

Introducing the new

IONNIC

ICS Switch Panel

New vehicles have proven to be increasingly difficult when it comes to installing electrical accessories, including finding a location to place the required number of switches.

With this in mind IONNIC has developed an advanced switching system able to directly control the majority of products in the IONNIC range.

The IONNIC ICS Switch Panel features 8 individual switches and 3 programmable master switches, capable of activating any combination of those 8 circuits, with one press of a button. All of this contained in a stylish, compact and easy to install back-lit panel that looks at home in cars, 4WD's, trucks or earthmoving equipment.

Developed specifically to control LED lighting and other electronic automotive accessories, the multi-voltage ICS Switch Panel has built-in circuit protection, eliminating the need for fuses or circuit breakers and has a maximum output of 40A across the 8 circuits.

For more information see page 8.





Switching Systems

ICS Switch Panel

8

ESM

10

ESM Mini

12

Switching Systems

ICS Switch Panel

NEW



12V
24V

- Developed specifically to control LED lighting and other electronic automotive accessories.
- Incorporates the latest in onboard circuit protection and monitoring technology.
- Each output surge protected to 6A.
- 3 programmable master switches.
- Mounting point on back of switch panel – use with common 1/4" thread adjustable mounts.
- Epoxy encapsulated receiver module for enhanced moisture and vibration protection.
- Includes 4 decals.
- 8 outputs (6A each).
- Eliminates excess wiring.
- Multi-voltage.
- Compact design.

Voltage :	12–24V
Outputs :	8
Max. Output Current Rating (per output) :	6A
Max. Output Current Rating (total) :	40A
Cable Length :	4.5m
Construction :	ABS
Operating Temperature :	-40°C to 85°C

The ICS Switch Panel has been developed specifically to control LED lighting and other electronic automotive accessories.

The switch panel and receiver communicate using a proprietary signal which allows the switching system to be configured using a single receiver module for typical applications, or with additional slave receiver modules on larger systems or vehicles.

The ICS Switch Panel incorporates the latest in onboard circuit protection technology. In the event of a short circuit the system immediately turns off the affected output preventing damage to the switch panel and devices controlled by it.



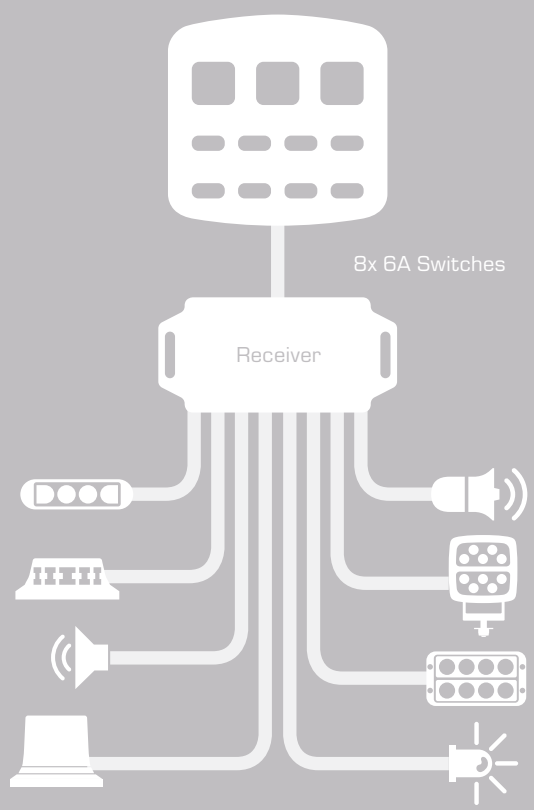
The panel provides real time feedback to the operator via LED's on both the panel and receiver module as to the state of each output.

In the event of an intermittent short circuit the output of the affected circuit will turn off and remain off for 4 seconds.

After this period of time the ICS will check the circuit, if no short is present it will automatically turn the output back on.

All circuits are monitored and controlled independently. In the case of a short circuit only the affected output is isolated while all others remain operational.

The ICS-O1L is not compatible with halogen beacons/worklamps or other items with high in-rush current without the use of an additional relay.

