

# THE DIGITAL RELAY BOX

PUT AN END TO MECHANICAL FUSES, RELAYS AND SWITCHES!



## IN ONE BOX



## **FUNCTIONS**

- Configurable fuse with slow fuse option
- Fixed or normal "relay" function
- Timers
- Multiple input sources for each output
- Set/reset from different inputs
- Flashing output with configurable duty cycle
- Individual voltage settings for each output
- Toggle functions
- Counters

- Logics for sirens and blue-lights for emergency vehicles
- Parallel or serial use of multiple functions
- Multiple input sources
- Temperature control from sensor
- H-bridge for DC motor control with timers and deadtime settings
- PVM dimmer functions
- Energy saving mode
- Combinations of inputs and outputs
- And more...

## FOR USE IN VEHICLES AND INDUSTRY

**SERVICE VEHICLES** 

**EMERGENCY VEHICLES** 







### **CONFIGURE WITH EASE**



- Addio Control Center is developed for a great user experience. It's easy to learn without any prior skills.
- The tool offers great flexibility to easily create many different combinations of functions.





## **CONTROL EASILY**

#### WITH ADDIO SWITCH PANELS...

The Addio Switch Panel can be used for both controlling the applications of the relay box and to indicate the status of the applications.

The two controllers shown here are available with 4 or 8 configurable RGB LED illuminated buttons. We also provide a larger Hand Controller with 15 configurable RGB LED illuminated buttons.





#### ...OR WITH YOUR SMARTPHONE!

Addio Remote is a mobile application for mobile phones and tablets. It works as a remote control for the advanced models of Addio Digital Relay Boxes. Addio Remote connects to the relay box via Bluetooth using an external bluetooth dongle.

It's possible to use several mobile devices for the same relay box, and to use the same mobile devices for several boxes.



### **DIGITAL RELAY BOXES 12V AND 24V**

Addio provides different models of the Digital Relay Box (DRB) with various sizes and features. All units are configured with our user friendly Addio Control Center software. STD versions are mainly for time saving and cost efficient solutions in stand alone installations where no external accessories are needed.

ADV units have the ability to connect external devices such as and controllers, switch panels, vehicle

CAN reader, or other DRBs to achieve even more advanced solutions. Using our Bluetooth module you can connect to a mobile device that's using our app.

All DRBs have advanced microprocessors and use MOSFET technology for high current switching and a long lifetime. Available in 12 and 24 volt versions.



#### **SCR-1612 ADV**

- · 12V Power supply
- · 4 outputs/6 inputs
- 16A total output current
- Communication (CAN) port for external devices
- Can be controlled with Hand Controller, Switch Panels etc
- Can be controlled with a mobile device



#### **SCR-8012**

- 12V Power supply
- 3 outputs/3 inputs
- 1 high current output (80A)
- Not possible to configure via USB, works as a slave device from other ADV units.



#### SCR-9012 STD SCR-9012 ADV

- 12V Power supply
- 8 outputs/8 inputs
- 90 A total output current

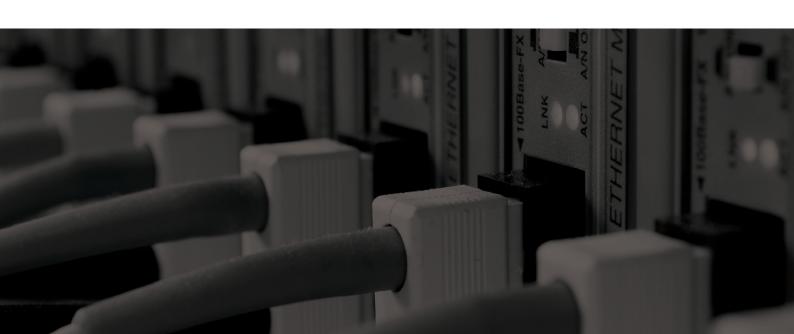
#### **ADV functions compared to STD**

- Communication (CAN) port for external devices
- Can be controlled with Hand Controller, Switch Panels etc.
- Can be controlled with a mobile device
- · LED indication for each output
- · H-bridge for DC motor control
- Built in pull-ups for grounded signals



