

SIDEMOUNT COURSE EQUIPMENT LIST

PAGE 1

SIDEMOUNT SYSTEM

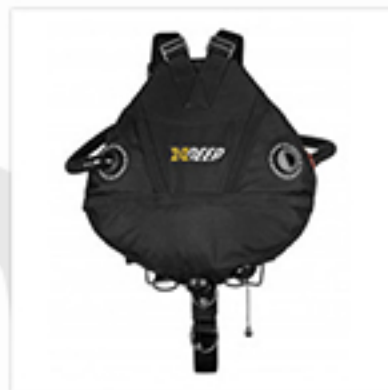
A low-profile, adjustable, environmentally appropriate sidemount system is essential.

Required features include:

- ☐ Must be sidemount specific.
- ☐ 2 low-profile d-rings on each hip **or** sliding d-rings
- ☐ Butt pouch for storing accessories
- ☐ Rear attachment points for clipping the pouch
- ☐ Butt d-ring & scooter d-ring
- ☐ Continuous or loop bungee upper cylinder attachments points
- ☐ Triangular/diamond shaped wing that can be raised and lowered on the harness without changing the fit of the harness.
- ☐ Minimum of 13L /28 lbs of lift.
- ☐ The sides of the wing should wrap around the diver's torso through the use of a bungee, and not be sewn inflexibly into the harness webbing.
- ☐ Only one chest d-ring on each side, the chest rings must be able to be raised or lowered. No sewn in d-rings or attachment points.
- ☐ Side or butt deflation valves only, no over the shoulder pull strings.

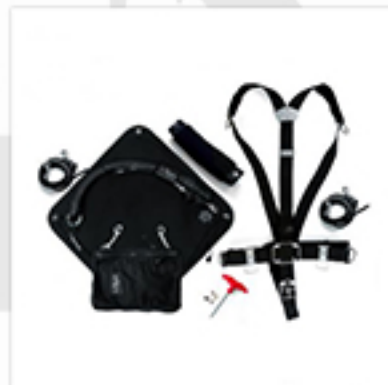
X-DEEP STEALTH

The X-DEEP STEALTH with a rec or tec wing. Classic wings are not acceptable, pouches must be purchased separately.



RAZOR SIDEMOUNT

The COMPLETE RAZOR SIDEMOUNT SYSTEM should be purchased, as it includes a safety pouch.



PRE-APPROVED SYSTEMS

* Other systems meeting these qualifications are usually accepted upon consideration. Consult your instructor before purchasing other systems.

SIDEMOUNT SAFETY & ACCESSORY POUCH



The sidemount pouch clips to the harness rear attachment points, and sits under any accessories on the butt d-ring. The pouch should have several compartments/attachment points to allow for the separation of accessories. A typical sidemount cave diver's pouch contains: back-up mask, back-up light, safety spool, line cutter, spare bungee, spare double ender clip, spare mouthpiece, zip ties, and wetnotes.

SIDEMOUNT COURSE EQUIPMENT LIST

PAGE 2

UNDER
THE
JUNGLE



1.



2.

Pre-approved regulator first stages.

- ☐ 1. Atomic
- ☐ 2. Apex XTX50 with 5th port adaptor
- ☐ 3. Deep Six Signature or DGX Version
- ☐ 4. ScubaPro MK25

* Similar first stages with the required features are permissible. Check with your instructor before purchase.

REGULATOR FIRST STAGES

Regulators must be a matched set, and should have the following characteristics. *Rental regulators are available.*

- ☐ 1. Swiveling turret with 5 low pressure ports.
- ☐ 2. High pressure ports on opposing sides of the first stage body
- ☐ 3. DIN connection only, 300 bar connection is preferable.



3.



4.

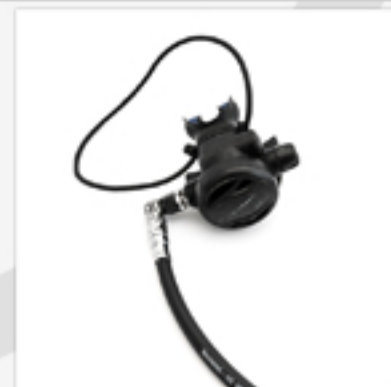
REGULATOR SECOND STAGES

Most commercially available second stages are appropriate. Hose protectors should be removed. All hoses, clips, and adaptors are available for purchase at Under the Jungle.

