

user's manual

ACCU 12V 18Ah

Please read the following manual carefully before the first use and keep it for future reference.

Scuba diving is treated as an extreme sport and requires proper training and certification. Using scuba equipment, ACCU 12V 18Ah included, by an untrained and inexperienced person without proper certification may cause health damage and even risk of death.

Tech specification

The set includes:

- 1 x ACCU 12V 18Ah
- 1 x dedicated charger
- 1 x RCA port cap

Technical details:

- 12V
- 18Ah
- Li-lon 12V battery pack
- max power consumption from both ports: 200W



Purpose of use

ACCU 12V 18Ah is dedicated for underwater heating systems with max voltage 12V using compatible connection system through E/O cord and for compatible underwater light heads equipped with light-for-me RCA or E/O (through additional light-for-me RCA-E/O cord) connection. Make sure the used heating system and/or underwater light head are compatible before connecting them to ACCU 12V 18Ah. The manufacturer does not take any liability for any damage caused by connecting ACCU 12V 18Ah to incompatible heating system and/or underwater light head.

Charging

ACCU 12V 18Ah is equipped with two RCA ports marked as DIRECT (direct connection to the battery pack) and SWITCH (connected to the battery pack through a switch).



Charging is done through the DIRECT port only. Connecting charger to the SWITCH port can cause battery pack damage.

Prior to starting the charging process make sure that ACCU 12V 18Ah is dry. Then disconnect the device connected to the DIRECT RCA port or unscrew the cap and dry this port as well with a clean tissue.

Make sure the ACCU's switch is in OFF position - it must stay OFF throughout the whole charging process. Use only the charger provided with the set. Before plugging the charger in, check its condition thoroughly; in case of noticing any mechanical damage to the charger, cut or broken cable or any other fault which may influence its proper work, do not use the charger.

In order to start the charging process plug the charger's RCA connector into the DIRECT port, then plug the charger to the mains. The charger will go through a self-test (power red diode on, all 4 green diodes flash one by one) and then will start the charging process, which is indicated by green diodes flashing. Each solid green diode indicates 25% charge of the battery pack. The charging process is finished when all the four green diodes are on. Unplug the charger from the mains

Usage

ACCU 12V 18Ah is equipped with two RCA ports:

- DIRECT used for charging, connecting light-for-me light heads with RCA connection and additional RCA-E/O cord (to connect compatible light head with E/O cord)
- SWITCH used for connecting RCA-E/O cord and heating system. Switch placed in ON position does not draw any current when there is nothing plugged into this port. Disconnecting the E/O cord underwater (regardless of which port it is connected to) may cause irreversible damage to the E/O connector. Switch should be in OFF position when this port is not in use.

Prior to connecting the heating system and/or light head to an RCA port check the condition of orings sealing the RCA port, if necessary grease them with pure vaseline (petroleum jelly). Damaged, torn or cut orings require immediate replacing.

Check also the cables / cords connected to RCA ports - both from the heating system and underwater light heads - any damages, tears or breaks require fixing / servicing - if immersed in water they may cause flooding and irreversible damage to the battery pack.

If only one RCA port is used, closed the other one with the RCA cap provided. Open RCA port is not watertight and when immersed in water will flood the ACCU and cause irreversible damage to the battery pack.



Make sure the sealing orings placed in the RCA ports are in good condition, if needed grease them with petroleum jelly. Damaged orings need replacing.

To switch on/off the RCA SWITCH port - move the red switch according to the ON / OFF marks. The switch should be in OFF position when the SWITCH RCA port is not in use, between the dives and during the charging process.



Switch placed on the bottom can be easily reached and operated in different kit configurations and is easy to switch on/off even in dry gloves with thick inner insulation.

Storage

After the dive rinse the equipment in lukewarm water, make sure the RCA ports are closed (with RCA cap or RCA-E/O cord or underwater light head), then dry it and check its condition - any damages that may influence the proper work of the ACCU and the devises connected to it must be fixed / serviced by an authorised service point before next dive.

The ACCU 12V 18Ah should be stored in a dry room with its battery pack charged. The ACCU should not be left for a longer time with low charge level of its battery pack. In case of leaving the ACCU with its ports open, make sure they are not prone to increased humidity or water entering inside the canister.

RCA-E/O cord should not be stored in a bend position, prone to any breaks or damages. Its E/O connection should be clean and dry, if needed it can be slightly greased with pure vaseline (petroleum jelly).

RCA ports should be kept clean and slightly greased with vaseline (petroleum jelly). Sealing orings must be checked regularly and kept clean and greased.

Burn times

Burn times of ACCU 12V 18Ah depends on the total power drawn by the connected devices. The maximum power that can be drawn from both ports is 200W.

The below table shows max burn times of ACCU 12V 18Ah with Santi™ heating systems and underwater light heads LIGHT-FOR-ME. Given burn times of ACCU 12V 18Ah may differ from real burn times of +/- 10%.

		Port SWITCH + DIRECT						
	Port SWITCH	4TEC 18W	7XPE 24W	7XML 84W	NW7			
					18W	30W	48W	
Head only		12h	9h	2h 30min	12h	7h 10min	4h 30min	
Heated Gloves 30W	7h	4h 30min	4h	1h 45min	4h 30min	3h 40min	2h 40min	
Heated Vest 55W	3h 50min	2h 50min	2h 40min	1h 30min	2h 50min	2h 30min	2h	
Heated Undersuit 110W	2h	1h 45min	1h 40min	1h 5min	1h 45min	1h 30min	1h 15min	
Heated Gloves 30W + Heated Vest 55W	2h 30min	2h 10min	2h	1h 10min	2h 10min	1h 50min	1h 35min	
Heated Gloves 30W + Heated undersuit 110W	1h 30min	1h 25min	1h 20min	exceeds 200W	1h 25min	1h 10min	1h 5min	

Troubleshooting						
Problem	Solution					
Switch is on ON position, the heating system / light head does not work.	Charge the ACCU according to the manual. Make sure the heating system / underwater light head are connected to the proper RCA port. Check the condition of connected device - if necessary contact its manufacturer. If all is checked and seems to be fine, and the connected device still does not work, contact the manufacturer / authorised service point of the ACCU.					
RCA-E/O cord is broken / cut / torn or damaged.	RCA-E/O cord needs servicing / replacing. Do not take the broken equipment underwater. Contact the authorised service point / manufactorer of the ACCU.					
Charger seems to be broken / does not charge properly / one of its cord is broken.the rest.	Charger needs servicing / replacing. Do not take the broken equipment underwater. Contact the authorised service point / manufacturer of the ACCU.					
There is something wrong with a device connected to the ACCU 18Ah 12V	Follow the manual provided with the device by its manufacturer. If in doubt, contact its authorised service point or manufacturer.					
One of the RCA ports was left open and the ACCU was taken underwater.	It is probable that the ACCU got flooded and its battery pack damaged. Contact the authorised service point / manufacturer immediately.					