#### SCR-5024 ADV SCR-10024 ADV\*

- 24V Power supply
- 8 outputs/8 inputs
- 50 A total output current
- 100 A total output current\*
- Can be controlled with Hand Controller, Switch Panels etc.
- Can be controlled with a mobile device
- LED indication for each output
- · H-bridge for DC motor control
- Built in pull-ups for grounded signals



## **SPECIFICATIONS**

MODEL	SCR-1612 ADV	SCR-8012	SCR-9012 STD	SCR-9012 ADV	SCR-5024 ADV SCR-10024 ADV*
Power supply	10-22 VDC	10-22 VDC	10-22 VDC	10-22 VDC	20-32 VDC
Internal power consumption (approximately)	5-10 mA	-	5-15 mA	15-25mA	15-25mA
Undervoltage protection (adjustable)	10-13V, 0.5V steps	10-13V, 0.5V steps	10-13V, 0.5V steps	10-13V, 0.5V steps	18-25V, 0.5V steps
Overvoltage protection (adjustable)	16-26V, 2V steps	No	16-26V, 2V steps	16-26V, 2V steps	26-31V, 1V steps
Max.total current 1 minute	16A	92A	90A	90A	50A/100A*
Max. total current continous	16A	80A	70A	70A	50A/100A*
Total number of inputs	6 pcs	3 pcs	8 pcs	8 pcs	8 pcs
Digital inputs	6 of 6 pcs	3 pcs	8 of 8 pcs	4 of 8 pcs	4 of 8 pcs
Analogue inputs	2 of 6 pcs	0 pcs	4 of 8 pcs	4 of 8 pcs	4 of 8 pcs
Input resistance @12V	22kΩ	22kΩ	22kΩ	22kΩ	22kΩ
Connections inputs (jackable screw terminals)	8-pole inc. +/-	5-pole inc. +/-	10-pole inc. +/-	10-pole inc. +/-	10-pole inc. +/-
Number of outputs	4 pcs	3 pcs	8 pcs	8 pcs	8 pcs
Connection outputs	6-pole screw terminal	M5 nut, Cable crimp/ connector	Cable crimp/ connector	Cable crimp/ connector	Cable crimp/ connector
Fuse size in Amps per outputs	2, 4, 6A	Out 1 = 80A Out 2, 3 = 6A	2, 3, 5, 7.5, 10, 13, 15, 18, 20, (25 only U7, U8)	2, 3, 5, 7.5, 10, 13, 15, 18, 20, (25 only U7, U8)	2, 3, 5, 7.5, 10, 13, 15, 18*, 20*, 25*, 30*
Connection power supply	Screw terminal	M5 nut, Cable crimp	M5 nut	M5 nut	M5 nut
Bluetooth	Yes, accessory	No	No	Yes, accessory	Yes, accessory
Motor control H-Bridge (prel current)	No	No	No	yes, max 12A	yes, max 12A
Error Indication	No	Yes RGB LED	Shared RBG LED	Shared RBG LED	Shared RBG LED
Led per output (adjustable color)	No	Yes, RGB	No	yes, RGB	yes, RGB
Communication bus (CAN bus)	Yes 1 pcs RJ10	Yes 1 pcs RJ10	No	Yes 2 pcs RJ10	Yes 2 pcs RJ10
Computer connections	USB	No (Slave unit)	USB	USB	USB
Earthing Signals	Yes with internal pull up	Yes with internal resistor to positive	Yes with external resistor to positive	Yes with internal pull up	Yes with internal pull up
External devices, Hand Control, Switch Panel etc.	Yes, as accessory	No	No	Yes, as accessory	Yes, as accessory

