

DEVICE SETUP AND OPERATION

STRUCTURED MONITORING PRODUCTS

VetGuardian



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1. REVISION HISTORY AND CHANGE CONTROL

Date	Reason for Change	Version
10/1/18	Initial Version for Production Release	A
12/20/18	Updated Per Review	B



2. EQUIPMENT STATEMENTS

For All Equipment:

Changes or modifications not expressly approved by SMP could void the user's authority to operate the equipment.¹ This device complies with Part 15 of 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.

Class B equipment: 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 or an experienced radio/TV technician for help.

This device contains an array of SPAD (single photon avalanche diode) detectors and an integrated 940 nm light source based on an eye-safe Class 1 VCSEL (vertical cavity surface-emitting laser). The laser output is designed to remain within Class 1 laser safety limits under all reasonably foreseeable conditions including single faults in compliance with IEC 60825-1:2014 (third edition).

Caution: Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure

Compliance Information for the WiFi module

FCC PART 15 STATEMENTS:

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. The end user of this product should be aware that any changes or modifications made to this equipment without the approval of the manufacturer could result in the product not meeting the Class A limits, in which case the FCC could void the user's authority to operate the equipment.

Compliance Information for the WiFi module in the T7-Pro and T7-Pro-OEM

FCC:

Contains FCC ID: T9J-RN171

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.

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:

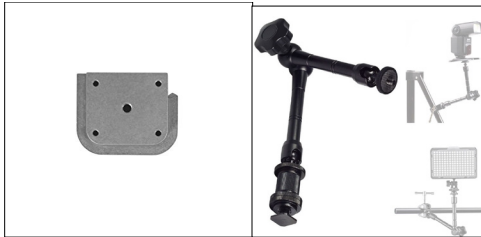
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

To satisfy FCC RF Exposure requirements for mobile and base station transmission devices, a separation distance of 20 cm or more should be maintained between the antenna of this device and persons during operation. To ensure compliance, operation at closer than this distance is not recommended. The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.



3. SETTING UP THE VETGUARDIAN

1. Unpack the contents of the box
2. The Device Arm is already connected to the Piranha-Lox® mount



3. Unpack the TP_Link ®Hotspot Router and plug it to the wall socket within the room. **(Note: The TP-Link DOES NOT connect to anything else).**



4. Unpack VetGuardian (Contained in the smaller box) and mount the bottom of the device to the Device Arm.
- 5.

Warning! The screw-insert of the VetGuardian is glued in. So be careful when you mount the device to the arm. Any sudden movements, the screw insert may come off. Please mount it until the flat portion on the arm is flush with the device base. Future models will have better clamped screw-inserts.



6. Attach the Kennel Gear to a Cat cage



7. Mount the assembled VetGuardian along with the Device Arm and the Pirhana Lox on to the Kennel Gear, with the VetGuardian outside the cage with the camera lens facing the animal.
8. Plug in the VetGuardian using the adapter provided in the box.

NOTE: The VETGUARDIAN power Adapter is in a small white box)

4. INSTALL DRIVER

4.1. RUNNING THE KIPLING PROGRAM

1. Install the Kipling Software driver.
 - The Kipling program contains the drivers and Kipling SW which can be used to test the hardware connections.
2. Once the TP-Link is setup as an Access Point, Turn on VetGuardian
3. A **Green LED** Light indicates that the device is on
4. Wait for a few seconds and the Camera, the **Yellow** light, and the **flashing blue** light will appear on the camera



