

# ARU208 Multi-channel digital relay unit - 8 relays

## Highlights:

- Compatible with AUDAC Touch™
- Remote control web interface (HTML5)
- · DIN rail mounting enclosure
- · RS485 & TCP/IP controllable
- · Pre-programmed timed relay triggering
- Terminal block connection (In- and output)
- Double pole relays with Normal Open (NO) and Normal Closed (NC) contacts

#### Product information:

The ARU208 is specially designed with flexibility and functionality in mind. Various ways of switching the 8 relays are provided, these include the integrated web interface, optional paging consoles and analogue contact triggering making the ARU208 AUDAC's smartest and most innovative relay modules.

With this ingenious device, switching between audio sources, signal routing, and even customized automation setups are obtainable. The bipolar relays allow switching of balanced mono signals as well as unbalanced stereo signals. Normal open and normal closed contacts are provided as well. A wide variation of signals can be switched, ranging from line-level audio signals to amplified loudspeakers signals (Low impedance or 100V) and voltage distribution (low voltage up to 240 V AC mains voltage distribution).

Possibility for triggering relays through dry contact inputs, which can be used for triggering relays through external devices or actuators. Dry contacts priority over the digital functions/triggers. Typical applications are activations by external buttons, switches or alarm contacts.

Thanks to its modular nature, the ARU208 is perfectly suitable for small home or retail applications as well as big installations. Integration of numerous ARU20x units in one system is possible due to the RS485 which allows daisy-chaining of multiple units. The ARU208 features an RS485 in and output connector, allowing even more convenient connections. The TCP/IP control possibilities allow integration of the ARU20x's in any ethernet network. The integrated web-browser running an HTML5 interface allows the most flexible and complete operation while the freely available command set allows integration with any TCP/IP based control or automation system.

The front of the black ABS housing provides a brief overview of its connection possibilities, while the back is equipped with a spring mount mechanism allowing easy mounting on widely available standard DIN rails. This way it's possible to easily integrate it in any electrical cabinet where it can be powered using the optional PSD24x power supply.







## System specifications:

Number of relays		8
Contacts		Normal open & normal closed
Control		Digital communication bus (RS-485)
		Manual (contact) relay activation
		TCP/IP
		Audac Touch™
Connectors		RJ45 (Ethernet)
		2 x RJ45 (RS-485 + Audio)
Max. cable length		300 m
Connection standard		TIA/EIA T568B
Relay	Туре	Two pole type
Inputs	Signal	8 x 3-pin screw terminal for A & B input
Outputs	Signal	8 x 2-pin screw terminal
Power	Consumption	12 W (max.)
	Supply	24 V DC

## **Product Features:**

Dimensions		159 x 87.5 x 54 mm (W x H x D)
Weight		0.4 kg
Data protocol		RS-485
Required cabling		UTP CAT5E
Colours		Black
Construction		ABS
Accessories	Optional	PSD24x external Power supply

### Architects' and Engineers' Specifications:

The relay shall be an intelligent unit, featuring 8 double pole switching relays with normal open (NO) and normal closed (NC) contacts. The relay shall be controllable through an integrated web interface, a digital RS-485 communication protocol or the analogue contact inputs.

Up to 74 ARU-units shall be connectable in one RS-485 bus while an unlimited amount of ARU units/BUS can be connected through Ethernet, allowing great flexibility to suit every installation.

Using the digital communication, linking the relay to a paging or audio matrix system shall be possible without requiring complex programming or configuring.

The relay unit shall be capable of handling a wide variety of signals, including line level audio signals, loudspeaker level signals as well as low voltage power distribution with a maximum voltage up to 100 Volts. The double pole relay configuration allows switching of balanced / stereo signals.

The relays shall be switchable through an integrated web interface, functions shall include Relay ON, Relay OFF and Relay pulse. For the pulse function the relay shall be switched on for a given time at the pressing of the switch. The relay shall switch off automatically after the given time has passed, disregarding if the contact is still closed or not. To again activate the contact the contact shall be released before closing it again.

A delayed startup function shall be provided, enabling consecutive switching of the relays, avoiding a big peak when switching multiple big loads (e.g. 8 4000W amplifiers).

When connected to a network with access to a timeserver, pre-programmed timed events shall be possible.

All signal in & Dupter connections shall be implemented using screw terminal connections while the digital communication bus is implemented using 2 x RJ45 connectors for signal linkthrough to other units. An Ethernet port with signal LED's shall also be provided. The system shall have an operation voltage of 24 V DC and shall be powered by an external power supply. Analogue relay inputs shall be provided to switch the relays by connecting these to the ground contact. Switching these analogue relay inputs shall have priority over the web interface or the APM paging console.

Distinct labeling shall provide a brief overview for both the user and the installer.

The system shall be housed in an ABS enclosure, a mounting system shall be implemented on the back to enable mounting on DIN-rail allowing rack / cabinet implementation with other electrical or control equipment. The dimensions shall not exceed  $159 \times 87.5 \times 54$  mm and the weight shall not exceed 0.4 kg.

The relay unit shall be implementable in a total system control application which is compatible with Android and iOS devices, allowing combining its controls together with other audio & companies application which is compatible with Android and iOS devices, allowing combining its controls together with other audio & companies application which is compatible with Android and iOS devices, allowing combining its controls together with other audio & companies application which is compatible with Android and iOS devices, allowing combining its controls together with other audio & combining its controls and combining its control of the combining its control of

