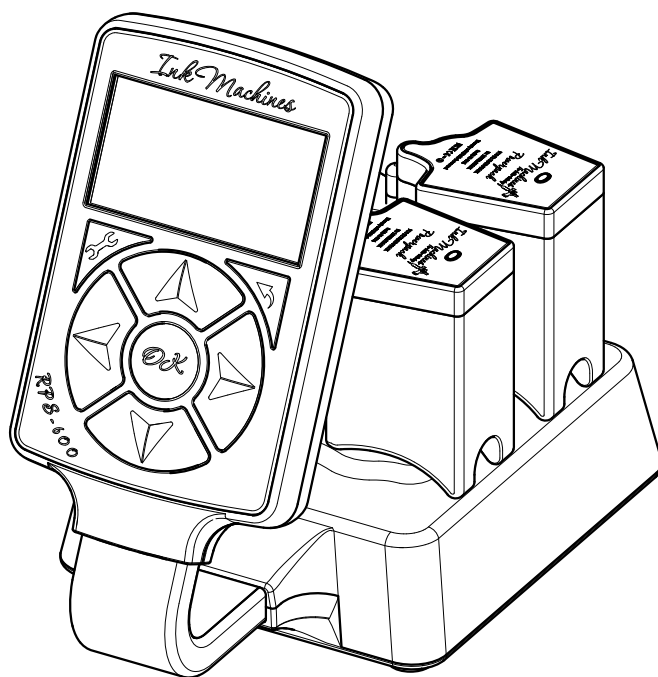


Manual for

RPS-600



Manufacturer: Ink Machines Sweden AB
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350 08 VÄXJ Ö, Sweden



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Document history

Date	Changes	Revision

We are proud to present the *RPS-600* wireless power supply for the **Dragonfly** and **Stingray** tattoo machines. Designed with the tattoo artist in focus and manufactured with the highest quality materials and components available.

Working without cords gives the Tattoo artist flexibility and a freedom to perform otherwise difficult movements. It also enables the user to provide a better environment for their customers as the cord reduce the risk for cross contamination

Intended use

The *RPS-600* is designed and developed solely for tattooing of humans for the use by professional tattoo artists only. The *RPS-600* can be used with the products **Dragonfly** and **Stingray** and with other tattoo machines that can be powered by a wire.

Document information

It is important to keep this document for the life of the equipment, and pass the document on to any subsequent holder or user of the equipment.

Information in this document is subject to change without notice. Ink Machines assumes no responsibility for any errors that may appear in this document

Stylistic conventions

In this manual all references texts are shown in *italic*.

