

SUPERNOVA DELUXE

Instruction Manual

SJ PROPO

RC DC12V (Ni-Cd), (Ni-MH), (Li-Po) (Pb)

12V 5A 12V, 12A - 25A 12V 7A

BOX

Pb

가

가

가

가 가

OUTPUT 가

가

가

1.2A

가

가

가

1.2A

가

	2300mA	1000mA	7.2V 3700mAh	12V7A	11.1V3100mAh
BATT. TYPE	NiMH	NiCD	NiMH	Pb	LiPO
BATT. CELL	8CELL	4CELL	6CELL	6S 12V	3S 11.1V
CAPACITY	2300mAh	1000mAh	3700mAh	7000mAh	3100mAh
CHG CURR.	1.2A	1.2A	5.0A	1.5A	3.1A
DCHG CURR.	1.2A	1.2A	5.0A	0.1A	5A
DCHG VOLT	0.8V/C	0.8V/C	0.8V/C	1.8V/C	2.8V/C
PEAK SENS.	8mV/C	8mV/C	5mV/C	-	-
CUT-TEMP	45	45	48	45	40
MAX-CAP.	120%	120%	150%	120%	120%
PEAK DELAY	5min	7min	8min	-	-
TRICKLE	OFF	OFF	OFF	-	-

AA

1.2A

CAPACITY

1

가

www.sjpororc.com

faq

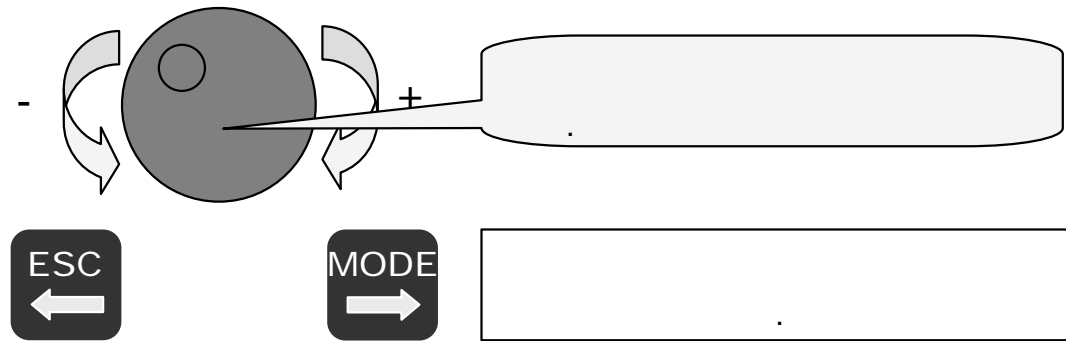
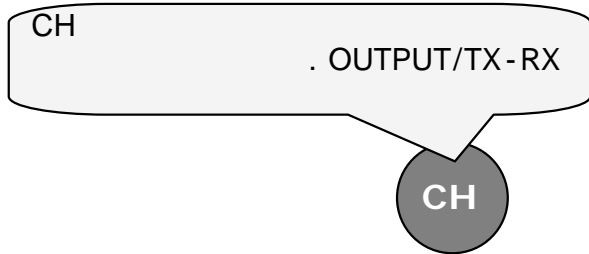
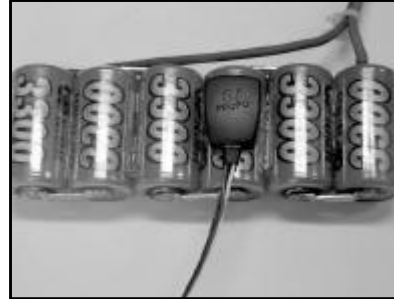
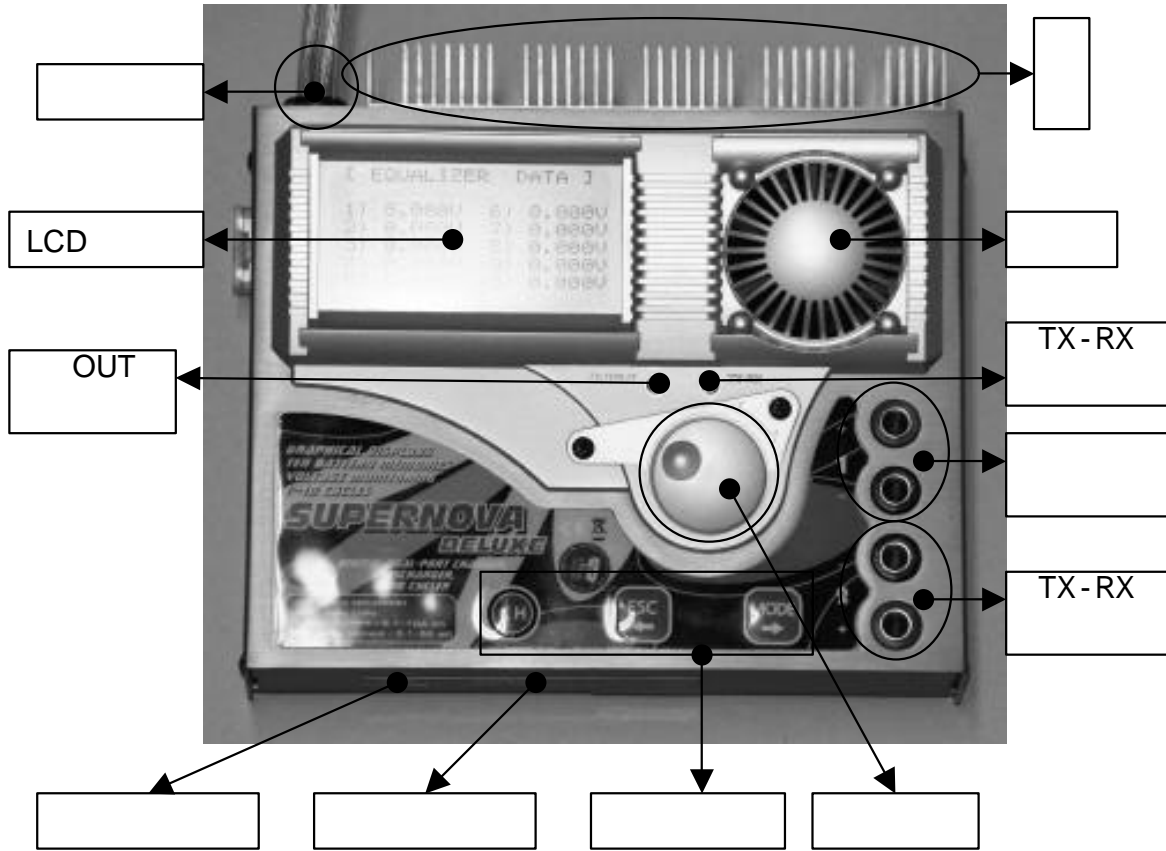
LCB-6C

LCB-6C

LCB-5C

가

2.



SuperNova Deluxe

1) SuperNova Deluxe 12V

- . (+) , (-) .

2) CH1

- . (+) , (-) .

- .

3.

Supernova Deluxe

12V

가

< >	< >	< >	< >	< >
0] BATTERY NAME..	[USER SETUP]	[DATA VIEW]	[CYCLE DATA]	[EQUALIZER DATA]
BATT. TYPE : NiCd	TEMP. MODE : C	INPUT = 0.000V	NO CAPACITY VOLTAGE	
BATT. CELL : 6CELL	BUTTON SOUND : ON	OUTPUT = 0.000V	1 C: 0mAh 0.000V	1) 0.000V 6) 0.000V
CAPACITY : 3000mAh	FINISH SOUND : 5sec	BATT. TEMP = No. Sens	D: 0mAh 0.000V	2) 0.000V 7) 0.000V
CHG CURR. : 3.0A	MELODY : 1	PEAK TEMP = 0.0`C	2 C: 0mAh 0.000V	3) 0.000V 8) 0.000V
DCHG CURR. : 3.0A	LCD CONTRAST : 10	BAT. RES. = 0m@	D: 0mAh 0.000V	4) 0.000V 9) 0.000V
DCHG VOLT : 0.9 V/C	LCD BACKLIT : ON	CHG TEME = 0:00:00	3 C: 0mAh 0.000V	5) 0.000V 10) 0.000V
PEAK SENS. : 8mV/C	< USER NAME.. >	DCHG TIME = 0:00:00	D: 0mAh 0.000V	

1)

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2)

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3)

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4)

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5)

- .