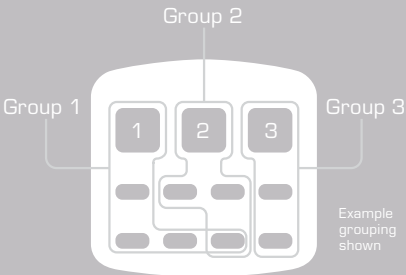


Switching Systems

Master Switches

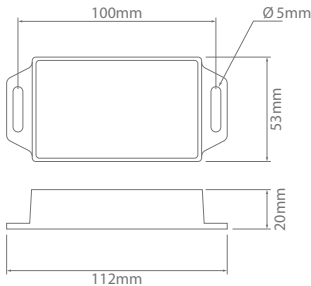
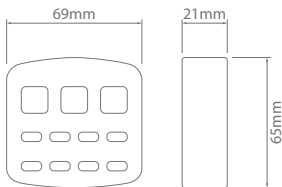
The ICS switch panel features 3 user programmable master switches. These switches can be used to link any combination of the 8 individual switches together to allow activation of multiple circuits via the switching of a single button.

Note individual switches can be associated to more than one master switch.

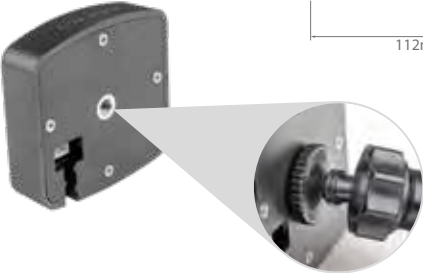


Custom assign any number of buttons to one of the three master switches

Example grouping shown



Receiver Module



Mounting point on back of switch panel – use with common 1/4" thread adjustable mounts. Not supplied with mount.

ICS Switch Panel Kit NEW

Part No.	Voltage	Kit Contains :	
ICS-01L	12-24	1 x Switch Panel	4 x Overlay Function Decals
		1 x Receiver Module	1 x Mounting Screws & Washers
		1 x 4.5m Cable (Switch Panel to Receiver)	1 x Double-sided Mounting Tape



ICS-01S



50127



50128



HT-4301

Accessories & Related Products

Part No.	Description
ICS-01S	Slave Receiver Module
50127	AMP Superseal kit – 3 circuits – Receptacle
50128	AMP Superseal kit – 3 circuits – Plug
HT-4301	Parallel Crimping tool



Switching Systems

ESM



- Electronically monitored switch centre with inbuilt circuit monitoring and protection.
- Each output surge-protected to 10A.
- 10 inputs, 13 outputs.
- 1 grouped input – 4 separate outputs
- On board LEDs indicate circuit output.
- Saves space and installation time.
- Multi-voltage
- Environmentally sealed – IP67.
- Available in positive, or positive/negative switched models.



Voltage :	12–24V
Current Draw :	10mA @ 13.8V
Inputs :	10
Outputs :	13
Max. Output Current Rating (per output) :	7.5A
Max. Output Current Rating (total) :	50A
Construction :	Polycarbonate
Ingress Protection :	IP67
Approvals :	C-Tick
Operating Temperature :	-40°C to 85°C

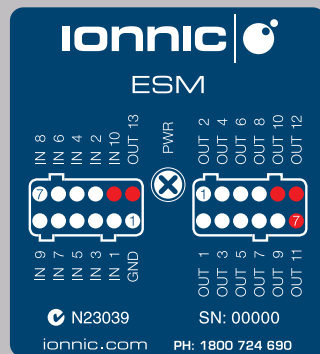
The ESM is an electronically monitored switch centre with inbuilt circuit monitoring and protection.

The unit can be used in any application in which conventional circuit protection may have been used in the past.

The ESM can be used for any application from connecting auxiliary lighting off original vehicle tails lights, eg Minebar hook up, to using it to monitor and protect a range of auxiliary equipment switched off the original vehicle inputs or after market toggle, rocker switches etc.

