redox GAMMA GAMMA DUO

Multilingual Instruction Manual

Key Features:
1.Compatible with LiPo/Li-ion/LiFe/LiHv/ NiMH/NiCd and Pb batteries
2.8 has Charge、Discharge、Balance Charge.
3.Support Data Storage and Copy
4.Quad Memory Function、NiCd/NiMH Cycle

Hauptmerkmale:
1. Kompatibel mit LiPo / Li-Ionen / LiFe / LiHv-, NiMH / NiCd- und Pb-Batterien
2. Es verfügt über die Modi Ladung, sicher Entladung, Balance-Ladung und Lagerung.
3.Datenfunktion laden, NiCd / NiMH-Zyklus

Principales caractéristiques:
1.Compatible avec les batteries LiPo / Li-ion / LiFe / LiHv / NiMH / NiCd et Pb
2.8 a la charge, la décharge, la charge équilibre, la charge rapide, les modes de charge de stockage
3.Fonction de mémoire de chargement、cycle NiCd / NiMH

Caracteristicas principale:
1.Compatible con baterías LiPo / Li-ion / LiFe / LiHv / NiMH / NiCd y Pb
2.Dispone de modalidad Carga, Descarga, Carga Balanceada,Carga rapida y Carga di stoccaggio
3. Funzione di caricamento della memoria、ciclo NiCd / NiMH

主な機能:
1.LiPo / Li-ion / LiFe / LiHv、NiMH / NiCd、Pb バッテリーのバランス充電および放電
2. 充電、放電、バランス充電、急速充電、保管充電モードがあります。
3.データメモリー機能、NiCd / NiMH サイクル

Caracteristicas principales:
1. Compatible con baterías LiPo / Li-ion / LiFe / LiHv, NiMH / NiCd y Pb
2. Tiene carga, descarga, carga de equilibrio, carga rápida, modos de carga de almacenamiento
3. Función de memoria de carga, ciclo NiCd / NiMH

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Thank you for purchasing the GAMMA/DUO Balance Charger. This product is a rapid charger with a high performance microprocessor and simple software. Please be sure to read this entire operating manual completely before you use this product for the first time,as it covers a wide range of information on operation and safety.

Avoid Rest Space Use

Never allow the positive touch with negative electrode ,otherwise it may cause fire or explosion

Please connect the chargers in turn
1 Connect AC Lidle
2 Connect correctly the positive and negative electrode cable(Red connect the battery and the octopus cable(Black connect)
3 Correctly connect the balalace board with the battery
4 Correctly connect the balance ports correctly
Charge Power Limited:GAMMA AC 150W,DC 150W,
GAMMA/DUO AC 110W,DC 110W, DC 120W*2
Discharge Power Limited:Max.10W
Battery Type:CellsLiPo/LiHv/LiFe:1-6S
NiMH/NiCd:1-15cells
Pb:Lead Acid:2-20V,1-10cells

1.Press the'BATT TYPE/STOP'button, you can select or quit a program and back to the main menu.
2.Press the 'ENTER/START'button , you can enter the submenu, make the parameter numbers blink , and save the profile. press and hold the 'ENTER/START'button for 2 seconds to start the process.
3.Press the 'DEC' or 'INC', you can select a program or a submenu, set the parameter. or see the battery charging status

Following is an example of charging NiMH battery,for more operating instructions please refer to Page 17 to Page 32, or Go to our website **www.an-finans.com**.

Press the 'BATT TYPE/STOP'button until you see the 'PROGRAM SELECT NiMH/NiCd'

Press the 'ENTER/START'button to enter the submenu

press the left/DEC/ or right/INC/START/key to set up the parameters

After you set up all parameters.. press and hold the 'ENTER/START' button for 2 seconds, the screen will display BATTARY CHECK WAIT and confirmation Interface, press it again to start charging

Battery Type: NiMH | NiMH CHARGER 10.0A | Work Mode: Charge | Current

Vielen Dank, dass Sie sich für das **GAMMA/DUO** Balance Charger entschieden haben. Dieses Produkt ist ein Schnellladegerät mit einem Hochleistungs-Mikroprozessor und einer Betriebssoftware. Bitte lesen Sie die gesamte Bedienungsanleitung vollständig durch, bevor Sie dieses Produkt zum ersten Mal verwenden, da es eine Vielzahl von Informationen zu Betrieb und Sicherheit enthält.

