

# Manual for TPS-500 X2



Manufacturer: InkMachines Sweden AB

Grusåsvägen 8 352 42 VÄXJÖ, Sweden



# **Table of Contents**



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Table of Contents	
Document history	2
Introduction	3
Intended use	
Document information	
Stylistic conventions	3
Description	
TPS-500 X2 Main unit	
X2 Powerpacks	
X2 Foot switch (WFS)	
X2 Neorail	
X2 Charger	
Safety and responsibility	
Only for professional use	6
Instruction	
Delivery	
Unpacking	
Getting started	
Cross-contamination prevention	
Connections	17
User interface	
Display	
Settings	
Pairing X2 devices	
Active Powerpack  Settings for Powerpack and Rotary mode for cable	
Run mode display window for Coil machines	
Service and maintenance	
Software updates	
·	
Waste	
Trouble shooting	26
Technical specifications	
Main unit, TPS-500 X2	
X2 Powerpack for Scorpion	
X2 Powerpack for Stingray and Dragonfly	
X2 Powerpack for Cobra  Foot switch WFS X2	
Warranty	
CE	32
FCC	33
FMC.	34



## Document history

Date (YY- MM-DD)	Changes	Revision
2023-02-25	Released	1.0

## Introduction



## Introduction

We are proud to present the TPS-500 X2 wireless power supply system 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 freedom to perform otherwise difficult movements. It also provides a better environment regarding hygienic as the lack of cords reduce the risk of cross contamination

#### Intended use

The TPS-500 X2 is designed and developed solely for tattooing of humans for the use by professional tattoo artists only. The TPS-500 X2 can be used wirelessly with the products Cobra, Scorpion, Stingray, Dragonfly and with other tattoo machines by wire.

#### Document information

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 the text font italic.

Cautions	and Notes are shown as below		
		Text	

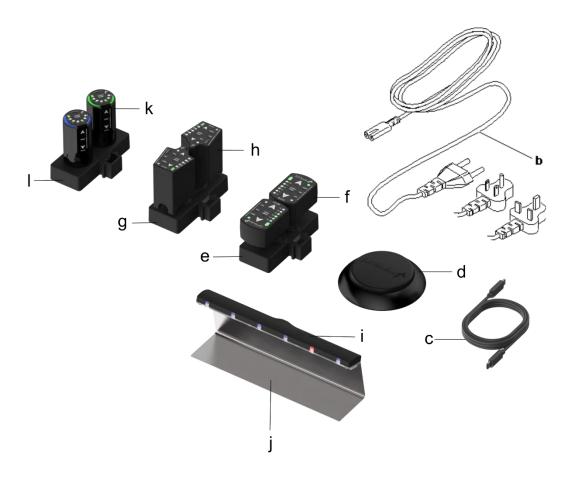
#### **Document producer**

This document has been produced by InkMachines Sweden AB.



# **Description**

The TPS-500 X2 is a modular system designed to allow the freedom of tattooing without a cord to the tattoo machine or the foot switch. The system can also be used without the main unit and charger bay so that the footswitch acts as a main unit communicating directly to the powerpacks, in this case a smartphone with the InkMachines app can be used to control the settings. Without the main unit the Neorail and/or corded machines can't be used and charging will have to be done with external USB charger.



- a. Main unit (optional)
- b. Power cord (different depending on country) (Included in delivery of a.)
- c. USB-C to USB-C cable (Included in delivery of a, d, f, h, i)
- d. Foot switch (optional)
- e. Charger bay for Scorpion (optional)
- f. Powerpack for Scorpion (optional)

- g. Charger for Stingray and Dragonfly (optional)
- h. Powerpack for Stingray and Dragonfly (optional)
- i. Neorail (optional)
- j. Neorail stand (optional)(Included in delivery of i.)
- k. Powerpack for Cobra (optional)
- I. Charger bay for Cobra (optional)

## **Description**



#### TPS-500 X2 Main unit

The Main unit (a.) is equipped with a graphic LCD display that makes it possible to view status and change settings to the connected units. Communication between the wireless units are by BLE radio for optimal reliability and performance, equipped with a multi color backlit touch panel for optimal hygiene and reliability. The transformer or power brick is built in and no external transformer is needed making it ideal for travel.

The Main unit is equipped with regular ¼" Phono plugs for corded tattoo machines and foot switch. It has one USB-C connection for charging of powerpack / footswitch or connection of the Neorail. This port can also be used for software updates if the app is not used.