- ☐ 1. The right-side regulator second stage should be attached to the first stage swiveling turret via a 7 ft / 210 cm rubber long hose. Myflex hoses are not advisable for long hoses. A small stainless steel bolt snap should be attached to the long hose with a breakaway connection within 1-3 inches of the second stage. Breakaway connectors may be commercially available, but zip-ties also work! No angled adaptors or swivels should be used on the long hose.



- ☐ 2. The left-side regulator second stage should be attached to the first stage swiveling turret via an appropriate length rubber hose. Standard length is 24 in / 60 cm, but this varies with diver. A variety of hose lengths are available to test-dive at the shop. The hose should connect to the second stage with a fixed 90 degree adaptor, and the second stage should be attached to permanently to a bungee necklace. No silicon necklaces.



SIDEMOUNT COURSE EQUIPMENT LIST

PAGE 3

REGULATOR HOSE CONFIGURATION

LEFT SIDE

Positioning the DIN threading away from the diver and the swiveling turret to the right (as it will be during the dive):

- Depending on diver preference, the LPI hose for either the wing or drysuit (drysuit configuration) is attached to the 5th port of the turret. Inflation hoses lengths typically range from 4-9 in.
- The SPG is attached to a 6 or 9 inch rubber hose on the lower HP port.
- The short hose is attached to a port on the side of the swiveling turret.



RIGHT SIDE

Positioning the DIN threading away from the diver and the swiveling turret to the left:

- In drysuit configuration, the LPI hose for either the wing or drysuit is attached to the 5th port of the swiveling turret. If a wetsuit is used, no LPI hose is needed on the right regulator.
- The SPG is attached to the lower HP port.
- The long hose is attached to a port on the side of the swiveling turret. Rubber long hoses are strongly preferred.

**Hose lengths must be fit to the diver, hoses are available for trial and purchase at the shop*



ALTERNATE CONFIGURATION USING TRANSMITTERS



SIDEMOUNT COURSE EQUIPMENT LIST

PAGE 4

HOSE RETAINERS



Divers will need a minimum of 3 hose retainers. Retainers may be rubber, EPDM, elastic or silicon, with or without tabs per diver preference. Hose retainers are available for purchase at Under the Jungle.

TANK HARDWARE

Mounting hardware is included with the use of sidemount tanks. Technical sidemount requires stainless steel hose clamps and bolt snaps, cam bands are not permitted. Bolt snaps must be connected using paracord or kernmantle line, no metal to metal connections. Should divers choose to purchase their own, hardware is available for



SPARE HARDWARE AND PARTS

Technical sidemount divers carry spare hardware and replacement parts to manage hardware failures. Each student must have:

- ☐ spare double ender clip
- ☐ spare continuous bungee **or** neck leash on a bolt snap (if using loop bungees)
- ☐ spare regulator mouthpiece and zip tie



OPTIONAL SPARES



Depending upon the environment and type of dive, some sidemount divers may choose to carry additional tools in the safety pouch. Most items are available for purchase at the shop. Examples include:

- ☐ multitools
- ☐ spare hose retainer
- ☐ backup wing mouthpiece (Razor)
- ☐ zipties

SIDEMOUNT COURSE EQUIPMENT LIST

PAGE 5



DIVE COMPUTERS AND COMPASS

Each diver should have two methods of monitoring dive parameters. *Under the Jungle* sells Shearwater computers but requires advanced notification of purchase.

- ☐ Backlit computers are preferable.
- ☐ Transmitters are allowed.
- ☐ Shearwater products are recommended.
- ☐ Each diver should have an analog or electronic compass (integrated into the computer is fine).

EXPOSURE/SUITS

While the cenotes are relatively warm, long dive times tend to cause divers to get colder than they expect. *Under the Jungle* rents 5mm wetsuits and hooded vests.

- ☐ A minimum of a 5mm wetsuit is recommended. Most divers are more comfortable with a 7mm wetsuit or a semi-dry suit.
- ☐ If you dive dry back home, bring your drysuit with a thin undergarment. You'll be more comfortable.
- ☐ Drysuits are also a nice form of redundant buoyancy.
- ☐ Hoods are recommended.



