1. INTRODUCTION:

1-1. Master Unit :

Front Panel:



Rear Panel:





2.INSTALLATION:

2-1. Master Unit Connection Ports:





2-2. Detecting Unit Connection Ports:



2-2-1. Detecting Units Serial Connection:



2-2-2. Detecting Unit and Batteries Connection.



2-3. Master Unit and Detecting Units Connection Diagram:



Installation:

- 1. Connect # 001 Detecting Unit to the 1st battery "-"
- 2. Connect L1 "-" to the 1st battery "+".
- 3. Connect Hi "-" to the last battery "-".
- 4. Connect Hi "+" to the last battery "+".
- 5. Connect all Detecting Units serially with a 6P6C cable.

(One Interface card provides 4 port connecting ports. One port can be connected to 16 pcs Detecting units.)

2-4. Wiring Diagram



3. LED & LCD

3-1. Master Unit LCD & LEDs:

There are both LED indicating lights and LCD Display on DC MAN II Master Unit for the users to view battery data and for setting DC MAM II.



1. LCD Display: To indicate Master Unit status, Detecting Unit status and Battery information. Also for setting detecting range, password and printer.

2. LED Lights:

2. Green LED- NORMAL

ON: Master Unit is operating properly.

BLINKING: Master Unit is collecting Battery Data.

3. Yellow LED- WARNING

ON: Master Unit is in Setting Mode.

- 4. Red LED –FAULT:
 - **ON**: Abnormal status warnings. Including battery voltage abnormal, battery over heat ,battery Internal resistance too high, Master Unit fault, Detecting Unit disconnect, and SD card abnormal.
- 3. LCD Control Keys:
 - 5. Up-key: Use to select upward settings.
 - 6. Down-key: Use to select downward settings.
 - 7. Enter-key: Use to enter data viewing or setting pages. Press to set, confirm and save settings.

3-2. Detecting Unit LEDs:



Green LED:

ON: Detecting Unit is working properly.

BLINKING : Detecting Unit is collecting Battery information.

Yellow LED:.

ON: Battery connections polarity Fault.

Red LED: :

ON: Abnormal Status Warnings. Including Battery voltage abnormal, battery over heat ,battery internal resistance to high, Detecting Unit disconnect.

3-3. Printer LEDs:

Green LED **ON**: Printer is working properly.

Green LED **BLINKING**: Printer paper Jam or runs out of paper.

4. OPERATION:

4-1. Start Up

4-1-1. After Power on, System proceeds Start-Up data collecting. LCD displays:

DATA COLLECTING

4-1-2. After System finishes Start-Up procedures,

LCD displays greeting:

	WELCOME	!!	
ВАТТ	. M O R N I T	O R	I N G

4-1-3. System is in normal status.

LCD displays System Time:

D C M	2	0	0	8	/	0	3	/	0	3
АИТО			0	8	:	3	2	:	5	5

"System Time" page

From "System Time" display page, you can go to

5. SYSTEM WORKING STATIS SETTTINGS AND BATTERY VIEW

6. VIEW BATTERY ERROR EVENT HISTORY

7. DETECTING VALUES SETTING (PRIME SETTING)

4-2. Set System Working Status



- 1. Enable Auto Detection: Press Down-key and Enter-key simultaneously for 3 seconds to enable auto detection.
- 2. Stop Detection : Press Up-key and Down-key simultaneously for 3 seconds to stop detection.
- 3. Perform detection : Press Enter-key to perform new detection manually.
- 4. System Test: When there is no Battery Abnormal status, press Up-key and Enter-key simultaneously for 3 seconds to perform system self test.
- 5. Mute: On Battery Abnormal warning Beeping, press Up-key and Enter-key for 3 second to turn beeper mute.

5. SYSTEM WORKING STATUS SETTINGS & BATTERY VIEW

To set System working Status and View Battery Data.

5-1. System Working Status Settings:

To set to Enable and Disable Detecting.

1) Disable Detection

On "System Time" page, press both Up-key & Down-key simultaneously for 3 seconds. System will be set to stop measuring .

D C M	2	0	0	8	/	0	3	/	0	3
АИТО			0	8	:	3	2	:	5	5

"System Time" page

D C M	2	0	0	8	/	0	3	/	0	3
- S T O P -			0	8	:	3	2	:	5	5

System is set to stop measuring.

2) Enable Detection.

On "System Time" page, press both Up-key & Enter-key simultaneously for 3 seconds. System will be set to enable measuring .