Nicht vor Gebrauch zerstören wenden

Lassen Sie niemals die positive Berührung mit der negativen Elektrode zu, da dies zu Bränden oder Explosionen führen kann

Bitte schließen Sie die Ladegeräte der Reihe nach an

1 Verbinden Sie das Netzkabel an
2 Verbinden Sie die positive und negative Elektrode richtig
3 Verbinden Sie die Balance und den Octopus-Stecker
4 Verbinden Sie die Balance-Ports richtig an

Ladeleistung begrenzt: GAMMA AC 150W,DC 150W,
GAMMA/DUO AC 110W,DC 110W, DC 120W * 2

Entladeleistung begrenzt: Max.10W
Batteriertyp:LiPo / LiHv / LiFe:1-6 Zellen
NiMH / NiCd: 1-15 Zellen
Pb: Bleisäure: 2-20 V, 1-10 Zellen

Gewicht: 460g

Drücken Sie die Taste 'BATT TYPE / STOP', bis 'PROGRAM SELECT NiMH / NiCd' angezeigt wird.

Drücken Sie zweimal die Taste 'ENTER / START', um die Untermenüs aufzurufen und die Parameternummern blinken zu lassen

Drücken Sie die linke (DEC) oder rechte (INC) 'START'-Taste, um die Parameter einzustellen

Nachdem Sie alle Parameter eingerichtet haben, halten Sie die Taste 'ENTER / START' 2 Sekunden lang gedrückt. Auf dem Bildschirm wird BATTARY CHECK WAIT und die Bestätigungsoberfläche angezeigt. Drücken Sie diese Taste erneut, um den Ladevorgang zu starten

Batterietyp: NiMH | NiMH CHARGER 10.0A | Arbeitsmodus: Laden | Strom

1.Appuyez sur le bouton 'BATT TYPE / STOP', vous pouvez sélectionner ou quitter un programme et revenir au menu principal.
2.Appuyez sur le bouton 'ENTER / START', vous pouvez entrer dans le sous-menu, faire clignoter les numéros de parametres et enregistrer le profil, appuyez et maintenez le bouton 'START' pendant 2 secondes pour démarrer le processus.
3.Appuyez sur 'DEC' ou 'INC', vous pouvez sélectionner un programme ou un sous-menu, définir le parametre ou voir l'état de charge de la batterie.

Voici un exemple de chargement de la batterie NiMH, pour plus d'instructions d'utilisation, veuillez vous référer à la page 17 à la page 32, ou allez sur notre site Web **www.an-finans.com**.

appuyez sur le bouton 'BATT TYPE / STOP' jusqu'à ce que vous voyez 'PROGRAM SELECT NiMH / NiCd'

appuyez deux fois sur le bouton 'ENTER / START' pour entrer dans le emplacement et faire clignoter les numéros de parametres

appuyez sur la touche 'START' gauche (DEC) ou droite (INC) pour configurer les parametres

Après avoir configuré tous les paramètres, maintenez enfoncé le bouton 'ENTER / START' pendant 2 secondes. Ecran affichera BATTARY CHECK WAIT et l'interface de confirmation, a pouvez à nouveau pour démarrer la charge

Type de batterie NiMH | NiMH CHARGER 10.0A | Mode de travail: charge | Actuel

Gracias por adquirir el cargador equilibrado**GAMMA/DUO**. Este producto es un cargador rápido con un microprocesador de alto rendimiento y un software operativo. Asegúrese de leer completamente este manual de instrucciones antes de usar este producto por primera vez, ya que cubre una amplia gama de información sobre operación y seguridad.

Nunca permita el contacto positivo con negativo de electrodos, de lo contrario puede provocar un incendio o una explosión.

