

SKIN DIVER MAGAZINE

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Bestseller
Series

U/W VIDEOS

THE
DELUXE

PRO-PAK6

EQUINOX'S ANSWER TO THE IDEAL VIDEO HOUSING



The Pro-Pak 6 underwater video housing is made of schedule 80 PVC tubing. It is designed to stand securely on a dive boat deck.

TEXT AND PHOTOGRAPHY BY JACK AND SUE DRAFAHL

Our story begins with two tool and die makers, Tom Mansfield and Doug Whaley, who were interested in using their new video camera underwater. They felt they needed a change from just shooting 35mm cameras, so they went in search of the ideal underwater video housing. They checked the features of all the housings on the market but couldn't find any with all the features they desired. They were also dismayed by the prices. The initial price sounded great, but when they added the options they needed, they were "sticker shocked!" In the fall of 1987, Tom and Doug set out to make their own underwater video housing and Equinox was born.

The men had certain criteria in mind when they designed this new underwater video housing. It had to feel right underwater, take sharp videos and look great above water. They wanted to include all the options needed as standard equipment. They had a tough task ahead of

them, but they did it! The Deluxe Pro-Pak 6 underwater video housing is Equinox's answer to the demanding diving industry.

CONSTRUCTION

One of the quandaries Tom and Doug faced was how to design housings to accommodate more than 120 types of video cameras. Equinox's solution was to use four different diameters of housings and modify each slightly to accommodate a specific camera. For example, the Sony CCD-V9 and V11 cameras fit into the same six inch housing; only the camera control positions are different.

Schedule 80 PVC (polyvinylchloride) tubing with a rating of 280 psi is used in all the standard Equinox housings. This high impact material allows for precise machining of all sealing surfaces. In addition, this material resists fogging. Fogging occurs with aluminum housings when the temperature of the high humidity surface air inside the tube drops below

its dew point because of the coolness of the water outside the housing. The cylindrical PVC tube can accommodate a variety of cameras with simple adjustments of the width of the mounting tray and the location of the control knobs.

Special three-quarter inch wings are attached to the housing using a dovetail rail and aircraft quick-release pins for easy removal and storage. These wings act as stabilizers that cancel side to side camera movement as the diver swims. They also reduce diver fatigue by allowing the hands to be placed in a more natural position.

Tom and Doug wanted to make the ballast look as if it were part of the housing. They built the ballast into the two black buoyancy handles and feet, which are plastic coated for comfort and good looks. These feet also help keep the housing from rolling around on the deck of a pitching boat.

There are three basic camera controls on the top and right side of the housing. Each control uses both O-ring and X-ring seals to ensure watertight security. The power on/off and zoom controls are on

COMPARISON OF EQUINOX DELUXE PRO-PAK SERIES VIDEO HOUSINGS

Model	Cameras Accommodated	Price	Depth Rating	Length	Diameter	Weight	Controls	Materials	Lens	Color Filter
Deluxe Pro 12	Sony EDC-50 Panasonic 3000 Other prof. cameras	Call	200'	20-22"	12"	94-105 lbs.	Custom	PVC, optional aluminum, stainless steel	As required	UR Pro
Deluxe Pro-Pak 10	Sony CCD-V110, V220 Panasonic AG 350, 400, 500	\$1,050	200'	20-22"	10"	64-70 lbs.	Power Zoom Start/stop	PVC, cast acrylic stainless	As required	UR Pro
Deluxe Pro Hi 8	Sony CCD-V99 Canon AI Ricoh R800H Kyocera KD-H130	\$895	200'	15-17"	8"	29-34 lbs.	Power Zoom Start/stop	PVC, cast acrylic stainless	.50x high resolution wide angle	UR Pro
Deluxe Pro-Pak 8	Sony CCD-V3, V5 Olympus VX-801, 802, 803 Minolta 8-8100, 3000 Kyocera KD-3010, 3030 Mitsubishi HS-C30U JVC GR-C25, S55	\$895	200'	15-17"	8"	27-34 lbs.	Power Zoom Start/stop	PVC, cast acrylic stainless	.42x high resolution wide angle, macro	UR Pro
Deluxe Pro-Pak 6	Sony CCD-V9, V11 F-30, 35, 40, 50 & 70 JVC GR-C55 Ricoh R-600, 610, 620 & 630 Panasonic PV-110, 150 Canon E70, 77	\$795	200'	16-17"	6"	21-23 lbs.	Power Zoom Start/stop	PVC, cast acrylic stainless	.42x high resolution wide angle, macro	UR Pro

