















Two Diver Portable Panel with Two Diver Radio and D1/D2 cctv system













Information	Two Diver Panel
Case	Model 1650, Black, Interior (28.57" L x 17.52" W x 10.65" H), with wheels and handle, water, rust
	and dust proof), Pelican USA
	<b>Exterior dimensions:</b> 80.14 x 52.1 x 31.67cm (31.55" x 20.51" x 12.47")
	<b>Interior dimensions:</b> 72.16 x 44.2 x 27.03cm (28.41" x 17.40" x 10.64")
	Weight without foam: 10.9kg (24.03lbs)

1 x 0-250 fsw/75 msw Depth gauge, 4.5", 0.25 % accuracy, mirror scale, with calibration point, Diver 1, Color coded White (2)

1 x 0-250 fsw/75 msw Depth gauge, 4.5", 0.25 % accuracy, mirror scale, with calibration point, Diver 2, Color coded

Air / Gas Supplies	HP 1 - Independent Line				
	HP 2 - Independent Line				
	LP - Independent Line				
Regulator	Tescom 26-1100 series Brass Mini High pressure regulator				
Relief valves	0-250 psi on regulated diver supply line, 100 psi on pneumo gauges				
Air supply ports	All fittings provided behind the panel, with each line labelled. No hoses or connections				
	criss crossing the front of the panel.				
Analysis	Individual Oxygen analyzer with hi low alarm and flow meter per diver				
Calibration	Inbuilt calibration points for pneumo gauges				
Power supply	Works on 220v with 12v adapter, and on 12v battery, provided with digital				
	amp/voltmeter to check incoming supply				

# Optional:

Diver CCTV	Can be provided for Diver 1/Diver 2
Supervisor CCTV	Provided with panel (optional)
Monitor	TFT 15.5" (splitter will be provided if diver CCTV options are required)
Surface control unit	Video / light control
Primary recording	Mini DVR common with 125GB storage
Backup recording	1 TB backup hard drive to record all diver video simultaneously
USB Out	To retrieve data onto a USB memory drive from hard drives
HDMI Out	To mirror broadcast diving operations work via HDMI cable to remote monitor
Control Switches	Touch button switches with backlight for low visibility weather conditions
Light Control	Dimmer switch, knob type

















# SY-2820A-11 AMCOM II TWO-DIVER RECHARGEABLE BASIC PORTABLE COMMUNICATOR





#### **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.

















# SY-2820A-11 AMCOM II TWO-DIVER RECHARGEABLE BASIC PORTABLE COMMUNICATOR

#### **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:

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

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

#### **AVAILABLE OPTIONS:**

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

















# SYNERGY SURFACE DIVING HOSES AND UMBILICALS SY-AQUAFLOW

Known worldwide for its lightweight and ultra flexible construction, Aquaflow hoses are ideal for surface demand applications. Aquaflow kink resistant construction comprises of an extruded core tube, reinforcement of high strength yarn and a bonded outer cover. Both tube and cover are extruded from high performance thermoplastic polymers which are particularly clean and free from odors often associated with conventional rubber hoses. Coupled with the wide operating temperature range this ensures breathing gas quality is maintained under all conditions from -20°C to +66°C.







Part No.	Nominal Bore		0.	D.	Min.		Wor	U	Nom.		Weig ai		Weig sea w		Typical application
	in	mm	in	mm	in	mm	psi	bar	psi	bar	lb/ft	g/m	lb/ft	g/m	
SY-HDA0104	1/4	6.3	0.50	12.7	1.25	32	300	21	1200	84	0.078	116	-0.009	-14	Pnuemo
SY-HDA0106	3/8	9.5	0.66	16.8	2	50	500	35	2000	140	0.119	177	-0.034	-50	Air/Gas
SY-HDA1108	1/2	12.7	0.83	21.0	3	76	300	25	1200	84	0.178	265	-0.054	-80	Hot water

# **Aquaflow Umbilicals**

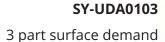


Lightweight, ultra flexible and kink resistant, Aquaflow Umbilicals are ideal for breathing gas supply, comms and pneumo service for surface demand umbilicals. They can be produced in production runs up to 740 meters long and can be over extruded or braided for additional protection against abrasion and use in contaminated waters.

The unique materials and cabled "rope-like" construction combine to produce the most flexible, controlled buoyancy umbilicals available today. The umbilicals have no need

for tape, the repairs are much reduced and they have a longer life. They keep the professional diver safer and more efficient both while diving and on deck. They will ultimately reduce costs for the operator. The highest quality materials, workmanship with competitive pricing and unmatched service to our clients worldwide. SYNERGY invites you to visit our website or contact us directly so that we can assist you with all your Diving Umbilical needs.

#### SYNERGY SURFACE DIVING HOSES AND UMBILICALS SY-AQUAFLOW







**SY-UDA0204** 3 part plus video















# **OUTLAND VIDEO CAMERA / LIGHTS / UMBILICALS**

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





Mechanical	Specification
Weight	7oz)0.2kg) Dry, 3 oz.(.1kg) Wet
Depth Rating	2000 ft (600m)
Housing	6061-16 Anodized Aluminium
Electrical	
Power	12 VDC @ 110 ma.
Wattage	18 watt (Eq to 150 watt halogen)
Output	700 lux at 1 meter

PART NO: SY-UWL-401

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







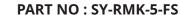






# SYNERGY PIGTAILS AND CONNECTORS

Connector	SY-RMK-5-FS
Туре	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	SY-XSL-5-BCL on Outland
	Camera SY-UWC-325/p/e





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



Locking sleeve for Rmk-5-fs **PART NO: SY-K-FLS-D** 

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

Locking sleeve for Rmg-3-fs

**PART NO: SY-G-FLS-D** 



PART NO: SY-MS3108B-18-08P

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





**PART NO: SY-CLBRK** 

SS camera and light bracket with jubilee clamp

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













# **CLASS WITNESS CERTIFICATES**



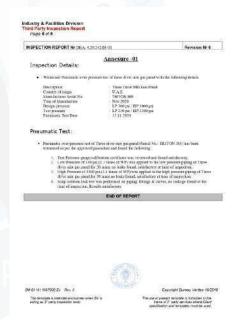












## Certifications

## Provided with each panel

Manufacturer	Synergy certification
International	IMCA D023
Class	Bureau Veritas pressure test certificates
Warranty	1 year international manufacturer warranty
Weight	68 kg













#### **ORDERING INFORMATION**

Sr.	Part Number	Description
1	SY-2DPD037	Portable two diver panel, offshore, imca (no radio, no diver cctv)
2	SY-2DPD037-R	Portable two diver panel, offshore, imca with radio (no diver cctv)
3	SY-2DPD037-R-1DV	Portable two diver panel, offshore, imca with radio and one diver cctv)
4	SY-2DPD037-R-2DV	Portable two diver panel, offshore, imca with radio and diver 1/diver 2 cctv

# **BESPOKE DESIGNS - ANY CONFIGURATION AS PER CLIENT REQUIREMENT**



















# 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