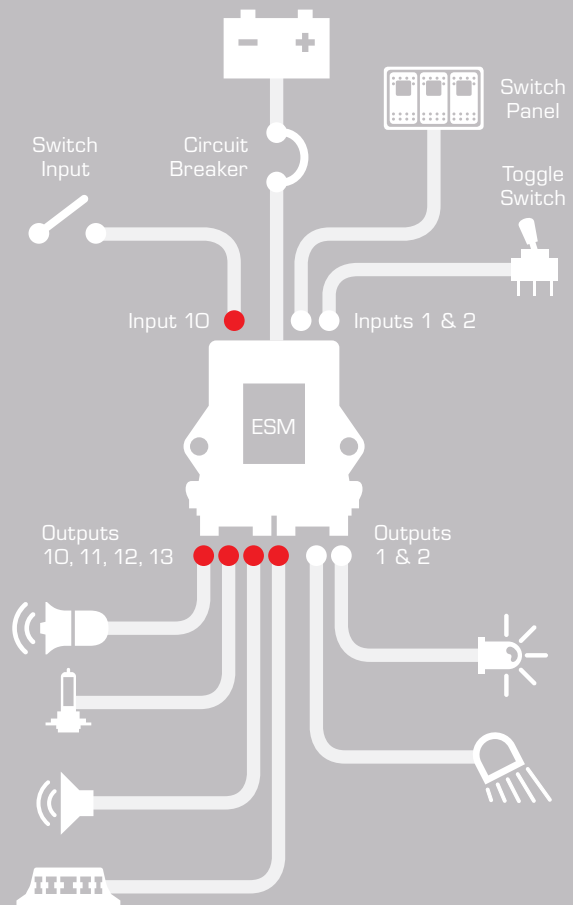
If a short or over current condition presents on any of the outputs then the output will shut down. This will then cycle 3 times (on/off).

If the over current situation is still present the output will then shut down permanently until the input is turned off.

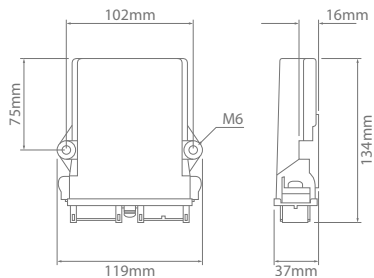


Inputs 1 to 9 controls outputs 1 to 9 respectively.
Input 10 controls outputs 10, 11, 12, 13.

Inductive loads must not be used on the input or output circuits without additional external protection. Failure to do so will result in damage to the unit and will void warranty.



Switching Systems



ESM

Part No.	Switching	Notes
ESM0013	Positive	—
ESM2013	Positive & Negative	ESM2013 will switch on both positive or negative inputs, diodes may be required to prevent false triggering.



Accessories & Related Products

Part No.	Description
ESM9001	Connection Kit
DE-DET-20	Crimp tool. Size 20
HDT-48-00	Crimp tool. Size 12, 16, 20 & 22
DE-DET-RT	Multi-use hook tool
CB285XX	Circuit breaker – Surface Mount Series XX are current rating (A), available in 25, 30, 40, 50, 60, 70, 80, 100, 120, 150
CB255-XX	Circuit breaker – Panel Mount Series XX are current rating (A) in numbers, available with 10, 15, 20, 25, 30, 35, 40, 50
AMIXX	AMI Fuse Series XX are current rating (A) in numbers, available with 30, 40, 50, 60, 70, 80, 100, 125, 150, 175, 200
AMIFH	AMI Fuse holder – Surface Mount



Switching Systems

ESM Mini



- Electronically monitored switch module with inbuilt circuit monitoring and protection.
- Each output surge protected to 8A.
- 6 inputs, 6 outputs – 12V.
- 5 inputs, 5 outputs – 24V.
- Compact design.
- Save space and installation time.
- Eliminates excess wiring.
- Multi-voltage.
- Epoxy encapsulated for enhanced moisture and vibration protection.

12V
24V

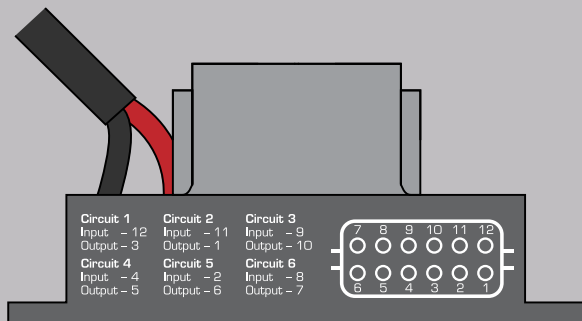
Voltage :	12–24V
Inputs :	6 x 12V 5 x 24V
Outputs :	6 x 12V 5 x 24V
Max. Output Current Rating (per output) :	7A
Max. Output Current Rating (total) :	20A
Housing :	ABS
Cable Length :	120mm
Operating Temperature :	-40°C to 85°C

The ESM Mini is a compact, electronically controlled switch module with inbuilt circuit monitoring and protection.