Cautions and Notes are shown as below

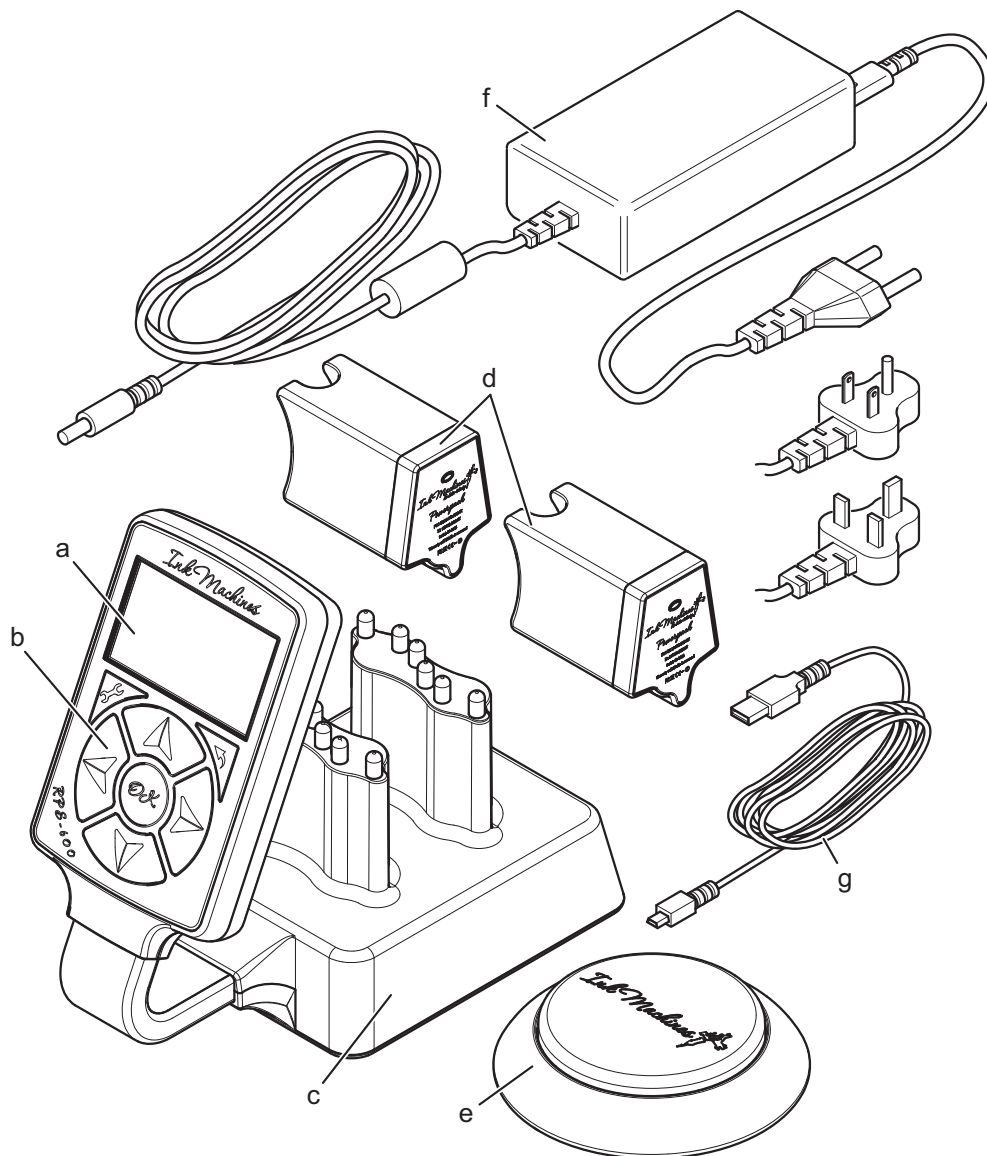
Text

Document producer

This document has been produced by Ink Machines Sweden AB.

The original manual is produced in the english language.

The *RPS-600* wireless power supply is a power supply designed to allow the freedom of tattooing without any cords to the tattoo machine or the foot switch. Once the machines are rigged with Powerpacks (max 6 machines) the main unit will sense which machine you pick up and recall the volt settings. Normally there is no need to touch the Powerpacks during the session once set up and encapsulated.



System overview

- | | |
|-----------------------------------|--|
| a. User interface/ Display | e. Foot switch |
| b. User interface / Control panel | f. Power adapter (different dep. on country) |
| c. Main unit / charger | g. USB cable |
| d. Powerpack | |

Main unit / charger

The Main unit is designed to stand on its own on a flat surface. Combined with a large LCD display the status and settings of the setup is easily overviewed from the working position. Communications between the units are by radio for optimal reliability and performance. The *RPS-600* can handle up to 6 active Powerpacks and charge 4.

The Main unit/charger is also equipped with regular ¼" Phono plugs on the back and can handle other tattoo machines and foot switches by wire for full compatibility. There is also a USB connection for future software upgrades.

User interface – Control panel and Display

The User interface gives you the possibility to control the voltage and the settings, and to view time left and status of the active Powerpack. The User interface is equipped with a Display and a Control panel. The Display will show the status of the Active Powerpack and the Control panel will make it possible to choose different selections and change settings.

All the touching takes normally place on the Control panel during the session, so for the hygienic barrier the User interface is designed to accept a 100x150mm plastic bag, *see Cleaning and hygienic*. There is no need to touch the Powerpacks during session.

Powerpack

The battery packs or Powerpacks are made with leading edge battery technology weighing only 65 grams each. The normal RCA or clip cord from the machine to the floor weighs about 50 grams, so the actual weight difference from a normal corded setup is about 15 grams.

The Powerpacks slides on to any *Dragonfly* or *Stingray* machine and are designed to avoid interfere with the hand as slight as possible. The high capacity batteries allows about 5 hours of effective running under normal circumstances (the time can vary depending on setup).

Foot switch

The simple round design makes it easy to activate from all angles the electronics is designed with a magnetic switch which ensures optimal service life. Standard changeable button cell battery easy to replace by user, *see Service and maintenance*. The Foot switch communicates with the Main unit by radio for optimal reliability and performance.

Power adapter

*Note! To avoid damage to product,
use only the Power adapter delivered with the product!*

The purpose of the Power adapter is to deliver the right power to the Main unit. The Power adapter delivered is selected to fit with the local requirements for electrical power. The Power adapter is tested together with the Main unit and should only be used with this product.

USB cable

The USB cable should ONLY be used for software upgrades to the Main unit.

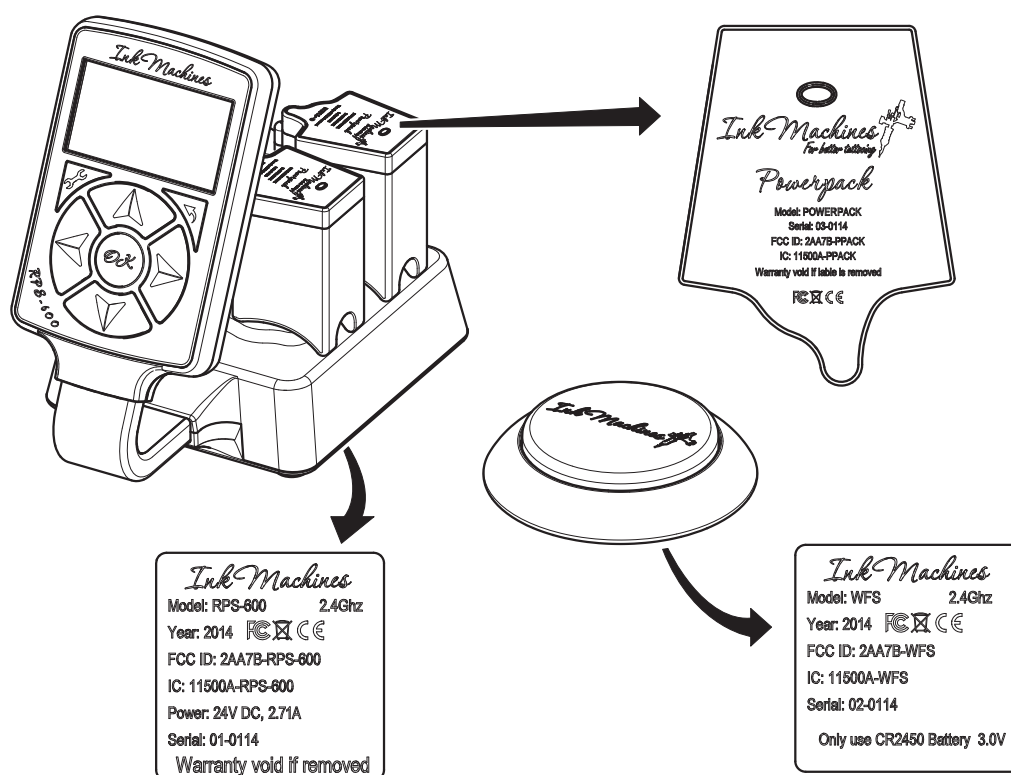
This product is approved and tested to the US requirements of the Federal Communications Commission, Title 47 Code of Federal Regulations Part 15 - Radio Frequency Devices.