D C M	2	0	0	8	/	0	3	/	0	3
АИТО			0	8	:	3	2	:	5	5

"System Time" page

DCM	2	0	0	8	/	0	3	/	0	3
АИТО			0	8	:	3	2	:	5	5

System is set to enable measuring

5-2. View Battery Status

To view total battery numbers, Battery Vdc and individual Battery status.

1) On "System Time" page, press Up-key or Down-key to get the next page.

	2	0	0	8	/	0	3	/	0	3
АИТО			0	8	:	3	2	:	5	5

"System Time" page.

2) On "ENTER SETTING" page, press Up-key or Down-key to get the next page.

ENTER	SETTING
ΥE	S

3) On "TOTAL –VDC" page, press Up-key or Down-key to get individual Battery data.

Т	ОТ	A L	-	V D C		1	9	4	•	5	V
U	ΝI	Τ_	S	UΜ	2	0					

4) Go to the battery you want to view by choosing the Battery number.

Up-key: The first one . One touch : +1. Down-key : The last one .One touch : -1

В	А	Т	#	0	0	1		R	:	2	6		7	m	Ω
Т	:	3	1		2	'	С		V	:	1	3	•	7	V

5) Press Enter to ESC to "TOTAL-DCV" page.

Т	Ο	Т	А	L	-	D	CΛ	7		1	9	4	•	5	V
В	А	Т	Т		S	U	М	2)	0					

6) On "TOTAL-VDC" page, press Enter to ESC to "System Time" page.

6.VIEW BATTERY ERROR EVENT HISTORY:

To view battery error event history.

- 6-1. View Battery Event History.
- 1) On "System Time" page, press Up-key or Down-key to get the next page.

2 0 0 8 / 0 3 / 0 3 A U T O 0 8 : 3 2 : 5 5 "System Time" page

2) On "ENTER SETTING" page, press Enter key to get the next page.

ENTER	S	Е	Т	Т	Ι	Ν	G	
ΥE	S							

3) On "PASS WORD" page, input pass word.

PASS WORD 0 0 0 0

- * Default Pass Word: 0000
- [★] Press Up-key to choose number.
- * Press Down-key to choose position. From Left to Right : $0000 \cdot 0000 \cdot 0000 \cdot 0000$
- * Press Enter to confirm .

4) In case the input pass word is wrong, LCD displays:

PASS WORD ERROR RESET INPUT WORD

5) After System confirmed the pass word is correct, you will get "LCD ERROR DATA" page.

BATT.ERROR EVENT HISTORV

Press Enter to view battery error events.

Press Up-key to get Prime Setting page.

Press Down-key to ESC to "System Time" page.

6-2. Battery Error Events List:

No Abnormal History:

Ν	0	

А	ΒN	ORMA	L

Battery Voltage Abnormal

#	0	0	1	0	4	/	0	5		2	1	:	1	4
V	-	U	N L	Ι	Κ	Е			0	9		1	V	

		Ba	ttery	Int	err	nal	Re	esis	star	nce	A	bn	orn	nal
#	0	0	1	0	4	/	0	5		2	1	:	1	4
R	-	U	N L	Ι	Κ	Е			2	9		1	m	Ω

Detecting Unit Disconnected.

#	0	0	1		0	4	/	0	5		2	1	:	1	5
D	Ι	S	С	Ο	N	Ν	Е	Т	Е	D					

Battery Temperature Abnormal

#	0	0	1	0	4	/	0	5		2	1	:	1	4
Т	-	U	ΝL	Ι	Κ	Е			3	9		1	"	С

SD card Abnormal

#	0	0	0	0	4	/	0	5	2	1	:	1	4
S	D	-	ΕR	R	Ο	R							

SD card Memory Full

#	0	0	0	0	4	/	0	5		2	1	:	1	4
S	D	-	ΟV	Е	R	F	Ι	L	L					

SK card OK

#	0	0	0	0	4	/	0	5	2	1	:	1	4
S	D	-	O K										

Master Unit Abnormal

#	0	0	0	0	4	/	0	5	2	1	:	1	4
М.	А	Ι	Ν	0	R	G	А	Ν	Е	R	R	Ο	R

Master Unit OK

# 0	0 0	0 4 / 0 5	2 1 : 1	4
ΜA	ΙN	ORGAN	ОК	

7. DETECTING VALUES SETTING (PRIME SETTING)

To set Detecting unit number, Battery Measuring Ranges, the built-in printer and SD card .etc. You can set system time and pass word here, too. Measuring ranges include : Battery Voltage, Temperature, Internal Resistance,.

