6. SAFETY

Read carefully this manual and comply with all safety instructions. This product must be installed by qualified technician only. Keep this manual on hand for any future revisions.

SAFETY & USE:
WARNING: This device must be installed following instruction from this manual.
The manufacturer is not liable for any damage that might rise from misusing this unit or defective installation.
WARNING: This product has been designed to operate safely and reliably for years. Nevertheless, as it is an electrical device, it is required to read and understand this manual. Keep manuals as references for future consults.
WARNING: This product has been designed to be used indoors, protected of water, direct sun light and extreme temperatures. This device must not be used outdoors, close to moisture of heat sources.
WARNING: Do not set objects on this equipment. Handle with care. Do not block UPS ventilation.
WARNING: Make sure to connect this unit to proper power line according to selected model. The Technical Specs sticker shows power rating information. DO NOT connect this device to any of its own power outlets.
WARNING: DO NOT connect life support medical equipments, microwave ovens, vacuum cleaners, refrigerators, or any other appliance to this device.
WARNING: In case of emergency turn off the UPS pressing Power Button, unplug it and call technical support.

DISPOSAL
We strongly recommend disposing this product according to regulations in your country to prevent possible environmental damages; besides some parts might be recycled.

7. SAFETY & QUALITY STANDARDS

SAFETY - LOW VOLTAGE DIRECTIVE (2006/95/EC)	
IT Equipment-Safety-Part 1: General Requirement	EN 60950-1:2006 + A11: 2010
UPS Part 1-1: General & Safety UPS in accessible areas	IEC/EN 62040-1
ELECTROMAGNETIC COMPATIBILITY - EMC DIRECTIVE (2004/108/EC)	
UPS, Part 2, Electromagnetic Compatibility:	IEC/EN 62040-2
Low Freq. Conducted Disturbances & Signals:	IEC/EN 61000-2-2
Electrostatic discharge immunity Test:	IEC/EN 61000-4-2: 2009
Radiated radio Frequency immunity:	IEC/EN 61000-4-3: 2006 + A1: 2008 + A2: 2010
Electrical Fast Transient / burst immunity:	IEC/EN 61000-4-4: 2004 +A1: 2010
Surge immunity:	IEC/EN 61000-4-5: 2006
IP PROTECTION	IP20 (static)
QUALITY MANAGEMENT:	Manufactured under: ISO 9001 : 2000
ENVIRONMENTAL MANAGEMENT:	Manufactured under: ISO 14001 : 2004

Any modification made by user or operator may affect compliance of the safety and performance certifications listed above. UPS manufacturer is not responsible of any modification made on the product or its accessories after it is manufactured.
This product is designed to operate in domestic and commercial environment.

- Technical information on this manual is property of INTEGRA ®. This manual Information cannot be copied or distributed totally or partially without written approval of INTEGRA.
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ENGLISH

USER MANUAL: STA-16A
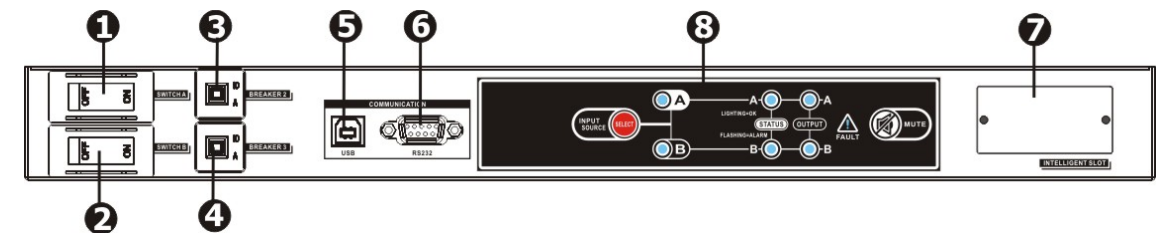# AUTOMATIC TRANSFER SWITCH