The main unit is not equipped with any power switch, instead a sleep mode is activated if the unit is not used for a period of time. The display will use less power and if there is a charger bay attached with Powerpacks they will charge and maintain the batteries so they are optimized for next session.

#### X2 Powerpacks

The Powerpacks or battery packs are made with leading edge battery technology for light weight and high capacity. The X2 powerpack versions are equipped with buttons, status lights and USB-C port for independent use. The Powerpacks can also be paired directly to a footswitch or smartphone app.

Note! The Powerpack batteries will not take damage from constant charging or irregular charging cycles.

Store the Powerpacks on the charger bay when not used.

#### X2 Foot switch (WFS)

The round design makes it easy to activate from all angles and the electronics is designed with an internal contactless magnetic switch which ensures optimal service life. On board USB-C port for recharge of the battery so that cell change is not required. The X2 Foot switch communicates with BLE radio for optimal reliability and performance.

#### X2 Neorail

The Neorail (i.) should be used together with the supplied stand (j.) and USB-C to USB-C cable (c). The Neorail can only be connected to the USB-C port on the TPS-500 X2 main unit to function.

The Neorail is only for use with Neo-Cartridges and can handle up to six Neo-Cartridges. The Neo-Cartridges are held magnetically to the Neorail which makes it both hygienic and easy to work with. Allowing the user to only touch the external "front" part of the cartridge to eliminate contamination of the tattoo machine.

When used, it takes over the voltage setting from the Powerpack(s) and instead each Neo-cartridge gets their own unique volt setting. Only one Neo-Cartridge should be picked at a time for the system to recall the settings correctly. The Neo-cartridges can be placed in random slots on the Neorail and the system will keep track of them as long as only one is picked at the time. Return the used cartridge to an empty slot before picking another cartridge. Never pick two at a time.

Every slot on the Neorail has LED lights. This light will change color depending on if the Neo-cartridge is in place or not. White is working light, blue indicates that the system recognizes that a Neo-cartridge is present in that slot and red indicates the active slot, namely the empty slot which represents the cartridge currently in the machine. When connected the Neorail can manage start and stop of the active tattoo machine in three different ways, see settings page 21.

#### X2 Charger

The charger bay can only be used together with the Main unit. It is connected to the Main unit a special contact and can charge two Powerpacks on the tailor fitted slots and charge two additional powerpacks or devices by the two extra USB-C ports with a USB-C to USB-C cable.

# Safety and responsibility



## Safety and responsibility

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

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 any contamination or infection.

#### Only for professional use

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

For each client and session always use:

- sterile grips
- new sterile needles
- new rubber gloves
- new plastic barriers for tattoo equipment; around the machine, powerpacks, TPS main unit and the Neorail.



## Instruction

### Delivery

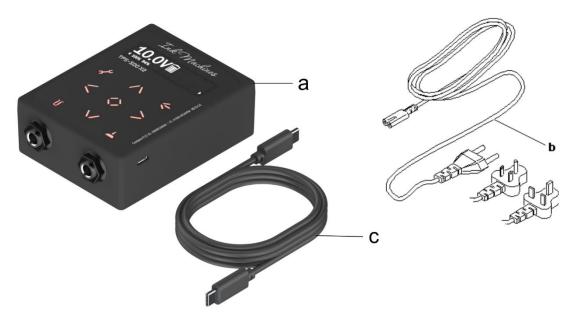
When your package arrives, please check that:

- there are no transport damages
- everything is delivered accordingly.

## Unpacking

Standard parts delivered with the TPS-500 X2 main unit:

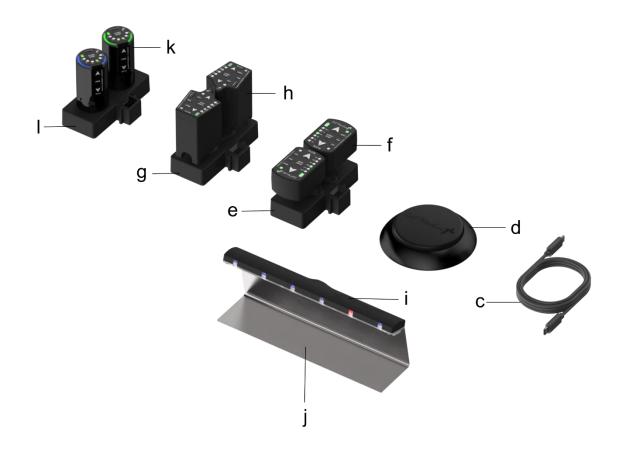
a. 1x TPS-500 X2 power supply (Main unit)



- b. 1 power cord
- c. 1 USB-C to USB-C cable



The following devices are optional to the TPS-500 X2 power supply unit and may be included in the delivery.