Conecta los cargadores uno a uno
1 Conecta el cable de CA
2 Conecta correctamente el electrodo positivo y negativo
3 Conecta correctamente la batería y el arnés de carga multicable del pulpo
4 Conecta correctamente los puertos de equilibrio

Carga de energía limitada: **GAMMA** AC 150W DC 150W
GAMOU AC 0+1+DO~150W, DC 120W*2

Potencia de descarga limitada: Max.10W
Tipos de batería / celdas: Lipo / Lion / LiFe / LiHv: 1-6 celdas
NiMH / NiCd: 1-15 celdas
Pb (ácido de plomo): 2-20V,1-10 celdas

Rango de voltaje de entrada de CA: 100-240V
Rango de voltaje de salida de CC:11-18V
Pantalla: pantalla LCD 1602
Controles: botón de navegación de 5 teclas
Rango de corriente de carga: 0.1-10A
Rango de corriente de descarga: 0.1-6A
Dimension: 140x105x64 mm

Peso: 460g

1.Presione el botón 'BATT TYPE / STOP', puede seleccionar o salir de un programa y volver al menú principal.
2.Presione el botón 'ENTER / START', puede ingresar al submenú, hacer que los números de los parámetros parpadeen y guardar el perfil, presione y mantenga presionado el botón 'ENTER / START' durante 2 segundos para iniciar el proceso.
3.Pulse "DEC" o "INC", puede seleccionar un programa o un submenú, configurar el parámetro o ver el estado de carga de la batería.

A continuación se muestra un ejemplo de carga de la batería de NiMH, para obtener más instrucciones de funcionamiento, consulte la página 17 a la página 32 o visite nuestro sitio web **www.an-finans.com**.

presione el botón 'BATT TYPE / STOP' hasta que vea 'PROGRAM SELECT NiMH / NiCd'

presione el botón 'ENTER / START' dos veces para ingresar al submenú y hacer que los números de los parámetros parpadeen

presione la tecla izquierda (DEC) o derecha (INC) para configurar los parámetros

Después de configurar todos los parámetros, presione y mantenga presionado el botón 'ENTER / START' durante 2 segundos. La pantalla mostrará BATTARY CHEQUE WAIT y la interfaz de confirmación, presione nuevamente para comenzar a cargar

Tipo de batería NiMH | NiMH CHARGER 10.0A | Modo de trabajo: carga | Actual

1.Premere il pulsante 'BATT TYPE / STOP', è possibile selezionare o uscire da un programma e tornare al menu principale.
2.Premere il pulsante 'ENTER / START', è possibile accedere al sottomenu, far lampeggiare i numeri dei parametri e salvare il profilo, tenere premuto il pulsante 'ENTER / START' per 2 secondi per avviare il processo.
3.Premere il tasto 'DEC' o 'INC', è possibile selezionare un programma o un sottomenu, impostare il parametro o vedere lo stato di carica della batteria.

Di seguito è riportato un esempio di ricarica della batteria NiMH, per ulteriori istruzioni operative fare riferimento a pagina 17 a pagina 32 o visitare il nostro sito Web **www.an-finans.com**.

premere il pulsante 'BATT TYPE / STOP' fino a visualizzare 'PROGRAM SELECT NiMH / NiCd'

premere due volte il pulsante 'ENTER / START' per entrare nel sottomenu e far lampeggiare i numeri dei parametri

premere il tasto sinistro 'START' sinistro (DEC) o destro (INC) per impostare i parametri

Dopo aver impostato tutti i parametri, premere a tenere premuto il pulsante 'ENTER / START' per 2 secondi, lo schermo visualizzerà BATTARY CHECK WAIT e l'interfaccia di conferma, premerlo di nuovo per avviare la ricarica

Tipo di batteria: NiMH | NiMH CHARGER 10.0A | Modalità di lavoro: carica | Attuale

GAMMA/DUO バランス充電器をお買い上げいただきありがとうございます。この製品は、高性能マイクロプロセッサと操作ソフトウェアを備えた急速充電器です。操作と安全に関する幅広い情報が含まれているため、この製品を初めて使用する前に、この操作マニュアル全体をお読みください。

マニュアルを読んでください

警告!!正極と負極を接触させないでください。火災や爆発の原因となります。

充電器を順番に接続してください
1 ACケーブルを接続します
2 正極と負極を正しく接続します
3 バッテリーとタコベルトチャンジャーボードを正しく接続します
4 バランスポートをバランスに正しく接続します