5. On the Desktop, look for the Kipling Software



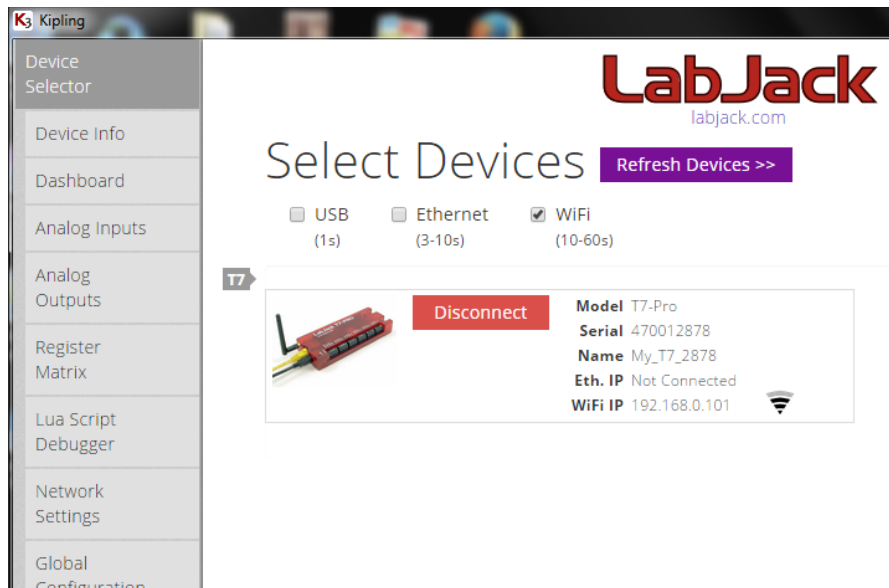
6. The Kipling software is initially used to connect to the LABJACK. (The LabJack is a device that is inside the VetGuardian to transmit the raw signals to the laptop via the TP-Link)



7. After the program loads, you may see the below page. Make sure the **wifi** is option checked and then click on **Refresh Devices**



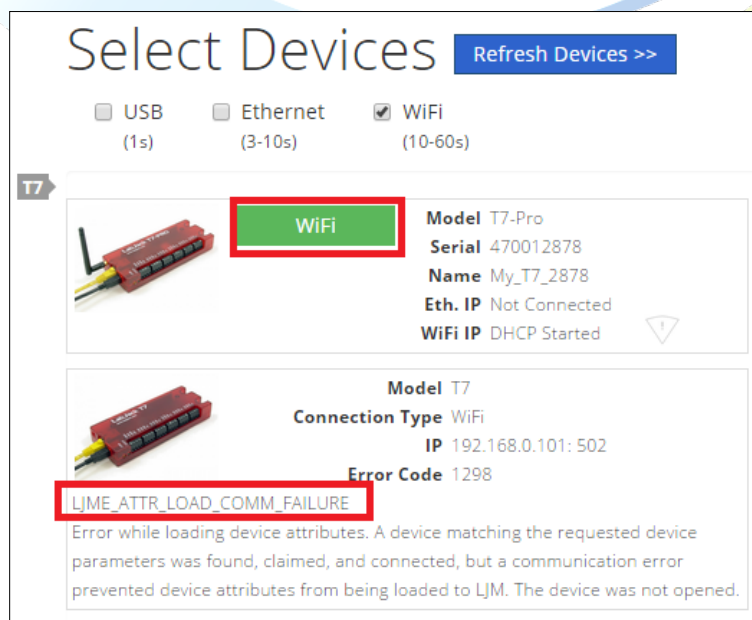
8. If the refresh is successful, you will see the screen below. (**DO NOT CLICK ON THE DISCONNECT BUTTON**). If it's not successful, please keep refreshing as shown in step 6, until you get the screen below. If it still does not work after a couple of tries, call 305-799-3075 for support.



9. You will notice that an **Yellow light** also starts flickering on the VetGuardian

10. After this step, close the Kipling Software.

11. Some other errors you may encounter are shown below. In this case, click on the **Green Wifi** Button and then Step 7 will be shown



5. VETGUARDIAN

5.1. INSTALL THE VETGUARDIAN SOFTWARE PER THE INSTALLER FILE

Note: Registration may be required to run the program.