The product also complies with the Europe requirements for CE-marking towards the R&TTE Directive, 1999/5/EC.

See Declaration of conformity in the end of the manual.

Identification labels

The product is labelled according to below;



Regulations

Always follow local regulations concerning the tattoo operation. It is the operations responsibility to follow regulations and to provide a reliable environment for their customers.

The manufacturer does not have responsibility for any kind of material or personal damage or infection caused by the operation. Negligence or misuse of the machine or the components attached to the machine is the operations responsibility.

The manufacturer does not have responsibility for contamination or infection of humans or animals.

Product

To keep your product in good shape handle it with care!

The product should not under any circumstances come in direct contact with fluids. If fluids will get in contact with the electronic it can ruin the product.

Do not connect any other power adapter then the one delivered with the machine.

Keep the product away from warm places.

Customer

Ink Machines only provide products for professional tattoo artists and the product may only be used by professionals with knowledge about diseases and how to maintain a clean working environment and a sterile equipment.

For a good hygienic barrier use:

- sterile tubes, grips, tips and needles.
- rubber gloves.
- plastic bags and wraps for tattoo equipment; around the power supply and the machine with the Powerpack or the power cord.

Always keep your equipment clean! *See chapter Cleaning and hygienic for further instruction.*

Electromagnetic compatibility

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Note!

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer for help.

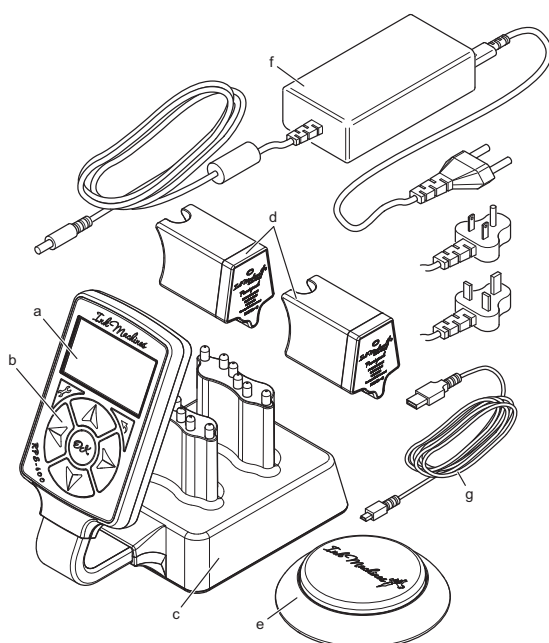
Delivery

When your package arrive please check that:

- there are no transport damages
- everything is delivered according to your order.

Unpacking

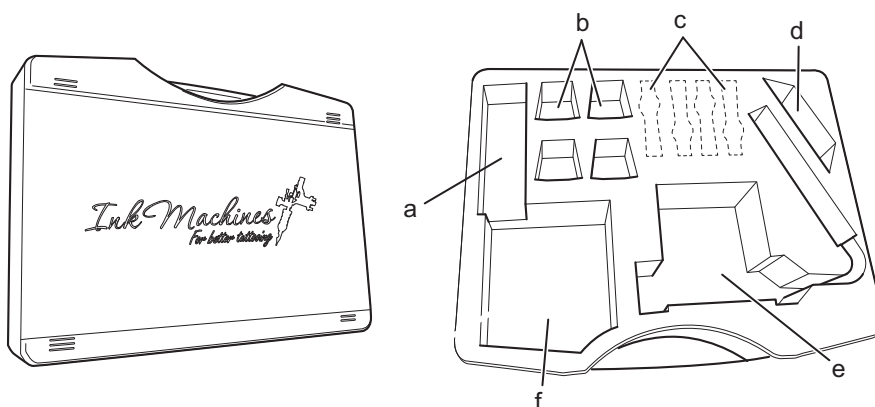
Note! Before unpacking make sure the area is cleaned!



Standard parts delivered:

- a-c. 1 powersupply;
Main unit / charger, Display,
Control panel
- d. 2 powerpacks
- e. 1 foot switch
- f. 1 power adapter for local
connection req.
- g. 1 USB cable

The product is delivered in a bag with trays for all your tattoo equipment from Ink Machines.



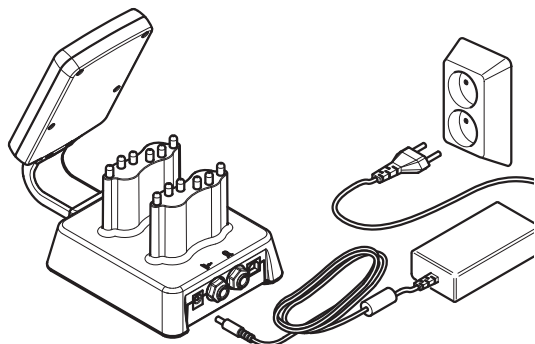
- a. Power adapter
- b. Powerpacks

- c. Tattoo machines
- d. Foot switch

- e. Power supply
- f. Cable units

Getting started

To get the Powerpack and the tattoo machine up running follow the steps below:



- 1 Connect the power adapter to the main unit (see *Connection*) and the power cord to a regular wall power outlet.