充電電力制限 GAMMA AC 150W,DC 150W
GAMOU AC 0+1+DO~150W, DC 120W*2

放電電力制限 最大10W
バッテリーの種類/セル:Lipo / Lion / LiFe / LiHv:1-6セル
NiMH / NiCd:1-15セル
Pb:鉛蓄電池:2-20V,1-10セル

重量: 460g

1.'BATTTYPE / STOP'ボタンを押すと、プログラムを選択または終了して、メインメニューに戻ることができます。
2.'ENTER / START'ボタンを押すと、サブメニューに入り、パラメータ番号を点滅させ、プロファイルを保存し、'ENTER / START'ボタンを2秒間押し続けてプロセスを開始できます。
3.'DEC'または'INC'を押すと、プログラムまたはサブメニューを選択したり、パラメータを設定したり、バッテリーの充電状態を確認したりできます。

以下は、NiMHバッテリーの充電例です。操作手順の詳細については、17ページから32ページを参照するか、当社のWebサイト**www.an-finans.com**にアクセスしてください。

'PROGRAM選択 (NiMH / NiCd)'が表示されるまで、'BATT TYPE / STOP'ボタンを押します。

'ENTER / START'ボタンを2回押してサブメニューに入り、パラメータ番号を点滅させます

左(DEC)または右(INC)ボタンを押して、パラメータを設定します

すべてのパラメータを設定した後、'ENTER / START'ボタンを2秒間長押しします。画面にBATTARY CHECK WAITと確認インターフェースが表示されます。もう一度押すと、充電が開始されます。

バッテリータイプ:NiMH | NiMH CHARGER 10.0A | 作業モード:充電 | 電流

Key Features

Optimize Operating Software
When charging or discharging, **GAMMA / DUO** has an 'AUTO' function that can automatically identifies the cell count of the battery.

Wide Battery Type Compatibility
GAMMA / DUOis compatible with LiPo/Li-ion/LiFe/LiHv, NiMH/NiCd and Pb battery .
Please select the correct one before charging.

Balance Individual Cells on Discharge
GAMMA / DUOcan also monitor and balance individual cells of the battery pack during discharging.

Fast charge and Storage charge for Li-ion/Li-Polymer batteries
Fast charge mode reduces the charging time of the battery than charge mode. Storage charge mode controls the final voltage of the battery, suitable for long term storage.

Load Memory Function
For your convenience,**GAMMA / DUO**can store 20 memories for different types of batteries. You can select the data and the process can be executed directly without setting.

NiCd/NiMH Cycle
Continually perform 1 to 5 cycles of charge/discharge NiCd/NiMH batteries.

Extra Function
1.>Meter Lixx Battery Status; 2.>Meter Lixx Battery IR;3.>Balancer Lithium Battery;4.>Digital Power;5.>Smart Battery Charge.

Batteries information and charge current range

Battery Type	No.of Cells	Rated Voltage(V)	Charge Current(A)
LiPo	1	3.7V	0.1~10A
	2	7.4V	0.1~10A
	3	11.1V	0.1~10A
	4	14.8V	0.1~10A
	5	18.5V	0.1~10A
	6	22.2V	0.1~10A
LiFe	1	3.3V	0.1~10A
	2	6.6V	0.1~10A
	3	9.9V	0.1~10A
	4	13.2V	0.1~10A
	5	16.5V	0.1~10A
	6	19.8V	0.1~10A
LiHv	1	3.8V	0.1~10A
	2	7.6V	0.1~10A
	3	11.4V	0.1~10A
	4	15.2V	0.1~10A
	5	19.0V	0.1~10A
	6	22.8V	0.1~10A
Lilo	1	3.6V	0.1~10A
	2	7.2V	0.1~10A
	3	10.8V	0.1~10A
	4	14.4V	0.1~10A
	5	18.0V	0.1~10A
	6	21.6V	0.1~10A

