

**THREE DIVER AIR PANEL (HIDDEN PLUMBING) SY-3DPD023-X-XXX-XX**



**PART NO : SY-3DPD023-R-3DV-4M**

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



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**PART NO : SY-3DPD023-R-3DV-4M**



**PART NO : SY-3DPD023-R-3DV-3M**

**PART NO : SY-3DPD023-R-2DV-2M**





**PART NO : SY-3DPD023-R-3DV-4M**

## THREE DIVER AIR PANEL (HIDDEN PLUMBING) SY-3DPD023-X-XXX-XX

Sr.	Description
1	Matt grey powder coated marine grade aluminum non rust fascia other colors available
2	All engraved lines with each valve/fitting/regulator clearly marked
3	DP alarm to connect to bridge with mute button (optional)

### Design criteria for dive panel

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

1 x 0-230 fsw/70 msw Depth gauge, 6", 0.25 % accuracy, mirror scale, with calibration point , Diver 2, Color coded **Yellow** 

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

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
3	SY-873-400	Option 1 Aqua Environment high pressure Regulator w/gauges	3
4	SY-44-1315-2081-005	Option 2 Tescom high pressure regulator	3
5	SY-FLR-DS	Flow Restrictor (one per diver)	3
6	SY-DIVMKII-COM (Optional)	Interspiro full face breathing air mask, communications, 10 mtr of Communication cable with end fitting (one end to BA comms/other to chamber comms)	1
7	SY-UPS-DP (Optional)	Emergency power back – UPS for video systems	1
8	SY-PG-A-2.5-5000	High pressure gauges (incoming air supply) 0-5000 psi (Hp1)	3
9	SY-PG-A-2.5-5000	High pressure gauges (incoming air supply) 0-5000 psi (Hp2)	3
10	SY-PG-A-2.5-500	Low pressure gauge (regulated air supply) 0-500 psi	3
11	SY-PG-A-2.5-500	Low pressure gauge (common low pressure supply) 0-500 psi	3
12	SY-PG-A-2.5-500	Low pressure gauge (downstream for umbilical supply pressure)	3
13	All air supply lines (inlet and outlet) are color coded per diver		
14	Pressure gauges		
15	Diver 1 – Independent high pressure line Diver 2 – Independent high pressure line Diver 3 – Independent high pressure line		
16	Diver 1 – Common high pressure line Diver 2 – Common high pressure line Diver 3 – Common high pressure line		
17	Diver 1 – Common low pressure line Diver 2 – Common low pressure line Diver 3 – Common low pressure line		
18	All tubing used will be stainless steel high pressure		
19	All valves for incoming air supplies will be brass , high pressure		
20	All valves for regulated supplies will be brass, high pressure		

## THREE DIVER AIR PANEL (HIDDEN PLUMBING) SY-3DPD023-X-XXX-XX

### DIVE PANEL COMMUNICATION (Sold Separately)

Sr.	Part Number	Description	Qty
1	2830A-11	Amron 3 diver radio with ac/dc power	2
2	2405-28	Push to talk microphone	2

### DIVE PANEL DIVER CCTV SYSTEMS (Sold Separately)

Sr.	Part Number	Description	Qty
1	SY-DIVERVISION SERIES	Diver 1/Diver 2 / Diver 3 , surface control unit, Synergy/Outland Technology	3
2	SY-MON-15.5-TFT	Diver 1/Diver 2 / Diver 3 , 15.5"waterproof TFT monitor	1
3	SY-DVR-1TB-HD	Primary Recorder, 1 TB hard drive (simultaneous recording of all diver)	1
4	SY-DVR-1TB-HD	Backup recorder (black box) 1 TB hard drive (simultaneous recording of all dives), USB out for recording to USB sticks, HDMI out for mirror image to be displayed remotely via HDMI cables	1

## SY-2830A-11 AMCOM III THREE-DIVER RECHARGEABLE BASIC PORTABLE COMMUNICATOR

### SY-2830A-11 AMCOM III THREE-DIVER RECHARGEABLE PORTABLE COMMUNICATOR WITH OUTDOOR AC POWER MODULE AND INTERNATIONAL LOCKING POWER CORD



#### 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:

- Separate channels and volume controls for each diver and tender to accommodate individual earphone and microphone adjustments, equipment variations and individual comfort levels.
- Divers' umbilicals can be set to 4-wire mode (full duplex) or 2-wire mode (push-to-talk) or any combination of the two modes for any diver.
- Ability to use both dynamic and pre-amplified diver microphones with a unique circuit that detects microphone type and automatically adjusts volume levels.
- Weatherproof push-to-talk microphone for better voice intelligibility topside. For optimum clarity, see Tech Note (below) for other recommended equipment.
- 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.

