



WE SPECIALISE IN APPLICATIONS
THAT EMBRACE THE
PHILOSOPHY OF
WELLNESS THROUGH WATER

SPA SOLUTIONS





MODO... CUSTOMIZED WELLNESS



WE OFFER A WIDE RANGE OF CONTROLS, KEYPADS, LED LIGHTING SYSTEMS AND ACCESSORIES FOR SPA MANUFACTURES. SPA CONTROLS ARE DEVELOPED AS TO MEET THE NEEDS OF THE EUROPEAN MARKET. HI-LEVEL CUSTOMER SERVICE.



▶▶▶ electronic solutions for wellness

MODO IS THE BUSINESS UNIT OF ASTREL, STRONGLY FOCUSED ON THE RESEARCH OF ELECTRONIC SOLUTIONS FOR THE MARKETPLACE OF WELLNESS AND SPECIALIZES IN APPLICATIONS WHICH EMBRACE THE PHILOSOPHY OF "WELLNESS THROUGH WATER".

MODO DEVELOPS A RANGE OF STANDARDISED, INNOVATIVE AND RELIABLE PRODUCTS, WHICH BENEFIT FROM MANY YEARS OF EXPERTISE IN THE FIELD OF ELECTRONICS AND HYDROMASSAGE.

MODO TAKES PARTICULAR CARE IN THE ANALYSIS AND CREATION OF EASY AND FLEXIBLE SOLUTIONS THAT GUARANTEE ITS CUSTOMERS A HIGH LEVEL OF CUSTOMIZATION.



ASTREL has been designing and manufacturing electronic systems for the whirlpool market since 1989, by actively co-operating with the main European companies in this field. **ASTREL** is **GECKOALLIANCE** partner for European market since 2003.



ASTREL is structured with a designing and engineering department, in-house lab for fast prototyping and EMC tests, a production plant of over 3.000 sqm. In-house production allows **ASTREL** to provide a high standard quality control (100% inspection). The company is located in Mossa (GO) - Italy, featuring 4,000 sqm of covered premises and with a staff of 100 employees.

ASTREL has a modern organization, "lean enterprise" oriented. Its management system is certified in compliance with ISO 9001 since 1999.





CONTROLS FOR PORTABLE AND

COMMERCIAL SPA



MODO PROVIDES A WIDE AND COMPLETE RANGE OF CONTROLS AND ACCESSORIES FOR **PORTABLE AND COMMERCIAL SPAS**.

MODO CONTROLS ARE BASED ON PROJECT CHOICES WHICH ARE FOCUSED ON THE DESIGNING OF "OPEN" AND RELIABLE SYSTEMS.

ALL OUR CONTROLS ARE CERTIFIED IN COMPLIANCE WITH THE CURRENT EUROPEAN STANDARD AND LAWS IN FORCE.



▶▶▶ main characteristics of MODO controls

- FLEXIBILITY:** great possibilities of using accessories and components which are not bound by proprietary and/or dedicated systems: the possibility of using separate heaters along with the possibility of making use of common electrical wires for cabling, allow customers to choose the most convenient, functional and cheapest solution for their needs.
- SIMPLICITY:** the new generation MODO controls allow you to automatically configure your system through a programming key by making the installation procedure easier.
- SW UP-GRADE:** our controls allow you to re-program your firmware through a programming key and thereby the system upgrade is made easier directly by the manufacturer.
- HW UP-GRADE:** possibility of widening the system functionality thanks to the integration of a standard serial gate (for example RS485).
- SUSTAINABILITY:** the MODO controls for small-medium sized SPAs entail the possibility of using a heat exchanger to heat up the water, to be connected, for example, with a solar-thermal system.

The 100% of **MODO** production undergoes test-in-circuit and functional tests. All **MODO** products are CE and ROHS certified in compliance with the European standards in force. **MODO** is partner of the Canadian company **GECKOALLIANCE** for Europe, for which it manufactures and distributes, exclusively for Europe, **some controls and accessories for SPAs**.