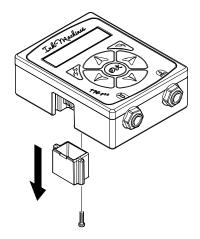
d.	Footswitch	h.	Powerpack for Stingray and Dragonfly
e.	Charger bay for Scorpion	i./j.	Neorail with stand
			(1 piece of USB-C to USB-C cable for Neorail included in delivery)
f.	Powerpack for Scorpion	C.	USB-C to USB-C cable for Neorail or charging various devices
g.	Charger bay for Stingray or Dragonfly	I.	Charger bay for Cobra
		k.	Powerpack for Cobra



#### Getting started

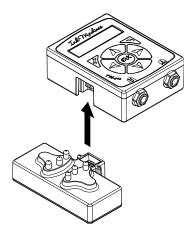
Caution! Make sure you have the right power cord for your country.

To get the Main unit with charger bay and Powerpacks up running follow the steps below:

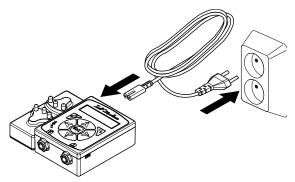


If charger bay and powerpacks are to be used:

 Remove the cover over the connection for the charger. Use a screwdriver, Torx T7, to remove the screw that holds the cover.



2. Connect the charger bay to the main unit. NOTE!! Be careful not to press directly on the display window of the main unit when attaching the charger bay. It can damage or break the display.



Connect the power cord to the main unit (see Caution! Never spray or pour fluids directly on any of the units, it can cause short circuit and will void the warranty.

## **Cross-contamination prevention**

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

Do NOT use alkaline or acid cleaning agents with strong bases (high or low pH). Only use pH neutral cleaning agents and 70% alcohol disinfectants on

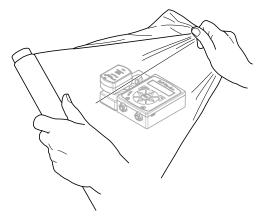


the units. Use a damped piece of paper or to wipe off surfaces of the units before and after use.

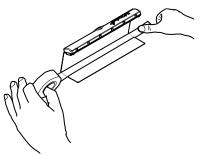
To prepare the tattoo machine before starting a new session. Always clean the tattoo machine according to the machine manual before attaching the Powerpack. Always use a sterile grip and bag the whole machine including the powerpack, use medical tape min 5mm below the grip seal to fix and seal the plastic bag to the sterile grip.



Always bag or wrap all devices with plastic film before starting your session.

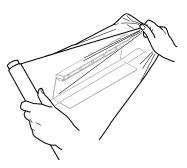


When using Neorail start with attaching the Neorail on the table with tape.



After that, wrap the Neorail with plastic film.





Put the Neo-Cartridges on the Neorail.

Always clean the foot switch between sessions. It is recommended that the whole foot switch is put inside a plastic bag.

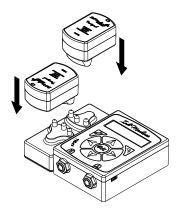
3. Connection *on page 15)* and to a regular wall power outlet.

Note! The power cord should be connected directly to a wall socket without any branch outlet. Doing so can cause interference from other devices that's connected to the branch outlet

Ink Machines TPS-500 1465 S TARTING UP 4. The display will power up.

(Firmware version is displayed in the lower left corner.)

Note! UNIT UPDATE might be displayed in the lower part of the display at start up.



If powerpacks are to be used:

5. Place the Powerpacks on to the charger for automatic pairing and to begin the charging.





The apperance of the display when one Powerpack is placed in the charger

If powerpacks are to be used:

6. The charging begins.

The Powerpacks will automatically pair to the main unit.

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



If foot switch is to be used:

 Place the foot switch on the floor, make sure you can reach it (make sure the foot switch is paired to the main unit, see page 23).

Note! Handle the foot switch with care, dont drop it on to the floor.

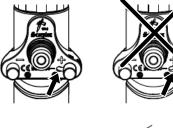


If powerpacks are used follow step 8-12, otherwise go to direct to step 13:

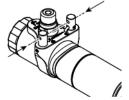
8. When charging is complete set up the tattoo machine(s) (for further instructions read the Scorpion manual).



Note! Clean the Tattoo machine(s) before attaching the Powerpacks.

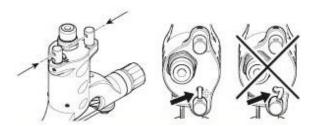


Make sure the motor cable is in the right position or it can interfere with the Powerpack.

