







USER MANUAL
VS2400
Veterinary Scale



Please keep the instruction manual at hand all the time for future reference.

Explanation of Graphic Symbols on Label/Packaging

	Caution, consult accompanying documents before use		Separate collection for waste of electrical and electronic equipment, in accordance with Directive 2002/96/EC
	Manufacturer of device		Manufacturing year of device

Copyright Notice

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I. Safety Notes

General Information

Thank you for choosing this Charder Medical device. It is designed to be easy and straightforward to operate, but if you encounter any problems not addressed in this manual, please contact your local Charder service partner.

Before beginning operation of the device, please read this user manual carefully, and keep it in a safe place for reference. It contains important instructions regarding installation, proper usage, and maintenance.

Intended Use

This device is intended to measure the weight of living animals, for measurement of weight by professionals.

General Handling

- We strongly recommend you use this device on flat and hard surface. Any soft surface, like carpet will cause inaccuracy.

Safety Instructions

Before putting the device into use, please read with care the information given in the Operating Instructions. They contain important instructions for installation, proper use and maintenance of the device.

The manufacturer shall not be liable for damages arising out of failure to heed the following instructions:

- When using electrical components under increased safety requirements, always comply with the appropriate regulations.
- Improper installation will render the warranty null and void.
- Ensure the voltage marked on the power supply unit matches your main power supply.
- This device is designed for use indoors.
- Observe the permissible ambient temperatures for use
- The device meets the requirements for electromagnetic compatibility. Do not exceed the maximum values specified in the applicable standards.
- The device has an expected service life of 5 years when correctly handled, serviced, and periodically inspected in accordance with manufacturer's instructions.

If you have any problem, contact your local CHARDER MEDICAL service partner.

Environmental

- All batteries contain toxic compounds; batteries should be disposed of via designated competent organizations. Batteries should not be incinerated.

Cleaning

- Device surface should be cleaned using alcohol-based wipes.
- Do not use large amounts of water when cleaning the device, as it may cause damage to the internal electronics.

Maintenance

- Device does not require routine user maintenance. However, regular checking of accuracy is recommended; frequency to be determined by level of use and state of device, or local metrology/measuring instrument regulations if applicable. If results are inaccurate, please contact local distributor.

Warranty/Liability

- The period of warranty shall be eighteen (18) months, beginning on the date of purchase. Please retain your receipt as proof of purchase.
- No responsibility shall be accepted for damage caused through any of the following reasons: unsuitable or improper storage or use, incorrect installation or commissioning by the owner or third parties, natural wear and tear, changes or modifications, incorrect or negligent handling, chemical, electrochemical, or electrical interference.
- All maintenance, technical inspections, and repairs should be conducted by an authorized Charder service partner, using original Charder accessories and spare parts. Charder is not liable for any damages arising from improper maintenance or usage.

Disposal

- This product is not to be treated as regular household waste, but should be taken to a designated collection points for electronics. Further information should be provided by local waste disposal authorities.



Warning

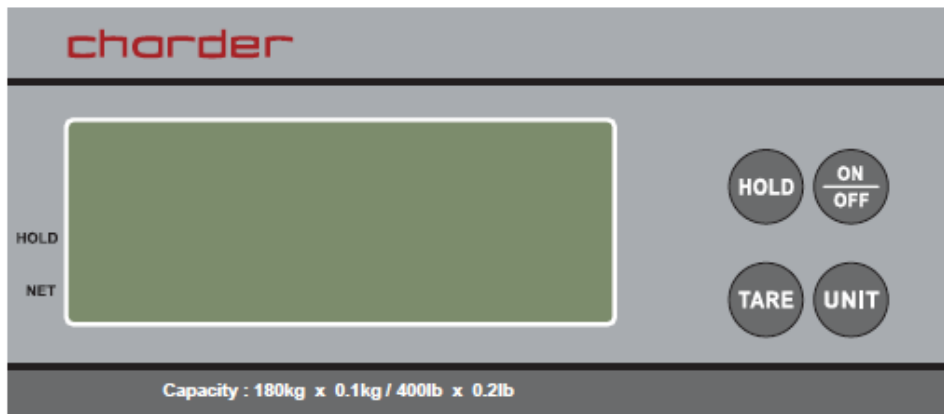
- Do not under any circumstances dismantle or alter the device, as this could result in electric shock or injury as well as adversely affect the precision of measurements.
- Do not place the device in direct sunlight, or in close proximity to an intense heat source. Excessively high temperatures may damage the internal electronics.