the top of the housing and require small, gentle movements to operate. The start/stop control is next to the right wing. A slight forward pressure on it activates the camera.

The two endplates are made of one inch clear cast acrylic and are sealed with large O-rings. They are clear so you can see the indicator lights on the camera. Four stainless steel catch and strike clamps hold each end plate in position and form a high integrity seal. Each strike and clamp has a special lock that prevents accidental release.

The front port is the industry standard Ikelite dome that fully corrects for wide angle photography. The black dome port shade prevents flare and also allows the housing to be set on its front end without damaging the port.

PVC has one drawback; it is available in a limited selection of colors. Tom and Doug wanted their new housings to look great, so they devised a five coat paint process that is not only attractive, but holds up well in the worst of conditions. They chose their colors from the charts of famous sport cars—three colors from the Porsche chart, two from the Corvette.

Since optics are so important in obtaining great, colorful footage, an optical glass, four element, high resolution wide angle lens is standard. Since a UR Pro filter helps put the color back into U/W video footage, it is also a standard feature on most camera models.

Each Equinox housing also comes with a video instruction tape that tells the new owner everything he/she needs to know about camera installation, maintenance, focusing, etc.

CAMERA INSTALLATION

To install the camera—in this case a Ricoh R-630—in the housing, first attach it to the stainless steel mounting plate using the 1/4-20 bolt supplied. Attach the high resolution .42x wide angle adapter and the UR Pro color correction filter to the front of the camera. Remove the backplate of the housing, pull out all the controls and slide the camera tray and camera into the housing until the front edge aligns with two registration bolts attached to the walls of the housing.

Finally, secure the back of the camera tray to the housing walls using two small thumb screws supplied. Reattach the

housing backplate, making sure the indexing mark is toward the top of the housing. To remove the camera, just reverse the process. There is extra room behind the camera so that batteries can be changed without removing it from the housing or so an LCD color monitor can be added.

TRANSPORTATION OF HOUSING

When transporting the Equinox housing from one location to the next, simply press the button on the top of the aircraft pin and pull. Next, slide the wing and handle off the dovetail rail and store it separately. Remove the other wing in the same manner. If a drastic change in altitude is anticipated, Equinox recommends the removal of one O-ring, so a vacuum cannot be created. Remember to replace the O-ring before the next dive. After the housing is broken down it can be stored in a gym bag.

The Equinox Deluxe Pro-Pak 6 underwater video housing is a product designed by divers for divers. Tom and Doug's goal of reducing "sticker shock," while still providing a superior product, has become a reality. >

KEY FEATURES

- Unit breaks down for easy cleaning, storage and transport
- All options needed for professional results are standard equipment
- Five brilliant colors available
- Near neutral buoyancy with handle designed for comfort and control
- High quality optics
- Spare parts kit included



Above: The Equinox U/W video housing, Ricoh R-630 camcorder, wide angle adapter and UR Pro color correction filter.

ACCESSORIES

- AquaLights (100 watts)\$795.00
- Underwater microphone.....\$ 89.00
- Sony monitor\$550.00
- Casio monitor\$295.00
- Carrying straps (nylon webbing, velvet and velcro).....6"-\$ 29.95
8"-\$ 35.95
10/12"-\$ 45.95
- Extra controls\$50.00
- Diver Alert System (100 watt amplifier, power supply, waterproof cable and hydrophone)\$1,595.00