1) On "System Time" page, press Enter-key to get the "ENTER SETTING" page.

D C M	2	0	0	8	/	0	3	/	0	3
АИТО			0	8	:	3	2	:	5	5

"System Time" page

2) On "ENTER SETTING " page, Press Enter-key to get "PASS WORD " page.

ΕΝΤΕR	S	Е	Т	Т	Ι	Ν	G	
ΥE	S							

3) On "PASS WORD " page, input the correct pass word to get "LCD ERROR DATA" page.

PASS	WORD	
	0 0 0 0	

(Note: For how to input Pass words, please refer to .)

4) On "LCD ERROR DATA" page, press Up-key to go to setting pages.

Press Enter to view battery error events.

Press Up-key to get Prime Setting page.

Press Down-key to ESC to "System Time" page.

7-1. Battery Voltage Setting

To set Battery Voltage Range. When System detects the Battery is running out of this range, System will recognize it as an abnormal status. Default : 2.5V.

 Battery Type 12V:
 0.1~9.9V

 Battery Type- 6V:
 0.1~9.9V

 Battery Type-2V:
 0.01~0.99V

1) On "BATT. ERROR EVENT HISTORY" press Up-key to get "Battery Voltage Setting "page.

BATT.ERROR EVENT _HI_STO_{RV}

2) On "Voltage Range" page, press Enter-key to get into Setting page.

VOLTAGE RANGE 1.5V

3) Press Up-key or Down-key to set Voltage Range

V O L T A G E R A N G E1.5V $\leftarrow \rightarrow$

Up-key :One touch : + 0.1 V.(or 0.01) Down-key : One touch: -0.1V. (or 0.01) Press Enter-key to go to Confirm page.

4) On Confirm page, press Up-key or Down-key to get ESC or YES.

VOLTAC	GE RANGE
1.5V	SAVE ESC

5) Press Enter-key to Save or ESC.

VOLTAGE	RANGE
1 . 5 V	SAVE YES

7-2. Temperature Range Settings

To set Battery Temperature Range and to set disable this function. When System detects the Battery is running out of this range, System will recognize it as an abnormal status. Default: OFF

Range: 0.1° C ~ 9.9° C

1) Press Enter-key to get into setting page.

T E M P . R A N G E 1 . 5 'C

2) Press Up-key or Down-key to set Temperature Range.

 $\begin{array}{rcl} T \ E \ M \ P & . & R \ A \ N \ G \ E \\ 1 & . & 5 & `C & \longleftarrow \end{array}$

Up-key : One touch: + 0.1 Degree. Down-key :One touch: - 0.1Degree. Press Enter-key to go to Confirm page.

3) On Confirm page, press Up-key or Down-key to get ESC or YES.

TEMP.RANGE 1.5 °C SAVE ESC

4) Press Enter-key to Save or ESC.

TEMP.RANGE 1.5 'C SAVE YES

7-3. Battery over heat Temperature Settings.

To set battery over heat Temperature. When System detects the Battery is running out of this range, System will recognize it as an abnormal status. Default: 60 \degree C

Range: 0° C ~ 99° C

1) Press Enter-key to get into Setting page.

OVERHEAT RANGE 60 °C

2) Press Up-key or Down-key to set Temperature Range.

O V E R H E A T R A N G E6 0 'C <--->

Up-key : One touch +1 Degree. Down-key :One touch -1 Degree. Press Enter-key to go to Confirm page

3) On Confirm page, press Up-key or Down-key to get ESC or YES.

OVERHEAT RANGE 60 'C SAVE ESC

4) Press Enter-key to Save or ESC.

OVERHEAT RANGE 60 °C SAVE YES

7-4. Internal Resistance Range Settings

To set Battery internal Resistance Range. When System detects the Battery is running out of this range, System will recognize it as an abnormal status. Default: 60% Range: 1%~ 199%

1) Press Enter-key to get into Setting page.

R E S I S . R A N G E 6 0 %

2) Press Up-key or Down-key to set Internal Resistance Range.

RΕ	S I	S	. R A N G E	
	6 0	%	$\leftarrow \rightarrow$	

Up-key : One touch:+1%. Down-key :One touch : - 1% Press Enter-key to go to Confirm page.

3) On Confirm page, press Up-key or Down-key to get ESC or YES.

R	Е	S	Ι	S	•	R	А	Ν	G	Е					1
		6	0	%				S	А	VΕ	4	Е	S	С	

4) Press Enter-key to Save or ESC.

