b>KSC-25</b>					
			A02-3970-08	CABINET(UPPER)	
			A02-3968-08	CABINET(BOTTOM)	
			E03-0459-08	DC JACK	
			E23-1321-08	RELAY TERMINAL	
		*	E30-7666-08	AC POWER CORD	K
		*	E30-7682-08	AC POWER CORD	X
			W08-1000-05	AC ADAPTER 230VAC 50HZ	T
			W08-1001-05	AC ADAPTER 230VAC 50HZ	E
		*	W08-1058-28	AC ADAPTER 100-240VAC 50/60HZ	K,X

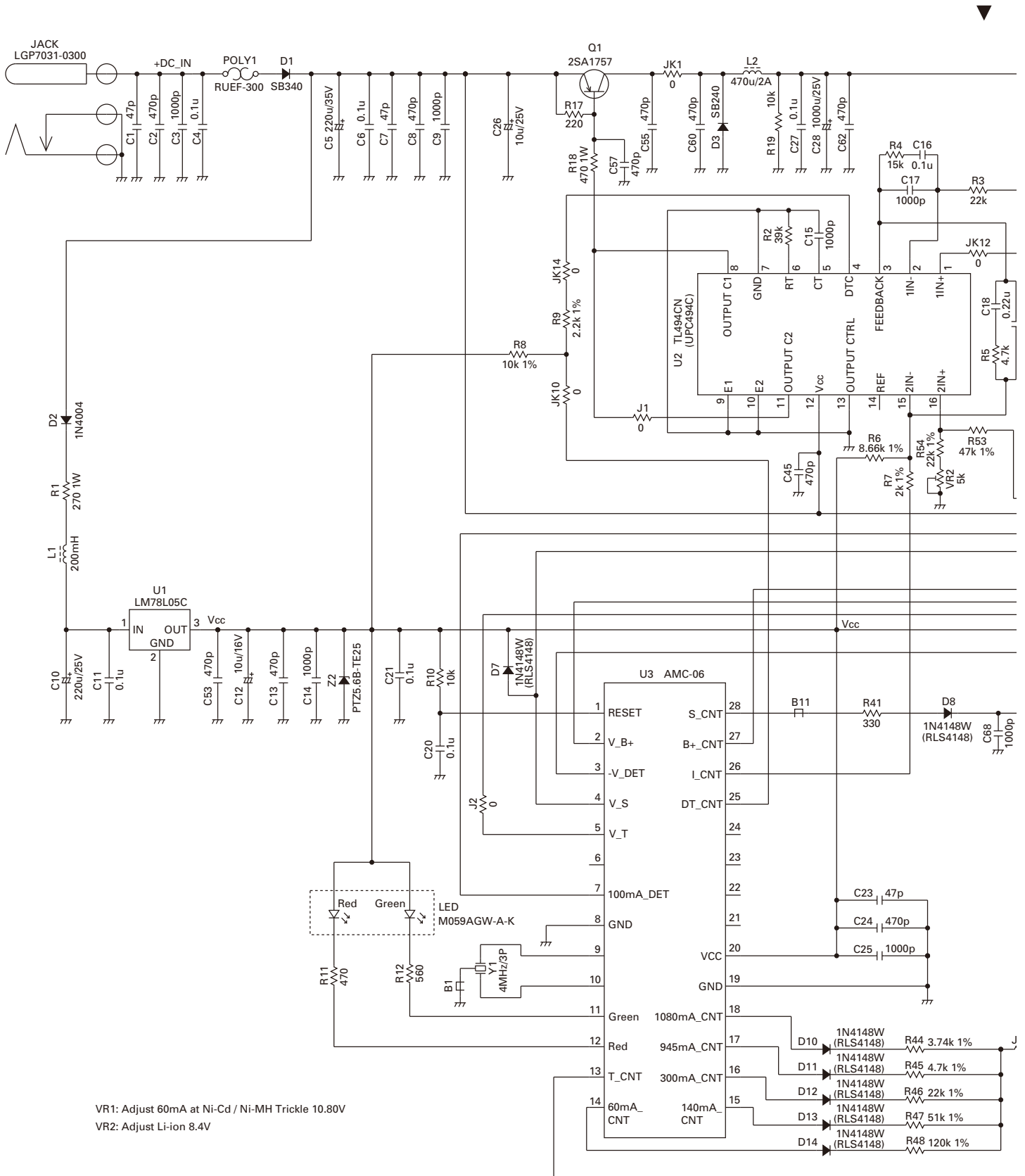
## CHARGER FLOW CHART

- 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/Ni-MH voltage must consider  $V_f$  of protected reverse connection diode.