▶▶ controls MICRO SPA

▶▶ controls EASY MINI



ELECTRONIC CONTROL FOR SMALL SIZE PORTABLE SPA. THANKS TO THE IN-BUILT CONTROL PLACED ON THE EDGE OF THE 2.0 KW HEATER, IT CAN BE FITTED EASILY EVEN IN SMALL PLACES. CONNECTION THROUGH J&J CONNECTORS.



ELECTRONIC CONTROL FOR SMALL-MEDIUM SIZE PORTABLE SPA. IT ENTAILS **THE MANAGEMENT OF HEATERS UP TO 3.6 KW**, THE SMART MANAGEMENT OF LOADS AND THE SYSTEM UPGRADE WITH ACCESSORIES THROUGH A RS485 SERIAL GATE.

EASYMINI, THANKS TO THE **POSSIBILITY OF A FIRMWARE RE-PROGRAMMING AND THE AUTOMATIC CONFIGURATION OF THE SYSTEM THROUGH A PROGRAMMING KEY**, ALLOWS YOU TO USE THE SAME CONTROL FOR VARIOUS MODELS, THUS SIMPLIFYING THE MANAGEMENT OF THE WAREHOUSE AND SPEEDING UP THE CONFIGURATION PROCEDURE.

FEATURES.

Power supply: 230V/50 Hz (single phase)
 Jet pumps: max 2 Hp (1.5 kW)
 Blower: max 1.2 kW
 Electric Heater: 2.0 kW
 Light: 12VAC - 2A
 Ozonator: 230V - 5A

CONFIGURATIONS

	2s	2s	2s
Pump 1			
Pump 2		1s	
Blower	•		
Ozonator			•

1s=1 speed; 2s=2 speeds

FEATURES.

Power supply: 230V/50 Hz (single phase)
 Jet pumps: max 2 Hp (1.5 kW)
 Blower: max 1.2 kW
 Electric Heater: max 3.6 kW
 Ozonator: 230V-1A / 12V-350mA
 Light: 12VAC - 2A

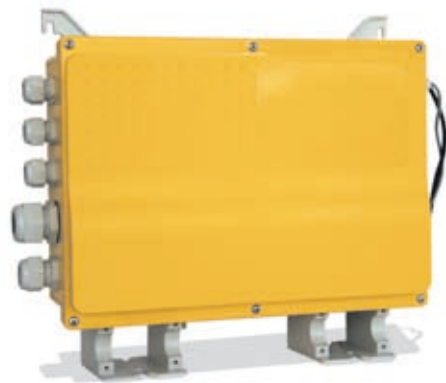
CONFIGURATIONS

	2s	1s
Pump 1		
Pump 2		1s
Blower	•	•

1s=1 speed; 2s=2 speeds



▶▶ controls EASY NOVA



ELECTRONIC CONTROL FOR MEDIUM SIZE PORTABLE SPA. **MANAGEMENT OF ELECTRICAL HEATERS UP TO 3.6 KW OR HEAT EXCHANGER.** EASYNOVA ENTAILS THE SMART **MANAGEMENT OF LOADS, THE CONTROL OF A BLOWER AND A VARIABLE SPEED PUMP** AS WELL AS THE MANAGEMENT OF A COMPENSATION TANK. A **RS485 SERIAL GATE** ALLOWS YOU TO CONNECT THE CONTROL WITH ACCESSORIES UPON REQUEST. **THE POSSIBILITY OF A FIRMWARE RE-PROGRAMMING AND THE SYSTEM AUTOMATIC CONFIGURATION THROUGH A PROGRAMMING KEY,** ALLOWS YOU TO USE THE SAME CONTROL FOR VARIOUS SPA MODELS, THUS SIMPLIFYING THE MANAGEMENT OF THE WAREHOUSE AND SPEEDING UP THE CONFIGURATION PROCEDURE.

FEATURES.