R E	S	Ι	S	R A N G E	
	6	0	%	SAVE	YES

7-5. Detecting Unit Number Setting.

To set Detecting units total number. Default: 1 set/ 29 pcs Batteries.

Total Detecting units should be equal to total battery units.

Battery units are counted by Battery Set * Battery number in one string.

Range: 1 Set/ 232 pcs Batteries ., 2 sets/ 116 pcs Batteries., 3 sets/ 77 pcs Batteries.

D E T E C T . U N I T S S U MN = A * B B B = C C C

N= Detecting Unit number.

A= Battery Set. B= Battery number in one string. C= Total Battery number.

1) Press Up-key or Down-key to set Battery Set. (1~3 sets)

D E T E C T . U N I T S S U M N = 1 * 0 2 0 = 0 2 0

Up-key : One touch:+1. Down-key :One touch -1. Pre Enter-key to confirm and to set Battery number in one string.

2) Press Up-key or Down-key to set Battery number in one strong. (1~232 pcs)

D	E	Т	E	С	Т		U	N	Ι	Т	S	S	U	Μ
N	=	1	*	0	2	0	=	0	2	0				

Up-key : One touch:+1. Down-key :One touch -1. Press Enter-key to go to Confirm page.

3) On Confirm page, press Up-key or Down-key to get ESC or YES.

D	E	Т	Е	С	Т	•	U	Ν	Ι	ΤS	S	U	M
N	=	1	*	0	2	0	=	0	2	0	Е	S	С

4) Press Enter-key to Save or ESC.

D	Е	Т	Е	С	Т	•	U	N	Ι	ΤS	S	U	Μ
Ν	=	1	*	0	2	0	=	0	2	0	Y	Е	S

7-6. Battery Charging Voltage Settings

To set battery Charging Voltage. Default: 316V. Range: 0~999V

1) Press Enter-key to get into Setting page.

CHARGING VOL = 3 1 6 V

2) Press Up-key or Down-key to set Charging Voltage Range.

C H A R G I N G V O L= 3 1 6 V $\leftarrow \rightarrow$

Up-key :One touch: +1 V. Down-key :Out touch : -.1V. Press Enter-key to go to Confirm page

3) On Confirm page, press Up-key or Down-key to get ESC or YES.

CHARGINO	G VOL	
= 3 1 6 V	S A V E	ESC

4) Press Enter-key to Save or ESC.

С	Η	Α	R	G	Ι	N G		V	ΟL		
=	3	1	6	V			S	А	VΕ	ΥES	

7-7. Battery Type Settings

To set Battery Voltage type: 2V, 6V, 12 V. Default: 12V.

1) Press Enter-key to get into Setting page.

BATT. TYPE = 1 2 V

2) Press Up-key or Down-key to set Battery Voltage Type.

Up-key : 2V-> 6V-> 12V Down-key : 12V-> 6V -> 2V. Press Enter-key to go to Confirm page.

3) On Confirm page, press Up-key or Down-key to get ESC or YES.

B	A	Т	Т	Т	Y	Р	E						
=	1	2	V				S	А	V	Е	Е	S	С

4) Press Enter-key to Save or ESC.

В	A	Т	Т	ΤΥ	Р	E					
=	1	2	V			S	А	VΕ	Y	Е	S

7-8. Enable Battery Equalizing Setting

To set to enable or disable batteries voltage equalizing function. Default: Off.

1) Press Enter-key to get into Setting page.

V EQUAL. ON/OFF

2) Press Up-key or Down-key to set ON or OFF.

V	EQUAL.	ON/OFF
O N	$\leftarrow \rightarrow$	

Press Enter-key to go to Confirm page.

3) On Confirm page, press Up-key or Down-key to get ESC or YES.

V	EQUAL.			0	N /	0	F	F
O N	[S	А	V	Е	Е	S	С

4) Press Enter-key to Save or ESC.

V	EQUAL.		ON /	0	F	F
O N		S A	VΕ	Y	Е	S

7-9. Battery Equalizing Voltage Range Setting

To set Battery Equalizing Voltage. Default: 1.5 V Range:1 2V: 1.5V., 6V:1.5V., 2V: 0.15V.

1) Press Enter-key to get into Setting page.

EQUAL.VOL RANGE EV:0.1V

2) Press Up-key or Down-key to set Battery Equalizing Voltage.

E Q U A L . V O L R A N G E $E V : 0 . 1 V \leftarrow \rightarrow$

Up-key :One touch: +/_ 1V) Press Enter-key to go to Confirm page.