Li-Po

. (LCB-6C

가)

[0] BATTERY NAME..
 BATT. TYPE : NiCd
 BATT. CELL : 6CELL
 CAPACITY : 3000mAh
 CHG CURR. : 3.0A
 DCHG CURR. : 3.0A
 DCHG VOLT : 0.9 V/C
 PEAK SENS. : 8mV/C

[0] BATTERY NAME..
 BATT. TYPE : NiCd
 BATT. CELL : 6CELL
 CAPACITY : 3000mAh
 CHG CURR. : 3.0A
 DCHG CURR. : 3.0A
 DCHG VOLT : 0.9 V/C
 PEAK SENS. : 8mV/C

[0] BATTERY NAME..
 BATT. TYPE : NiCd
 BATT. CELL : 6CELL
 CAPACITY : 3000mAh
 CHG CURR. : 3.0A
 DCHG CURR. : 3.0A
 DCHG VOLT : 0.9 V/C
 PEAK SENS. : 8mV/C

[0] BATTERY NAME..
 BATT. TYPE : **NiCd**
 BATT. CELL : 6CELL
 CAPACITY : 3000mAh
 CHG CURR. : 3.0A
 DCHG CURR. : 3.0A
 DCHG VOLT : 0.9 V/C
 PEAK SENS. : 8mV/C

[0] BATTERY NAME..
 BATT. TYPE : **NiMH**
 BATT. CELL : 00CELL
 CAPACITY : 3300mAh
 CHG CURR. : 3.3A
 DCHG CURR. : 3.3A
 DCHG VOLT : 0.8V/C
 PEAK SENS. : 5mV/C

[0] BATTERY NAME..
 BATT. TYPE : **LiPo**
 BATT. VOLT. : 5S18.5V
 CAPACITY : 2100mAh
 CHG CURR. : 2.1A
 DCHG CURR. : 4.2A
 DCHG VOLT : 3.0V/C
 CUT-TEMP : 55`C

[0] BATTERY NAME..
 DCHG CURR. : 3.0A
 DCHG VOLT : 0.9V/C
 PEAK SENS. : 8mV/C
 CUT-TEMP : 55`C
 MAX-CAP. : 150%
 PEAK DELAY : 3MIN
 TRICKLE : 100mA

[0] BATTERY NAME..
 BATT. TYPE : **Pb**
 BATT. VOLT. : 6S12.0V
 CAPACITY : 4500mAh
 CHG CURR. : 7.0A
 DCHG CURR. : 5.0A
 DCHG VOLT : 1.8V/C
 CUT-TEMP : 55`C



<NiCd >
 [0] BATTERY NAME..
 BATT. TYPE : NiCd
 BATT. CELL : 6CELL
 CAPACITY : 3000mAh
 CHG CURR. : 3.0A
 DCHG CURR. : 3.0A
 DCHG VOLT : 0.9V/C
 PEAK SENS. : 8mV/C
 CUT-TEMP : 55`C
 MAX-CAP. : 150%
 PEAK DELAY : 3MIN
 TRICKLE : 100mA

<NiMH >
 [0] BATTERY NAME..
 BATT. TYPE : **NiMH**
 BATT. CELL : 6CELL
 CAPACITY : 3300mAh
 CHG CURR. : 3.3A
 DCHG CURR. : 3.3A
 DCHG VOLT : 0.8V/C
 PEAK SENS. : 5mV/C
 CUT-TEMP : 55`C
 MAX-CAP. : 150%
 PEAK DELAY : 3MIN
 TRICKLE : 100mA

<LiPo >
 [0] BATTERY NAME..
 BATT. TYPE : **LiPo**
 BATT. VOLT. : 5S18.5V
 CAPACITY : 2100mAh
 CHG CURR. : 2.1A
 DCHG CURR. : 4.2A
 DCHG VOLT : 3.0V/C
 CUT-TEMP : 55`C
 MAX-CAP. : 120%

<Pb >
 [0] BATTERY NAME..
 BATT. TYPE : **Pb**
 BATT. VOLT. : 6S12.0V
 CAPACITY : 4500mAh
 CHG CURR. : 7.0A
 DCHG CURR. : 5.0A
 DCHG VOLT : 1.8V/C
 CUT-TEMP : 5805`C
 MAX-CAP. : 120%

1) [0] BATTERY NAME :

- SuperNova Deluxe 0~9 10

- . (page.9 .)

2) BATT. TYPE :

- / /

- 가 NiCd (), NiMH (), LiPo (), Pb () .

3) BATT. VOLT. : ()

- / /

Nicd /NiMh 1.2V Lilo/Lipo 3.6V /3.7V .
가

가 .

) 1.2V 1000mA AA

4 4.8V 1000mA .

4 1.2V 4000 mA .

) 3.7V 1500mA

2 7.4V 1500mA .

2 3.7V 3000mA .

4) CAPACITY :

- .

- .

5) CHG CURR :

-.

6) DCHG CURR :

-.

7) DCHG VOLT :

-.

-.

0.8V ? 0.9V

-.

2.8V

가

가

8) PEAK SENS. :

(NiCd/NiMH)

-.

-NiCd

5 ~ 25mV/C

NiMH

3 ~ 15mV/C

가

, NiMH

“Zero Volt Delta Peak ”

가

9) CUT-TEMP :

-.

10) MAX-CAP. :

-.

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%

)

3000mAh

MAX-CAP.가 120%

3600mAh가

- NiCd/MH 150%, Li-ion/Po 120%"
 -.100%

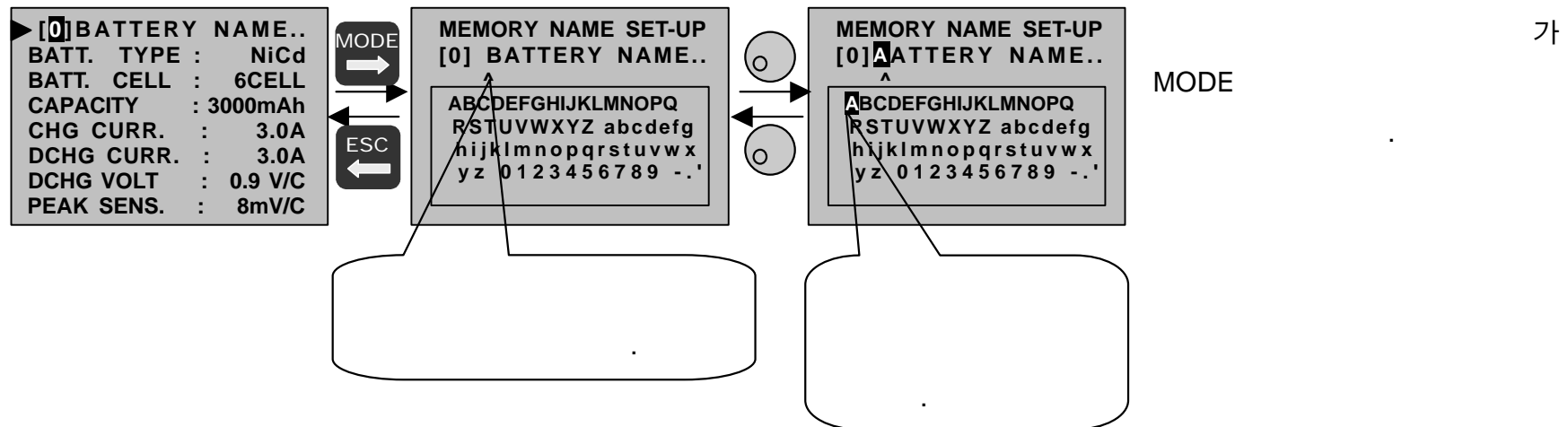
10-50%

11) PEAK DELAY : (NiCd/NiMH)

