

**COSWORTH**

**Family**

# Rubber Switch Panel

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# Rubber Switch Panel

## Overview

- Rubber switches to ensure accurate operation
- Available with 10 or 20 switch versions

The RSP is the next generation of switch panel from Cosworth Electronics. Designed to withstand harsh environments from 24-hour endurance racing to rallying, the RSP features tactile feedback switches as well as raised switch guards to ensure accurate button activation.

The RSP range has been designed to work seamlessly with Cosworth's family of Intelligent Power Supplies (IPS) and ECU's.

Available in 10 or 20 switch variants. Each switch is independently backlit by 4 powerful tri-colour LEDs providing ultimate visibility in all light conditions. Switch colours, flash patterns, brightness levels and switch functions are all fully configurable ensuring ultimate readability for day or night use.



The RSP features user-configurable CAN allowing for IDs, rates of the packets as well as BUS termination. The state of each switch is transmitted over CAN at 200Hz by default as well as the additional 2 digital inputs providing external switches. All communication is made through a single double density Deutsch Autosport connector including the RS232 Debug comms.

Once installed an IP rating of IP66 can be achieved at the front surface. The RSP's design means the rear surface is almost completely flat, allowing it to easily be incorporated into any application.

As standard each RSP is supplied with the RSP Switch Identification Label Set which provides a selection of icons to cover the most common switch functions.

Electrical Data	
Supply Voltage	6.5-32V
Supply Current	RSP10-5x2 159mA @ 13.8V*1 RSP20-5x4 292mA @ 13.8V*1
Push Switches	RSP10-5x2 10 Switches RSP20-5x4 20 Switches
Switch Type	Momentary
External Digital Inputs	2 x with 10K pull up to +5V
LED's	7 Colours per Switch
Debug Communication	RS232
RS232 Settings	115200, 8, none, 1
CAN Communication	1 x CAN 2.0A
CAN Rate	100/125/250/500/1000 Kbps

\*1Current based on all LED's ON White.

\*\*Front panel thickness not including rear connector protrusion.

\*\*See dimensional drawing for IP rating zones.

Mechanical Data	
Material	Black PU 60 Shore
Dimensions	RSP10-5x2 137.00 x 70.00 x 15.10mm*2 RSP20-5x4 137.00 x 123.00 x 15.10mm*2
Weight	RSP10-5x2 130g RSP20-5x4 230g
Connector	Deutsch Autosport
Fixings	RSP10-5x2 6x M4 x 11.4mm RSP20-5x4 8x M4 x 11.4mm
Temperature Rating	Operating -20 to +70°C Storage -30 to +80°C
IP Rating	IP66 / IP64*3

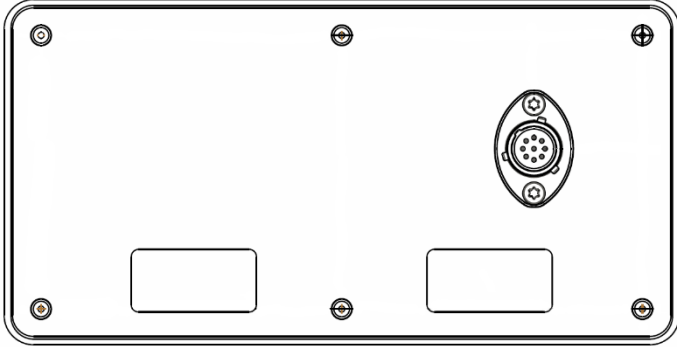
## Ordering Information

Description	Part Number
Rubber Switch Panel 5x2	01D-620120-C
Rubber Switch Panel 5x4	01D-620130-C