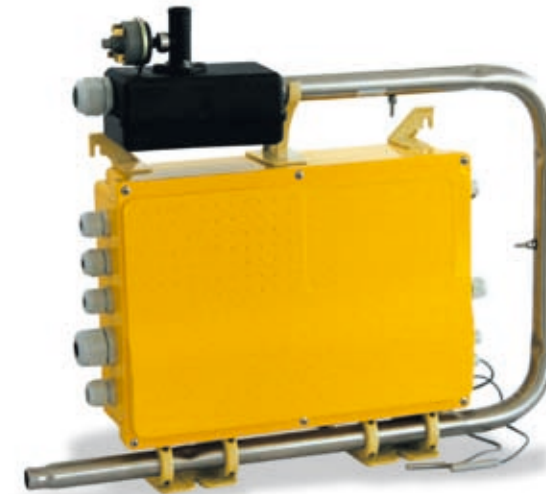
Power supply: 230V/50 Hz (single phase) o 380V/50Hz (three phase)
 Jet pumps: max 2 Hp (1.5 kW)
 Circ. Pump: max 0.75 Hp (550 W)
 Blower: max 1.2 kW
 Electric Heater: max 3.6 kW / 230V
 Ozonator: 230V-1A / 12V-350mA
 Light: 12VAC-2A

CONFIGURATIONS

	2s	2s	2s	2s
Pump 1	2s	2s	2s	2s
Pump 2	2s	1s		2s
Pump 3		1s	v.s.	v.s.
Circ. Pump	•	•	•	•
Blower	1s/v.s.	1s/v.s.	1s/v.s.	1s/v.s.

1s=1 speed; 2s=2 speeds; v.s.=variable speed

▶▶ controls EASY TOP



ELECTRONIC CONTROL FOR HIGH PERFORMING PORTABLE SPAS. IT ENTAILS THE POSSIBILITY OF USING **SINGLE-PHASE ELECTRICAL HEATERS (230V) WITH A POWER UP TO 3.6KW OR TWO-PHASE ELECTRICAL HEATERS (230V) UP TO 5.2KW.** EASYTOP ALLOWS YOU TO USE **THREE JET PUMPS AT THE SAME TIME** OF WHICH TWO DOUBLE SPEED AND ONE SINGLE SPEED. THEY COME ALONG IN THE **LOW-END VERSION,** WITH ONLY A 230VAC POWER SUPPLY-SINGLE PHASE.

FEATURES.

Power supply: 230V/50 Hz (single phase) o 380V/50Hz (three phase)
 Jet pumps: max 2 Hp (1.5 kW)
 Circ. Pump: max 0.75 Hp (550 W)
 Blower: max 1.2 kW
 Electric Heater: max 3.6 kW (230V-single phase) o max 5.2 kW (230 V-two phase)
 Ozonator: 230V-1A / 12V-350mA
 Light: 12VAC-2A

CONFIGURATIONS

	E. TOP	E.TOP LOW-END
Pump 1	2s	2s
Pump 2	2s	1s
Pump 3	1s	
Circ. Pump	•	•
Blower	•	•

1s=1 speed; 2s=2 speeds

▶▶ controls EASY COM



EASYCOM IS THE CONTROL DESIGNED FOR MANAGING SPAS WITH OVERFLOWS AND COMPENSATION TANK WHICH ARE MEANT TO BE USED IN PUBLIC SPACES. THE EASYCOM, WITH RESPECT TO THE COMMONLY USED PANELBOARDS, OFFERS YOU NUMEROUS ADVANTAGES, AMONG WHICH A **WEEKLY PROGRAMMING** OF THE HEATING FUNCTIONS (HIGH ENERGY SAVING) AND FILTERING (OPTIMISATION OF MAINTENANCE), **TRIGGERING OF HYDROMASSAGING PUMPS BOTH THROUGH A PRE-SELECTED CYCLE (IT CANNOT BE MODIFIED BY THE USER) AND THROUGH SOME KEYPADS PLACED ALONG THE POOL EDGE** (PNEUMATIC, PIEZOELECTRIC FUNCTION), AUTOMATIC MANAGEMENT OF A COMBI ELECTRIC AND SOLAR HEATING SYSTEM. THE EASYCOM CAN BE CONNECTED TO EXTERNAL ACCESSORIES AND TO SUPERVISION SYSTEMS THROUGH A **RS485 SERIAL PORT**.

FEATURES.