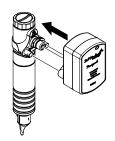


Motor cable position for Scorpion

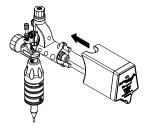




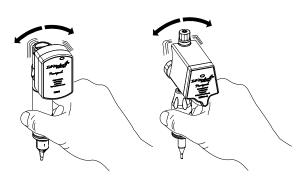
Motor cable position for Stingray and Dragonfly



Tattoo machine Scorpion



Tattoo machine Stingray and Dragonfly





The image shows the display's appearance when Powerpack is used

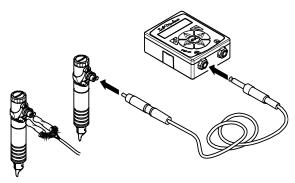
10. Connect the Powerpack to the tattoo machine.

11. Activate the Powerpack (and the tattoo machine) by shaking it or giving it a gentle tilt. It is also possible to activate Powerpack manually by selecting active Powerpack with the arrows on the Control panel or swiping work page in the app.

Note! This does not start the tattoo machine.

12. Charging status for the active Powerpack is highlighted on the display. The active work page will be displayed in the app if used

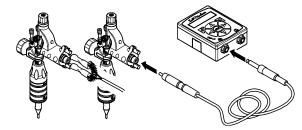




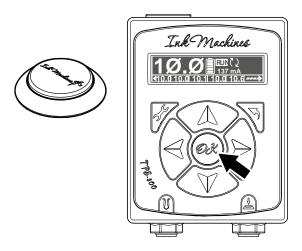
Connection of Scorpion to TPS-500 X2

If RCA cable or clip cord are to be used:

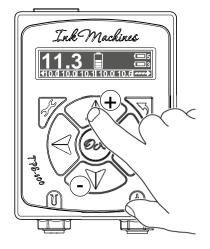
13. The tattoo machine is connected as shown in the picture



Connection of Stingray or Dragonfly to TPS-500 X2



14. Start the machine with the foot switch (optional) or the OK button on the control panel of the main unit (a symbol [RUN] is shown on the display). Can also be started with the on board start button of the Powerpack or with the app.



15. Set the voltage with the up (+) and down (-) arrow keys on the TPS control panel, the Powerpack buttons or in the app.

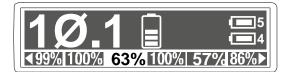




16. For additional settings see Settings on page 20.

If powerpacks are used follow step 17 - 18:

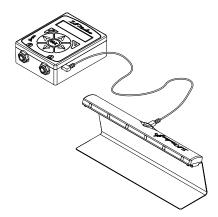
- 17. Repeat the steps 8-14 if you have more machines.
- 18. While working it is possible to charge two Powerpacks on the charger bay that are not in use and additional devices can be charged by USB.





#### Neorail

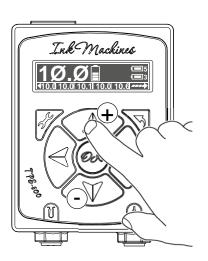
The Neorail is only intended for use with Neo-Cartridge tattoo needles. To get the Neorail up running follow the steps below:



1. Connect the Neorail to the TPS main unit with the supplied USB-C to USB-C cable.



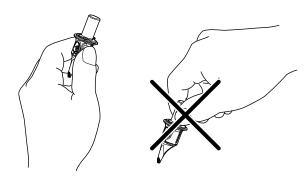




- 2. Prepare the Neorail as described in chapter Fel! Hittar inte referenskälla. on page Fel! Bokmärket är inte definierat.
- 3. When Neorail is connected the appearance of the display on the main unit changes. In the lower row of the display the setting of voltage for each Neo-Cartridge is now displayed. The setting of voltage for active Neo-Cartridge is highlighted. The same applies to the app if
- 4. Each Neo-Cartridge has its own setting of voltage. This is changed with the arrow keys (up + or down -).

- 5. Just pick one Neo-Cartridge at a time from the
- 6. To avoid cross-contamination never touch the part of the Neo-Cartridge which should be inserted into the tattoo machine.





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

#### **Cross-contamination prevention**



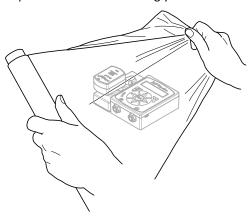
It's important for the tattoo operation to keep a clean and hygienic environment to avoid contamination and infection.