Battery Type	No.of Cells	Rated Voltage(V)	Charge Current(A)
NiMH /NiCd	1	1.2V	0.1~10A
	2	2.4V	0.1~10A
	3	3.6V	0.1~10A
	4	4.8V	0.1~10A
	5	6V	0.1~10A
	6	7.2V	0.1~10A
	7	8.4V	0.1~10A
	8	9.6V	0.1~10A
	9	10.8V	0.1~10A
	10	12V	0.1~10A
	11	13.2V	0.1~10A
	12	14.4V	0.1~10A
	13	15.6V	0.1~10A
	14	16.8V	0.1~10A
	15	18.0V	0.1~10A

Battery Type	No.of Cells	Rated Voltage(V)	Charge Current(A)
PB	1	2V	0.1~10A
	2	4V	0.1~10A
	3	6V	0.1~10A
	4	8V	0.1~10A
	5	10V	0.1~10A
	6	12V	0.1~10A
	7	14V	0.1~10A
	8	16V	0.1~10A
	9	18V	0.1~10A
	10	20V	0.1~10A
	11	22.0V	0.1~10A
	12	24.0V	0.1~10A

LiPo	Voltage Level: 3.7V/cell Max Charge Voltage:4.2 /cell Discharge Voltage Cut off Level :3.0V/cell or Higher
Lilo	Voltage Level: 3.6V/cell Max Charge Voltage:4.1V/cell Discharge Voltage Cut off Level :3.0V/cell or Higher
LiFe	Voltage Level: 3.3V/cell Max Charge Voltage:3.6V/cell Discharge Voltage Cut off Level :2.0V/cell or Higher
LiHV	Voltage Level: 3.8V/cell Max Charge Voltage:4.35V/cell Discharge Voltage Cut off Level :3.2V/cell or Higher
NiCd/NiMH	Voltage Level: 1.2V/cell Max. Charge voltage:1.55V/cell Discharge Voltage Cut off Level:1.0V/cell or Higher
PB	Voltage Level: 2.0V/cell Max Charge voltage:2.45V/cell Discharge Voltage Cut off Level:1.50V/cell or Higher

Operating Instructions

Main Menu
When**GAMMA / DUO**Charger first power up, the LCD screen will display the brand and official website for 2 seconds. To select the desired program, press'BATT TYPE/STOP', and cycle through the options.

WELCOME REDOX GAMMA | PROGRAM SELECT Lithium BATT | Press BATT TYPE/STOP For More Options | NiMH/NiCd | PB(Lead Acid) | User Settings | Extra Function | Load Memory

Lithium Batteries Program

Balance Charge Mode

Press the 'ENTER/START 'button to enter the submenu

Press the 'ENTER/START' button again to make the parameter numbers blink

Press the "- "or" + "STATUS key to set up the parameters

Press the 'ENTER/ START'button to save the profile

After you set up all parameters, press and hold the 'ENTER/START' button for 2 seconds, the screen will display BATTARY CHECK WAIT and confirmation interface

if confirm, press the 'ENTER/START'button to enter Balance Charge mode

Press the '- 'or" + 'STATUS keys to see the battery's charging state

- Please make sure to select the correct type of Lithium battery.
- Please make sure the charge rate don't exceed the maximum value.
- Use this formula to find the charge rate: Charge rate≤Capacity/1000.
- The operating steps of Charge mode, Fast Charge mode and Storage Charge mode、Discharge mode are same with Balance Charge mode.
- Please make sure the discharge rate don't exceed 2A.

NiMH/NiCd and PB Batteries Program-Charge Mode

Press the 'BATT TYPE/ STOP'button until you see "PROGRAM SELECT NiMH/NiCd"

Press the 'ENTER/START' button to enter the submenu

Press the 'ENTER/START' button again to make the parameter numbers blink

press the 'ENTER/ START'button to save the profile

After you set up all parameters, press and hold the 'ENTER/ START' button for 2 seconds, the screen will display BATTARY CHECK WAIT and confirmation interface

if confirm, press the 'ENTER/START'button to enter Charge mode

- Please make sure to select the correct type of battery.
- Please make sure the charge rate don't exceed the maximum value.
- Use this formula to find the charge rate: Charge rate≤Capacity/1000.
- The operating steps of Discharge mode and Cycle mode are same with Charge mode.
- Please make sure the discharge rate don't exceed 2A.
- In Cycle mode, C→ C means discharge to charge, C→ 0 means charge to Discharge

User Settings

Key Beep and Buzzer VOL
In this submenu, you can turn on/off the key beep and set the volume of buzzer.