1. PRODUCT DESCRIPTION

This is an automatic selector or switch with 2 AC inputs and 1 AC output.
AC output is always connected to the pre-selected AC input (For example Input A). In case input A has a power failure, STA-16A automatically switches to connect Input B to the output. When STA-16A detects power in input A is reconnected, it switches back to input A.
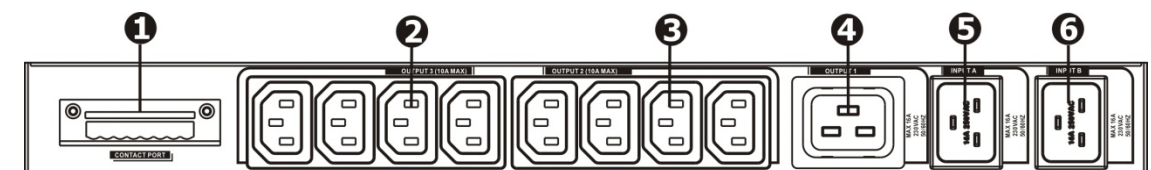
This device is usually used for 2 main applications:
   1.- To offer redundant input for one UPS, connecting 2 different AC lines to STA-16A inputs (A & B) and connecting UPS to the STA-16A output or
   2.- To offer UPS redundant system by connecting 2 different UPS at STA-16A inputs and output powering to the protected system.

FRONT PANEL:

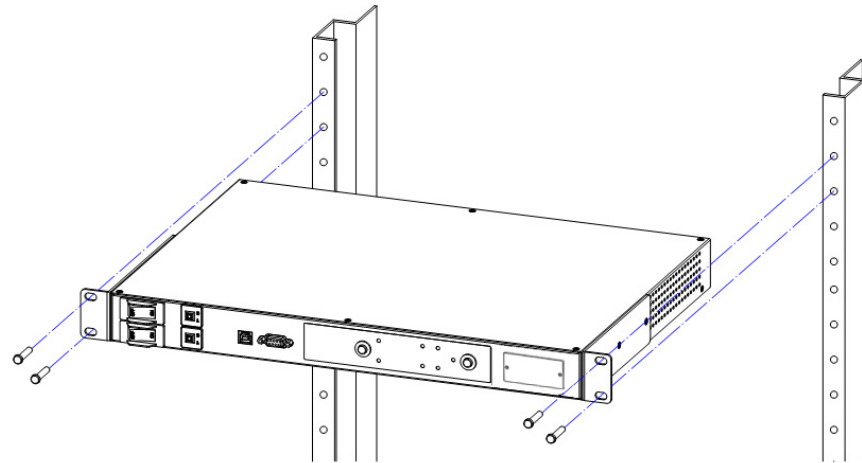| 1. SWITCH ON/OFF input A (main)	5. USB (optional for future use)
2. SWITCH ON/OFF input B (secundary)	6. RS232 port (optional for future use)
3. Input Breaker input A	7. Intelligent port for LAN card (optional for future use)
4. Input Breaker input B	8. Operation panel

REAR PANEL:

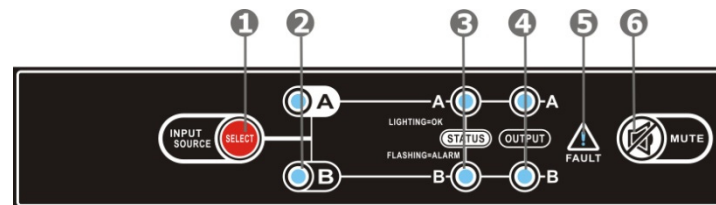| 1. Dry contact output (Relays)	4. AC outlet (capacity 16A)
2. AC outlets (capacity 10A)	5. Input socket "A"
3. AC outlets (capacity 10A)	6. Input socket "B"

2. INSTALATION

This product can be installed in a 19" rack cabinet or over a flat surface as well.
In case of installing in a rack cabinet, please below instructions.

