Truecharge 20+ and 40+

20 and 40 Amp Multistage Battery Chargers

Truecharge 20+

Truecharge 40+

Battery Temperature Sensor

NRTL/C

CSA/NRTL Certified to UL and CSA Standards

Charges Three Battery Banks Simultaneously

With respective outputs of 20 and 40 amps, Truecharge 20+ and 40+ are ideal for your deep cycle batteries when recharging from a source between 90-135 VAC at 60 Hz. Truecharge 20+ and 40+ offer high frequency power conversion, microprocessor control, multi-step charging, wide input voltage range, battery type selector switch, and an extensive array of protection features.

Product Features

- 20 and 40 amp output
- Microprocessor controlled, multistage charging
- Charges up to three battery banks simultaneously
- Independent settings for AGM, flooded or gel lead-acid batteries
- Wide voltage range operation (90–135 VAC, 50/60 Hz)
- Optional remote LED panel to indicate battery and charge status
- Automatic 21 day top-up
- Durable and corrosion resistant chassis
- One year warranty

Protection Features

- Over-temperature shutdown and overload projection
- Adjustable temperature sensitive charging for optimal battery charging
- Transformer isolated for safety and to protect against electrolysis
- Reverse polarity protection (internal fuses open)
- Short-circuit and surge protection
- Ignition protected
- Equalization mode conditions batteries for longer life

Options

- Battery temperature sensor
- Remote display panel – displays total charging current and battery voltage for two battery banks using bar graph LEDs

Xantrex Technology Inc.
Headquarters
8999 Nelson Way
Burnaby, British Columbia
Canada V5A 4B5
800 670 0707 Toll Free
604 420 1591 Fax

5916 195th Northeast
Arlington, Washington
USA 98223
800 446 6180 Toll Free
360 925 5144 Fax

© 2002 Xantrex International. Xantrex and Truecharge are registered trademarks of Xantrex international. All rights reserved. Part Number 970-5041-01-01 Rev. A Printed in Canada

www.xantrex.com

Truecharge 20+ and 40+

xantrex

20 and 40 Amp Multistage Battery Chargers

Electrical Specifications

Truecharge 20+		Truecharge 40+	
Output current	20 A @ 14.5 V nominal	**Output current**	40 A @ 14.5 V nominal
Output voltage (nominal, depending on settings)		**Output voltage (nominal, depending on settings)**	
· Charge	13.8–14.8 VDC	**· Charge**	13.8–14.8 VDC
· Float	13.1–14.2 VDC	**· Float**	13.1–14.2 VDC
· Equalize	15.5 VDC @ 5 A maximum	**· Equalize**	15.5 VDC @ 5 A maximum
DC output connections	Three	**DC output connections**	Three
AC input voltage	90–135 VDC, 50/60 Hz	**AC input voltage**	90–135 VDC, 50/60 Hz
Temperature compensation	3 settings or optional remote sensor	**Temperature compensation**	3 settings or optional remote sensor
Charger efficiency	85% approx.	**Charger efficiency**	85% approx.
Recommended battery size	100Ah to 400Ah	**Recommended battery size**	400Ah and up

General Specifications

Truecharge 20+		Truecharge 40+	
Operating temperature	0°C – 30°C	**Operating temperature**	0°C – 30°C
Storage temperature	-25°C – 70°C	**Storage temperature**	-25°C – 70°C
Battery connection	3 pos. terminals, 1 neg. terminal	**Battery connection**	3 pos. terminals, 1 neg. terminal
Dimensions (HxWxL)	2.75 x 6.7 x 15.1″	**Dimensions (HxWxL)**	2.75 x 6.7 x 15.1″
	(70 x 172 x 385 mm)		(70 x 172 x 385 mm)
Weight	6.9 lb (3.1 kg)	**Weight**	7.4 lb (3.3 kg)
Warranty	One year	**Warranty**	One year
Part No.	804-0220	**Part No.**	804-0440
Part No. (remote panel)	808-0200	**Part No. (remote panel)**	808-0400
Part No. (temperature sensor)	808-0231	**Part No. (temperature sensor)**	808-0231

Regulatory Approvals

CSA/NRTL approved to CSA 107.2, UL 1236, UL 458, UL 1564, including the marine supplement and ignition protection
EMC FCC Class A

Note: Specifications subject to change without notice

Battery Charge Times (Based on a recommended 50% discharge)

Battery Group (Truecharge 20+)	Approx. amp hours	Charge time (hours)
27	**100**	**3**
4D	**200**	**6.5**
8D	**230**	**7.5**
Two 8D	**460**	**15**

Battery Group (Truecharge 40+)	Approx. amp hours	Charge time (hours)
27	**100**	**1.5**
4D	**200**	**3.5**
8D	**230**	**4**
Two 8D	**460**	**7.5**

Three-stage Charging

Multistage charging ensures batteries receive optimum charging, but with minimal wear and tear, regulating the voltage and current delivered to the batteries in three automatic stages:

- **Bulk:** Replaces 70-80% of the battery's state of charge at the fastest possible rate.
- **Absorption:** Replenishes the remaining 20-30% of charge, bringing the battery to a full charge at a slow, safe rate.
- **Float:** Voltage is reduced and held constant in order to prevent damage and keep batteries at a full charge.