Completion Ring Beep
In this submenu, you can set the completion ring time from 1 to 5 minutes.

Cycle Waste Time
In this submenu, you can set the waste time between charge and discharge in NiMH/NiCd cycle mode, range from 1-60Min.

Low Input VOLT Cut-Off
In this submenu, you can set the cutoff input voltage of the power supply of the charger to protect it. The charger will cut off working when input voltage lower than the sting value.Range from 10-18V

Ext.Temp Cut-Off
In this submenu, you can set the cutoff external temperature to protect your battery. The charger will cut off working when the external temperature is higher than the setting value. Range from 30-90◦C .

Capacity Cut-Off
In this submenu, you can set the cutoff capacity to protect your battery. The charger will cut off working when the capacity is more than the setting value. Range from 100-60000mAh.

Safety Timer
In this submenu, you can set a safety time to protect your charger and battery. The charger will cut off working when reach the setting value. 0=OFF is optional. range from 10-720 minutes.

Charge Power Limit
In this submenu, you can set the charge power limit to meet your power supply requirement.Range from 0-150W.

LiXX Balance Control
In this submenu, you can set set the balance control of LiPo/Li-ion/LiFe/LiHV to meet your desired.Stand/Fast/Accurate is optional.Default is Stand.

Fast: Balance speed fastest, less accurate.

Accurate: Balance speed lowest, more accurate.

Standard: Balance speed and accurratesness between Fast and Accurate.

Termination Voltage Control
In this submenu, you can set the termination voltage value per cell of your batteries according to your request.

LiPo Charge TVC: Range from 4150-4250 mV/s, default is 4200 mV/s
LiPo Discharge TVC: Range from 3000-3850 mV/s, default is 3200 mV/s

LiHV Charge TVC: Range from 4300-4400 mV/s, default is 4350 mV/s
LiHV Discharge TVC: Range from 3000-3750 mV/s, default is 3300 mV/s

Li-ion Charge TVC: Range from 3750-4200 mV/s, default is 4100 mV/s
Li-ion Discharge TVC: Range from 3000-3750 mV/s, default is 3100 mV/s

Life Charge TVC: Range from 3300-3800 mV/s, default is 3600 mV/s
Life Discharge TVC: Range from 2500-3300 mV/s, default is 2500 mV/s

NiMH Sensitivity D.Peak: Range from 4-20mV
NiMH Discharge TVC: Range from 500-1000mV/s, default is 800mV/s

NiCd Sensitivity D.Peak: Range from 4-20mV
NiCd Discharge TVC: Range from 500-1000mV/s, default is 1000mV/s

Pb Charge TVC: Range from 1500-2500 mV/s, default is 2400 mV/s
Pb Discharge TVC: Range from 1000-1500 mV/s, default is 1500 mV/s

Reset Factory Default Setting.
In this submenu, you can restore factory setting.

The operating steps of Key Beep and Buzzer VOL、Completion Ring Beep, Cycle Waste Time, Low Input VOLT Cut-Off, Ext.Temp Cut-Off, Capacity Cut-Off, Safety Timer、Charge Power Limit、LiXX Balance Control、Reset Factory Default Setting.

Press the 'BATT TYPE/ STOP'button until you see "PROGRAM SELECT User Settings"

Press the 'ENTER/ START'button to enter the submenu

Press the '- 'or" + 'STATUS key until you find the submenu you want to set

Press the 'ENTER/ START'button again to make the parameter numbers blink

press the "- "or" + " STATUS key to set up the parameters

Press the 'ENTER/ START'button to save the profile

The operating steps of Termination Voltage Control

Press the 'BATT TYPE/ STOP'button until you see "PROGRAM SELECT User Settings"

Press the 'ENTER/ START'button to enter the submenu

press the "- "or" + " STATUS key to set up the parameters

Press the 'ENTER/ START'button to enter the submenu

Press the "- "or" + " STATUS keys until you find the submenu you want to set

Press the 'ENTER/START' button again to make the parameter numbers blink

Press the '- 'or" + 'STATUS keys to set up the parameters

Press the 'ENTER/ START'button to save the profile

Extra Function Program
1.>Meter Lixx Battery Status
This function let you know your battery status