FINS

Open heel, blade fins are required. Split fins and full-foot fins are not allowed. Wetsuit divers will prefer a lighter fin, such as Mares Avanti Quattros or DiveRite XTs (shown) while divers in drysuits may consider heavier fins, such as ScubaPro Jet Fins. A variety of fins are available to test or rent at the shop.



MASKS

Each diver should carry a primary and a back up mask. Back up masks are stored in the safety pouch. Low profile or framless mask models are preferred. Be sure to thoroughly defog new masks.



DGX Untraview
Frameless Mask

REQUIRED FOR CAVE AND CAVERN COURSES

PRIMARY LIGHT

** Primary lights are available for rent, demo, or purchase at Under the Jungle.*

All primary lights should have the follow features:

- ☐ Tight/focused beam angle, $\pm 10^\circ$ angle beam.
- ☐ Burn time of 4 hours minimum or spare battery for replacement between dives.
- ☐ Minimum of 1200 lumens output.
- ☐ A hand mount is required. If the diver elects to use a sidemount helmet (recommended) the light should come cleanly off the hand mount with a single motion. If no helmet is used, either a goodman handle or a glove from which the light may be removed are acceptable.

Features to consider:

- ☐ Lights may be canister lights, such as the Light Monkey 12W LED or they may be handheld, such as the Big Blue TL4800P handheld light.
- ☐ Canister lights should have a 90° angle on the cable where it exits the canister to reduce wear on the cable. When the canister is butt-mounted, the cable should be long enough to run to the diver's fully outstretched arm.
- ☐ Both canister and handheld lights must have a bolt snap permanently attached, or a method of attaching a double-ender clip to the light head.
- ☐ Many modern dive lights have LEDs that indicate the percentage of burn time remaining.
- ☐ Lights that can be stepped down to a lower output are often advantageous on long dives.



Big Blue TL4800P



Big Blue TL3500
Supreme



Light Monkey 12 W Sidemount Version

SIDEMOUNT COURSE EQUIPMENT LIST

PAGE 7

REQUIRED FOR CAVE AND CAVERN COURSES



PRIMARY LIGHT HANDLES

Primary lights must have a handle. *Razor hand mounts are available for rental or purchase at Under the Jungle.*

- ☐ The primary light must be able to be removed from the hand in a single, smooth motion.
- ☐ The Razor hand mount (top) features c-shaped adaptor that snaps into the glove or onto the helmet with a simple twist. This is recommended for divers using helmets.
- ☐ Goodman handles (lower) are a traditional light handle, and are appropriate only for divers who do not use a helmet.

Divers should have at least 2 back up lights. *Back up lights are available for rental or purchase at Under the Jungle.*

- ☐ Back up lights should have a minimum of 2 hours burn time.
- ☐ Lights must have a focused, tight beam of $\pm 10^\circ$ for signalling
- ☐ Back up lights may use rechargeable or non-rechargeable batteries. If selecting lights that use non-rechargeable batteries, be sure to consider the availability of replacement batteries in remote locations.
- ☐ Preference is for smaller, lighter back ups, those that use C-batteries are antiquated and bulky.
- ☐ A small bolt snap should be permanently attached to each back up light.
- ☐ Divers using helmets will attach one light to the right side of the helmet in a way that it may be quickly removed, and will store the other light in the safety pouch. Divers without helmets will store all lights in the safety pouch or thigh pockets. Under no circumstances should back up lights be attached to the harness straps.

BACK UP LIGHTS



The Big Blue NP1100-II features rechargeable batteries, adjustable power, and a push button switch with a charge indicator.



The Big Blue AL250 uses AA batteries, twists on by rotating the light head, and may be used outside of the water without overheating.

SIDEMOUNT COURSE EQUIPMENT LIST

PAGE 8

REQUIRED FOR CAVE AND CAVERN COURSES



HELMET (OPTIONAL)

Helmets are optional, but recommended. Contrary to popular belief, a sidemount helmet's primary use is NOT to protect the diver's head, but as a temporary location to hold lights while writing or performing a two-handed task such as restowing the long hose. If a helmet is not used, a hood is required. *Helmets are available for rental or purchase at Under the Jungle.*

- ☐ Helmets should fit snugly but comfortably over the diver's hood and mask strap.
- ☐ Helmets must have vents to avoid trapping air.
- ☐ No foam or positively-buoyant padding should be present.
- ☐ Back up lights may be attached to the right side of the helmet using bungee or a commercially available method that allows them to be removed.
- ☐ A primary light mounts may be attached on the left side of the helmet. It must allow the light to be removed with one hand. Our recommendation is the Razor helmet mounting plate.