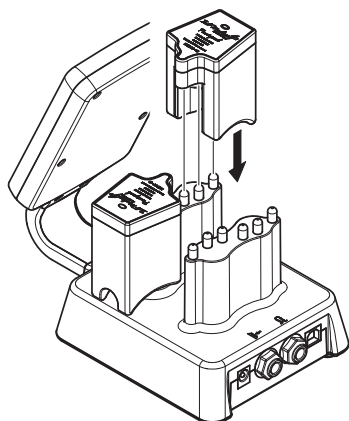
Caution! Make sure you have the right power cord for your country.

Note! The product is not equipped with a power on button.

When power up the display will present;

- the Ink Machine logotype
- the Software version

After that the charging location for the Powerpacks will be shown as 4 crossed over symbols on the Display.

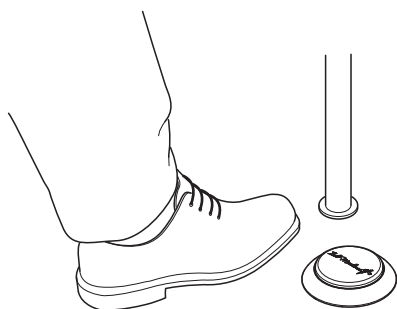


- 2 Place the Powerpacks on to the Main unit/charger so the charging can begin. The Powerpacks will start loading, see status on the Display. Once the Powerpacks are put in the main unit the Powerpacks will automatically pair* to the Main unit. The pairing will take about 5 sec.



Note! It will take a couple of minutes for the correct charging to be displayed.

The charging cycle takes about one hour if the Powerpacks are empty.



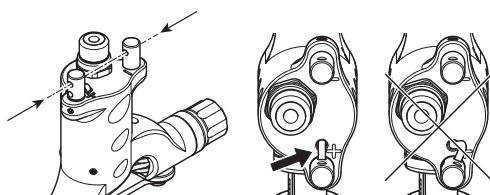
- 3 Place the delivered foot switch nearby you on the floor, make sure you can reach it. The main unit will recognize the foot switch as it is paired* from the factory.



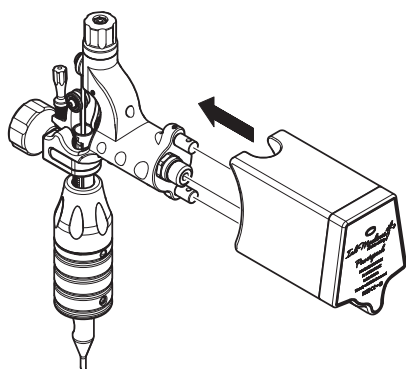
- 4 When charging is complete you are ready to start using the units.

First set up the tattoo machines you intend to use like you would normally do, for further instructions read the **Dragonfly** or **Stingray** manuals.

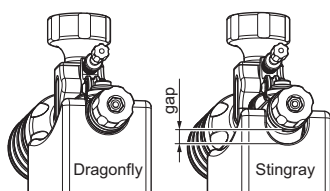
Note! Clean the Tattoo machines before attaching the Powerpacks.



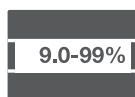
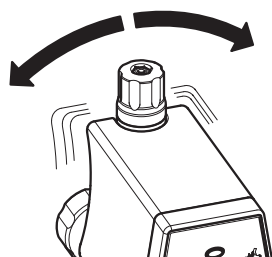
Make sure the cable is in the right place before attaching the Powerpack to the tattoo machine.



- 5 Connect the Powerpacks to your **Dragonfly** or **Stingray** tattoo machine by sliding it on to the back of the machines. The Powerpack should go all the way and mate with the back surface of the machine.

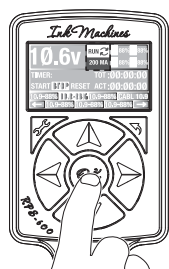


On the Stingray there should be a gap between the powerpack and the machine.

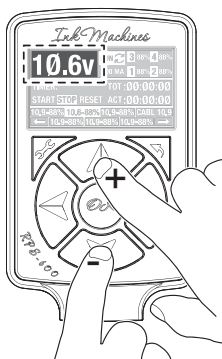


- 6 To activate the Powerpack and the machine you are holding you need to shake it or give it a gentle tilt. The active Powerpack** will be highlighted on the Display.

You can also chose active Powerpack manually by selecting active Powerpack with the arrows on the Control panel.



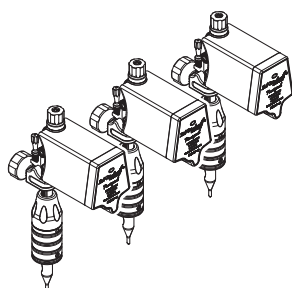
- 7 Now you should be able to start the machine with the foot switch or the OK button on the Control panel. Information will be highlighted on the display for the activated machine and a symbol [RUN] showing that the unit is working.



- 8 Set the voltage you need with the up(+) and down(-) arrows on the User interface and make sure the machine is running the way you want it.



For additional settings see *Settings*.