Press the 'BATT TYPE/ STOP'button until you see "PROGRAM SELECT Extra Function"

Press the 'ENTER/ START'button to enter the submenu

Press the 'ENTER/START' button to enter Select Lixx

Press the 'ENTER/ START'button again to make the parameter numbers blink

Press the - or + 'STATUS'key to select the correct battery type

Press the 'ENTER/START' button to save the profile

Press and hold the 'ENTER/START' button for 2 seconds

Press the - or + 'STATUS' key to see your battery statu

2.> Meter Lixx Battery IR
This function let you know your battery IR.

Press the 'BATT TYPE/ STOP'button until you see "PROGRAM SELECT Extra Function"

Press the 'ENTER/ START'button to enter the submenu

Press the ' or right(INC)/'STATUS' key to find '2.> Meter Lixx Battery IR'

Press the 'ENTER/ START'button to see your battery IR

3.> Balancer Lithium Battery
With this function the charger can Balance Individual Cells of your battery.

Press the 'BATT TYPE/ STOP'button until you see "PROGRAM SELECT Extra Function"

Press the 'ENTER/ START'button to enter the submenu

Press the - or + 'STATUS'key to find " 3.> Balancer Lithium Battery

Press the 'ENTER/ START'button to enter the next submenu

Press the 'ENTER/ START'button again to make the parameter numbers blink

Press the - or + 'STATUS'key to select the correct battery type

Press the 'ENTER/START 'button to save the profile

Press and hold the 'ENTER/START' button for 2 seconds

Press the - or + 'STATUS'key to see your battery status

4.> Digital Power
With this function the charger can be used as a voltage adjustable power supply, voltage range from 5-27V, power is 80W.
The operating steps is same with 3.> Balancer Lithium Battery.

5.> Smart Battery Charge
With this function the charger can charge smart batteries.
The operating steps is same with 3.> Balancer Lichium Battery.

Load Memory Program
There are 20 memories record the work of the charger,LS=latest record.

Press the 'BATT TYPE/ STOP'button until you see "PROGRAM SELECT Load Memory"

Press the 'ENTER/ START'button to enter the submenu

Press the - or + 'STATUS' key to select the memory record you want.

Press and hold the 'ENTER/START' button for 2 seconds to start

Error Messages

INPUT VOLTAGE TOO HIGH	Input voltage is higher than 18V, check the power supply, then restart the charger.
INPUT VOLTAGE TOO LOW	Input voltage is lower than the value of LOW INPUT VOLTAGE CUT-OFF,check the power supply, then restart the charger.
REVERSE POLARITY CHECK	Reverse polarity, check the connection between the charger and the battery, correct the connection, then restart the work.
BATTERY CHECK DISCONNECT	Battery disconnect, check the connection between the charger and the battery, then restart the work.
BATTERY CHECK OVER VOLTAGE	Total voltage of the battery is over the termination voltage controalTVCI, check the battery and the TVC setting, then restart.
BATTERY CHECK LOWER VOLTAGE	Total voltage of the battery is lower than the termination voltage controalTVCI, check the battery and the TVC setting, then restart.
BATTERY CHECK CELL CONNT ERROR	Cell count detected by the charger is different from the setting, check the battery cell count and reset the cell count of the work.
BATTERY CHECK OVER CELL VOLT	Cell voltage of the battery pack is over the termination voltage controalTVCI, check the battery and the TVC setting, then restart.
BATTERY CHECK LOWER CELL VOLT	Cell voltage of the battery pack is lower the termination voltage controalTVCI, check the battery and the TVC setting, then restart.
BATTERY CHECK FULL BATTERY	Full battery, no need to charge.
OVER Ext.TEMP CUTOFF	External temperature is higher than the setting value, cutoff.
OVER CAPACITY CUTOFF	Capacity is over than the setting value, cutoff.
SAFETY TIME OUT CUTOFF	Time is up to the setting value of Safety Timer, cutoff.