Power supply: three phase 380V
 Jet pumps: three phase max. 3Hp
 single phase max 3Hp
 Filter pump: max 1 Hp three phase
 Blower: max. 1.0 kW
 Electric Heater: max 12kW three phase

CONFIGURATIONS

Pump 1	1s	1s [†]
Pump 2	1s	1s [†]
Filter Pump	•	•
Blower 1	•	•
Blower 2	•	•

1s=1 speed; 2s=2 speeds; [†]=three phase

▶▶ KEYBOARDS



K 4

10 key **main** keyboard equipped with a graphic display and a real time clock.

EXT SIZE: 78 x 83 mm
HOLE SIZE: 163 x 66 mm
OVERLAY: Pump1, Pump2, Pump3, Up, Down, Blower, Light, Filter, Econo, Clock.



K 89

10 key **main** keyboard equipped with a graphic display and a real time clock.

EXT SIZE: 78 x 83 mm
HOLE SIZE: 163 x 66 mm
OVERLAY: Pump1, Pump2, Pump3, Up, Down, Blower, Light, Filter, Econo, Clock.



K 8

8 key **main** keyboard equipped with a backlighted graphic display.

EXT SIZE: 178 x 83 mm
HOLE SIZE: 163 x 66 mm
OVERLAY: Pump1, Pump2, Blower, Light, Econo, Purge, Up, Down.

▶▶ KEYBOARDS



K 35
6 key **main** keyboard equipped with LED display.

EXT SIZE: 178 x 83 mm
HOLE SIZE: 163 x 66 mm
OVERLAY: Pump1, Pump2, Blower, Light, Up, Down.



K 19
4 key **main** keyboard equipped with LED display.

EXT SIZE: 178 x 83 mm
HOLE SIZE: 163 x 66 mm
OVERLAY: 1. Pump1, Pump2, Light, Up/Down
2. Pump, Light, Up, Down,
3. Pump, Blower, Light, Up/Down



K 9
4 key **main** keyboard equipped with a display and flashing LEDs.

EXT SIZE: 113 x 50 mm
HOLE SIZE: 85 x 22 mm
OVERLAY: 1. Pump1, Pump2, Light, Up/Down
2. Pump, Light, Up, Down,
3. Pump, Blower, Light, Up/Down



TSC 79
4 key **main** keyboard equipped with a frame, a display and flashing LEDs.

EXT SIZE: 110 x 39 mm
HOLE SIZE: 85 x 22 mm
OVERLAY: 1. Pump1, Pump2, Light, Up/Down
2. Pump, Light, Up, Down,
3. Pump, Blower, Light, Up/Down



TSC 79 ROUND
4 key **main** keyboard equipped with a frame, a display and a flashing LEDs.

EXT SIZE: 110 x 39 mm
HOLE SIZE: 85 x 22 mm
OVERLAY: 1. Pump1, Pump2, Light, Up/Down
2. Pump, Light, Up, Down,
3. Pump, Blower, Light, Up/Down



K 3
4 key **auxiliary** keyboard.

EXT SIZE: 113 x 50 mm
HOLE SIZE: 85 x 22 mm
OVERLAY: Pump1, Pump2, Blower, Light

▶▶ ACCESSORIES



EASY HEATER

230V Electrical single phase heater, purposely designed for SPAs. It comes along with proper horizontal fitting supports.

Safety devices included in the heater are:

- Flow-switch / Pressure switch
- Hi-Limit temperature probe

Versions as here below are available:

- 2,0 KW - 230V
- 3,0 KW - 230V
- 3,6 KW - 230V

Pipe fitting: 2".



CLS-2

12 LED "super bright" light. By pressing a single key you can select a steady colour or let the light to choose the cycles of colours (at 3 sec intervals). The light comes along with a dedicated plastic support.



SPOT LIGHT

RGB LED light, high performing thanks to the reflecting dish. You can connect **up to 6 synchronous lights**. You can choose between a steady colour or a cycle of colours with a special fading away effect. This light is available with a driver that connects itself with the SPA control and a plastic support.



MCD-50

Corona discharge ozonator for portable SPA of the company DEL OZONE, an American company which is world-wide leader in the production of ozonising devices.