- PEAK DELAY
 -. pre-peak
 -. pre-peak가

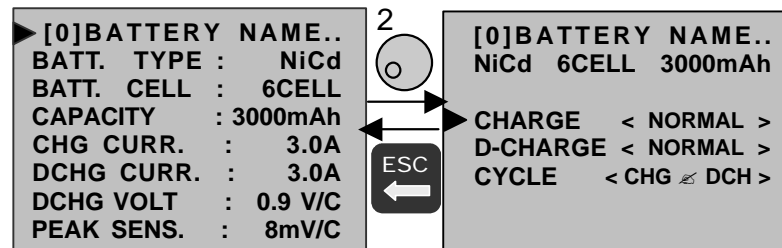
12) TRICKLE : (NiCd/NiMH)

-
 -. 가 delta-peak temp cut
 -. ?2 가 가
 가



Parameter	NiCd	NiMH	Li-Polymer	Pb
BATT. VOLT.	1 ~ 30 cell	1 ~ 30 cell	3.7V(1S) ~ 37.0V(10S)	2.0V(1S) ~ 12.0V(6S)
CAPACITY	100 ~ 9900mAh	100 ~ 9900mAh	100 ~ 20000mAh	500 ~ 50000mAh
CHG CURR	0.1 ~ 10.0A	0.1 ~ 10.0A	0.1 ~ 10.0A	0.1 ~ 10.0A
CHG CURR	0.1 ~ 5.0A	0.1 ~ 5.0A	0.1 ~ 5.0A	0.1 ~ 5.0A
DCHG CURR	0.1 ~ 1.1V/cell	0.1 ~ 1.1V/cell	2.5 ~ 3.7V/cell	1.8V/cell fixed
PEAK SENS.	5 ~ 25mV/cell	3 ~ 15mV/cell, Zero Delta Peak	X	X
CUT-TEMP	10 ~ 65°C 1°C/step 50 ~ 150°F 2°F/step	10 ~ 65°C 1°C/step 50 ~ 150°F 2°F/step	10 ~ 65°C 1°C/step 50 ~ 150°F 2°F/step	10 ~ 65°C 1°C/step 50 ~ 150°F 2°F/step
MAX-CAP.	10 ~ 150% 10%step	10 ~ 150% 10%step	10 ~ 120% 10%step	10 ~ 120% 10%step
PEAK DELAY	1 ~ 20min 1min/step	1 ~ 20min 1min/step	X	X
TRICKLE	0 ~ 500mA 50mA/step	0 ~ 500mA 50mA/step	CV charge trickle	CV charge trickle

2



1) CHARGE :

- . AUTOMATIC / NORMAL / LINEAR / RE-FLEX . (page.24)

- . 2 .

2) D-CHARGE :

- . AUTOMATIC / NORMAL / LINEAR . (page.24)

- . 2 .

3) CYCLE :

- . CHG \leftrightarrow DCH () / DCH \leftrightarrow CHG () .

- . 2 .

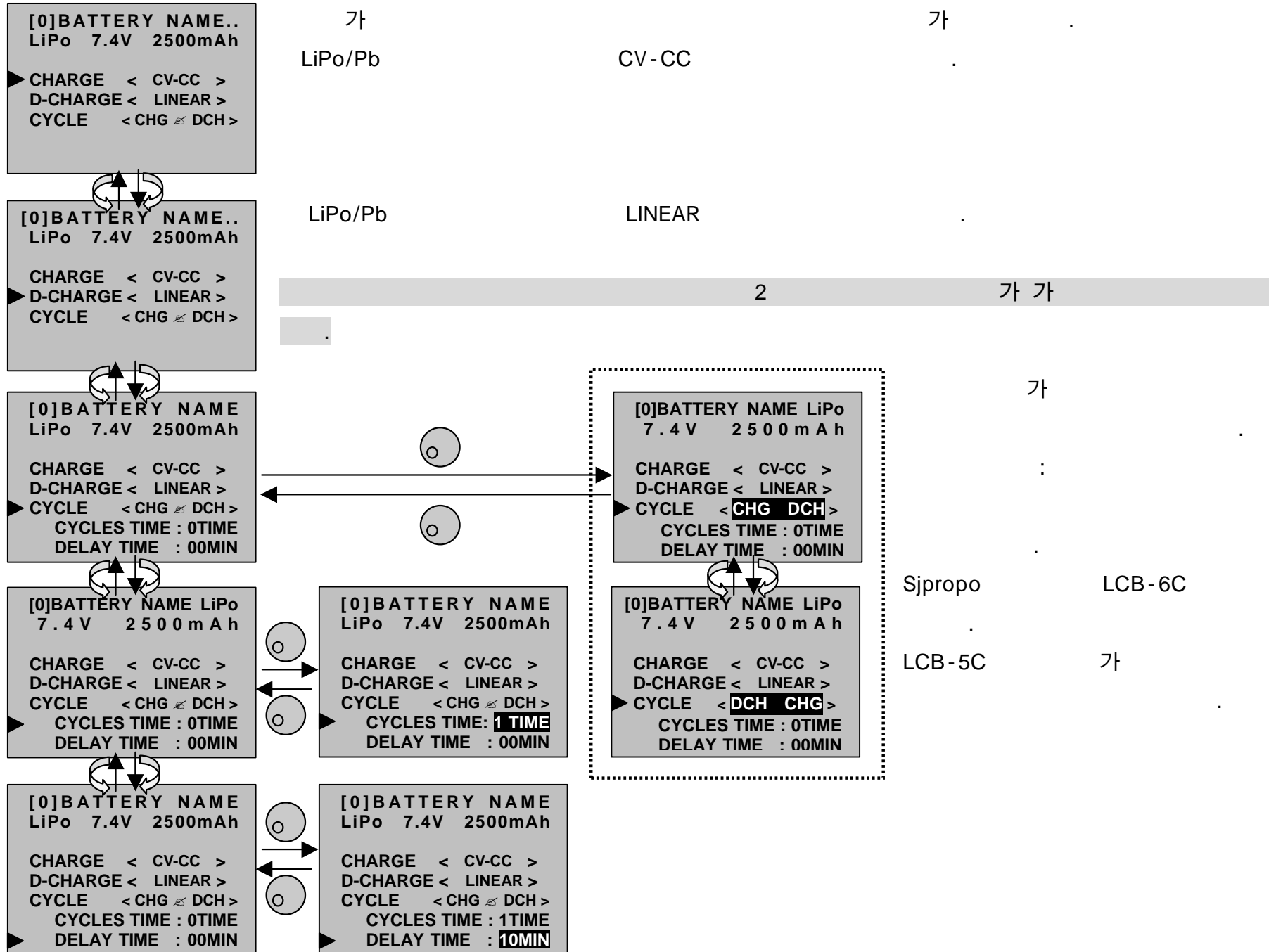
4) CYCLES TIME :

- . 1~10 .