Do NOT use alkaline or acid cleaning agents with strong bases (high or low pH). Only use pH neutral cleaning agents and 70% alcohol disinfectants on the units. Use a damped piece of paper or to wipe off surfaces of the units before and after use.

To prepare the tattoo machine before starting a new session. Always clean the tattoo machine according to the machine manual before attaching the Powerpack. Always use a sterile grip and bag the whole machine including the powerpack, use medical tape min 5mm below the grip seal to fix and seal the plastic bag to the sterile grip.

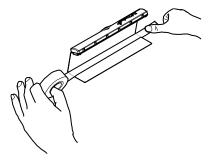


Always bag or wrap all devices with plastic film before starting your session.

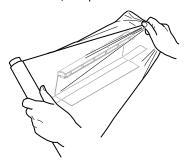




When using Neorail start with attaching the Neorail on the table with tape.



After that, wrap the Neorail with plastic film.

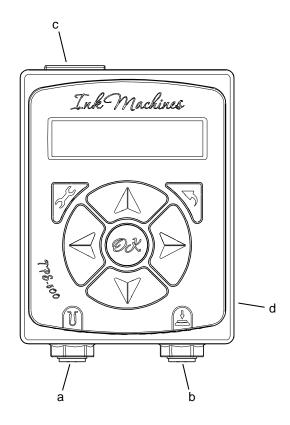


Put the Neo-Cartridges on the Neorail.

Always clean the foot switch between sessions. It is recommended that the whole foot switch is put inside a plastic bag.



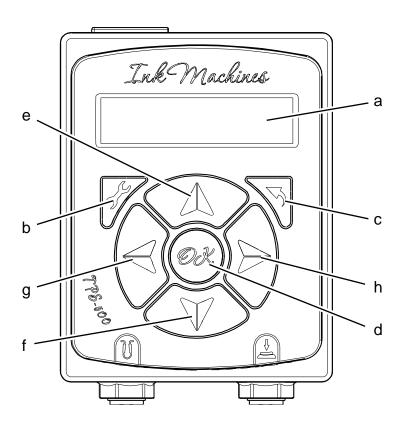
## **Connections**



#### Connection point for;

- a. tattoo machine, rotary or coil(1/4" Phono Plug)
- b. wired foot switch (1/4" Phono Plug)
- c. power cable (C7, 100 240V)
- d. Neorail or charging. USB-C to USB-C cable Can also be used for software updates.





- a. Display, see below
- b. Settings menu, see below
- c. Return to main menu
- d. Start and stop tattoo machine/Confirm selection
- e./f. Increase (e) and decrease (f) voltage to active unit
- g./h. Navigate left (g) and right (h) between Timer options and active Powerpacks



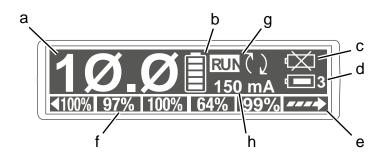
#### Display

#### Start screen

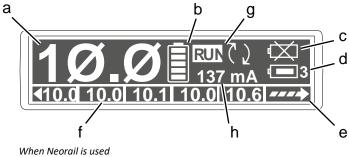


a. Firmware version

#### Main screen



When Powerpack is used



- Voltage for active Powerpack or e. cord connected
- b. Indicates Powerpack charge status. f.
  When cord is used this symbol

  CABLE
  is shown.
- c./d. c no Powerpack charging d Powerpack charging

- To timer menu (press right arrow key), see below
- f. When Powerpack is used: charging status in percent for each Powerpack paired to the Main unit

When Neorail is used: Voltage status for each Neo-Cartridge on the Neorail

- g. Symbol shown when the machine is running
- h. Current power consumption, can be set to Hz or Watts display aswell in the tools menu.



#### **Timer screen**



- i. Selections for the timer; START, k. STOP, RESET
- j. Total running time. Starts when a I. machine is activated for the first time and runs until sleep mode activates or manual stop / reset is selected
- Active time. Displays the time that all machines have been running actively
- Line only appears when Neorail is used. Switches between showing voltage setting for active Neo-Cartridge and charging for active Powerpack.



#### 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. These settings can also be changed within the app.

Make sure that the Powerpack you want to change the settings for is the active one. The settings under ACTIVE will only apply for the active Powerpack. The ACTIVE settings also apply for the cable machine when selected as active on the main screen.

The settings under BASE are global.



#### - ACTIVE -

KICK START \*

**BOOST MODE \*** OFF, LO, ME, HI Gives extra power when needed. Choose between Off, low, medium or high.

Gives extra power to the tattoo machine at start OFF, LO, ME, HI up. Choose between Off, low, medium or high.