II. Product Specification

Model		VS2400 (DP4510)	
Weight Measurement	Capacity	150 kg /330 lb	180 kg /400 lb
	Graduation	0.1 kg / 0.2 lb	
	Unit	kg / lb	
	LCD Screen	1.4-inch LCD screen (5 digits)	
Dimensions	Overall	90 (W) x 50(D) x 2.5(H) cm	
Device Weight		6.2 kg	
Key Functions		On/Off, HOLD, UNIT, TARE	
Power Supply		AC Adaptor / USB Powered / 4x AA Batteries	
Operation Temperature & Humidity		5°C~35°C	
Optional Function		Hand Wave Motion / Foot Switch	

III. Indicator and Key Functions

A Indicator Panel



(Without hand wave motion)



(With hand wave motion to TARE unwanted weight)

IV. Using Device

A. Basic Operation

Switch on the device using [**ON/OFF**] key. The device will automatically perform self-calibration, displaying software version.

Once "0.0kg" appears on indicator, device is ready for measurement.

Note: If "0.0kg" does not display on indicator, press [**TARE**] key to zero the device.

Guide subject to stand upon the measurement platform. After the weight has stabilized, the stable symbol "o" will appear on upper left of the display.

Note: If subject's weight exceeds scale capacity (including tare), indicator will display "Err" prompt due to overload.

B. Key Function

1. [**ON/OFF**]: Press to switch scales ON and OFF.
2. [**HOLD**]: Press to lock weight of subject, press again to unlock.
3. [**UNIT**]: Press to switch between kg or lb.
4. [**TARE**]: Press to tare the unwanted weight on platform (such as towel or blanket). *Tare the weight of subject previously so that the operator can get the net weight only.



5. [**Hand Wave Motion**] (Optional): Hand wave motion could also tare the unwanted weight on platform if operator does not press the TARE button.

C. HOLD

The hold function determines average weight, designed to be used if subject's weight will not stabilize (ex: an active subject).

Note: if fluctuation is too severe, average weight determination will be difficult and hold may not function correctly



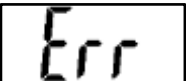
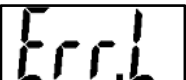

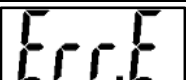
1. Press [**ON/OFF**] to power on the scale.
2. Step on the scale to weigh after stable "o" symbol appears.
3. Press [**HOLD**] key while subject is being weighed.
4. The arrow will indicate the [**HOLD**] on the panel.
5. The LCD shows weight after the subject move off the platform.
6. Press [**HOLD**] again to disable [**HOLD**] feature.

D. Tare

The tare function allows the user to deduct the weight of objects from the device's measurement result.

1. Place object that needs to be tared onto measurement platform.
2. Press [**TARE**] key after stable symbol appears on indicator. Display will indicate "0.00 kg".
3. Guide subject (plus tared object) to be weighed upon measurement platform. Conduct measurement.
4. To clear tare value, remove all objects from measurement platform, and press [**TARE**] key.

E. Error Messages

Error Message	Reason	Action
	Low battery warning Voltage of battery is too low to operate device. (Equal or lower than 4.2V)	Replace Batteries or Switch to DC power or USB power.
	Unstable Data Connection RJ45 cable does not connect to the indicator properly.	Reconnect RJ45 cable to the indicator.
	Force over zero Force is over limit when device is powered on	Ensure nothing is pushing on device and power on again. If problem persists, please contact distributor
	Counting Error (too low) Force is under limit when device is powered on	Ensure nothing is pulling on device and power on again. If problem persists, please contact distributor
	Force under zero Force is under zero when device is powered on	Press TARE key and try again
	Program Error Fault with device software	Restart the scale. If problem persists, please contact distributor

V. Device Setup

When the device is switched on, press and hold the [**TARE**] key for about 6 seconds, until the display shows the "SEt", followed by "Unit" (first option in setting menu).

In device setup menu:

[**HOLD**] to cycle through menu option.

[**TARE**] to confirm selection / enter submenu.

The image shows a rectangular LCD display with a black background and white characters. The word "Unit" is displayed in a simple, blocky font.

Unit: Measuring unit activation setting.

Unit options: kg, lb, oz, lb+oz

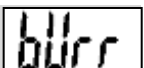
Press [**HOLD**] to toggle between options, and [**TARE**] to confirm selection. To get back to setup menu, continues to press [**HOLD**].

The image shows a rectangular LCD display with a black background and white characters. The words "Auto Off" are displayed in a simple, blocky font.