5) DELAY TIME : /

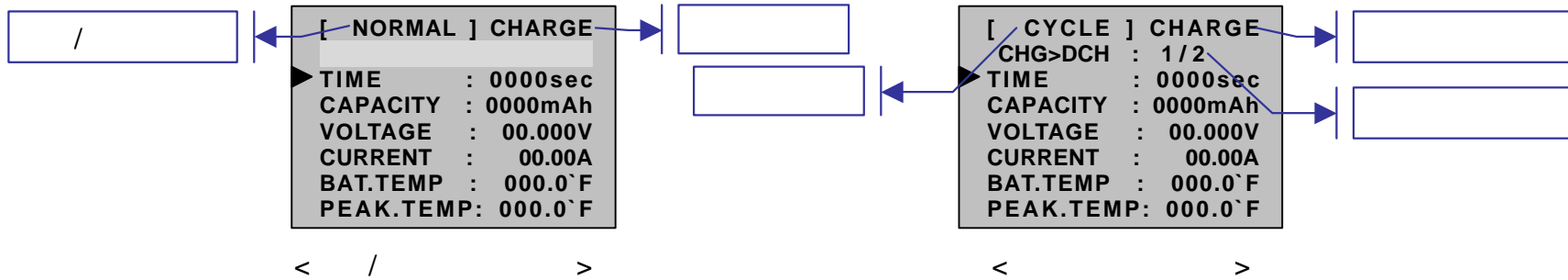
- . 1~30 .

4-2. LiPo / Pb





2



AUTOMATIC NORMAL LINEAR RE-FLEX CC-CV	AUTOMATIC NORMAL LINEAR

CHARGE DISCHARGE

- . CHG>DCH

. DCH>CHG

- . Y/X : 가 X

Y 가

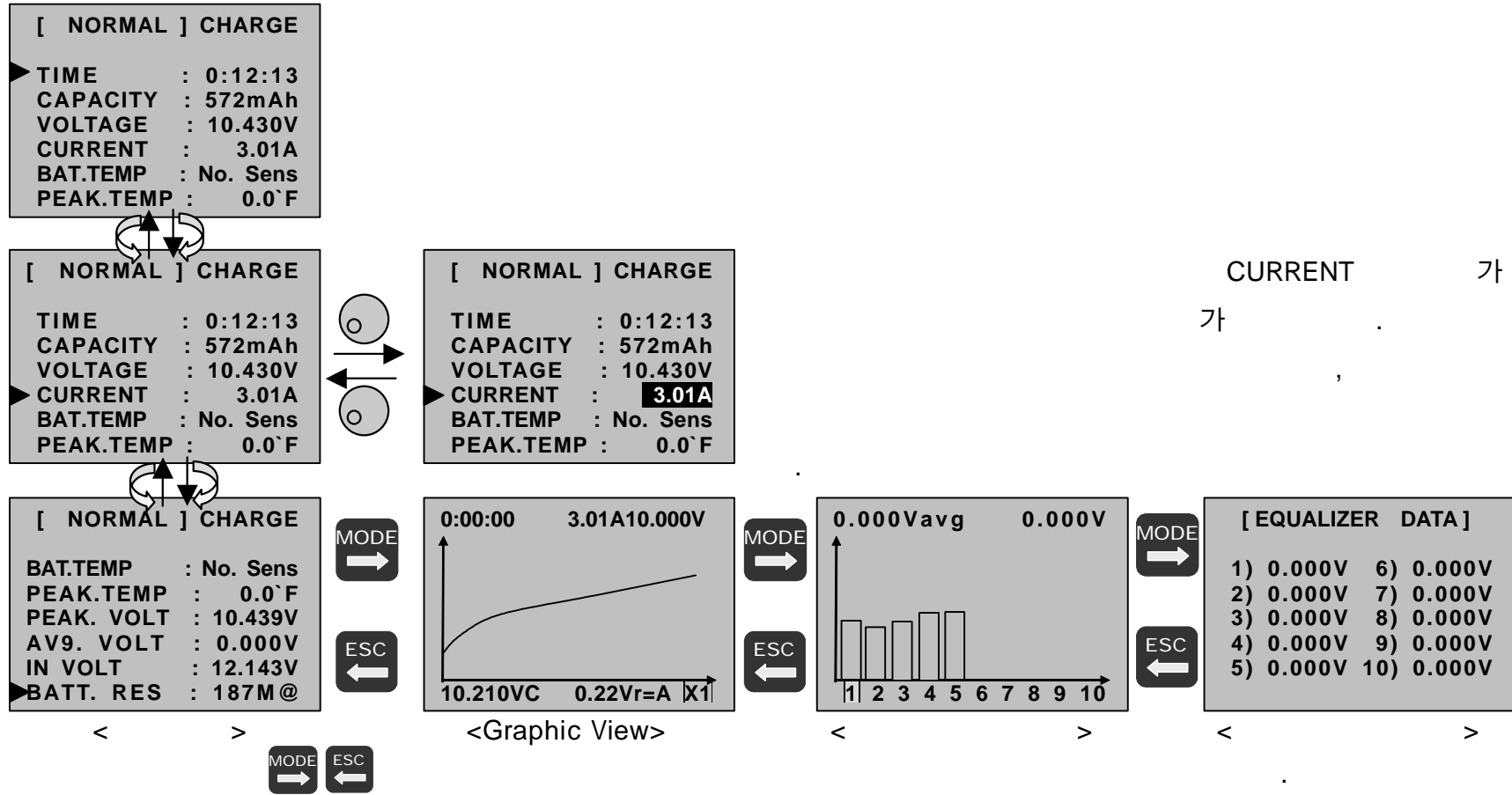
1)

?

[NORMAL] CHARGE	
TIME	: 0:12:13
CAPACITY	: 572mAh
VOLTAGE	: 10.430V
CURRENT	: 3.01A
BAT.TEMP	: No. Sens
PEAK.TEMP	: 0.0`F
PEAK.VOLT	: 00.000V
Avg. VOLT	: 00.000V
IN VOLT	: 00.000V
BATT.RES	: 000m@

- 1) TIME :
- 2) CAPACITY :
- 3) VOLTAGE :
- 4) CURRENT :
- 5) BAT.TEMP :
- 6) PEAK.TEMP : 가
- 7) PEAK.VOLT : 가
- 8) Avg.VOLT :
- 9) IN VOLT :
- 10) BATT.RES :

2)

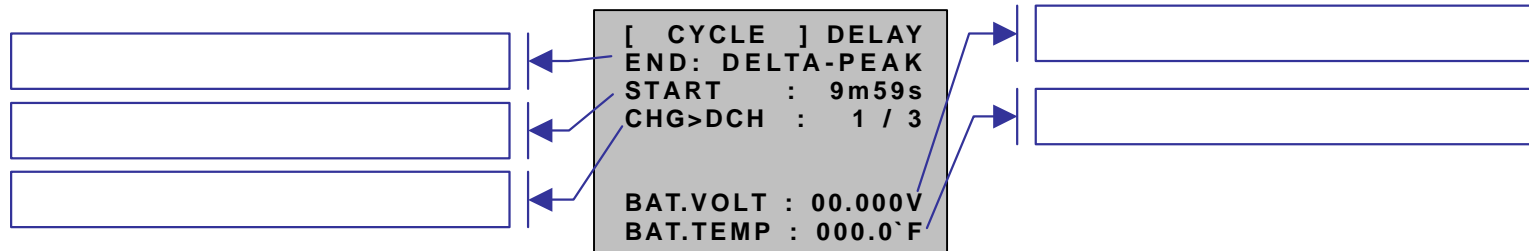


page.x

가
LCB-6C

가

3)



```

[ NORMAL ] CHARGE
END: DELTA-PEAK
TIME      : 0000sec
CAPACITY  : 0000mAh
VOLTAGE   : 00.000V
CURRENT   : 00.00A
BAT.TEMP  : 000.0`F
PEAK.TEMP: 000.0`F
    
```

[]

[]

DELTA-PEAK		CUT-VOLTAGE
ZERO DELTA-PEAK		:
CC-CV FULL		
TEMPERATURE		
MAX CAPACITY		

```

[ NORMAL ] CHARGE

TIME      : 0:12:13
CAPACITY  : 572mAh
VOLTAGE   : 10.430V
CURRENT   : 3.01A
BAT.TEMP  : No. Sens
PEAK.TEMP : 0.0`F
PEAK.VOLT : 00.000V
Avg. VOLT : 00.000V
IN VOLT   : 00.000V
BATT.RES  : 000m@
    
```

