

UAE • UK • INDIA • AZERBAIJAN

# THREE DIVER D023 AIR PANEL, OPEN PLUMBING AND CONTROLS, FRAME MOUNTED SY-3DAPD023-F



PART NO: SY-3DAPD023-F

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	



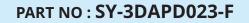






# THREE DIVER D023 AIR PANEL, OPEN PLUMBING AND CONTROLS, FRAME MOUNTED SY-3DAPD023-F







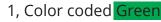


# THREE DIVER D023 AIR PANEL, OPEN PLUMBING AND CONTROLS, FRAME MOUNTED SY-3DAPD023-F

Sr.	Description
1	Diver 1 Green / Diver 2 Yellow / Diver 3 Red powder coated marine grade aluminum non
	rust fascia
2	All 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 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	4
4	SY-44-1315-2081-005	Option 2 Tescom high pressure regulator	4
5	SY-FLR-DS	Flow Restrictor (one per diver)	3
6	SY-DIVMKII-COM	Interspiro full face breathing air mask, communications,	1
	(Optional)	10 mtr of Communication cable with end fitting (one end to	
		BA comms/other to chamber comms)	
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





# THREE DIVER D023 AIR PANEL, OPEN PLUMBING AND CONTROLS, FRAME MOUNTED SY-3DAPD023-F

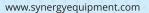
13	All air supply lines (inlet and outlet) are color coded per diver
14	Pressure gauges
15	Diver 1 - Independent high pressure line
	Diver 2 - Independent high pressure line
	Diver 3 - Independent high pressure line
16	Diver 1 – Common high pressure line
	Diver 2 – Common high pressure line
	Diver 3 – 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

#### DIVE PANEL COMMUNICATION (Sold Seperately)

6	C. Dart Number Description					
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 Seperately)

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







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.

#### **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):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:

AMCOM<sup>™</sup> III 2830A-11 Three-Diver Portable Communicator with AC Power, Internal Charger and Rechargeable **Battery 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)

#### POWER CORD 6.5 FT. OPTIONS:

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.







**DIVER-VISION 1D** 



**DIVER-VISION 2D** 



**DIVER-VISION 3D** 



**DIVER-VISION 1D-R** 



**DIVER-VISION 2D-R** 



**DIVER-VISION 3D-R** 











SPECIFICATIONS DIVER-VISION DIVER-VISION DIVER-VISION DIVER-VISION DIVER-VISION







1D-R 2D-R 3D **1D 2D** 3D-R 2 Surface control 1 1 2 3 3 unit for video and light 1 1 1 1 1 1 Monitor 1 1 1 1 1 1 Remote Splitter \_ 4WAY 4 WAY 4 WAY 4 WAY \_ 1 TB primary 1 1 1 1 1 1 recorder 1 1 tb backup 1 1 1 1 1 recorder

Amron radio	-	2 DIVER	-	2 DIVER	-	3 DIVER
		2820A-11		2820A-11		2830A-11
Flexible	1	1	2	2	3	3
keyboard						
Uwc-325/p/e	1	1	2	2	3	3
camera						
Uwl-401 led light	1	1	2	2	3	3
Video cable with	100 MTR/ OR	100 MTR OR				
end fittings for	150 MTR	150 MTR	150 MTR	150 MTR	150 MTR	150 MTR
camera/light			PER DIVER	PER DIVER	PER DIVER	PER DIVER
Usb out port	1	1	2	2	3	3
Hdmi out port	1	1	2	2	3	3
Pelican box	1550	1600	1550	1600	1600	1600
Maximum Weight	10kg	14kg	14kg	18kg	30kg	34kg