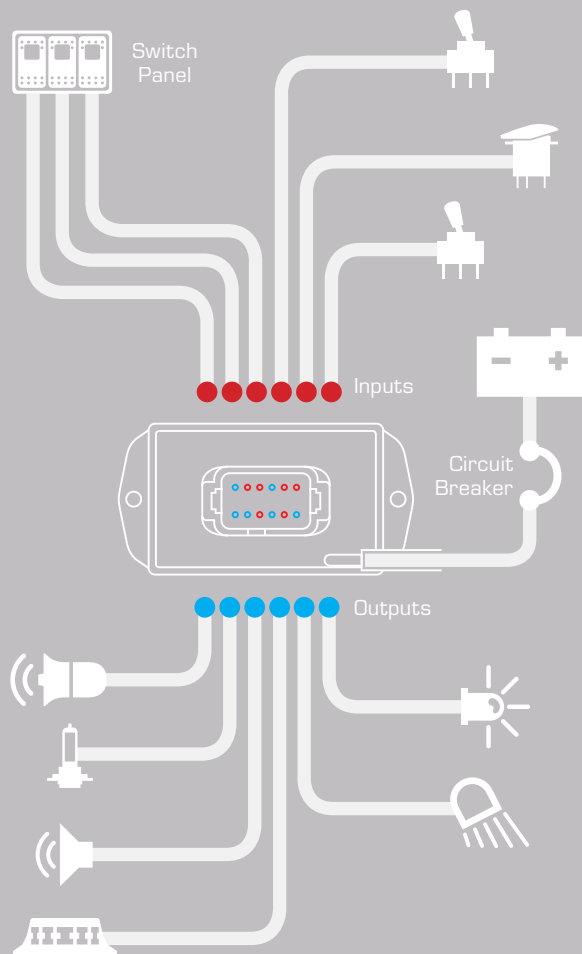
The unit can be used in any application where conventional circuit protection may have been used in the past.

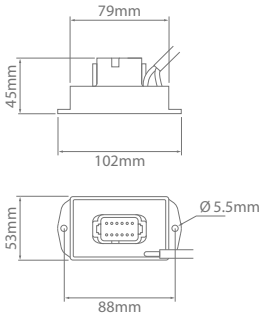
The ESM Mini can be used for any application, from connecting auxiliary lighting off original vehicle tails lights, eg Minebar hook up, to monitoring and protecting a range of auxiliary equipment switched off the original vehicle inputs or from after market toggle, rocker switches etc.

If a short circuit or over current condition presents on any of the outputs then the affected output will shut down. This circuit will then cycle 3 times (on/off) and if the over current situation is still present the output will then be locked in the off state until the fault is rectified and the input is reset.



Inductive loads must not be used on the input or output circuits without additional external protection. Failure to do so may result in damage to the unit and will void warranty.





ESM Mini Kit

Part No. Switching
ESM006 Positive

- Kit Contains :
- 1 x ESM006 Control Module
 - 1 x Connector (DT06-12SA)
 - 1 x Wedge (W12S)
 - 8 x Sealing Blank Size 12-6 (114017)
 - 12 x Socket Size 16 Green Band (0462-209-16141)
 - 1 x Connector (DTPO6-2S)
 - 1 x Wedge (WP2S)
 - 2 x Socket Size 12 (0462-203-12141)



DE-DET12, DE-DET16



HDT-48-00



DE-DET-RT



CB255-XX



P-WSBFH/5



BF30/10

Accessories & Related Products

Part No.	Description
DE-DET12	Crimp tool. Size 12
DE-DET16	Crimp tool. Size 16
HDT-48-00	Crimp tool. Size 12, 16, 20 & 22
DE-DET-RT	Multi-use hook tool
CB255-XX	Circuit breaker – Panel Mount Series XX are current rating (A) in numbers, available with 10, 15, 20, 25, 30, 35, 40, 50
P-WSBFH/5	ATC fuse holder kit – 30A Kit Contains: 5 x Housing, 5 x Plugs, 10 x Terminals
BFXX/10	ATC/ATO Blade Fuses, pack of 10 XX are current rating (A) in numbers, available with 1, 2, 3, 4, 5, 7.5, 10, 15, 20, 25, 30, 40

