

COUGARNET



BATTERY CHARGER – MA 4529A

When the COUGARNET radio communication system SMT unit is used in its transportable role it is powered by a rechargeable NICAD battery, the MA 4025D. This rechargeable power pack is fitted with thermistor sensing protection circuits to ensure that fast charging will only occur when it is safe to do so. The power pack is fused to prevent damage in case of accidental short-circuiting. The MA 4025D is an extremely rugged battery capable of withstanding arduous treatment, whilst strapped to a transportable manpack frame and used over unfriendly terrain.

MA 4529A Battery Charger

A specially designed battery charging unit, an MA 4529A, is capable of recharging up to five MA 4025D batteries at any one time. This mains driven, fully automatic charger incorporates LED indicators to show the rate of charge of the individual power packs. This charging unit is constructed to be used in a workshop environment and completes a charging cycle over three hours.

MAIN TECHNICAL PARAMETERS

MA 4529A CHARGING UNIT

Supply Voltage:	I15/230VAC \pm 20% 47-63Hz
Current Drain:	1A max at 230VAC
Charge Time:	Approximately 3 hours for a fully discharged battery
Charge Current:	High rate: 1.8A nominal Trickle rate: 400mA nominal After a full charge the charger will continue charging at the trickle rate
Protection:	The thermistor sensing will ensure that fast charging will only occur at safe battery temperatures. The charger range is defined as +5°C to +40°C. Thus 'hot' or 'cold' batteries will only receive a trickle charge current
Connectors	
Mains Input:	3 way socket
Battery Charging:	+ve charging contact -ve charging contact control contact
LED Indicators:	5 x Amber (fast charge) 5 x Green (ready for use and trickle charge) 1 x Red (mains on)
Fuses:	1 external fuse for mains input (1.5A for 230VAC) (3.0A for I15VAC)

MA 4025D RECHARGEABLE BATTERY

Output Voltage:	12V nominal	
Capacity at (20°C):	3.5Ah min at C rate discharge	
3 Hour Charge Rate:	1.8A nominal	
Protection:	Thermistor sensing Inbuilt thermostat External 6.3A fuse	
Environmental		
Immersion:	1m of water	
Vibration:	5-200Hz at 2g	
Shock:	40g for 10ms	
Temperature		
Storage:	-40°C to +70°C	
Operating:	-20°C to +70°C	
Charging (High Rate):	+5°C to +50°C	
Compatible Ancillaries:	MA 4529A (5 way charger)	
Dimensions	MA 4025D	MA 4529A
Height:	230mm	405mm
Width:	85mm	530mm
Depth:	90mm	255mm
Weight:	2.45kg	11kg

There is a requirement for some organisations to charge batteries quickly, in the field, under widely varying ambient temperature conditions. Whilst this is normally safe there are occasions where a battery cell (s) may have deteriorated and may fail to vent. It is possible in these circumstances that cell disintegration or even explosion may occur. It is therefore recommended that, as a precaution, batteries being charged should be isolated away from non essential personnel.



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Printed in England

Racal reserve the right to vary in detail from the description and specification in this publication.

Publication No. 2471-I

D/N984/GP CL