













The Synergy Divervision-1D is a reliable, economical underwater video system, recording on a primary mini dvr with 32gb sd card and a secondary 1TB hard drive for storage /playback. A Usb port is provided to copy data on any drive. Video on/off and led light dimming control, along with port for connecting audio cable from diver radio, enabling integration of audio to the video files when recording dives. A Hdmi out port is provided for connection to client room / bridge etc (remote location access through hdmi cable). A two diver amron radio is inbuilt for diver audio with cable provided for connection to video surface control unit.

15" TFT anti glare monitor provides crisp images for live video & playback, supplied with Outland Uwc-325/p/e camera and Uwl-401 light unit providing high quality pictures. The surface control unit is provided with a video typewriter (edit,

playback, time/date, titles, comments can be superimposed on the dive videos being recorded).

A combined voltmeter / ampmeter with digital display is provided for user to know the incoming power at all times during operation of the system

The system is built to run on 220v ac power with adaptor or 12v battery power (from standard car battery). All the fittings for power video/light/comms are provided on the left side of the system, for hassle free connections, eliminating any cables running in front of the screen or interfering with the functions of the video system.

















| Specifications        | Single diver video system with communication                             |
|-----------------------|--|
| Built in Pelican Case | The 1600 case has the following certificates: IP67 (Ingress Protection)  |
|                       | = 1-meter submersion for 30 minutes, MIL C-4150J (Military Standard      |
|                       | Defense Standard 81-41/STANAG4280 and ATA 300 specifications for         |
|                       | transit cases. Unbreakable, watertight, airtight, chemical-resistant,    |
|                       | corrosion, and dustproof case  |
| Dimensions            |  |
| Interior              | 21.4 x 16.5 x 7.9" / 54.4 x 41.9 x 20.1 cm                               |
| Exterior              | 24.3 x 19.4 x 8.7" / 61.7 x 49.3 x 22.1 cm                               |
| Colors                | Orange, Yellow, Grey, Black  |
| Monitor               | 15.5" TFT with remote built into lid of panel with 4 screen splitter     |
| Primary recording     | Mini Dvr with 32gb sd card   |
|                       | (can be upgraded to 128gb)   |
| Secondary recording   | 1TB backup hard drive records all diver video files                      |
| Surface Control Unit  | Patented synergy / outland with video /light controls, usb interface for |
|                       | keyboard / video titler inbuilt  |
| Connections           |  |
| Ac                    | 220 V adapter to 12v provided  |
| Dc                    | Battery terminals with leads (for standard car battery 12v,75            |
|                       | amps to be connected)  |
| Power meter           | Digital power meter to show remaining battery life                       |
| Keyboard              | Flexible waterproof with usb connection                                  |
| Mouse                 | Wireless mouse   |
| Protection            | Monitor plexiglass cover (to protect monitor damage)                     |
| USB out               | For easy copying of files to usb drives/ laptop etc                      |
| HDMI out              | For mirror images to be displayed in client room/bridge etc              |
| On/Off                | Main on /off switch  |
| Communication         | Two diver amron radio # 2820A-11   |
| Maximum Weight        | 14 kgs   |
| Warranty              | One year international manufacturer warranty                             |
| -                     |  |
| Cautifications        | Described with a selection   |

| Certifications | Provided with each system |
|----------------|---------------------------|
| International  | IMCA D023                 |
| Manufacturer   | Synergy Certificates      |
| Electrical     | Continuity/Function test  |

| ORDERING INFORMATION |  |
|----------------------|--|
| SY-DIVER-VISION-1D-R | PORTABLE SINGLE DIVER VIDEO SYSTEMS WITH COMMUNICATION |

















# AMCOM II Two-Diver Rechargeable Basic Portable Communicator with Outdoor **Power Module and International Locking Power Cord**





PART NO: SY-2820A-11

#### **NEWLY DESIGNED ENHANCEMENTS:**

## High Audio Fidelity

Ultra-low noise circuit combined with noise suppression circuitry produces crystal clear speech. Automatic gain adjustment will guard audio signal from distortion, enhance speaker protection and audio quality. Increases band width 47%.