BASE -CABL MACH. TYPE ROTARY FOOTSWITCH MODE TOGGLE HOLD

- BASE -

**FOOTSWITCH MODE** 

Choose which type of machine you connect to COIL CABLE MACH. TYPE **ROTARY** 

the cable outlet for optimal usage.

The machine is powered continuously when the pedal is pressed once. The machine is stopped

**TOGGLE** 

when pressing it again. Foot switch battery will

last longer with this setting.

The machine is powered only when the foot is HOLD

held down. Uses more of the battery.

Graphic display brightness.

DISPLAY SETUP: BACKLIGHT Choose units to display under the Voltage : UNITS

reading. Watts, Milliamps, HZ. Hz only works when using a Powerpack and not with cable.

Keypad color. **KEYPAD SETUP: LED COLOR** 

> : LED BRIGHTNESS Keypad brightness.

InkMachines



Turns the beep on or off for the footswitch press. The beep comes from the TPS when the TPS is on WFS BEEP

and from the footswitch when the TPS is turned

Turns the beep on or off for when pressing the **INDICATION BEEP** 

keypad buttons on the TPS main unit.

Pair the old type foot switch to the Main unit, PAIR OLD FOOTSWITCH

follow the instructions on the display.

Unpair the old type foot switch to the Main unit, UNPAIR OLD FOOTSWITCH

follow the instructions on the display.

Unpair a foot switch from the Main unit. **UNPAIR FOOTSWITCH** 

Unpairs all units except the footswitch. UNPAIR POWERPACKS AND APP

If there is interference in the communication between the units, it is possible to switch WIRELESS CHANNEL

channel manually. But its recommended to leave

it in AUTO for automatic shifting.

Run behaviour needle: Stop, Start/Stop,

Continuous.

Normal: Stops the machine when the cartridge is

placed back on the Neorail.

Start/Stop: Starts the machine when a cartridge is picked from the Neorail and stops when placed back on the Neorail. (No footswitch is required

for this option).

Continuous: The Neorail does not affect the start

or stop condition.

Setting of brightness for LED lights on Neorail

RED, BLUE, WHITE

#### Pairing X2 devices

**NEORAIL SETUP** 

Only when a Neorail is attached.

The X2 products can be paired unit to unit which means that you can pair one or several powerpacks directly to a foot switch and/or the smartphone app that will both act as a main unit. The system can then be expanded with the TPS-500 X2 main unit and future devices for additional functionality. The TPS-500 X2 main unit is required for full functionality to run machines with cable and to enable the use of the Neorail.

#### X2 Powerpacks

The Powerpacks will be paired automatically to the Main unit when they are placed on the charger bay. If the charger bay or main unit is not available the pairing can be performed by holding the pair button on the corresponding devices for example a foot switch and a powerpack for 5 sec until the lights start pulsing. They will then pair within a few seconds. Repeat the process if you have more powerpacks to form a system with one foot switch and several powerpacks. On the TPS-500 X2 unit the OK button is used as pair button. To unpair a unit and making it independent again, hold the pair button for about 12 sec until the lights flash



rapidly a few times. The mentioned features can with favour also be performed with the smartphone app. It is possible to have several separate systems in the same studio or room without interference. The X2 powerpacks are also backward compatible with the old system but the app can't be used in this case, they will pair to the old TPS-500 by placing them on the charger bay and behave like the old powerpacks. If the buttons on the powerpacks are to work when paired to the old system you also need to perform a software update on the old TPS-500.

#### X2 Footswitch (WFS X2)

To pair the X2 footswitch, the same procedure as with the powerpack applies with pair button or app.

The



running symbol(b) will be shown on the display of the main unit when the foot switch is pressed and working properly. It can also be verified in the app.

The X2 footswitch is also backward compatible with the old TPS-500 unit. To connect the foot switch to the old TPS-500 main unit, choose PAIR FOOTSWITCH from the TPS-500 settings menu. There will be 3 activities to perform/accept on the main unit before the Footswitch is paired. Chose OK to continue or Back(j) to abort.

Note! Make sure no other footswitch is being used during pairing!

PLEASE PRESS 5 TIMES FAST ON THE FOOT SWITCH BEFORE THE TIMER REACHES 0.

TIME LEFT 12 SECS

Unpairing a foot switch can be done by pressing the pair button on the back of the X2 footswitch for about 12 sec until the light flashes repeatedly a few times.

#### **Active Powerpack**

To control and view the correct status/ settings of the Powerpack you want to work with, you need to make the Powerpack active.