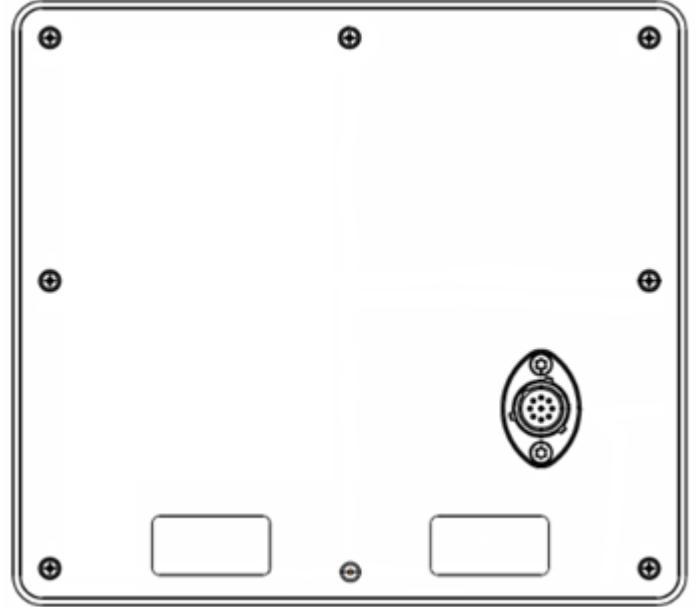
# Rubber Switch Panel

## Dimensions

### RSP10-5x2



### RSP20-5x4



Connector	Mating connector
ASDD206-09PB-HE	ASDD606-09SB-HE

Connector	Mating connector
ASDD206-09PB-HE	ASDD606-09SB-HE

## Pinout

Pin	Signal	Description
1	BATT+	Battery 6.5-32V Input Voltage
2	DEBRX	Debug Rx DB9 Pin 3
3	DEBTX	Debug Tx DB9 Pin 2
4	EXT DIN1	External Digital Input 1
5	EXT DIN2	External Digital Input 2
6	CANL	CAN Low
7	CANH	CAN High
8	GND	Digital/ Debug DB9 pin 5
9	BATT-	Battery 0V