Support and services

WARRANTY

AN-FINANS company provide a period of one year product warranty from the date of purchase.The warranty only applies to material or operational defects, which are present at the time of purchase.During that period we will repair or replace free of service, charge for products deemed defective due to those causes. This warranty is not valid for damage caused by subsequent damage arising a result of misuse, modification or as a result of failure to observe the use guideline in this manual.
LIABILITY EXCLUSION

This charger is designed and approved exclusively for charge the types of battery stated in this manual.**AN-FINANS company** do not accept any liability of the charging of other types and purpose other than that stated. We are unable to ensure you follow the instruction correctly and safely when using this charger and the battery you use, therefore we do not accept loss and maintaining this device.For this reason we are obliged to deny the liability for loss, damage or costs which are incurred due to the incompetent or incorrect use and operation of this product, or which are connected with such operation in any way. Unless otherwise prescribed by law, our obligation to pay compensation, regardless of the legal argument employed, is limited to the invoice valueof those products that were immediately and directly involved in the event in which the damage occurred.

CAUTION and NOTES

- This charger is ONLY suitable for charge rechargeable LiPo, Li-ion,LiFe,LiHV NiCd, NiMH, Smart and Pb batteries. Do not attempt to charge dry cells. Charge other types of batteries may cause fire or explosion.
- Set up the InputPower Limit/Low Input VOLT Cutoff correctly in the USER SETTING.
- Pay attention to the charger during use. Do not leave the charger unattended.
- Never charge the dead or damaged batteries.
- Do not attempt to charge a battery pack containing different types of batteries.
- Do not use a too short or damaged cables.
- Do not use the charger close by a flammable object. Use only in well-ventilated areas.
- Only charge the rechargeable batteries that meet the product specifications of this charger.
- Do not allow water, moisture or foreign objects into the charger.
- Do not use in humid locations. Do not operate with wet hands.
- Do not attempt to disassemble the charger.

- Do not use the charger on fleecy materials, such as carpets, blankets, beds and cushions.
- Do not block the cooling fan and the air inlet.
- Strongly recommend balancing Lithium packs. An unbalanced pack may damage during discharging.
- General default charging current is 1C. Read the manual of the battery and setup the suitable currents to charge the battery.Higher charge/discharge currents will damage the battery, even cause a fire.
- NEVER store LiPo batteries in any location that exceeds 80° F (e.g. in a car, garage, or in the sun)
- NEVER let the battery positive and negative leads touch. This can cause the battery to short circuit and lead to a FIRE. If for any reason you need to cut the terminal wires it will be necessary to cut each wire SEPARATELY, to ensure the wires do N OT touch each other.
- NEVER charge a swollen or ballooned battery (even if swollen upon purchase). Continue to charge a battery that has begun to swell will result in a fire.

  Follow these steps:
  a. STOP the charging process
  b. Disconnect battery from the device immediately.
  c. Place it in an open non-flammable area.
  d. Watch for signs of fire for minutes from a safe distance.
  e. Follow proper procedure to dispose of battery.
- ALWAYS store LiPo batteries in cool, dry places between 40-80° F.

- Avoid Over-Discharging LiPo Batteries
- The internal battery damage caused by over-discharging will not always be visible. However, this can potentially lead to a FIRE when attempting to re-charge it at later times.
- Allow the battery to cool down before charging.
- DO NOT charge multiple battery packs in series. Charge each battery pack individually. Failure to do so may result in incorrect battery recognition and charging functions. Overcharging may occur and possible result in FIRE.
- When selecting the cell count or voltage for charging purposes, select the cell count and voltage as it appears on the LiPo battery label. Selecting a cell count or voltage higher than that indicated on the label will cause improper charging rates that can lead to fire.
  Example: The label on a 2-Cell battery pack in series will read - - 7.4V
  - You must select 2-Cell for charging.
  Example: The label on a 3-Cell battery pack in series will read ~11.1V
  - You must select 3-Cell for charging.
- You must check the pack voltage before charging. Do not attempt to charge any pack if open voltage per cell is less than 3.3V. For example:

  Do not charge a 2-cell pack if below 6.6V

  Do not charge a 3-cell pack if below 9.9V

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