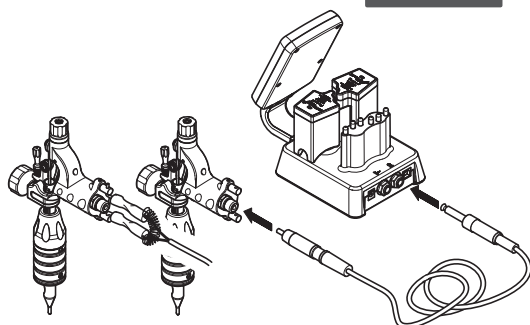
- 9 Repeat the steps 4-8 with up to 6 wireless machines with Powerpacks.

Additional Powerpacks can be charged while working. Max 4 Powerpacks can be placed in the charger at the same time.



- 10 If you want to use a 7th machine of another brand you can connect it with a RCA or a clip cord to the ¼" Phono outlet on the back of the Main unit. You will find the volt settings for the wired machine to the right on the display, pressing the arrow to the right as far as possible.

The wired machine always have to be activated manually on the User interface.

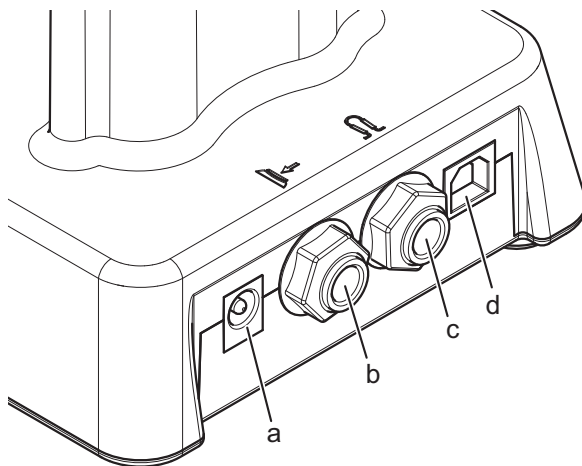


* read more about *Pairing* under *User interface*.

** read more about *active Powerpack* under *User interface*.

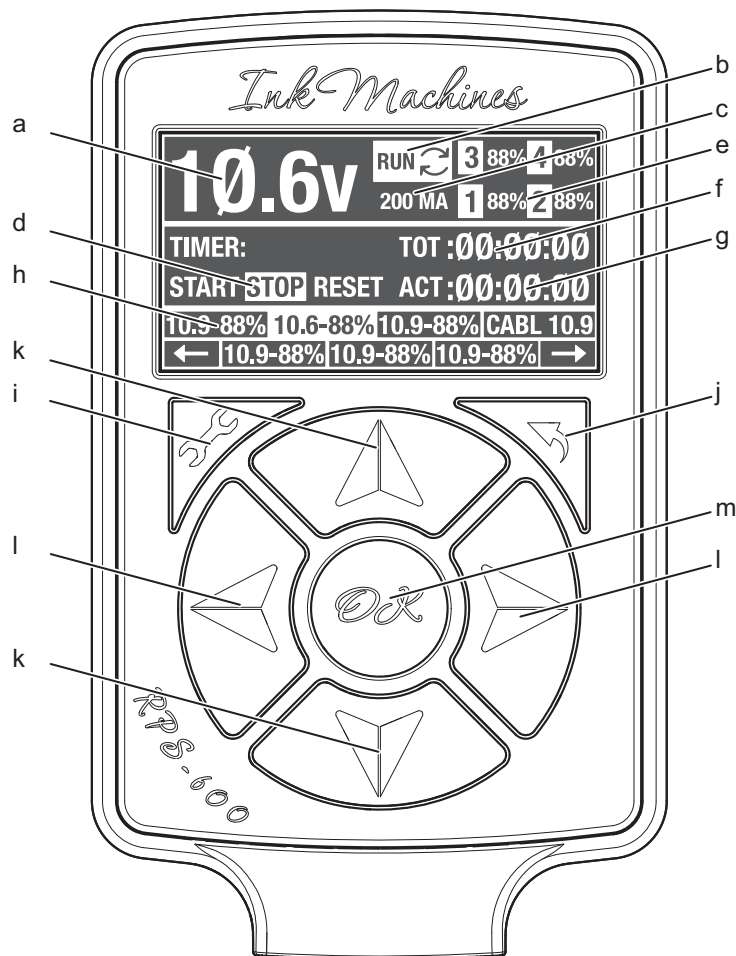
Wires

The wiring connection point can be found on the back side of the Main unit.



Connection point for;

- | | | | |
|----|--|----|---|
| a. | the power adapter delivered whit the unit. | c. | for wired Tattoo machine, rotary and coil. |
| b. | for a wired foot switch. | d. | USB cable ONLY for future software upgrade. |

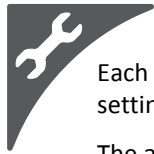


- | | |
|--|--|
| a. Voltage for active Powerpack | e. Powerpacks charging on the charger (max 4). (diff. when cable cord running) |
| b. Running status for active Powerpack | f. Total manual time activated. |
| c. Current power consumption when running on battery. (A for cord)
Keep it low to save power! | g. Automatic working time for active Powerpack |
| d. Selections for the Total manual time.
START, STOP, RESET | h. Paired Powerpacks voltage and power left on each Powerpack.
(ev. wired tattoo machine connected CABL.) |

Control panel

- | | |
|---|---|
| i. Settings, see <i>Settings</i> further below. | l. Navigate left and right between Timer options and Active Powerpack |
| j. Return to main menu | m. Start and Stop Tattoo machine.
Confirm selections |
| k. Change Voltage to the active unit, arrow up(+) and arrow down(-) | |

Settings



Each Powerpack has its own individual settings. Choose Settings in the main menu and the below settings will be displayed. To move between Settings use the buttons with arrows on the Control panel.