# Extended Battery Operation Time

Audio amplifier card deploys the state-of-the-art Class-D digital audio power amplifier. Has very low power dissipation, produces less heat, and extends battery life up to 32%.

## Flexible Gain Settings

The audio amplifier card has adjustable gain settings to accommodate different communication applications and environments.

## Ultra-Low Electromagnetic Interference (EMI)

EMI is achieved through spread-spectrum and de-phase control techniques providing for optimum integration with diving systems.

## Outdoor Rated AC Power Module

Weather resistant, IP65 rated AC power entry module accommodates country specific AC power cords.

## **Country Specific V-Lock AC Power Cord**

At time of order, simply choose the IP54 rated Locking AC power cord you need.

















#### **FEATURES:**

Single volume control for both divers.

Diver's umbilicals can be set up on 4-wire mode (full duplex) or 2-wire mode (push-to-talk) or any combination of the two modes for each diver.

Ability to use both dynamic and pre-amplified diver microphones with a unique circuit that detects microphone type and automatically adjusts volume levels.

The divers' connections consist of cross-talk and separate speaker and microphone inputs.

- Internal charger allows for simultaneous charging and operation of the unit while protecting the rechargeable battery from being over-charged. Automatically supplies power to the audio amplifier when AC power is disconnected to allow for continued operation.
- See **Tech Note** (below) for recommended accessories.

#### SPECIFICATIONS:

- Input Impedance (Each Input): 250 Ohms
- Frequency Response: 300 10000 Hz
- Common Mode Rejection: 40 dB Minimum
- Current Drain Maximum Full Volume: 3 Amps
- Minimum Quiescent: 0.190 Amps
- Output Impedance: 4 Ohm
- Power Supply Voltage: 12 VDC Nominal (9 Volts Minimum 16 Volts Maximum)
- AC Power Operating Range: 90-264 VAC, 50-60 Hz
- Sensitivity (Input): 0.5 mV
- Output Power (RMS @ 4 Ohm Load, 12 VDC): 10 Watts Audio
- Battery Life: 45 hours
- Dimensions: 10 in. H x 9 in. W x 14.5 in. L (25.4 cm x 22.9 cm x 36.8 cm)
- Weight: 16.25 Lbs. (7.37 Kg)

#### INCLUDED WITH COMMUNICATOR:

AMCOM II 2820A-11 Two-Diver Rechargeable Basic Portable Communicator with Outdoor Power Module and International Locking Power Cord includes:

- (1) Amron 2890-05 12 VDC Sealed Lead Acid Gel-Cell Rechargeable Battery with Slide terminals
- (1) Amron 282XA-UM Two Diver Portable Communicator User Manual

#### **AVAILABLE OPTIONS:**

- Amron 2460SM-28 Single Muff Operator Headset with Boom Mic and Dual Banana Plugs
- Amron 2405-28 Hand-Held Push-to-Talk Microphone
- Amron 2401-28 Deluxe Headset with Boom Mic
- Amron 2460-28 Standard Headset with Boom Mic
- Amron 2822-28 Remote Walk-and-Talk (4-wire mode)
- Amron 2821-28 Remote Walk-and-Talk (2-wire mode)

## **TECH NOTE:**

All communicators will inherently transfer topside noise to the divers when the tender speaks directly into the communicator's panel speaker. To eliminate background noise at the surface, we recommend purchasing the 2405-28 Push-to-Talk Microphone (not included with this model). For optimum communications, it is recommended to use the 2401-28 Deluxe Headset with Boom Mic, topside. For tender maneuverability, use the 2401-28 Deluxe Headset with Boom Mic along with the 2822-28 Remote Walkand-Talk (4-wire mode) or the 2821-28 Remote Walk-and-Talk (2-wire mode). For wireless tender communications, order the 2825A-03 Two Diver Deluxe Portable Communicator with built-in Wireless Tender option.

