- 1) TIME :
- 2) CAPACITY :
- 3) VOLTAGE :
- 4) CURRENT : NiCd/NiMH ?
LiPo ? CV
- 5) BAT.TEMP :
- 6) PEAK.TEMP : 가
- 7) PEAK.VOLT : 가
- 8) Avg.VOLT :
- 9) IN VOLT :
- 10) BATT.RES :

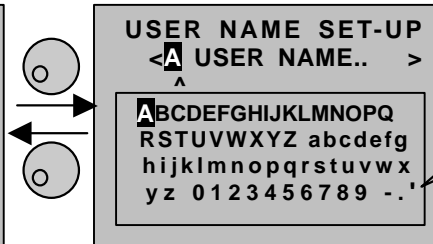
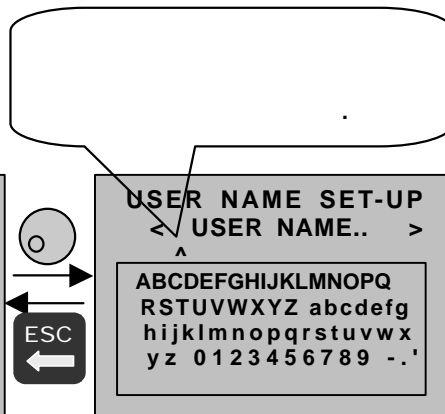
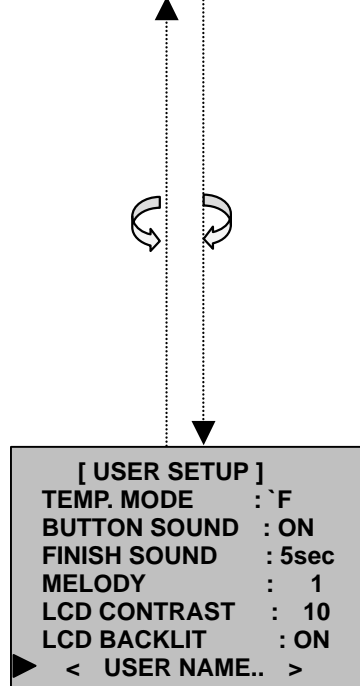
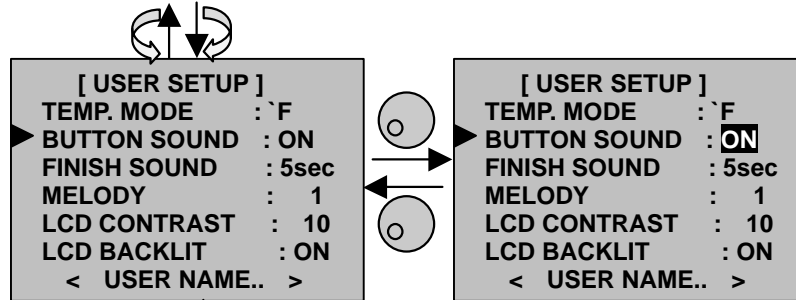
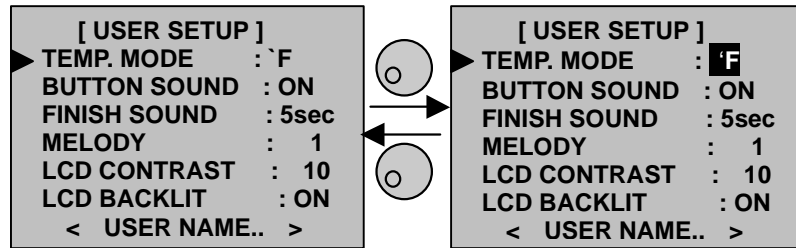


page.18~19

가



2



가
가
가
가

- 1) TEMP. MODE (): C()/ F()
- 2) BUTTON SOUND (/): ON()/OFF()
- 3) FINISH SOUND (): OFF/5 /15 /1 /ON
- 4) MELODY (): 1~10
- 5) LCD CONTRAST (): 0~15
- 6) LCD BACKLIT (/): ON()/OFF()
- 7) <USER NAME> (): 16 가

6.

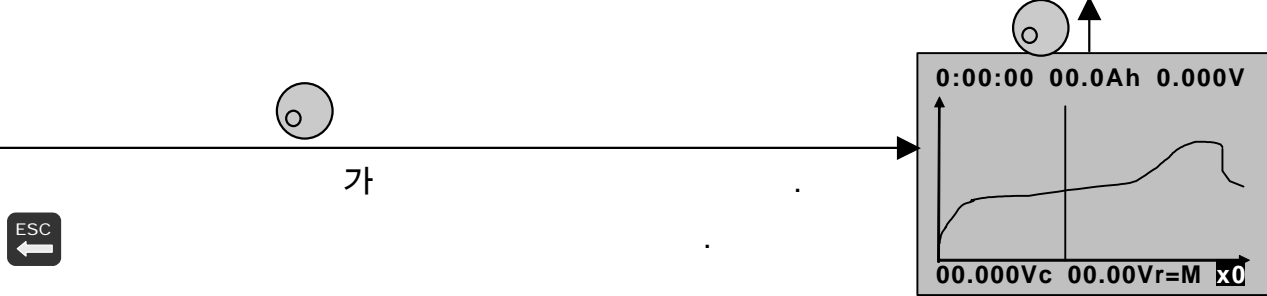
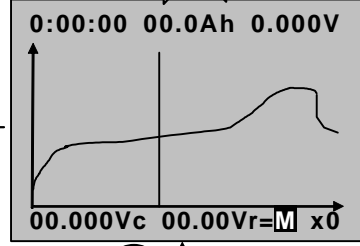
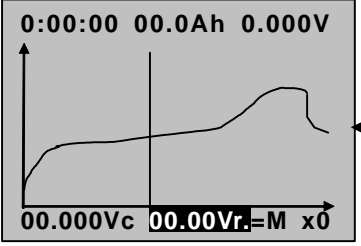
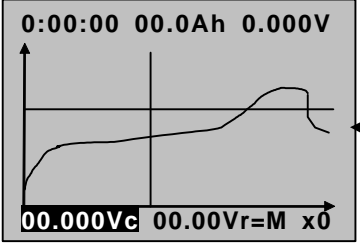
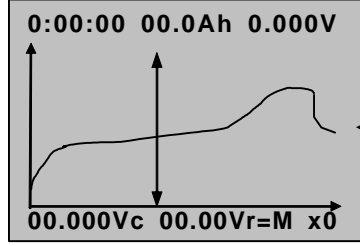
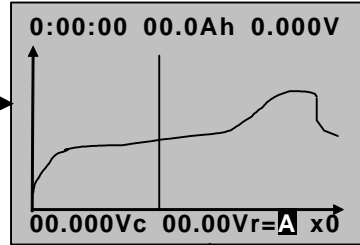
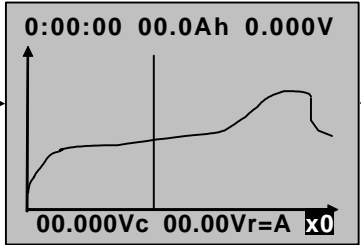
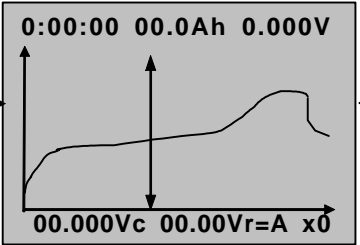
```
[ DATA VIEW ]
▶ INPUT      = 12.403V
  OUTPUT     =  0.000V
  BATT. TEMP =  90.5°F
  PEAK TEMP  =  90.5°F
  BAT. RES.  =    0m@
  CHG TIME   =  0:00:00
  DCHG TIME  =  0:00:00
```