Make Powerpack active;

- tilt or shake the Powerpack, this will send a signal to the paired units to make this Powerpack active.
- You can also use the arrow keys on the TPS Control panel to manually select which Powerpack that should be active. The Active Powerpack will be highlighted on the display. Can also be done with the app by swiping the work pages.

# Settings for Powerpack and Rotary mode for cable 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 regular cartridges and the standard voltage is not enough for the start up. There are 4 levels; OFF, LOW, MEDIUM and HIGH. Can be activated with the button on the powerpack, the corresponding light will flash one time for LOW, two times for MED and three for HIGH and no light for OFF. It can also be activated in the TPS menu or with the app.

When using Neo-Cartridges there is no need to use Kick start.



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

#### **Boost mode**

The Boost mode will increase your machines power considerable. It will enable the machine to keep the same speed when the workload is increasing. Depending on your setup this feature can be very useful. There are 4 levels; OFF, LOW, MEDIUM and HIGH. Can be activated with the button on the powerpack, the corresponding light will flash one time for LOW, two times for MED and three for HIGH and no light for OFF. It can also be activated in the TPS menu or with the app.

Note! The speed may vary when the machine is started

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

# Run mode display window for Coil machines Speed (CPS)

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

**Duty cycle (DUTY)** 

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



## Service and maintenance

Self-service and repairing of the TPS-500 X2 devices are prohibited and the warranty will be void if any unit has been opened or manipulated.

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.

#### Software updates

 $\label{thm:continuous} \mbox{Upgrading to the latest software can be done with the app or with a PC: $$ \underline{\mbox{https://trinity.xnk.nu/inkmachines/}}$$ 

The current software version will be displayed in the left corner at start-up of the Main unit.

## **Waste**

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 helath, please send the rechargable batteries back to the manufacturer for exchange and follow local regulations concerning waste of batteries.

The other



symbol indicates that the product and it's electronic accessories is not to be disposed with house hold waste.



# **Trouble shooting**

Check the following steps if you encounter problems.

Trouble shoot by excluding the different parts Tattoo machine, Powerpack and Footswitch

### **Tattoo machines**

Always check that the contact surface is clean from dirt.

Instruction	If the Tattoo machine still not functioning
1. Check that the machine runs with the clip cord binding posts. Test the machine with a clip cord and make sure the machine is working properly.  OK!	Consult the corresponding machine manual. Go to 2.
2. Check the motor cable location. It should be straight according to the picture. And the screw should hold the end of the cable. Align and tighten.	If the machine does not run by the clip cord binding posts it will not run with a powerpack. Contact InkMachines for service.

# **Trouble shooting**



## **Powerpacks**

Instruction	If the Powerpack still not functioning with the Tattoo machine
<b>1.</b> Make sure that the powerpack is charged and the lights are on.	Charge on bay or with USB-C. The onboard lights should indicate that the powerpack charging.
2. Make sure the machine starts with the onboard start button.	Check that the machine runs with a clip cord cable to rule out any problem related to the machine.
<b>3.</b> Reset the powerpack by holding the pair button for about 12 sec until the onboard lights flashes repeatedly and then retry.	Contact InkMachines for further instructions, see www.inkmachines.com

# **Trouble shooting**



### Foot switch

Instruction	If the Footswitch still not functioning
Make sure that the footswitch is charged and the light is active.	Charge with USB-C. The light on the back should indicate that the footswitch is charging with steady red or blue light.
2. Make sure that the footswitch is paired to at least one device. See instructions for pairing page 21.	Go to 3.
<b>3.</b> Pair the footswitch to the app and go to the footswitch device settings. The green light in the app should indicate when the footswitch is pressed.	Go to 4.
<b>4.</b> Check that the Foot switch foot button is moving freely so the switch can be triggered.	Go to 5.
<b>5.</b> Remove the two screws on the back and clean the inside from any dirt and check that the magnet is present in the top of the inside the footswitch button.	Contact InkMachines for further instructions, see www.inkmachines.com



# **Technical specifications**

## Main unit, TPS-500 X2

Volt output	5 - 13 Volt DC
Power input	100 – 240 V AC
Frequency	2.4 GHz BLE
Machine compatibility	Cobra, Scorpion, Stingray and Dragonfly wireless and other machines by cable
Display	LCD 55 x 13 mm
Charger capacity	2 Powerpacks on bay + 2 devices by bay USB-C + 1 on TPS main
Connections:	¼" Phono for various wired tattoo machines 5 - 13 V
	¼" Phono for wired foot switch
	1x USB-C for software upgrades and for Neorail
	C7 power connection
Operating temperature	10 – 35 °C Indoor use only.
НМІ	Backlit multicolor touch buttons, Sound
Weight	260 grams (main unit only)
Dimensions L x W x H	108 x 78 x 36 mm