The active Powerpack is configured and the settings are saved for that unique Powerpack.

FOOTSWITCH MODE	
TOGGLE	The machine is powered when pressing the pedal once. The machine is unpowered when pressing it again.
HOLD	The machine is powered when the foot is continuously pressing the foot pedal
BACKLIGHT	Display settings. Press the left and right arrow keys when selecting
CONTRAST	Display settings. Press the left and right arrow keys when selecting
BOOST MODE*	Will try to obtain constant speed when the load is increasing.
OFF, ON	
KICK START*	Gives extra power to the tattoo machine at start up.
OFF	
LOW, MEDIUM, HIGH	
PAIR FOOTSWITCH*	Pair the foot switch to the Main unit.
UNPAIR FOOTSWITCH*	Unpair the foot switch from the Main unit.
UNPAIR POWERPACKS*	Unpair Powerpacks from the Main unit
SLEEP MODE*	Manually activating of Sleep mode.

* See further below

Pairing

The pairing function is essential so the Main unit can provide the correct signals to the Active Powerpack and the correct Foot switch.

Powerpack

The Powerpacks will be paired to the Main unit when they are loaded to the charger. Each Main unit can have 6 Powerpack paired. The number of paired powerpacks will be shown on the lower part of the display.

It is possible to have several Main units in the room, then you will be able to borrow Powerpacks from other Main units.

You need to unpair the powerpack to be able to pair it with another Main unit. To unpair the Powerpacks chose UNPAIR POWERPACKS from the Settings menu. When unpairing the Powerpack all paired Powerpacks to that Main unit will be unpaired. Attache the Powerpack to the Main unit / charger to pair it again.

Footswitch

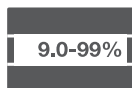
The foot switch delivered with the package will be paired with the Main unit before delivery to customer. To unpair the foot switch select UNPAIR FOOTSWITCH from the Settings menu. To connect the foot switch again choose PAIR FOOTSWITCH from the Settings menu.

Active Powerpack

To control and view correct status of the Powerpack you want to work whit, you need to choose Active Powerpack.

Choose active Powerpack;

- tilt or shake the Powerpack, this will send a signal to the paired Main unit to change active Powerpack.
- use the arrow keys on the User interface Control panel to manually select which Powerpack that should be active.



The Active Powerpack will be highlighted on the display.

Sleep mode

The Sleep mode is automatic activated if the unit is not touched for a while, this will put the machine in Standby mode. Sleep mode will dim the display and will use less power. Meanwhile the Powerpacks loaded on the charger will go on charging. Do not disconnect the Main unit.

The Sleep mode can be manually activated from the Settings menu by choosing; SLEEP MODE.

To deactivate Sleep mode just tilt the tattoo machine, push a button or the Foot switch.

Kick Start

The Kick start gives extra power to the Tattoo Machine at start up. This could be useful if the machine is equipped with extra features and the standard voltage is not enough for the start up. There are 4 levels; LOW, MEDIUM, HIGH and OFF.

Note! Only use this feature if necessary, it will increase wear!

Boost mode

The Boost mode will increase your machines capability considerable. It will enable the machine to keep the same speed when the workload is increasing. Depending on your setup this feature can be really useful.

Note! Only use this feature if necessary, it will increase wear!

Speed(CPS)

The speed of the machine is displayed as CPS, the cycles per second in Hz.

Duty cycle

The duty cycle is displayed as DUTY in %, it is calculated as the contact time.

Main unit, RPS-600 ©

Volt output	4 - 18 volt DC
Power input	24V 2.7A
Frequency	2.4GHz
Machine compatibility	Dragonfly and Stingray wireless and other machines by cable
Display	LCD 60x33mm (2.7")
Charger capacity	4 Powerpacks simultaneous charging
Connections:	¼" Phono for various wired tattoo machines 4-18v
	¼" Phono for wired foot switch
	USB for software upgrades
	5.5mm power connection
Operating temperature	10-35°C Indoor use only.
Weight	470 grams
Dimensions L x W x H	190 x 110 x 170 mm

Powerpack ©

Volt output	5 - 14 volt DC
Frequency	2.4GHz
Machine Compatibility	Dragonfly and Stingray
Battery capacity	Up to 5 hours. Depending on setup
Sensors	Accelerometer for activation
Operating temperature	10-35°C Indoor use only.
Weight	65 grams
Dimensions L x W x H	62 x 40 x 50 mm

Foot switch WFS ©

Battery	CR2450 3v 620mAh
Frequency	2.4GHz
Machine Compatibility	Dragonfly and Stingray
Battery	CR2450
Operating temperature	10-35 °C Indoor use only.
Weight	240 grams
Dimensions L x W x H	100 x 100 x 25 mm

Power adapter, ATS065-A240

Power input	100-240V 50-60Hz
Power output	24V 2.7A
Operating temperature	10-35 °C Indoor use only.
Weight	300 grams
Dimensions LxWxH	115 x 52 x 38 mm

This product includes a 12 month warranty from the date of purchase. The warranty applies to factory faults and not to wear of any components caused by normal or abnormal use.

If this product becomes defective during the Warranty period, Ink Machines shall have the option, in its sole discretion, to either repair the product or replace the product.

The warranty is void if:

1. The *RPS-600* user interface, main unit or Powepacks has been opened.
2. The *RPS-600* or any of its units or components have been autoclaved or cleaned in an ultrasonic cleaner.
3. Powerpacks have been used on any other machine than *Dragonfly* or *Stingray*.
4. Components have been damaged by misuse or carelessness.
5. Components have been manipulated.
6. Used with alkaline or acid cleaning agents with strong bases (high or low pH).
7. Used of other Power adapter.