Website: www.diver-vision.com





# **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

ndustry & Facilities D Third Party Inspection		Page	1016		
INSPECTION REPORT				Revision	Nr1
Intel Cintern Ch					
inspection requested by MS inspection performed as Re-	L Synergy Diving & Eqst. Suistion, P	ZC Debel, DAD		22 14	
B/ JN5 Nr 108.L 4.31-342	apresident of the second se	Tex. Dimot		700 146	
Project: Third Party Ince	cition Services		(applicable):		
		(BV internet	i Pile		
DV Clean: MO. Oynergy D. Dates), UAF	iving & Equipment Solution FZC	None: please Av			
Manufacturer/Vendor: M/S	Synargy Diving & Equipment	P/o nr:	1.7.11		
Solution F2C Bub-Vender/V appropriets	MC4	(nient to Juli	referency)		
Inspection Location ( A) 9.		Previous Inspection // applicable/: Adl (Table)			
inspection performed en : (Date(s) )	16/12/3620	Next inspection(2 applicable): 78A (Date)			
	OF INSPECTION let to attectment section al instead weeks/3515 proving in attentioned	ITEM / TAG P	ir (ITY Japar		red far extinit
Witness of pneumonic ow	ar poomato last of Three Diver Aar exg3300 psi & Low Pressure	Senal No TRITON 4		40. O	(No.
A-INSPECTION RESU	Cr				_
Satisfactory (Without comments)	Satisfactory with comment		Not Satis		-
(miner comond)	toren is still opera	internal y	inspection)	and an	
Inspection Summary					
	pression faul of from drive An pan TREDON 493, so per Annetwork A 4			N & LOU 1	Telecitie
Open Non Conformities.	Ties, details in section Q		I No		
Open Punch List Items:	Ves, cetals is section H		E 40		_
Relates Note Issued	Yes numberiak (Teleset hide	ZMORET	El No	_	_
BV Transmitter Stargeting	E THE OX		(F) No.		

GM-SI-DY WIRPOZDER Rev 3 Phatpenzeb is interaction annious of phate BV is antiog as 2° party regulation being. The use of phateet therefore in Mediater of the Table of 1° party services where Chart parteries and functions are to example

INSPECTION REPORT	Nr DBA	4.24.242 B-01			F	tovision Nr.1	
BV impactor:			BVC	oordinator			
Bankari Ros				Bitin La			
(Nerra and Signature) BV Office: Dutial				and Signature	e)   Date 10/12/20		
Distribution:	UFACTOR	GR.	Attac	innarita Rap in cietala in se	ort:	5	
B - REFERENCE DOCU	INENTATI	ON	Chillian	Fillparty/e disc	er to allocivitent unwert für is provi	section J insidering	
Title	Retarane	e#*	Rev.	Approval	Approvad by	Cate	
Diring Equipment System Inspection Opciance	DACA D	IMCA 1023		Assentia	Serange-	January 2014	
Preumais Over Pleasure Test	SSEL (QMB/M-H		92	Appoint	Subrype:	May Joint	
C -ATTENDEES							
Norno		Pesition			Hapricerting	1	
Bheshare Flee Nr. Alez A Siddise		Curveyor CC Engineer		ev.		203	
NIL ABRE A DROUGH		LOC EIGNNE -			Cynergy		
D MEASURING & TES	TING EQU	IPMENT VISES		[]Rel	for the othershimore gammer kief is given	t section at and	
Equipment Type		Exputation of the		Last Call	Bretixie Date	Expirit Claim	
Dystal Processe Gauge		049949		08.10.20	0a	07.10.2001	
INSPECTION OFTAIL							
E1 - Detailo of Witness I							
- and of succession		(contrastic					

The case of present template in holidation in the frame of 2 party textural volume Clear association and weightee must be used.

This isophile is indeeded antioxinally when  $B^{\gamma\prime}$  is acting as  $2^{-}$  party inspanies to by







INSPECTION REPORT NY DEAL 4 2020		Revision N
		1.000
Inspection Details:	Annexure -91	
inspection Decails:		
<ul> <li>Wypessel Previouts and pre-</li> </ul>	ours test of Three Diver Air panel	on the following details
Description Controy of rotati Machicenter Servel No. Year of Machicenter Desam pressure Tool provine Processive Tool Doo	Date Direct Ait panel U.A.E TRITION 486 Day 2020 UP 2000 ps: HP 3400 ps UP 230 ps: / HP 3300 ps 10 42,2020	
Pneumatic Test:		
<ul> <li>Pressure of strymous but of the provide approved procedure and 8</li> </ul>	reis diver A.r.genal (Smial No.: TRIT) Jonal die Allowing	2N 403) has been write-and
<ol> <li>Low Pressure of 330 pm down Air paul for 20 mi 3. High Pressure of 3300 p dises Air paul for 30 mi</li> </ol>	intrase cardificate was reviewed and its (1.1 these of Wijs was applied to the 1 tor, so leads found, articlescray art too of (1.1 these of Wijs was applied to the tractorised for principal strategy of the map performed or principal fittings is val- th settificatory.	er presence piping of Three of impaction high process piping of The of respector.
	END OF REPORT	
GHSLICI MEPOZHE Rev J	Copyright Bure	o Vertei 10/3819