Auto Power-Off: Instruct device to shut off automatically after a certain period of time.

Auto off options: 120 sec / 180 sec / 240 sec / 300 sec / OFF

Press [**HOLD**] to toggle between time options, and [**TARE**] to confirm selection.

The image shows a rectangular LCD display with a black background and white characters. The word "Buzzer" is displayed in a simple, blocky font.

Buzzer/Beep: When function is turned on, beeping noise will be made when: indicator is turned on, keys are pressed, and weight is stable.

Buzzer options: On / OFF

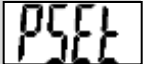
Press [**HOLD**] to toggle between options, and [**TARE**] to confirm selection.



Backlight: Toggle backlight for better visual in low light environment.

Backlight options: Auto / On / OFF

Press [**HOLD**] to toggle between options, and [**TARE**] to confirm selection.



Print Setting:

Print options: Auto / OFF

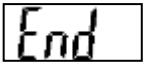
Press [**HOLD**] to toggle between options, and [**TARE**] to confirm selection.



IR Switch (optional): If the device has IR module installed, Hand Wave Motion function can be activated by turning IR Switch on.

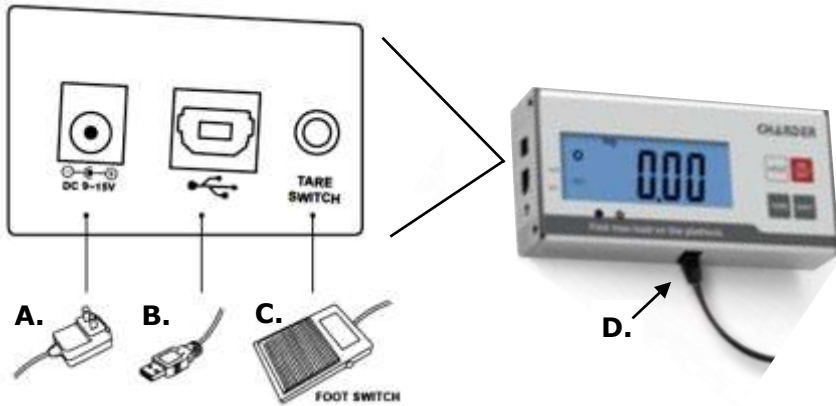
IR Switch options: On / OFF

Press [**HOLD**] to toggle between options, and [**TARE**] to confirm selection.



End: Press [**TARE**] to save setting, device will restart after saving.

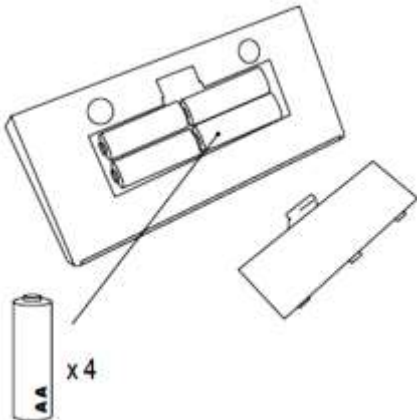
IV. Port Interface



A. DC Port – Power Supply

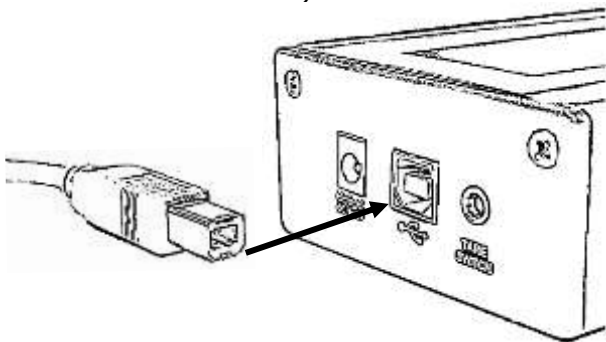
Plug included AC adaptor into the DC port for power supply.

Battery power supply is also available.



B. USB-B Port – Power Supply & Data Transmission

VS2400 can be powered by USB cable connection. Data transmission to PC software is also available via USB connection (refer to pg.16 *Setup USB Connection to PC*).