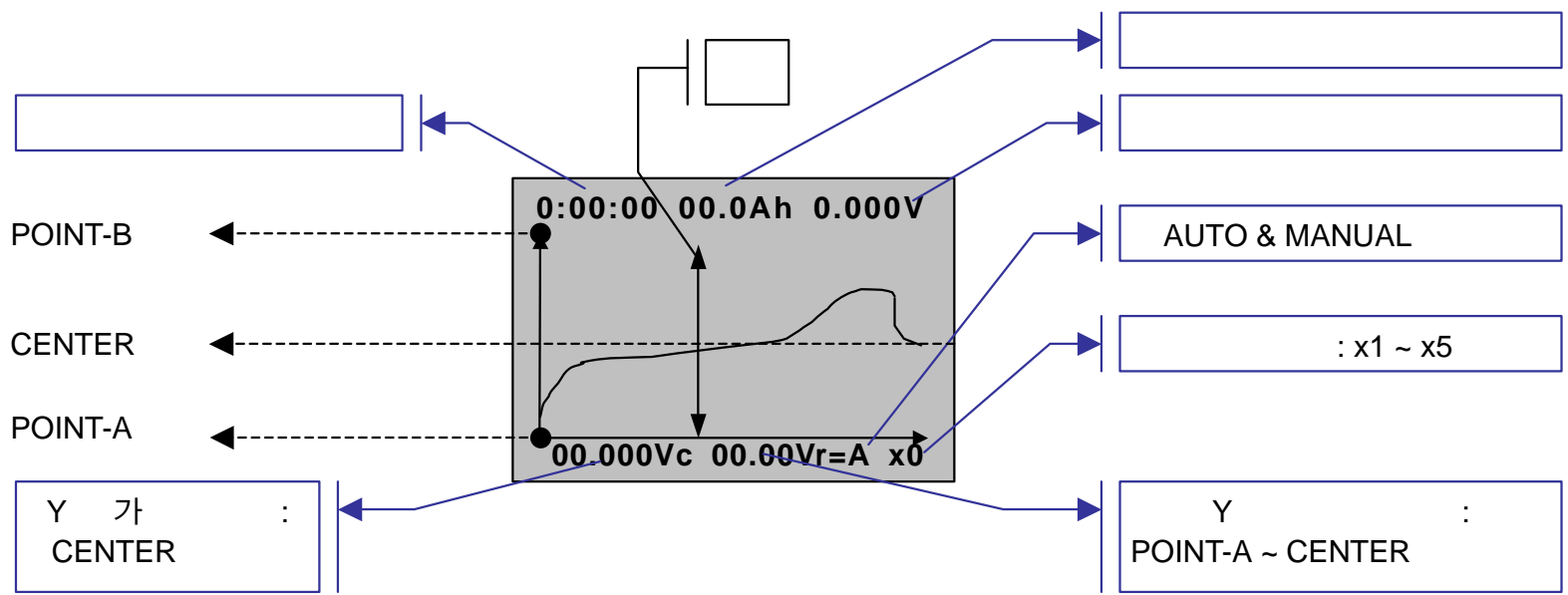
가

NO GRAPHICAL
DISPLAYS AVAILABLE..

- 1) INPUT :
- 2) OUTPUT : CH1
- 3) BATT. TEMP :
- 4) PEAK TEMP : 가
- 5) BAT.RES :
- 6) CHG TIME :
- 7) DCHG TIME :

```
[ DATA VIEW ]
  OUTPUT     =  0.000V
  BATT. TEMP =  90.5°F
  PEAK TEMP  =  90.5°F
  BAT. RES.  =    0m@
  CHG TIME   =  0:00:00
  DCHG TIME  =  0:00:00
▶ GRAPHIC DATA VIEW
```





- . Supernova Deluxe

- . 가 5

- . 가

- . 가

- .

1)

2) NiCd/NiMH /

3) LiPo / 3 . LiPo 3

3

4)

2

7. (Cycle data)

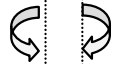
[CYCLE DATA]		
NO CAPACITY VOLTAGE		
▶ 1 C:	0mAh	0.000V
D:	0mAh	0.000V
2 C:	0mAh	0.000V
D:	0mAh	0.000V
3 C:	0mAh	0.000V
D:	0mAh	0.000V



[CYCLE DATA]		
NO CAPACITY VOLTAGE		
1 C:	0mAh	0.000V
D:	0mAh	0.000V
▶ 2 C:	0mAh	0.000V
D:	0mAh	0.000V
3 C:	0mAh	0.000V
D:	0mAh	0.000V



[CYCLE DATA]		
NO CAPACITY VOLTAGE		
8 C:	0mAh	0.000V
D:	0mAh	0.000V
9 C:	0mAh	0.000V
D:	0mAh	0.000V
▶ 10C:	0mAh	0.000V
D:	0mAh	0.000V

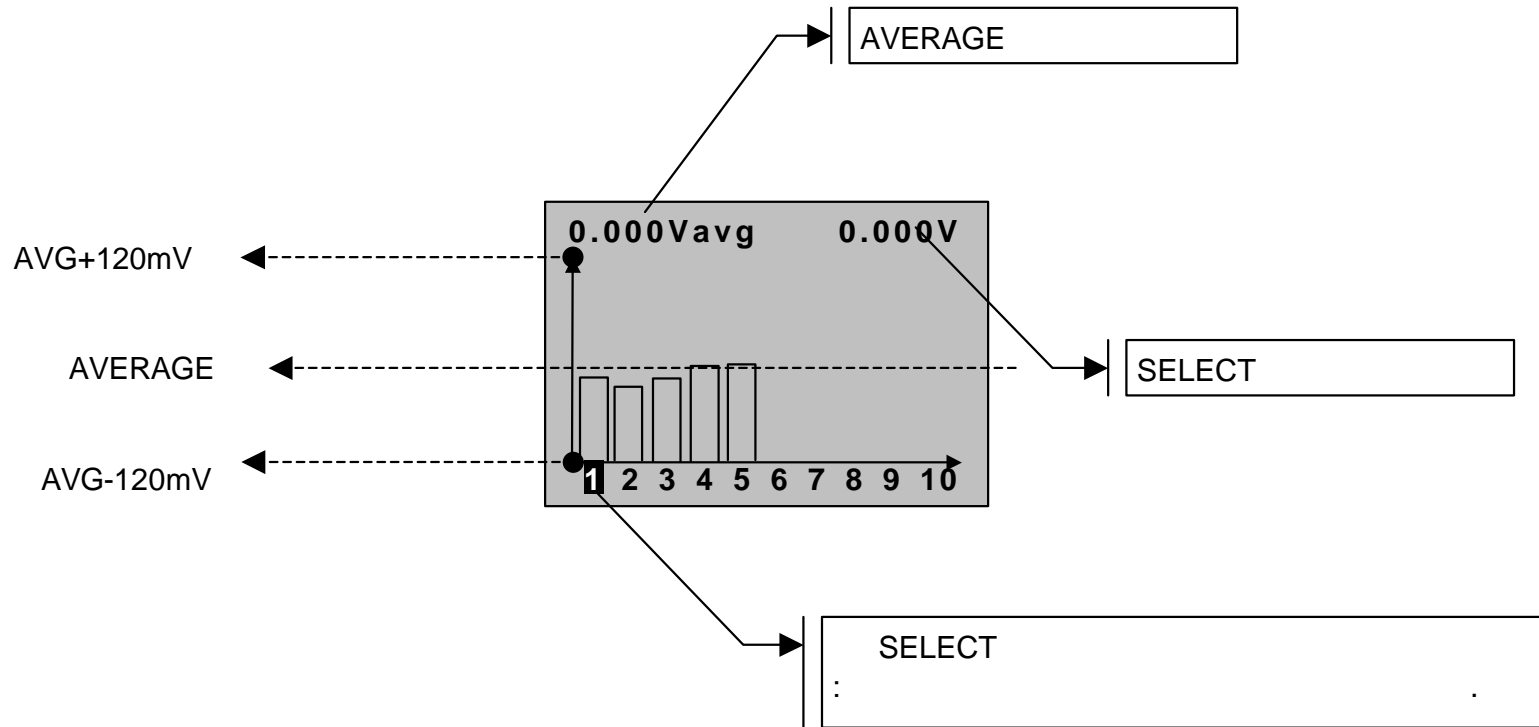
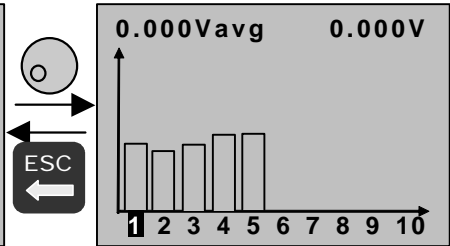