# ORDERING INFORMATION

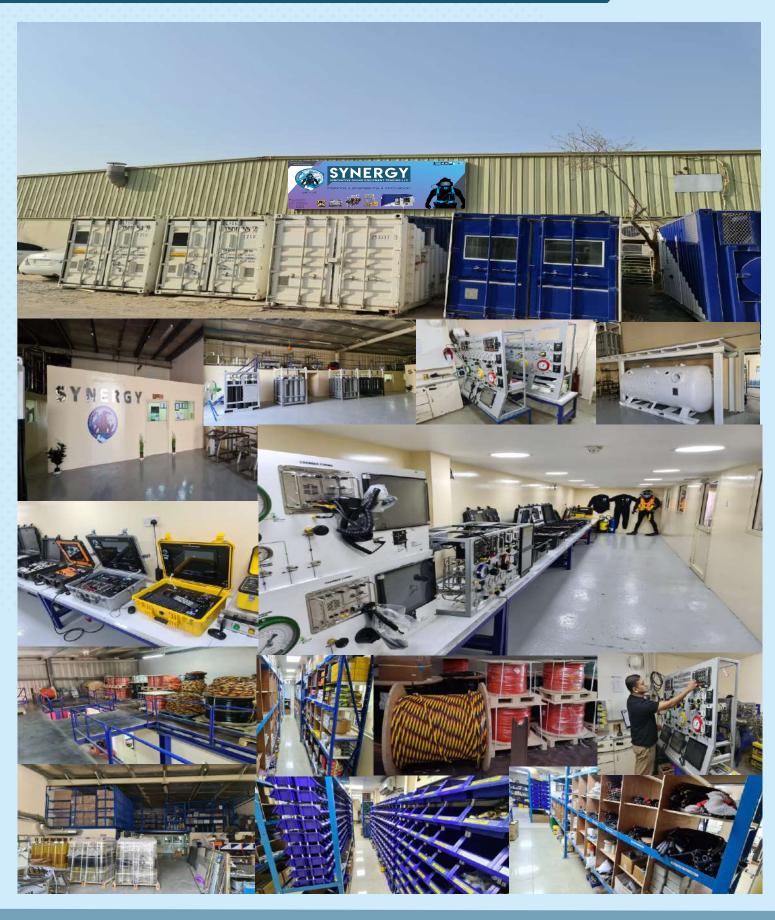
Sr.	Part Number	Part Number
1	SY-3DAPD023-F	THREE DIVER AIR PANEL, OUTFITTED WITH ALL CONTROLS IN FRONT
		COMPLIANT TO IMCA D023 AND WITH CLASS TEST CERTIFICATE
2	SY-2830A/11	AMRON THREE DIVER AIR RADIO WITH AC DC POWER SUPPLY (SOLD
		SEPERATELY)
3	SY-DIVER	SYNERGY OUTLAND DIVER VIDEO SYSTEMS (DIVER 1/DIVER 2/DIVER 3)
	VISION	(SOLD SEPERATELY)

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





# SYNERGY INFRASTRUCTURE





UAE•UK•INDIA•AZERBAIJAN

# THREE DIVER D023 AIR PANEL, OPEN PLUMBING AND CONTROLS, FRAME MOUNTED SY-3DAPD023-F

# **Contact us**

P.O. Box - 237849, Warehouse No 8, Al Maidoor Warehouse, Al Qusais, Industrial Area - Dubai - UAE

7	Tel :	009714 2580533 🗖
÷	Fax :	009714 2580534 🗖
	UAE :	00971505648178 🗖
	UK :	00447951966260 器
	Website :	www.synergyequipment.com
	Email :	ram@synergyequipment.com
	For Sale :	info@synergyequipment.com



SYNERGY TEAMWORK MAKES THE DREAM WORK