3) On Confirm page, press Up-key or Down-key to get ESC or YES.

E Q U A L . V O L R A N G E E V : 0 . 1 V S A V E E S C

4) Press Enter-key to Save or ESC.

E	Q	U	A	L		V	0	L		R	A N	G	Е	
E	V	:	0		1	V		S	А	V	Е	Y	Е	S

7-10 .Battery Voltage Record Intervals Setting

To set intervals for Battery Voltage Records. Default: 1 Min. Range: 1~99 Mins.

1) Press Enter-key to get into Setting page.

V O L R E C I N T E R V A LM I N = 0 0 1

2) Press Up-key or Down-key to set intervals time.

 $V O L \quad R E C \quad I N T E R V A L$ $M I N = 0 \quad 0 \quad 1 \leftarrow \rightarrow$

Up-key :One touch: +1 Min. Down-key :One touch: -1 Min. Press Enter-key to go to Confirm page.

3) On Confirm page, press Up-key or Down-key to get ESC or YES.

V C	L	R	E	С	Ι	N	Т	E	R	V	A	L
ΜI	N =	0	0	1	S	А	V	Е		Е	S	С

4) Press Enter-key to Save or ESC.

V O	L	R	Е	С	Ι	N	Т	E	R	V	Α	L
ΜI	N =	0	0	1	S	А	V	Е		Y	Е	S

7-11. Battery Internal Resistance Record Intervals Setting

To set intervals for Battery internal Resistance Records. Default: 1 Day.

1) Press Enter-key to get into Setting page.

R . R E C I N T E R V A L SD A Y = 0 0 1

2) Press Up-key or Down-key to set interval time.

 $R \cdot R E C \qquad I N T E R V A L S$ $D A Y = 0 \quad 0 \quad 1 \leftarrow \rightarrow$

Up-key :One touch : +1 Min. Down-key :One touch : -1 Min. Press Enter-key to go to Confirm page.

3) On Confirm page, press Up-key or Down-key to get ESC or YES.

R .	R E	С		Ι	Ν	Т	Е	R	V	A	L	S	
DA	Y =	0	0	1		S	А	V	Е		Е	S	С

4) Press Enter-key to Save or ESC.

R		R	E	С		I	N	Т	E	R	V	A	L	S	
D	A	Y	=	0	0	1		S	А	V	Е		Y	Е	S

7-12. Detecting Unit ID Setting

To set Detecting Unit ID Number. Default: 001

1) Press Enter-key to get into Setting page.

RENAME ID

2) Press Up-key or Down-key to input old **ID Number**.

Up-key : On touch: + 1 Down-key :One touch :-1.

3) Press Enter-key to go to confirm and to go to input new ID Number.

RENAME	I D
ID 001	$\rightarrow 0 1 2$

Up-key : On touch: + 1. Down-key :One touch :-1. Press Enter-key to go to Confirm page.

4) On Confirm page, press Up-key or Down-key to get ESC or YES.

5) Press Enter-key to Save or ESC.

R	ΕN	A	Μ	Е	I D	
Ι	D	0	0	1	$\rightarrow 0 1 2$	YES

RENAME ID

ID Re-Set Ok.

R	ΕΝΑΜΕ	ΙD	
			ERRO

ID Re-Set failed.

OK!

7-13. Auto Print Battery Data Sheet Setting

To set to enable or disable the built-in Printer to auto print out Battery data sheet when System finish detecting. Default: On

1) Press Enter-key to get into Setting page.

AUTO PRINT DATA

2) Press Up-key or Down-key to set On/Off

ΑUΤΟ	PRINT	D A T A
O N	$\leftarrow \rightarrow$	

Press Enter-key to go to Confirm page.

3) On Confirm page, press Up-key or Down-key to get ESC or YES.

ΑUΤΟ	PRI	ΝΤ	D A	ТА
O N		S A V	Е	$E \ S \ C$

4) Press Enter-key to Save or ESC.

ΑUΤΟ	P R	Ι	N	Т		D A	Т	Α	
O N			S	А	V	Е	Y	Е	S

7-14. Auto Print Battery Abnormal Data Sheet Setting

To set to enable or disable the built-in Printer to auto print out Battery Abnormal Data Sheet when an abnormal event is detected. **Default: On.**

1) Press Enter-key to get into Setting page.

AUTO PRINT ERROR

2) Press Up-key or Down-key to set ON or OFF.

ΑUΤΟ	PRINT	ERROR
O N	$\leftarrow \rightarrow$	

Press Enter-key to go to Confirm page.