1. Install according to above figure.
2. Connect input "A" in input socket "A" in rear panel.
2. Connect input "B" in input socket "B" in rear panel.
4. Connect protected products to STA-16A outlets. Note there are multiple outlets with 10A capacity and 1 outlet with 16A capacity.

3. OPERATION

OPERATION PANEL:

1. Selector for main input: Selects the preferred input.
2. Preferred Input LED: Indicates what is the preferred or pre-selected input (A or B) .
3. Status Input LED: Indicates status for each input
- LED A: ON: Input "A" OK
- LED A: OFF: Input "A" OFF (no voltage)
- LED A: Blinking (intermitent): Input "A" voltage is out of range (low or high input)
- LED B: ON: Input "B" OK
- LED B: OFF: Input "B" OFF (no voltage)
- LED B Blinking (intermitent): Input "B" voltage is out of range (low or high input)
4. Output LED: Indicates what input is connected to the output
- LED A: ON: Output connected to input "A"
- LED B: ON: Output connected to input "B"
5. Alarm LED: Alarma indicator
6. Alarm Mute

OPERACION:

TURN-ON:
After connecting all input and output cables, just activate input switches A and B to ON position.

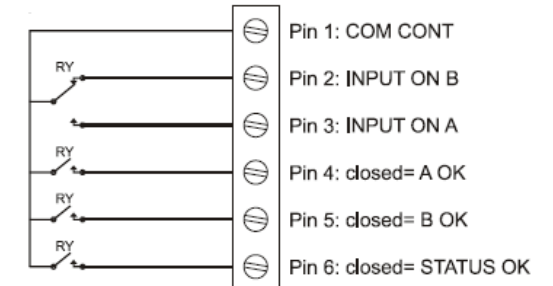**SELECTING PREFERRED INPUT:**
Select preferred input by button "1" in front panel. Default preferred input is "A".

4. COMMUNICATION PORTS

- **USB*:** USB communication using dedicated software. Pin 1: VBUS / Pin 2: D- / Pin 3: D+ / Pin 4: GND
- **RS-232*:** Serial communication using dedicated software. Pin 2: TX / Pin 3: RX / Pin 5: GND / Pin 6: +12Vdc
- **Relays outputs port**
  * check software manual.

RELAY OUTPUTS PORT

It is used to provide status information about AC inputs and STA-16A situation according to following figure.

- Pin 1: Common point.
- Pin 2: Close = Output connected to input "B"
- Pin 3: Close = Output connected to input "A"
- Pin 4: Close = Input "A" OK
- Pin 5: Close = Input "B" OK
- Pin 6: Close = Device OK

5. TECHNICAL SPECIFICATIONS

ATS 16A - 220V	16A
Capacity / Capacidad (VA):	16A @ 220V (3.500VA)
Input / Entrada	
Voltage / Voltaje (VAC)	220/230/240Vac
Range / Rango (VAC)	180 - 258 Vac
Frequency / Frecuencia (Hz)	50 / 60Hz
Max Input Current / Corriente Max:	16 Amps
Inlets / Tomacorrientes de Entrada	2 x IEC C20
Output / Salida	
Voltage / Voltaje (VAC)	220/230/240Vac
Power Outlets / Tomacorrientes de Salida	8 x IEC-C13 (10 Amps) + 1 x IEC-C19 (16 Amps)
Protections / Protecciones	
Overload & Shortcircuit / Sobrecarga & Cortocircuito	AC Breaker for each input / Disyuntor AC para cada entrada
Transfer Time / Tiempo de Transferencia	
Transfer Time / Tiempo de Transferencia	4 - 8 ms
Size & Weight / Características Físicas	
Size / Dimensiones (cm)	330x483x44 mm
Net Weight / Peso Neto (Kg.)	5,0
Gross Weight / Peso Bruto (Kg.)	6,0
Operating Conditions / Ambientales	
Temperature / Temperatura	0-40°C
Humidity / Humedad	< 90% (no condensing)
Noise / Ruido	< 40dB