IN.TUNE

AM/FM receiver, CD reader and mp3, fully waterproof, purposely designed for being used on portable SPAs.

AM/FM tuning device, graphic display with 7 levels of light, CD, CD-R, CD-RW and mp3 reader, equalizer, clock and built-in 4 x 50 Watt amplifier.

To trigger the functions you can use the front panelboard, a remote wired keypad or the infrared remote control.



IN.P3

Support for i-pod, with dock and wires to connect to the IN-TUNE system. It allows you to control your i-pod straightforwardly from remote keypads belonging to the INK series or from a remote control.

▶▶ ACCESSORIES



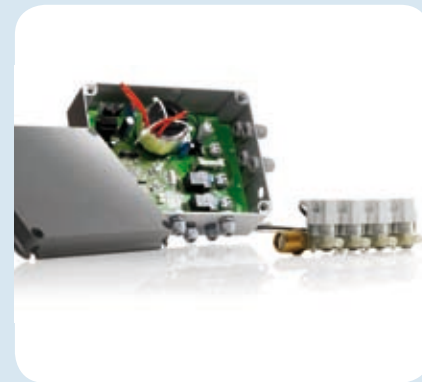
IN.K155

Wired auxiliary keypad, totally waterproof, to be used for the pool edge control of the IN.TUNE audio system. It is equipped with n° 11 backlighted keys.



IN.K455

Wired auxiliary keypad, totally waterproof, to be used for the SPA edge control of the IN.TUNE audio system. The IN.K455 keypad is equipped with LCD display and n° 7 backlighted keys.



DJS

Dynamic Jet Sequencer: electronic control to create some hydromassaging events with localised massages, thanks to the control of a series of electrovalves. The hydromassaging programmes are triggered through a customised keypad to be fitted on the edge of the SPA.










IRMT-4

Infrared remote control, waterproof and floating. Thanks to the remote control you can command the triggering of pumps in an easy way as well as a blower, the lights and control the audio system.



PROGRAMMING KEY

Programming key for the Easy MINI and Easy NOVA controls. It is equipped with a convenient SD-CARD memory card, where your programming firmware can be stored directly from your PC. Furthermore, the key is equipped with a series of dip-switches through which you can set the configuration of your loads, connected with the control, in order to get a quick programming during the production step.

	K 4	K 89	K 8	K 35	K 19	K 9	TSC 79	TSC 79 R.	K 3*	PIEZO*	PNEUM*
											
MICRO SPA					•	•	•	•			
EASY MINI				•	•	•	•	•			
EASY NOVA	•	•	•	•	•	•	•	•	•	•	
EASY TOP	•	•	•						•	•	
EASY COM										•	•

* Auxiliary Keypad

	230V - single phase 400V - three phase		Pump				Blower	HEATER					Ozonizing device	Light	Remote control or IR	Programming key	DJS	Compensation vat
	Pump 1	Pump 2	Pump 3	Circulation Pump	Max 2,0 kW-230V	Max 3,6 kW-230V		Two phase max 5,2 kW	Three phase max 12 kW	Heat exchanger								
MICRO SPA	•		2s				•°	•					•°	•				
EASY MINI	•		2s				•	•					•	•	•			
EASY MINI	•		1s	1s			•	•					•	•	•			
EASY NOVA	•	•	2s	2s		•	•°/v.s.°	•°				•°	•	•	•	•		•
EASY NOVA	•	•	2s	1s	1s	•	•°/v.s.°	•°				•°	•	•	•	•		•
EASY NOVA	•	•	2s		v.s.	•	•°/v.s.°	•°				•°	•	•	•	•		•
EASY NOVA	•	•	2s	2s	v.s.	•	•°/v.s.°	•°				•°	•	•	•	•		•
EASY TOP	•	•	2s	2s	1s	•	•	•°	•°			•°	•	•	•		•	
EASY TOP LOW END	•	•	2s	1s		•	•	•					•	•	•			
EASY COM	•	•	1s	1s		•	•				•	•	•	•				•
EASY COM		•	1s ^m	1s ^m		•	•				•	•	•	•				•

° As an alternative; 1s=1speed; 2s=2speeds; v.s.=variable speed; ^m=three phase



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