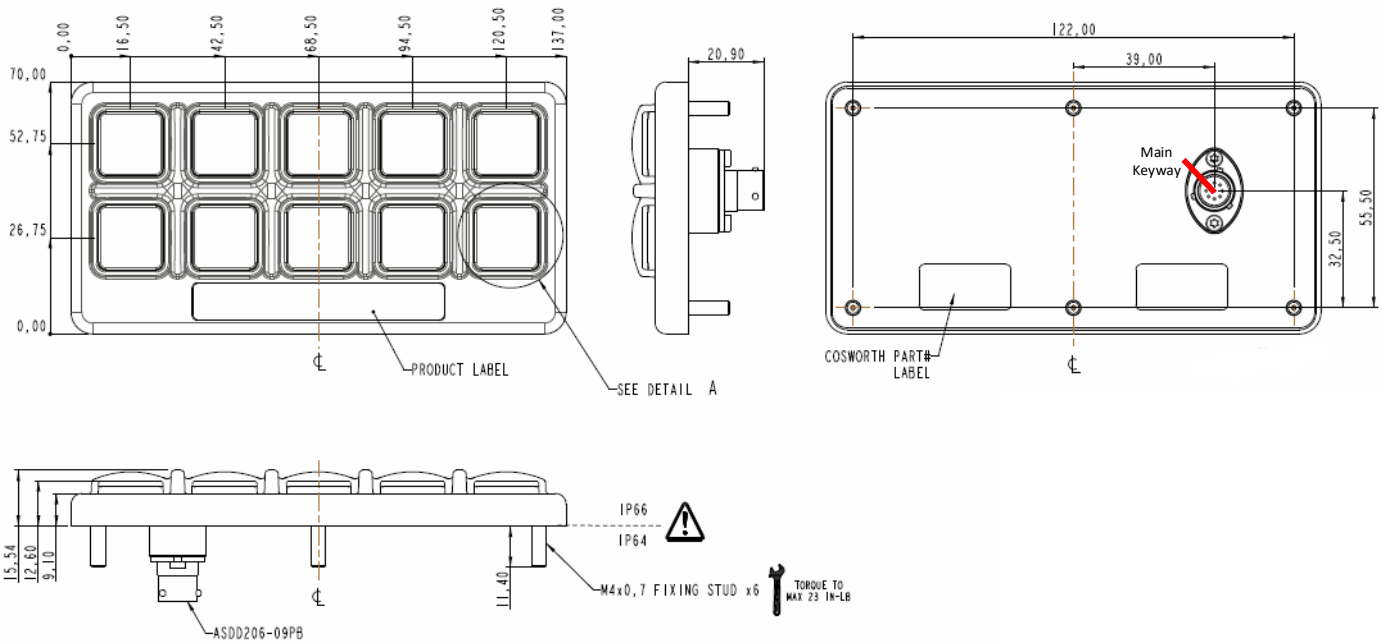
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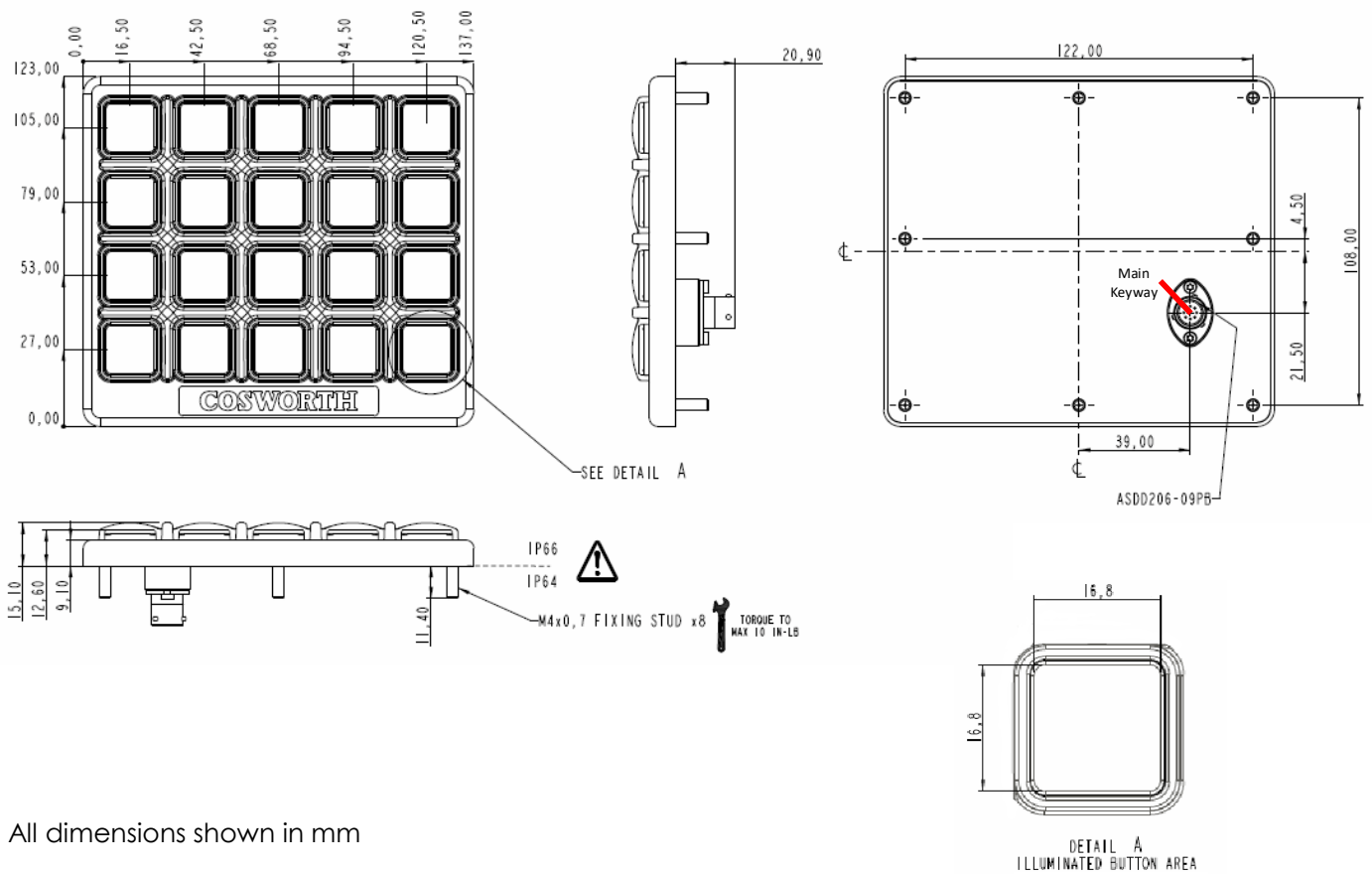
# Rubber Switch Panel

## Dimensions

### RSP10-5x2



### RSP20-5x4



All dimensions shown in mm

## Recycling and Environmental Protection

Cosworth Electronics is committed to conducting its business in an environmentally responsible manner and strive for high environmental standards.

### Manufacture

Cosworth products comply with the appropriate requirements of the Restriction of Hazardous Substance (RoHS)

### Disposal

Electronic equipment should be disposed of on accordance with the regulations in force and in particular on accordance with the Waste in Electrical and Electronic Equipment directive. (WEEE).

### Battery

This equipment contains a rechargeable battery (Manganese Silicon Lithium).

The equipment may be returned to Cosworth Electronics for a replacement battery. A charge will be made for this service.

To remove the battery for recycling:

- Remove the case(s).
- Remove printed circuit boards from the case.
- Remove the battery from the printed circuit board.
- Dispose of the battery in accordance with the regulations in force.

Removal of the battery will result in the warranty of the unit being void.



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