## SY-2830A-11 AMCOM III THREE-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: 41 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: 17.05 Lbs. (7.73 Kg)

### INCLUDED WITH COMMUNICATOR:

SY-2830A-11 AMCOM III Two-Diver Rechargeable Basic Portable Communicator with Outdoor Power Module and International Locking Power Cord includes:

- (1) SY-2405-28 Amron Hand-Held Push-to-Talk Microphone
- (1) SY-2890-05 Amron 12 VDC Sealed Lead Acid Gel-Cell Rechargeable Battery with Slide terminals
- (1) SY-283XA-UM Amron Three-Diver Portable Communicator User Manual

### AVAILABLE OPTIONS:

- SY-2460SM-28 Amron Single Muff Operator Headset with Boom Mic and Dual Banana Plugs
- SY-2401-28 Amron Deluxe 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, use the 2405-28 Push-to-Talk Microphone, included with this model. For optimum communications, we recommend purchasing the 2401-28 Deluxe Headset with Boom Mic, topside. For tender mobility, 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 2830A-03 Three-Diver Deluxe Portable Communicator with Wireless Tender.

**CERTIFICATES PROVIDED WITH EACH THREE DIVER AIR PANEL**

Diving panel	Bureau Veritas
Imca	D018 / D023
Class	Bureau Veritas pressure test witness for entire system
Fmea	As built by Synergy
Fmea stamped by class	As built by Synergy and reviewed by Class (optional)
Warranty	One year Synergy manufacturing warranty

Industry & Facilities Division  
Third Party Inspection Report  
Page 1 of 6

INSPECTION REPORT No: IIR-124198349 Revision No: 0

BY Inspector: Vahid Razi  
BY Coordinator: Sandosh Paul

BY Office: Dubai  
Inspection Report Date: 14.06.2020

Attachment Results:  
 CLIENT  BY  MANUFACTURER  OTHER

REFERENCE DOCUMENTATION:  
 Refer to attachment section 4 (instead of this section)  Refer to attachment section 4 (instead of this section) and also refer to attachment section 5

ATTENDEES:  
Name: Mr. Vahid Razi Position: Electrical Engineer Representing: Bureau Veritas  
Name: Mr. Sandosh Paul Position: Project Engineer Representing: Synergy Equipment Trading LLC

MEASURING & TESTING EQUIPMENT USED:  
Equipment Type: Digital Pressure Gauge Equipment Identity #: 11252 Last Calibration Date: 30.11.2019 Expiry Date: 29.11.2020

INSPECTION RESULT:  
 Satisfactory (Without comments)  Satisfactory with comments (Any of failing points or Non-Conformity items to fill upon)  Not Satisfactory (NCR raised during the inspection)

INSPECTION SUMMARY:  
At the request of Mr. SYNERGY INNOVATIVE DIVING EQUIPMENT TRADING witness for the three diver three pneumatic testing was carried out on 14/06/2020 at 14:00 hrs. 2020 and results were found satisfactory.

NON CONFORMITIES:  
None

Industry & Facilities Division  
Third Party Inspection Report  
Page 2 of 6

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Industry & Facilities Division  
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Page 5 of 6

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## ORDERING INFORMATION

Sr.	Part Number	Description
1	SY-3DPD023-R-3DV-4M	THREE DIVER AIR PANEL, WITH 2 X AMRON 3 DIVER AIR RADIOS, D1 / D2 / D3 VIDEO SYSTEMS, AND 4TH MONITOR FOR EXTERNAL INPUT
2	SY-3DPD023-R-3DV-3M	THREE DIVER AIR PANEL WITH 2 X AMRON 3 DIVER AIR RADIOS, D1 / D2 / D3 VIDEO SYSTEMS
3	SY-3DPD023-R-2DV-2M	THREE DIVER AIR PANEL WITH 2 X AMRON 3 DIVER AIR RADIOS, D1 / D2 VIDEO SYSTEMS
4	SY-3DPD-23-R	THREE DIVER AIR PANEL WITH 2 X AMRON 3 DIVER AIR RADIOS (NO CCTV)
5	SY-3DPD023	THREE DIVER AIR PANEL (NO RADIO , NO CCTV)
6	SY-2830A-11	AMRON 3 DIVER AIR RADIO

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



## THREE DIVER AIR PANEL (HIDDEN PLUMBING) SY-3DPD023-X-XXX-XX

# Contact us



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