



Military Tactical Equipment

AV-2

**EVOLUTION
SCOOTER**

**DIVER
PROPULSION
VEHICLE (DPV)**

NSN: 4220 6615 86194

WHEN ENDURANCE AND RELIABILITY MATTERS



**HANDS
FREE
RIDING
STYLE**

NORTHERN DIVER
MINE WARFARE & MILITARY DIVING SPECIALISTS

AV-2 ADVANTAGES

The new AV-2 and AVX DPV's bring advanced capability and improved performance along with dependability from over 25 years of experience in building DPV's.

Hands Free Riding Style

Using an underwater vehicle (DPV) can reduce your air consumption by up to 50%. Riding horizontally in front of the scooter "Hands Free" streamlines the body and scooter, reducing drag and dramatically improving both speed and distance travelled. In addition, speed adjustment is so easy with our built-in trigger arm and both hands are free for using other equipment.



Conventional Riding Style

You have the choice of conventional riding, although over long distances this may create muscular fatigue as riding behind and above the scooter creates resistance and reduces the overall efficiency.



Wing

By using the Wings it's now possible to pull 2 more divers with the AV-2 EVOLUTION.

Different diver's physiques have virtually no effect on the scooters performance when holding onto the wings.



The speed and distance with 3 men diving is almost the same as using the scooter solo without a saddle.



3 Speed adjustment - Propeller pitch assembly

Additionally, it is possible to easily vary the propellers angle or pitch, which allows for even more fine-tuning of the scooters speed to the individual diver's needs.

Pitch 1 – Fastest

Pitch 2 – Fast (lower Battery consumption)

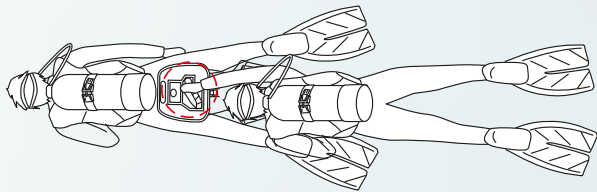
Pitch 3 – Medium (lowest battery consumption)

Please see following page for different riding styles

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AV-2 ADVANCED OPERATIONS

Tandem 2 - Person Ride

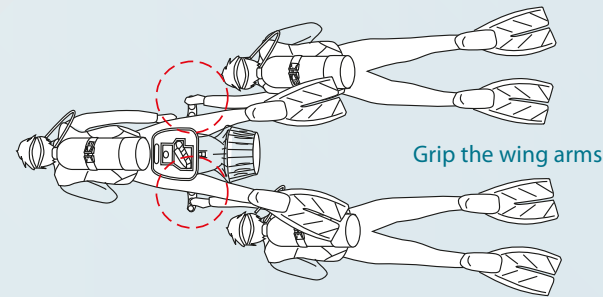


Hold of the grip located on the backside of the scooter

The pilot diver boards the scooter at the regular position. The guest diver takes hold of the grip located on the backside of the scooter.

In doing so, it is not necessary to hold on tightly. It is enough to hook on a few fingers. If the guest diver holds the grip too tightly, he will constrain the movement of the scooter, making it difficult for the pilot to steer.

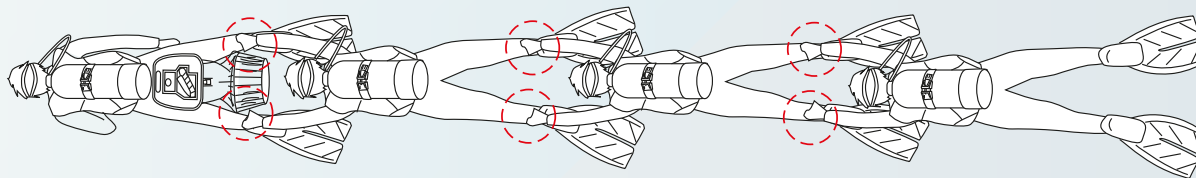
Tandem 3 - Person Ride



The pilot diver boards the scooter at the regular position. The two guest divers open and grip the wing arms of the saddle. The guest divers should position themselves underneath and horizontal to the pilot diver.

This will stabilize the overall movement. As for left and right positioning, the guest divers should try to stay in the water current created by the pilot diver. Such positioning will keep the propulsion resistance from increasing drastically, allowing for faster travel.

Train (riding with four or more persons)



Hold both ankles of the front diver

Four or more persons can ride together by linking up vertically like a train. The pilot diver starts the scooter at low speed. The first guest diver takes hold of the pilot diver's ankles. As soon as the first guest diver attaches oneself, the pilot diver increases the speed to stabilize the overall balance.

When the pilot diver pulls the accelerator, the scooter will not speed up right away.

While waiting for the speed to increase, the third and fourth divers take hold of ankles of the diver in front of them. The scooter has enough power to pull five to six persons, but having that many will make certain maneuvers such as turning difficult. It will obviously slow the speed down, and making sharp turns will be impossible.

Riding with many divers should be seen not as a mode of transportation, but as a form of recreation.

AV-2 SPECIFICATIONS

AV-2 SCOOTER SPECIFICATIONS	
Continuous Cruising Time:	110 minutes
Average Cruising Range [3kms/h]	9.6 kms
Speed maximum [km/h]	0 - 4.5 km/h
Shock-resistant ABS resin body	
Motor:	DC brushless
Three speed variable pitch propeller	
Progressive acceleration system and rotational speed adjustment function allows precise changes to speed while in motion	
Thermal switch protection automatically switches off if overheating occurs	
L.E.D. battery life indicator on bulkhead	
On the surface / neutral buoyancy underwater	20 KGs
Dimensions	720 x 340 mm
Body material	ABS Resin body
Depth rated	to 70 mtrs
Normal Capacity	27Ah/ (DC 29.2V)

BATTERY & CHARGER SPECIFICATION	
BATTERY TYPE	Lithium Ion Battery Can be re-charged approximately 2000 times. Can be used continuously.
Nominal voltage [V]	25.2
Nominal capacity[Ah]	27
Nominal wattage [W]	680
Weight [kg]	9.64
CHARGER	(AV-2 Li-ion Battery)
Output [Amps]	6
Charge time [hrs]	6-8
Input voltage	AC 90~264V 50/60Hz
Output voltage	DC 29.2V

L.E.D. battery life indicator

The AV-2 has a L.E.D battery life indicator on the top cover that allows the diver to easily see the remaining battery life. When the battery is full all three colours light up. Only the red light shows when the battery is empty. The L.E.D indicator should be used as a guide only.



Optional military packaging available

The perfect protection for your scooter

Built-in wheels make this case ideal for travelling
Watertight, tough HPX resin
Press and pull latches
Custom cut foam insert perfectly cradles scooter
Automatic pressure release

Exterior Dimensions
(LxWxH): 795 x 518 x 393mm
Interior Dimensions
(LxWxH): 737 x 457 x 349mm



Li ion Battery

E-HUB (Enhanced Propellor HUB)

Newly developed propeller HUB incorporates:

- Enhanced (zero Maintenance Bearings)
- Lightweight Alloy parts where necessary
- Resulting in efficiency gains due to less bearing drag





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NORTHERN DIVER

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