

Guide to charging OPTIMA Deep Cycle batteries in 24 V applications

YT U 4.2
YT S 4.2



YT U 3.7
YT R 3.7



YT SS 2.7
YT SJ 2.7



BT DCM 4.2



Table 1. Charging OPTIMA Deep Cycle batteries 2,7; 3,7 and 4,2 only.

Application / System	Type of Charging	Current, Voltage and Time limits	
Vehicle charger	Voltage Regulated	Voltage:	27,3 to 29 Volts
Mains charger (Automotive use)	Voltage Regulated	Voltage:	27,6 to 29 Volts
		Current:	10 Ampere maximum
		Time:	Depends on depth of discharge – 6 to 12 hours
Mains charger (Deep cycle use)	Current and Voltage Regulated	Phase 1:	no current limit as long as battery temperature is <51 °C
		Phase 2:	Continue charge at 29.4 V until current < 1 Ampere
		Phase 3:	Float charge of 27.6 V with max. current of 1 amp.
Float charger (Standby use)	Voltage Regulated	Voltage:	27.2 V to 27.6 V
		Current:	1 Ampere maximum
		Time:	Indefinite at lower voltages

Note: When using external chargers float charge can always be applied after finishing the main charging process

Guide to charging OPTIMA Deep Cycle batteries in 24 V applications



YT 5,5



BT 5,5



BT 5,0

Table 2. Charging OPTIMA Deep Cycle batteries 5,0 and 5,5 only.

Application / System	Type of Charging	Current, Voltage and Time limits	
Vehicle charger	Voltage Regulated	Voltage:	27,3 to 29 Volts
Mains charger (Automotive use)	Voltage Regulated	Voltage:	27,6 to 29 Volts
		Current:	10 Ampere maximum
		Time:	Depends on depth of discharge – 6 to 12 hours
Mains charger (Deep cycle use)	Current and Voltage Regulated	Phase 1:	No current limit as long as battery temperature is <51
		Phase 2:	Continue charge at 29.4 V until current < 1 Ampere
		Phase 3:	Float charge of 27.6 V with max. current of 1 amp.
Float charger (Standby use)	Voltage Regulated	Voltage:	27.2 V to 27.6 V
		Current:	1 Ampere maximum
		Time:	Indefinite at lower voltages

Note: When using external chargers, float charge can always be applied after finishing the main charging process