## X2 Powerpack for Scorpion

Volt output	5 - 13 Volt DC
Radio	2.4 GHz BLE
Machine Compatibility	Scorpion / Scorpion X2
Battery capacity	LiPo 2700mAh
НМІ	Accelerometer, led lights, buttons
Charging	TPS charger bay or USB-C
Operating temperature	10 – 35 °C Indoor use only.
Weight	78 grams
Dimensions L x W x H	56 x 38 x 35 mm



## X2 Powerpack for Stingray and Dragonfly

Volt output	5 - 13 Volt DC
Radio	2.4 GHz BLE
Machine Compatibility	Stingray and Dragonfly
Battery capacity	LiPo 1600mAh
HMI	Accelerometer, led lights, buttons
Charging	TPS charger bay or USB-C
Operating temperature	10 – 35 °C Indoor use only.
Weight	63 grams
Dimensions L x W x H	62 x 40 x 50 mm

## X2 Powerpack for Cobra

Volt output	5 - 13 Volt DC
Radio	2.4 GHz BLE
Machine Compatibility	Cobra
Battery capacity	LiPo 2760mAh
НМІ	Accelerometer, led lights, halo light, buttons
Charging	TPS charger bay or USB-C
Operating temperature	10 – 35 °C Indoor use only.
Weight	79 grams
Dimensions L x W x H	35 x 61mm

## Foot switch WFS X2

Battery	LiPo 550mAh
Radio	2.4 GHz BLE
НМІ	Status led, Sound, Button
Charging	USB-C
Modes	Hold or Toggle
Switch type	Magnetic
Operating temperature	10 – 35 °C Indoor use only.
Weight	160 grams
Dimensions L x W x H	Ø98x25mm



## Warranty

This product includes a 12 months 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, InkMachines shall have the option, in its sole discretion, to either repair the product or replace the product. Shipping costs to the repair destination is not covered.

The products should not come in direct contact with fluids. If fluids will get in contact with the electronic it can damage the product and the warranty will be void.

The warranty is void if:

- 1. The TPS-500 X2 user interface, main unit or Powepacks has been opened.
- 2. The TPS-500 X2 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 brand than InkMachines.
- 4. Components have been damaged by misuse or carelessness.
- 5. Components have been manipulated.
- 6. Alkaline or acid cleaning agents with strong bases (high or low pH) have been used on the products.
- 7. If fluids have been dripped or sprayed on the units.

**InkMachines** 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 InkMachines 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 InkMachines 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



## CE

# **Declaration of Conformity (DoC)**

We;			

Name InkMachines Sweden AB

Address Grusåsvägen 8

352 45 VÄXJÖ, Sweden

declare under our sole responsibility that the product;

Product name /model: TPS-500 X2

Type: Wireless power supply device for Tattoo Machines

to which this declaration relates is in conformity with the essential requirements and other relevant requirements with the relevant EU legislation.

#### Directives

- Radio Equipment Directive (RED): 2014/53/EU
- Restriction of the use of certain Hazardous Substances (RoHS): 2011/65/EU

References to the relevant harmonized standards used:

- RED, article 3.2 (Radio spectrum) EN 300 328 V2.2.2
- RED, article 3.1b (EMC) ETSI EN 301 489-17 V3.2.4
- RED, article 3.1a (Safety) EN 62368-1:2014+AC:2015 EN 62479:2010
- RoHS EN IEC 63000:2018

Place	and	date	of	issue	(of	this	2018-
DoC):							2018-

Signed by:

Name:

Title of Authority: CEO



## **FCC**

# **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



We, the responsible party:

Company Name: InkMachines Sweden AB (US rep. importer)

Address: Grusåsvägen 8

352 45 VÄXJÖ, Sweden

Phone: +46 470 244 03

declares that the product;

Type of equipment: Wireless power supply device for Tattoo Machines

Model / Name: TPS-500 X2

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: RISE Research Institutes of Sweden

Date of issue: 2018-

Signed:

Name:

Title of Authority: CEO



## **EMC**

## Electromagnetic compatibility

#### US Federal Communications Commission 47 part 15 of the FCC Rules

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!	
71010.	

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.

#### **Industry Canada license exempt RSS standard**

This device complies with Industry Canada licence exempt RSS standard(s). Operation is subject to the following two conditions:

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

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.