[CYCLE DATA]		
NO CAPACITY VOLTAGE		
1 C:	0mAh	0.000V
D:	0mAh	0.000V
2 C:	0mAh	0.000V
D:	0mAh	0.000V
3 C:	0mAh	0.000V
D:	0mAh	0.000V
4 C:	0mAh	0.000V
D:	0mAh	0.000V
5 C:	0mAh	0.000V
D:	0mAh	0.000V
6 C:	0mAh	0.000V
D:	0mAh	0.000V
7 C:	0mAh	0.000V
D:	0mAh	0.000V
8 C:	0mAh	0.000V
D:	0mAh	0.000V
9 C:	0mAh	0.000V
D:	0mAh	0.000V
10C:	0mAh	0.000V
D:	0mAh	0.000V

1

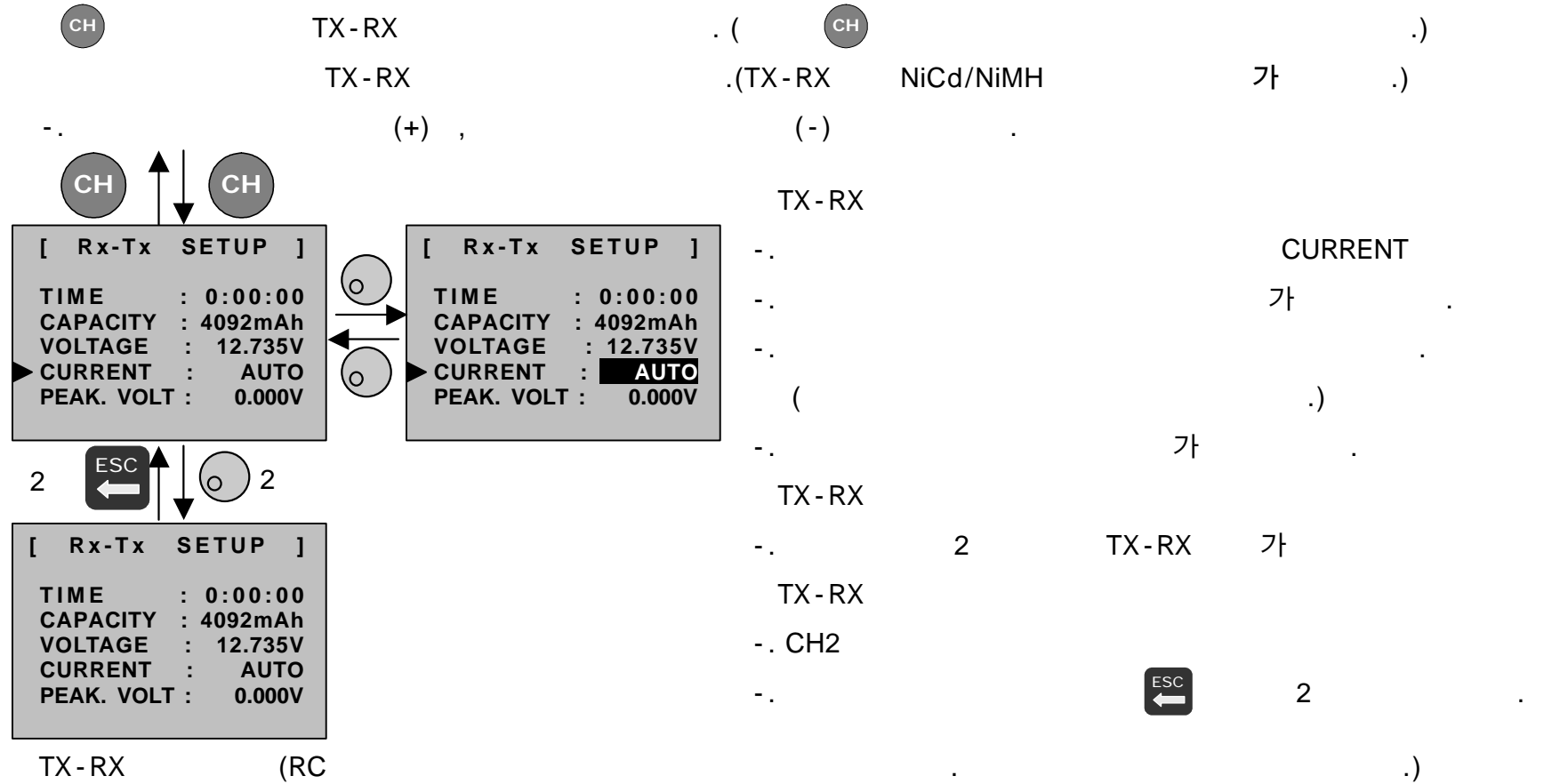
8.

[EQUALIZER DATA]	
1) 0.000V	6) 0.000V
2) 0.000V	7) 0.000V
3) 0.000V	8) 0.000V
4) 0.000V	9) 0.000V
5) 0.000V	10) 0.000V



9. TX-RX

TX-RX



가	NiCd & NiMH	
가	4 ~ 8 cell (1.2V~9.6V)	
가	100 ~ 9900mAh	
	AUTO, 0.1 ~ 2.0A	0.1A/step
	8 mV/cell	
	3	

10.

A. AUTOMATIC

- NiCd NiMH

- SJ Propo

- 가

- NiCd 8mV/C, NiMH 6mV/C

B. AUTOMATIC

- NiCd NiMH

- SJ Propo

- 가

x 0.8V가

C. NORMAL /

- OFF () /

- 가

D. Linear /

- 가

E. RE - FLEX

-

-

-

-

-

- , 2A

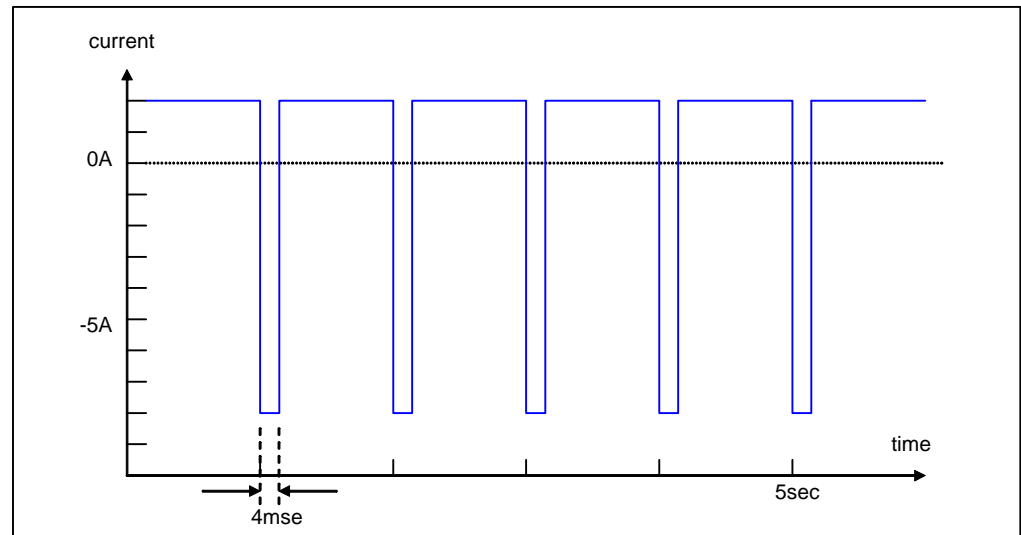
2Ax4=8A가

-

RE - FLEX

4

80%



< RE-FLEX CHARGE >

11.