| Mechanical    | Specification                    |
|---------------|----------------------------------|
| Weight        | 6 oz (.2kg) Dry, 3 oz(.06kg) wet |
| Depth Rating  | 2000 ft (600m)                   |
| Housing       | Black delrin                     |
| Electrical    |                                  |
| Image Device  | 1/3" CCD sensor (412k pixel)     |
| Sensitivity   | .001 lux @f1.4                   |
| Resolution    | 600 TV lines standard            |
| Video Out     | 1.2 Vpp                          |
| Power         | 12 VDC @ 110 ma.                 |
| Optical       |                                  |
| Lens          | 3.6mm, Electronic-Iris           |
| Focus         | Fixed 4" to infinity             |
| Angle of View | 70 horz. (in water)              |



PART NO: SY-UWC-325/p/e



PART NO: SY-UWL-401

| Mechanical    | Specification                    |
|---------------|----------------------------------|
| Weight        | 7oz)0.2kg) Dry, 3 oz.(.1kg) Wet  |
| Depth Rating  | 2000 ft (600m)                   |
| Housing       | 6061-16 Anodized Aluminium       |
| Electrical    | N                                |
| Power         | 12 VDC @ 110 ma.                 |
| Wattage       | 18 watt (Eq to 150 watt halogen) |
| Output        | 700 lux at 1 meter               |
| Optical       |                                  |
| Lens          | 3.6mm, Electronic-Iris           |
| Focus         | Fixed 4" to infinity             |
| Angle of View | 70 horz. (in water)              |

| Mechanical        | Specification                  |
|-------------------|--------------------------------|
| Conductors        | 16ea #22 awg 1 RG-59 Coax      |
| Length (mtrs)     | 100/150/200 as per requirement |
| Diameter          | 8.5mm (0.35")                  |
| Materials         | Orange Polyurethane jacket     |
| Breaking Strength | 1200 lbs                       |
| End fittings      |                                |
| Diver End         | Moulded Y connection           |
| Camera            | Rmk-5-fs with locking sleeve   |
| Light             | Rmg-3-fs with locking sleeve   |
| Surface end       | Soldered connection            |
| Cable             | 8 pin amphenol connector       |



PART NO: SY-VC-150M (length)

PART NO: SY-VC-100M (length)













## SINGLE DIVER VIDEO SYSTEM WITH VT (SY-SDVS-01-VT)

| Connector              | RMK-5-FS                         |
|------------------------|----------------------------------|
| Type                   | 5 Female Sockets                 |
| Cable                  | 18 in Pigtail of 18 SO AWG Cable |
| Material               | Special Neoprene, Molded         |
| Contacts               | Copper Alloy, Hard Gold Plated   |
|                        | per ASTM-B-488                   |
| Voltage Rating         | 600 VDC                          |
| Pressure Rating, Mated | Up to 20,000 psi                 |
| Mates with             | XSL-5-BCL on Outland Camera      |
|                        | UWC-325/p/e                      |

PART NO: SY-RMK-5-FS



**PART NO: SY-RMG-3FS** 



| Connector              | RMG-3-FS                         |
|------------------------|----------------------------------|
| Type                   | 3 Female Sockets                 |
| Cable                  | 18 in Pigtail of 18 SO AWG Cable |
| Material               | Special Neoprene, Molded         |
| Contacts               | Copper Alloy, Hard Gold Plated   |
|                        | per ASTM-B-488                   |
| Voltage Rating         | 600 VDC                          |
| Pressure Rating, Mated | Up to 20,000 psi                 |
| Mates with             | XSG-3-BCL on Outland             |
|                        | light UWL-401                    |

| Certifications | Provided with each system |
|----------------|---------------------------|
| International  | IMCA D0 23                |
| Manufacturer   | Synergy Certificates      |
| Electrical     | Continuity/Function test  |



PART NO: SY-MS3108B-18-08P

Cannon Right Angle Amphenol Connector is used for connecting the video camera umbilical to the surface video console unit.













# Contact us

29th Street, Amman Road, Behind Al Huraiz Est. For Industry, Al Qusais, Industrial Area - 1,

Dubai, United Arab Emirates

: 009714 2580533

Fax: 042516664

UAE: 00971505648178

UK: 00447951966260

Website: www.synergyequipment.com

: ram@synergyequipment.com

For Sale: info@synergyequipment.com