Ink Machines entire aggregate liability for losses and damages for any cause related to or arising out of the purchase and/or use of the product will in no event exceed the purchase price paid for the product. In no event will Ink Machines be liable: (a) any indirect, special, incidental, consequential or punitive loss or damage, or other economic loss of any kind, in any case, even if advised of, or if Ink Machines could reasonably foresee, the possibility thereof. The limitations, exclusions and disclaimers in this agreement shall apply irrespective of the nature of the cause of action, demand, or proceeding including but not limited to, breach of contract, negligence, tort, strict liability or any legal or equitable theory

It is important for the tattoo operation to keep a clean and hygienic environment to avoid infection.

Do NOT use alkaline or acid cleaning agents with strong bases (high or low pH). Only use pH neutral cleaning agents and alcohol disinfectants. Use a dampened piece of paper or cloth to gently wipe off surfaces of the units.

Caution! Never spray or pour fluids directly on any of the units, it can cause short circuit and will void the warranty.

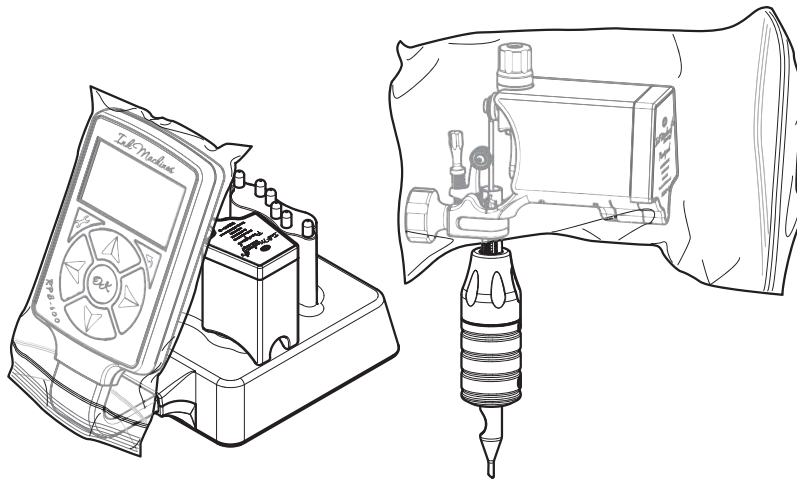
Preparation



Prepare all the tattoo machines before starting your session. Always clean the tattoo machine according to their manuals before attaching the RPS- 600 Powerpacks.

All the touching takes normally place on the Main unit during the session so there is no need to touch the Powerpacks during the session. To avoid contamination of the User interface (display and Control panel) it is designed to accept a 100x150mm plastic bag.

Wrap up the User interface before starting your session.



Foot switch

Clean the Foot switch outside and inside to eliminate dirt and deposits as it could affect the function of the Foot switch. Clean about 4 times a year depending on workload.

Dismount the foot switch, see *Service and maintenance*. Use a dampened piece of paper or cloth and gently wipe it off.

Self-service and repairing of the *RPS-600* and/or any of its units are prohibited and the warranty will be void if any unit has been opened or manipulated. The only exception is cleaning of the Foot switch and replacement of the battery in the Foot switch.

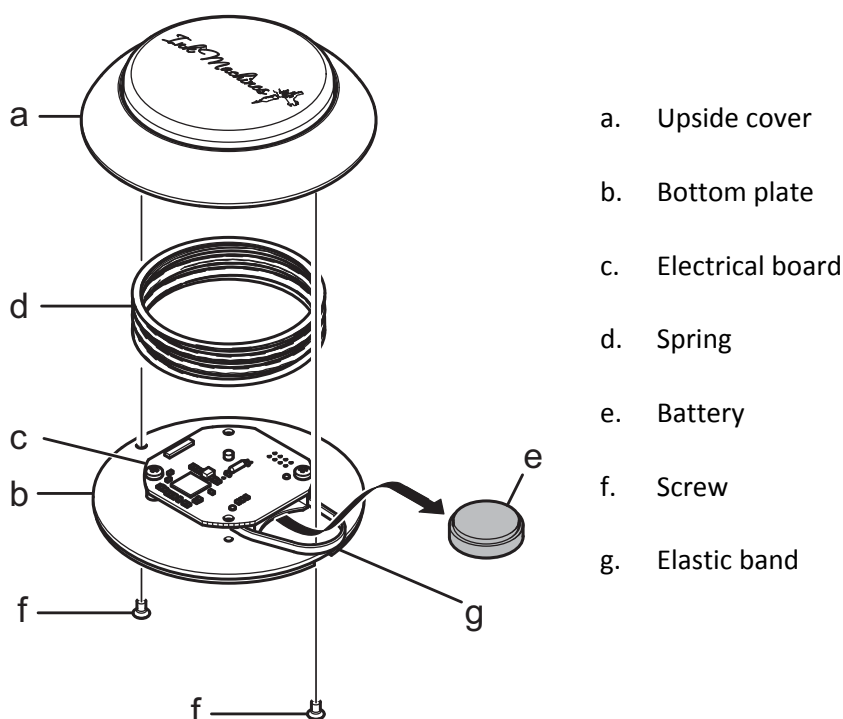
For service and repair visit www.inkmachines.com.

Caution! Changes or modifications not approved by the manufacturer could void the user's authority to operate the product.

Exchange of foot switch battery

The foot switch is equipped with a CR2450 battery. To exchange the battery you need to dismount the unit.

The foot switch consists of:



Exchange the battery according to below instruction.

