













PART NUMBER: SY-2DAP-BP-D023-R-2DV

IMCA D023	DESIGN for Surface Oriented (Air) Diving Systems
IMCA D018	Code of Practice for The Initial and Periodic Examination,
	Testing and Certification of Diving Plant and Equipment















Information	Two Diver Panel
Case	Model 1780, Black, Interior (41.1" L × 21.5" W × 14.9" H), with wheels and handle, water, rust
	and dust proof), Pelican USA
	<b>Exterior dimensions:</b> 114 x 64.3 x 41.9 cm (44.9" × 25.3" × 16.5")
	<b>Interior dimensions:</b> 104.4 x 54.7 x 37.8 cm (41.1" × 21.5" × 14.9")
	Weight including panel: 65kg (167.5lbs)

Sr.	Description	
1	Marine grade aluminium, non-rust fascia in Matt grey finish (other colors available)	
2	All engraved lines with each valve/fitting/regulator clearly marked	
3	SS etched side plate for all the external fittings	

1 x 0-230 fsw/70 msw Depth gauge, 6", 0.25 % accuracy, mirror scale, with calibration point, Diver 1, Color coded

Blue

1 x 0-230 fsw/70 msw Depth gauge, 6", 0.25 % accuracy, mirror scale, with calibration point, Diver 3, Color coded

Air Supplies	HP - 2 independent supplies, one per diver, LP – 1 independent supplies, one per diver
Communication	Amron 2830A-11 Three diver radio with AC/DC power supply
Regulator	1 x per diver, suitable for breathing air, Inlet: 6000 psi, outlet: 400 psi
Relief valves	0-250 psi on regulated diver supply line, 100 psi on pneumo gauges

# Air supply ports:

Option 1	All fittings provided from behind the panel for inlets and outlets
Calibration	Inbuilt calibration points for pneumo gauges

# Optional:

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CCTV	Can be provided for all three divers or two divers
Monitor	TFT 8.5" (splitter will be provided if both diver CCTV options are required)
Surface control unit	All touch button controls with backlight for low visibility operations, video and light
	control
Primary recording	upto 256GB SD card, one per diver
Secondary back	1 TB backup hard drive to record all diver video simultaneously
up recording	

Sr.	Part Number	Description	Qty
1	SY-PRO-O2	Oxygen analyzers with high low alarm (one per diver)	3
2	SY-VFA-BV-23	Flowmeters (per analyzer)	3
3A	SY-873-400	Option 1 Aqua Environment high pressure Regulator w/gauges	3
3B	SY-44-1315-2081-005	Option 2 Tescom high pressure regulator	3
4	SY-FLR-DS	Flow Restrictor (one per diver)	3
5	SY-PG-A-2.5-5000	High pressure gauges (incoming air supply) 0-5000 psi (HP1)	3
6	SY-PG-A-2.5-500	Low pressure gauge (regulated air supply) 0-500 psi	3
7	SY-PG-A-2.5-500	Low pressure gauge (downstream for umbilical supply pressure)	3
8	All air supply lines (inlet and outlet) are color coded per diver		
9	Diver 1 - Independent high pressure line HP1		
	Diver 2 - Independent high pressure line HP1		
10	Diver 1 - Independent high pressure line HP2		
	Diver 2 - Independent high pressure line HP2		













Sr.	Description	
11	Diver 1 – Independent low pressure line	
	Diver 2 – Independent low pressure line	
12	All tubing used will be stainless steel high pressure	
13	All valves for incoming air supplies will be brass/ss, high pressure	
14	All valves for regulated supplies will be brass/ss, high pressure	

# **DIVE PANEL COMMUNICATION**

9	ŝr.	Part Number	Description	Qty
1		2820A-11	Amron 2 diver radio with ac/dc power	1
2	,	2405-28	Push to talk microphone	1

#### **DIVE PANEL COMMUNICATION**

Sr.	Part Number	Description	Qty
1	SY-DIVERVISION	Diver 1/Diver 2, surface control unit, Synergy/Outland Technology	2
	SERIES		
2	SY-MON-8.5-TFT	Diver 1/Diver 2, 8.5"waterproof TFT monitor	2
3	SY-DVR-256GB-SD	Primary Recorder, 256GB SD card (individual DVR per diver)	3
4	SY-DVR-1TB-HD Backup recorder (black box) 1 TB hard drive (simultaneous recording of all dives) , U		1
		out for recording to USB sticks, HDMI out for mirror image to be displayed remotely	
		via HDMI cables	















## 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.

















#### **ORDERING INFORMATION**

Sr.	Part Number	Description
1	SY-2DAP-BP-D023-R-2DV	TWO DIVER PORTABLE AIR PANEL, WITH 1 X AMRON 2 DIVER AIR RADIO,
		D1 / D2 VIDEO SYSTEMS

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



















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