3) On Confirm page, press Up-key or Down-key to get ESC or YES.

АИТО	PR	I	N	Т		E	R	R	0	R
O N			S	А	V	Е		Е	S	С

4) Press Enter-key to Save or ESC.

ΑUΤΟ	Р	R	Ι	N	Т		E	R	R	0	R
O N				S	А	V	Е		Y	Е	S

7-15. SD Settings

To set to enable or disable built-in SD card Default: On

1) Press Enter-key to get into Setting page.

SD-CARD SETTING

2) Press Up-key or Down-key to set ON or OFF.

SD-CARD	SETTING
O N	$\leftarrow \rightarrow$

Press Enter-key to go to Confirm page.

3) On Confirm page, press Up-key or Down-key to get ESC or YES.

SD-CARD	SETTING
O N	SAVE ESC

4) Press Enter-key to Save or ESC.

SD-CARD	SETTING
O N	SAVE YES

7-16. Re-Set All Detection ID

To set to enable or disable auto ID setting function for All Detecting units.

1) Press Enter-key to get into Setting page.



2) Press Enter-key to go to confirm or press Up-key or Down-key to ESC.

!! CLK ALL ID !! ON

Ν	E	W		Ι	D	
?	?	?	>	0	0	1

(???=Old ID.)

Be cautious when use this setting page.

- 1) Make sure all Detecting Units are connected to the Master Unit.
- 2) Connect the First Detecting Unit to the first Battery "-".
- 3) Press every Detecting Unit on the ID Re-sent button in sequence. Master Unit will auto re-set Detecting Units ID. The first Detecting Unit will be re-set to # 001., The second Detecting Unit will be re-set to #002., and so on.
- Wait for Master Unit to "Beep" two times ,then, go to the next Detecting Unit and press on the Re-set ID button. Follow the same procedures to set every Detecting Unit.
- 5) After finishing re-set ID for all Detecting Units, connect the first Detecting Units to the first Battery "–".
- 6) Press to any key to ESC to RESET ALL ID" page.



* Press Down-key to go to the next setting page.

7-17. Pass Word Settings

To set pass word to be input to get into "View Battery Error History" and Detecting Values Setting (Prime Settings) page. Default: 0000

1) Press Enter-key to get into Setting page.

CHANGE PASS WORD

2) Press Up-key or Down-key to set number.

CHANGE PASS WORD NEW 0000

- **※** Up-key : 9 ->8 ->7-> 6->5->4->3->2->1->0
- X Down-key : 0->-1>-2->3->4->5->6->7->8->9->0
- % Press Enter-key to set the next number. From left to right.: $0000 \cdot 0000 \cdot 0000$

Press Enter-key to go to Confirm page.

3) On Confirm page, press Up-key or Down-key to get ESC or YES.

С	Η	A N	G	Е		Р	А	S	S		W	0	R	D
Ν	Е	W	0	0	0	0	S	А	V	Е		Y	Е	S

4) Press Enter-key to Save or ESC.

С	Η	A N	G	E		Р	А	S	S		W	0	R	D
Ν	Е	W	0	0	0	0	S	А	V	Е		Е	S	С

7-18. System Time Settings

To set System Time.

1) Press Enter-key to get into Setting page.

CHANGE SVSTEM TI^ME

2) Press Up-key or Down-key to set numbers.

2 0 0 8 - 0 4 - 0 8 1 6 : 2 3

Press Enter-key to change positions: YYYY- MM- DD HH: MM.

3) On Confirm page, press Up-key or Down-key to get ESC or YES.

2 0 0 8 - 0 4 - 0 8 1 6 : 2 3 S A V E E S C

4) Press Enter-key to Save or ESC.

2	0	0	8	-	0	4	-	0	8	
1	6	:	2	3				S	ΑVΕ	ΥES

7-19. Print Battery Data Setting

To set to print out Battery Data Sheet manually. Default : Off.

Press Enter-key to print out Battery Data Sheet.

PRINT BATT.DATA

7-20. Print Battery Abnormal Data Sheet Settings

To set to print out Battery Abnormal Data Sheet. Default: Off

Press Enter-key to print out Battery Abnormal Data Sheet.

PRINT ERROR DATA

Appendix :

Communication ports for Extra Battery Voltage Equalizing device.



BAT "+" : Connect to Battery " +" (Fuse: 1 A) Communication Port: Send out 5V signals when battery Voltage needs to be equalized. (Ground= BAT "-") BAT "-" : Connect to Battery " – ".