<p>[INPUT VOLTAGE] * The present input voltage is 0.00V. * Pls check the input voltage. * The input voltage must be 11-15V.</p>	<p>[NO BATTERY] * A battery is not connected to the output * Please connect the battery to the output then restart !</p>	<p>[REVERSE POLARITY] * A battery is connected to the output in reverse ! * Pls correctly connect the battery to the output.</p>	<p>[OPEN CIRCUIT] * A battery is disconnected during an operation. * Pls reconnect the battery and restart!</p>	<p>[SHORT-CIRCUITED] * Output short-circuited. * Pls check the output.</p>
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<p>[LOW OUTPUT VOLTAGE] * Output voltage is lower than the selected cells or voltages * Pls select proper cells or voltages</p>	<p>[HIGH OUTPUT VOLTAGE] * Output voltage is higher than the selected cells or voltages * Pls select proper cells or voltages</p>	<p>[TEMPERATURE ENSOR] * A temperature sensor is connected in reverse or is defective.</p>	<p>[BAT. TEMP TOO LOW] * Battery temp is too low to be charged! BAT.VOLT : 00.000V BAT.TEMP : 000.0`F</p>	<p>[BAT. TEMP TOO HIGH] * Battery temp is too high to be charged! BAT.VOLT : 00.000V BAT.TEMP : 000.0`F</p>
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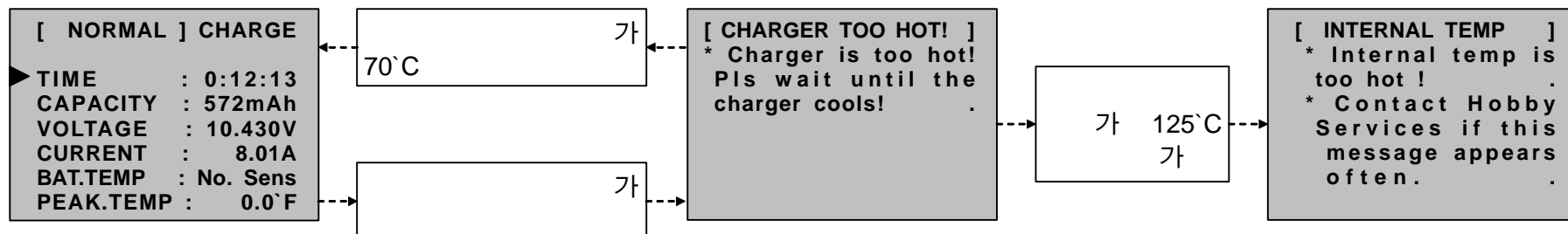
<p>[CHARGER TOO HOT!] * Charger is too hot! Pls wait until the charger cools !</p>	<p>[INTERNAL TEMP.] * Internal temp is too hot ! * Contact Hobby Services if this message appears often.</p>	<p>[DATA COMMUNICATION] * Something is wrong with the internal circuit. * Contact Hobby Services</p>	<p>[DATA RANG OVER] * The selected values are incorrect, or more than 5 Lithium cells without connecting the Equalizer can not be charged or discharged.</p>
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LiPo

5



가
가

A/S

가

LCD		
	가	
	가 45	
가 가		
	가 가	
	가 (.35)	

<http://www.sjproporc.com>

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MODE	TYPE	SPEC	STEP
Power supply	DC Input	11 ~ 15V	
Circuit protection	DC Fuse	20A	
Output channel		CH1, CH2	
Display Type	LCD	128 x 64 Graphic LCD indigo-coloured back-lighted	On, off
Operation display	LED	Operation, finish, error display	On, off, flash
Buzzer	Switch button	On/off	On, off
	Finish Sound	OFF, 5sec, 15sec, 1min, ON	
	Melody	1 ~ 10	
Case Type		Aluminum & Plastic	
Cooling System		Aluminum heat-sink & 40mm DC FAN X 1EA	
Input Type	Wire	DC Input Cable & Gold connector	
Output Type	Port	Banana output	
Languages	5 languages	English language	
input Control		Jog-switch , Membrane-switch	

<TX - RX >

MODE	TYPE	SPEC	STEP
Battery Type		NiCd, NiMH only	
Operating Mode	NiCd , NiMH	Charge only	
Operation function	Charge	Automatic charge Normal charge	
Number of charging cells	NiCd / NiMH	4 ~ 8Cell	Auto detection
Charge/Discharge Power	Charge	10V under : 10W Limited 10V over : 20W Limited	
Charge Current	NiCd , NiMH	Auto, 0.1 ~ 2.0A	100mA/step
Peak sensitivity	NiCd / NiMH	8mV/cell Fixed	Auto detection
Pre-peak delay time	NiCd , NiMH	3 min	fixed

MODE	TYPE	SPEC	STEP
Battery Type		NiCd, NiMH, LiPo, Pb	
Operating Mode	NiCd , NiMH, LiPo, Pb	Charge, Discharge, Cycle	
Operation function	Charge	Automatic charge Normal charge Linear charge RE-FLEX charge CC-CV charger (LiPo, Pb battery only)	
	Discharge	Automatic discharge Normal discharge Linear discharge	
Number of charging cells	NiCd / NiMH	1 ~ 30Cell	Cell
	LiPo	1 ~ 10Cell(3.7Vpack ~ 37.0Vpack)	Cell
	Pb	1 ~ 12Cell(2.0Vpack ~ 24.0Vpack)	Cell
Charge/Discharge Power	Charge	20V under 180W Limited 40V under 120W Limited 50V equal 90W Limited	
	Discharge	10V, 5A ≦ 50W Limited	
Charge Current	NiCd , NiMH, Pb	0.1A ~ 10.0A	100mA/step
	LiPo	0.1A ~ 10.0A Capacity 2C limited	100mA/step
Discharge Current	NiCd , NiMH, LiPo, Pb	0.1A ~ 5.0A	100mA/step
Discharge Voltage	NiCd, NiMH	0.1 ~ 1.1V/cell	0.1V/step
	Lilo, LiPo	2.5 ~ 3.7V/cell	0.1V/step
Trickle Current	NiCd / NiMH	Off ~ 500mA	50mA/step
		Auto Mode(Charge Current/20)	Auto
Cycle Mode (NiCd/MH only)	Cycle time	1~10time	1time/step
	Cycle delay	1~30min	1min/step
	Cycle direction	C ≧ D / D ≧ C	
Peak sensitivity	NiCd	5 ~ 25mV/cell	1mV/step
	NiMH	ZERO, 3 ~ 15mV/cell	1mV/step
Temperature Sensor	Centigrade	10 ~ 60 'C	1'C/step
	Fahrenheit	50 ~ 150 'F	2'F/step
Max charge capacity (safety timer)	NiCd , NiMH	10 ~ 150%	10%/step
	LiPo, Pb	10 ~ 120%	10%/step
Pre-peak delay time	NiCd , NiMH	1 ~ 20 min	1min/step
Memory	Memory number	10 memory	
	Memory name	16 character customer name setup	

LCB-5C / LCB-6C

(3.6V / 3.7V).

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1

11.1V 1600mA

1.6A

RC

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LCB-5C / LCB-6C

3.6V

2

7.2V

2 가

가

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가

18

15. A/S

SJ PROPO

SUPERNOVA DELUXE

A/S

가

A/S

:

939-28

104

SJ PROPO A/S

135-280

: 02)568-8573