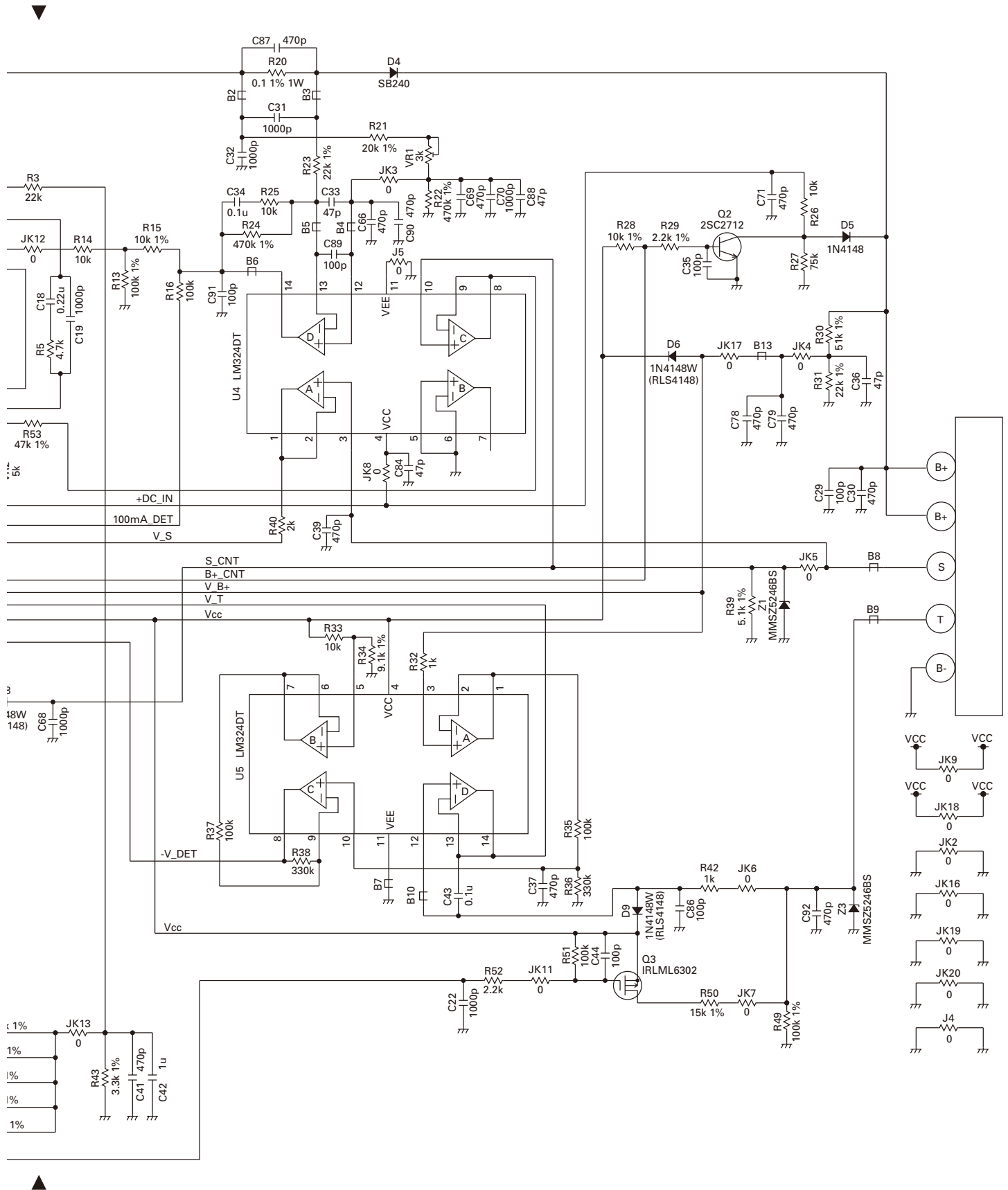
- Battery voltage should be kept inspecting when charge condition and on temperature stand-by condition.