HELMET MOUNTS FOR PRIMARY LIGHTS



Primary light mounts allow the light to be temporarily stowed on the helmet. *Razor primary light mounts are available for purchase at Under the Jungle.*

- ☐ The Razor helmet mount (left) is flat when the light is not attached, and allows the light to be angled when stowed on the helmet. It works with nearly all primary lights, and is the preferred option.
- ☐ A C-clip style helmet mount, such as the Light Monkey mount (right) is specific to the light model, and also acceptable.

CUTTING DEVICES

Divers must carry two cutting devices. Trauma shears and large knives are not allowed. *Eezy Cut line cutters are available at Under the Jungle.*

- ☐ The DIR style knife (left) or Eezy Cut line cutter (right) are appropriate types of cutting devices.
- ☐ Cutters may be store on the harness, in the safety pouch, on a computer strap, or even on a light handle.



SIDEMOUNT COURSE EQUIPMENT LIST

PAGE 9

REQUIRED FOR CAVE AND CAVERN COURSES

PERSONAL MARKERS AND MARKER HOLDER

A minimum of 3 personal markers is required to start overhead training, by full cave more will be required. *Markers/holders are available for purchase at Under the Jungle.*

- ☐ It's preferable to wait until a discussion of the merits of each marker type during the course to purchase your markers.
- ☐ Markers must be visually and tactilely marked.
- ☐ Marker holders are available at Under the Jungle

WRITING TOOLS

Divers should carry a wrist slate, wetnotes, or both. *Wrist slates and wetnotes are available for purchase at Under the Jungle.*



REELS AND SPOOLS



Each diver is required to have 2 safety spools. *Spools and reels are available for purchase at Under the Jungle.*

- ☐ Safety spools must be at least 125 ft long, white #24 braided line is preferred.
- ☐ Primary reels must be of the sidewinder variety, with a closed handle on the side, such as the Divesoft Reel above. Colored line is preferred.
- ☐ Jump spools can be any size. Colored line is preferred.

SIDEMOUNT COURSE EQUIPMENT LIST

PAGE 10

CHECKLIST

SIDEMOUNT

- ☐ SIDEMOUNT SYSTEM INCLUDING POUCH*+
- ☐ REGULATORS PROPERLY CONFIGURED +
- ☐ SPARE BUNGEE ATTACHMENT*
- ☐ SPARE DOUBLE ENDER CLIP*
- ☐ SPARE MOUTHPIECE*
- ☐ ZIPTIES
- ☐ PRIMARY MASK*+
- ☐ BACK UP MASK*+
- ☐ COMPUTERS +
- ☐ COMPASS *+
- ☐ CUTTING TOOL *
- ☐ WETSUIT+ OR DRYSUIT
- ☐ BOOTIES (IF NEEDED) +
- ☐ HOOD +
- ☐ FINS +
- ☐ 3 HOSE RETAINERS *

CAVERN AND INTRO TO CAVE

- ☐ PRIMARY LIGHT WITH HANDLE *+
- ☐ 2 BACK UP LIGHTS *+
- ☐ HELMET (OPTIONAL) WITH LIGHT MOUNT *+
- ☐ WETNOTES/ SLATE/ OR BOTH *+
- ☐ 2 LINE CUTTING DEVICES *
- ☐ 2 SAFETY SPOOLS *+
- ☐ PRIMARY REEL (OPTIONAL) *+
- ☐ PERSONAL MARKERS (3) AND HOLDER +

FULL CAVE

- ☐ JUMP SPOOLS *+
- ☐ ADDITIONAL PERSONAL MARKERS *

AN (*) INDICATES THAT THE ITEM IS AVAILABLE FOR PURCHASE AT UNDER THE JUNGLE.
A (+) INDICATES THAT THE ITEM IS AVAILABLE FOR RENT AT UNDER THE JUNGLE.