1. Clean the foot switch before dismounting the unit. When the unit is opened also clean it inside, but do not use liquid near the electrical board.
2. Release the two screws(f) located on the bottom plate(b) of the foot switch. Use a screw driver to release the screws.

Caution! Be careful not to damage the electrical board!

Note! Do not remove the electrical board!

3. The battery(e) is located beneath the electrical board(c) and fixed with an elastic band(g). Drag the elastic band horizontal from the board and release the battery. Use a tool to push the battery from the backside.
 4. Attach the new battery.
-

Note! Make sure the battery is placed with the positive terminal (+) facing down.

5. Ensure the elastic band fix the battery in it's position.
6. Reattach the bottom plate(b) to the spring(d) and upside cover(a) by mounting the unit upside down.
7. Attach the two screws(f).
8. Test that the foot switch is working.

Available accessories to order after delivery:

- Powerpack,
- Foot switch
- RCA cable

See www.inkmachines.com for contact information.

The manufacturing company is responsible for disposal of the Product. To avoid environment pollution and human injury follow local regulation concerning waste of electronic products.

This product contains rechargeable and not rechargeable batteries. In the interest of protecting the environment and human health, please send the rechargeable batteries back to the manufacturer for exchange and follow local regulations concerning waste of batteries.



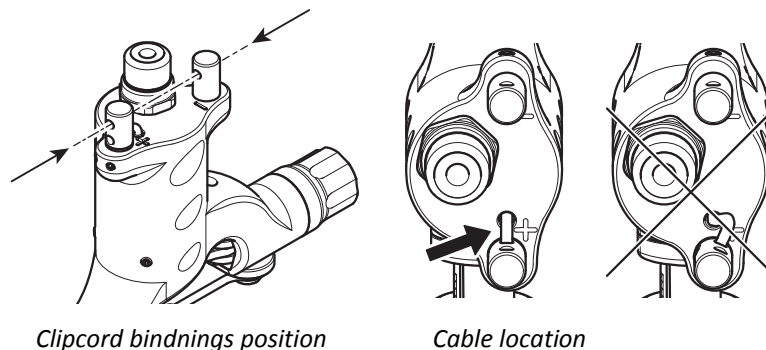
The symbol indicates that the product and its electronic accessories are not to be disposed with other household waste.

Check the following steps if you encounter problems.

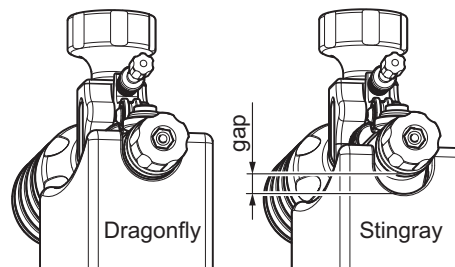
The Tattoo machine and the Powerpack does not work.

Check that;

1. the Powerpack is activated.
2. the tattoo machine is working, try with a cable power connection.
3. the contact surface is clean from dirt
4. the battery is charged and ok. A green light should be lit on the battery.
5. the clipcord binding post should be clean and correct. If you are not sure check the machine function with a clipcord.
6. the cable on the machine should be in the wright place. *See figure below.*



7. the clipcord bindning positions are aligned. Use a sprint to align them. *See figure up of.*



8. Viewed from the back side the **Stingray** should have a gap between the Powerpack and the machine, the **Dragonfly** should not have the gap. *See the figure up of.*

The foot switch does not work.

Check that;

1. the foot switch is paired with the Main unit.
2. you will get audio and display activities from the Main unit
3. the battery is placed with the positive terminal (+) facing down.
4. the foot switch is cleaned and there is no left dirt that could affect the function.
5. If the battery is finished, then exchange it.

Declaration of Conformity FCC

Per: 47 Code of Federal Regulations Part 15 - Radio Frequency Devices. This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation



Federal
Communications
Commission

We, the responsible party:

Company Name :	Ink Machines Sweden AB (US rep. importer)
Address :	BOX 8025 350 08 VÄXJÖ, Sweden
Phone :	+46 470 244 03

declares that the product;

Type of equipment:	Wireless powersupply for Tattoo Machines
Model / Name:	RPS-600

Was tested to confirm to the app. FCC rules and regulations. Testing was carried out by a listed facility of the FCC in accordance with the facility's registration.

Certification Summery;

Requirements tested :	FCC 47 CFR Part 15 Subpart C
Report Number :	3P07356-F15C
Tested by :	SP Technical Research Institute of Sweden
FCC listed Lab. Reg no :	90838

Date of issue:	2014-
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Signed:

Name:

Title of Authority:

CEO

R&TTE Declaration of Conformity (DoC)

We;

Name	Ink Machines Sweden AB
Address	BOX 8025 350 08 VÄXJÖ, Sweden

declare under our sole responsibility that the product;

Product name /model:	RPS-600 incl. WFS and Powerpack
Type:	Wireless powersupply for Tattoo Machines

to which this declaration relates is in conformity with the essential requirements and other relevant requirements of the R&TTE Directive (1999/5/EC). The product is in conformity with the following standards and/or other normative documents;

HEALTH & SAFETY (Art. 3(1)(a)):	EN 60 950-1:2006/A1:2010/A11:2009/A12:2011
EMC (Art. 3(1)(b))	EN 301 489-17 V2.2.1, EN 301 489-1 V1.9.2
SPECTRUM (Art. 3(2))	EN 300 328 V1.8.1

Place and date of issue (of this DoC): 2014-

Signed by:

Name:

Title of Authority:

CEO

Quick guide to *RPS-600*