## SCHEMATIC DIAGRAM

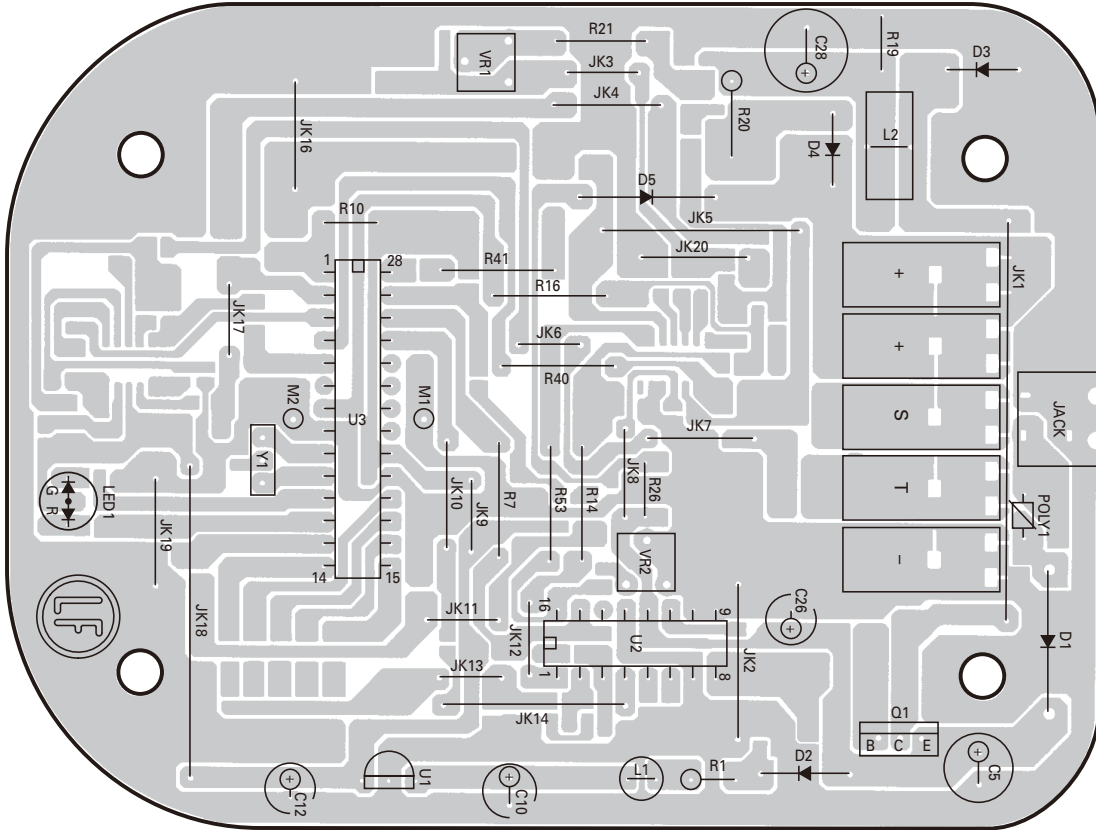


## SCHEMATIC DIAGRAM

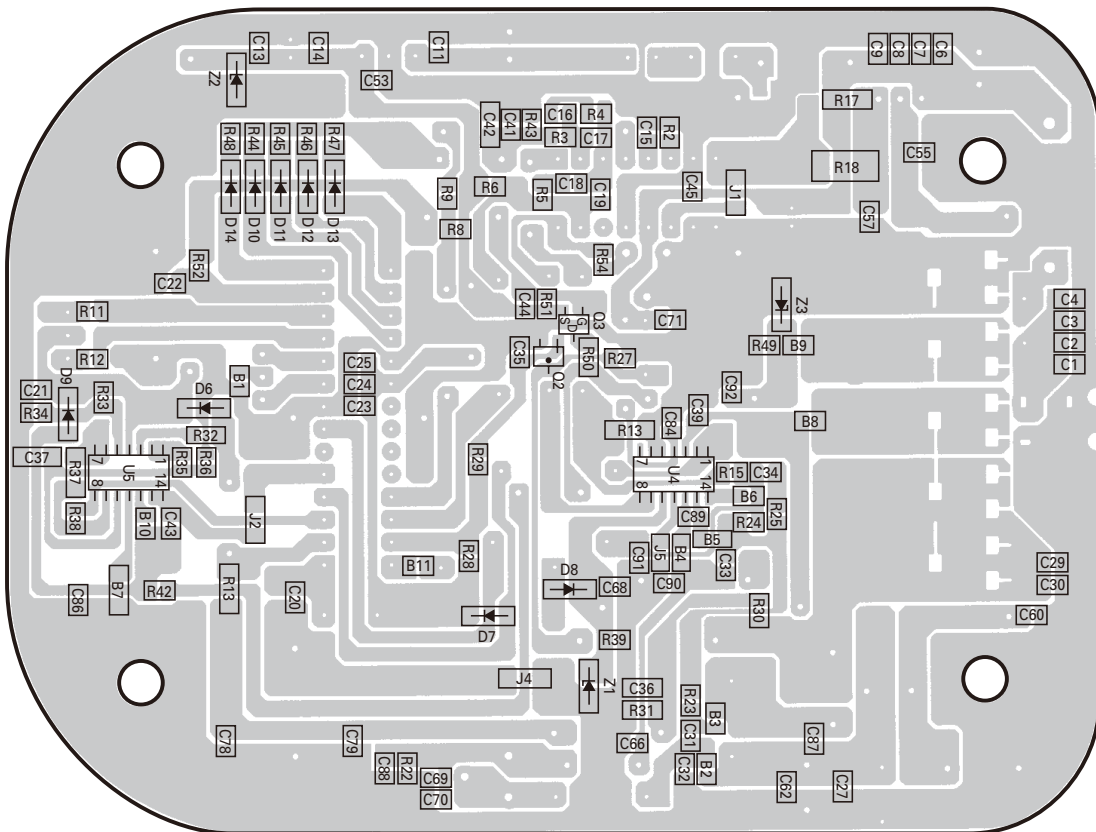


## PC BOARD

### CHARGER UNIT Component side view



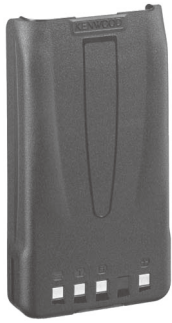
### CHARGER UNIT Foil side view



## BATTERY PACK

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

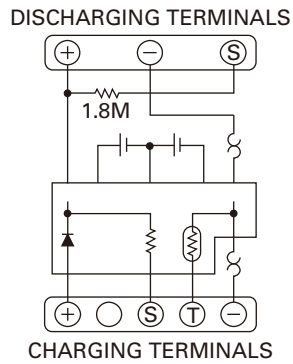
■ External View



■ Specifications

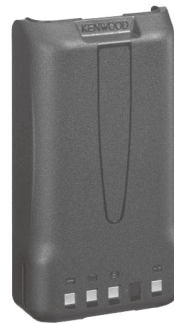
Voltage .....7.4V (3.7V x 2)

■ Schematic Diagram



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

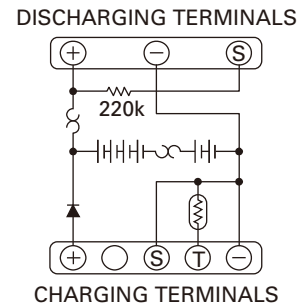
■ External View



■ Specifications

Voltage .....7.2V (1.2V x 6)

■ Schematic Diagram



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

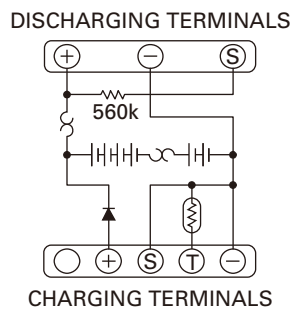
■ External View



■ Specifications

Voltage .....7.2V (1.2V x 6)