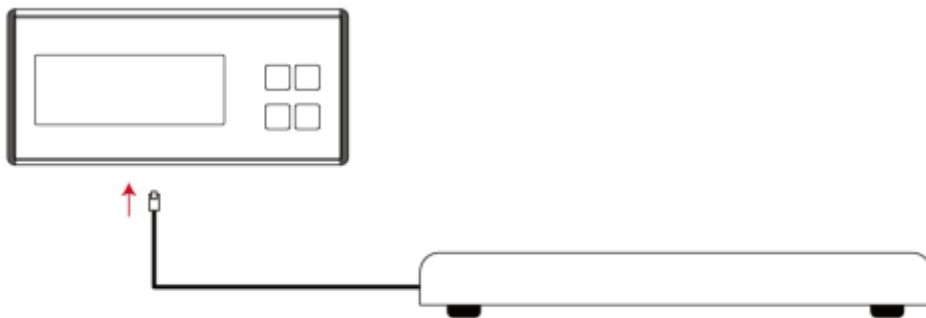
C. Foot Switch (Optional) – Hands Free Tare Function

Optional foot switch device can be attached to achieve hands free tare.

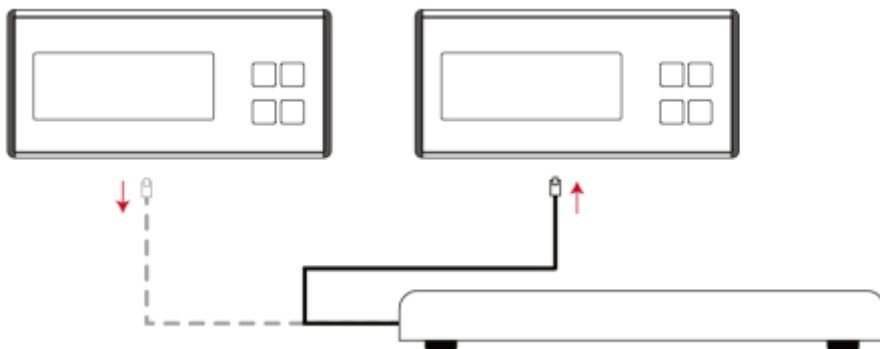


D. RJ45 Port – Scale Connection

Connect the scale and indicator with RJ45 cable attached on scale. Modular design of indicator provides easy solution for parts maintenance if needed.



Detachable design makes parts maintenance much easier.



VII. Setup USB Connection to PC

For successful connection, PC hardware must be connected to device using manufacturer's designated USB cable.

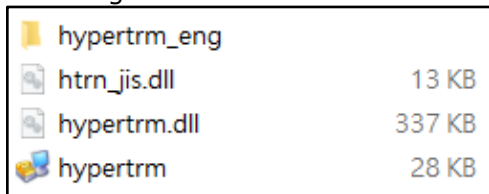
1. Hyper Terminal freeware software can be used to connect the device to a PC. The software program can be downloaded from the Charder website:

[LINK URL] <https://www.chardermedical.com/download.htm>

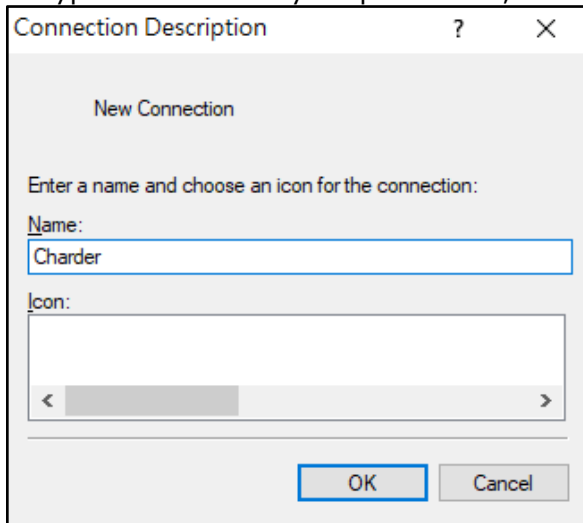
2. Connect USB cable to device indicator and PC. Follow installation instructions below:

A. Program Setup

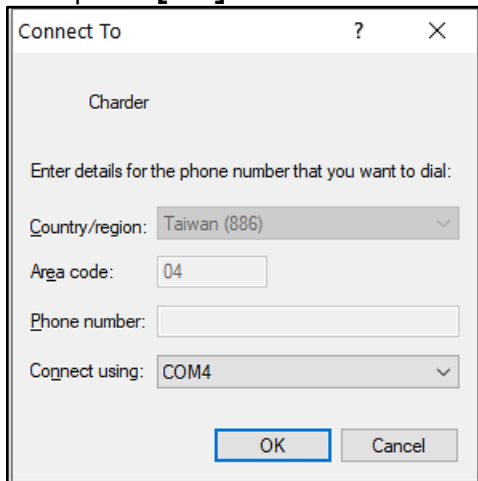
1. After downloading Hyper Terminal, extract rar file, folder items including contents as below shown:



2. Type in a name of your preference, then click OK.



3. Select COM (1, 2, 3, 4...) under "Connect using" dropdown menu, then press **[OK]**.



Connect To

Charter

Enter details for the phone number that you want to dial:

Country/region: Taiwan (886)

Area code: 04

Phone number:

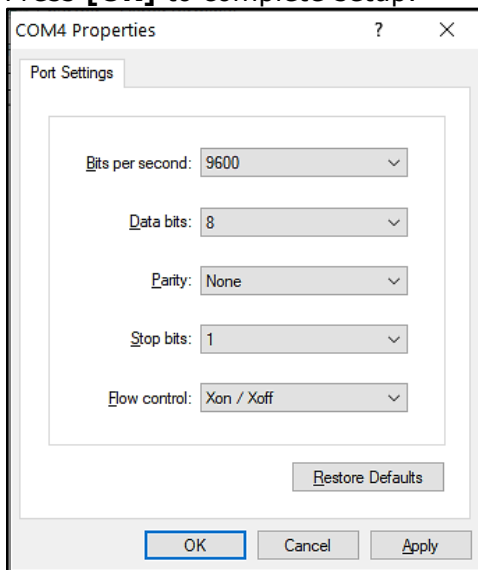
Connect using: COM4

OK Cancel

4. Set Port Settings as below:

- Bits per second: 9600
- Data bits: 8
- Parity: None
- Stop bits: 1
- Flow Control: Xon / Xoff

Press **[OK]** to complete setup.



COM4 Properties

Port Settings

Bits per second: 9600

Data bits: 8

Parity: None

Stop bits: 1

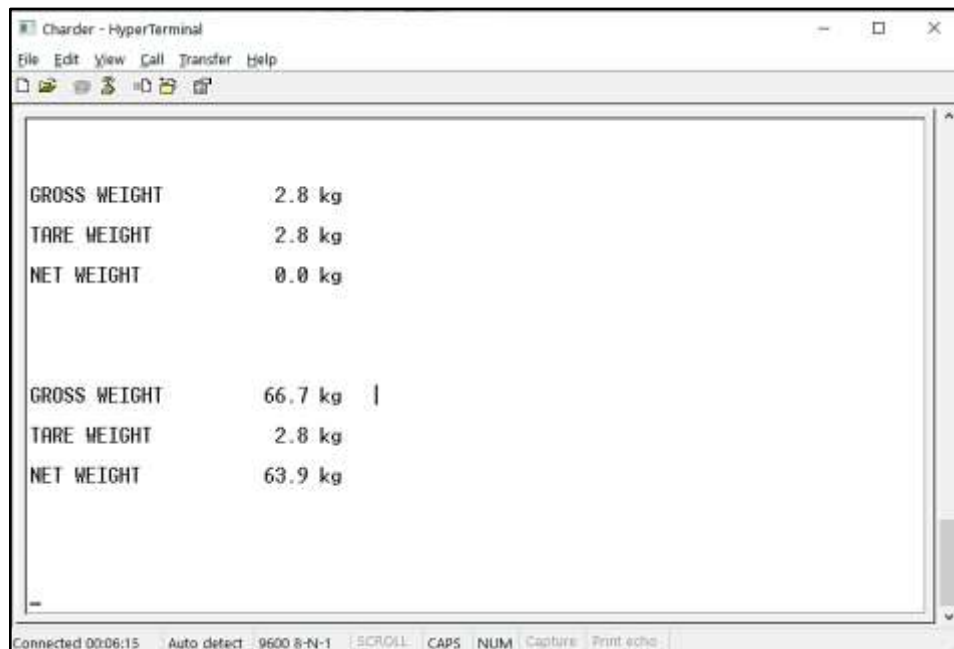
Flow control: Xon / Xoff

Restore Defaults

OK Cancel Apply

B. Send results from device to PC

Hyper Terminal will automatically retract data from device when weighing is stabilized.



VIII. Declaration of Conformity



Manufacturer's Declaration of Conformity

This product has been manufactured in accordance with the harmonized EU / UK standards, following the provisions of the below stated directives:

Electromagnetic Compatibility Directive 2014/30/EU
Electromagnetic Compatibility Regulations 2016

Low Voltage Directive 2014/35/EU
Electrical Equipment (Safety) Regulations 2016

RoHS Directive 2011/65/EU and Delegated Directive (EU) 2015/863



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