■ Schematic Diagram



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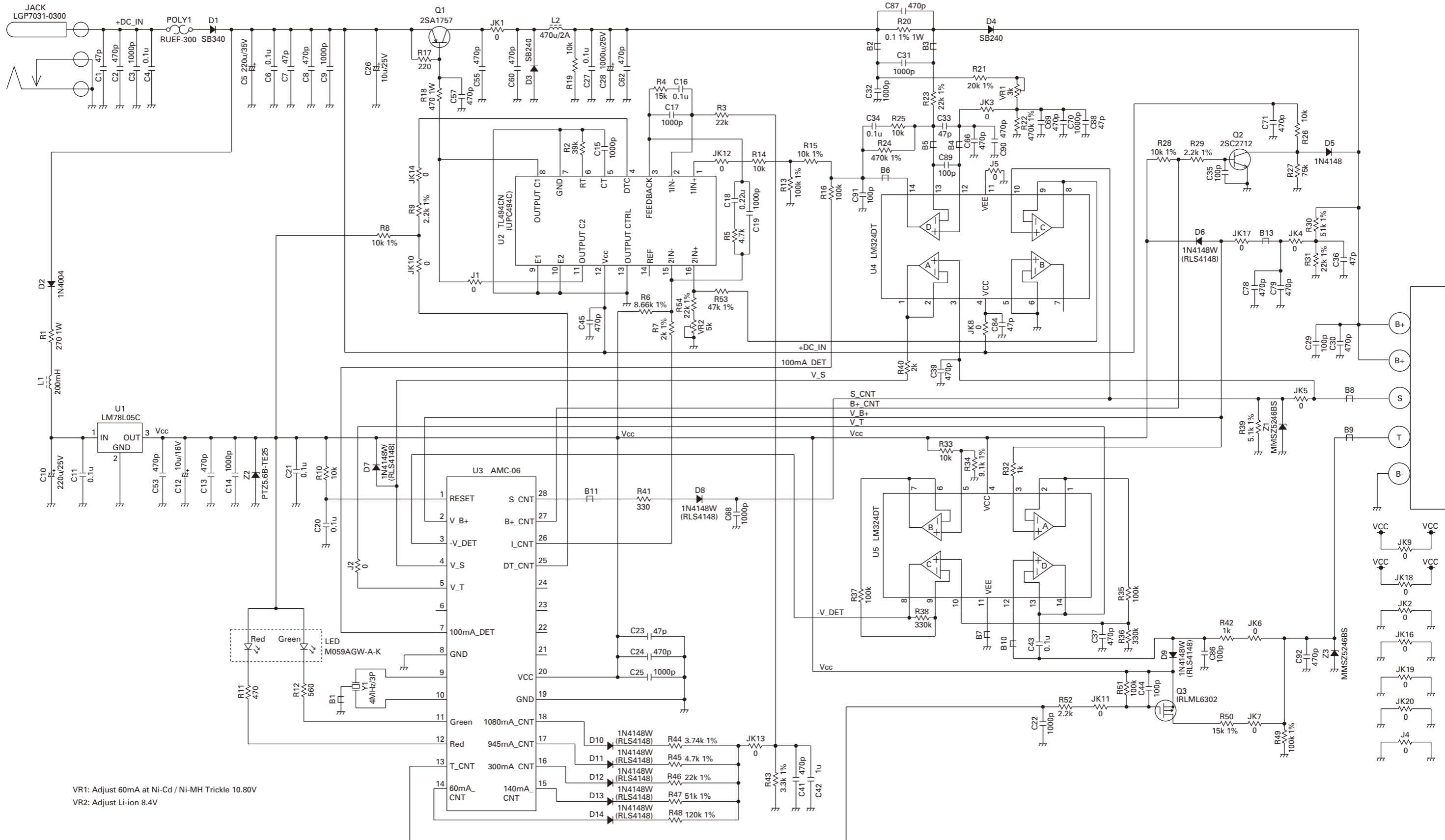
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VR1: Adjust 60mA at Ni-Cd / Ni-MH Trickle 10.80V  
 VR2: Adjust Li-ion 8.4V