5.2. RUNNING THE VETGUARDIAN PROGRAM

1. **WARNING! DO NOT OPEN\RUN VETGUARDIAN SOFTWARE and the KIPLING test software. It will cause the Wifi Connection to disconnect.**

2. Make sure Kipling is closed

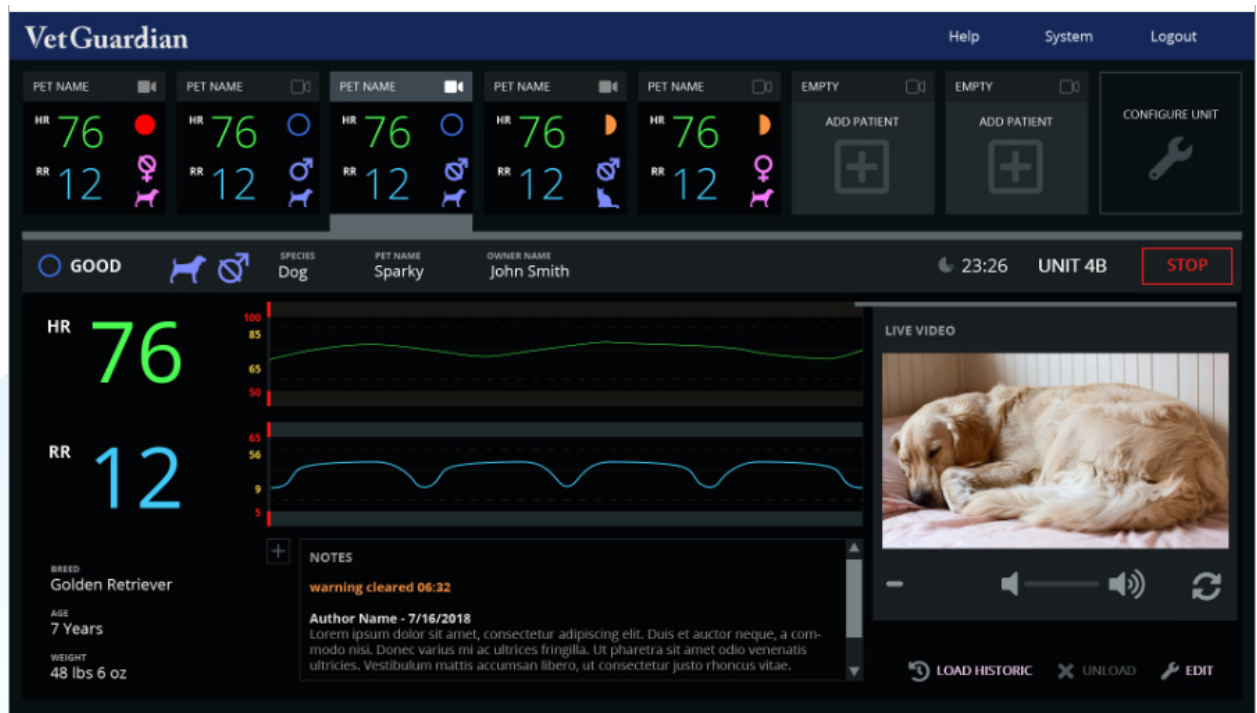
3. Open the VetGuardian application only after step 7 of Section 4.2 (running Kipling software) is successful



4. Please make sure you click VG Application only once. Also note that it takes time to load the application (at least 30 seconds). If you open more than one VG application, the wifi will fail and you may get a message like this shown below. If this happens, close the message box and try opening the VG application again.



5. When the application opens up, you will be seeing the screen below.



6. Select Animal and then choose the animal to be monitored such as CAT or DOG ,etc



7. Then choose **Setting Menu**, select **Calibrate** (if needed).

8. **Warning!** Make sure the unit is pointing at an empty cage or any location where there is no movement. Calibration is performed to differentiate between noise and signal. After Calibration, The application understands that if there is no movement, it will assign 0 for RR and HR.

9. Calibration Window open and after Calibration is completed, Click OK.

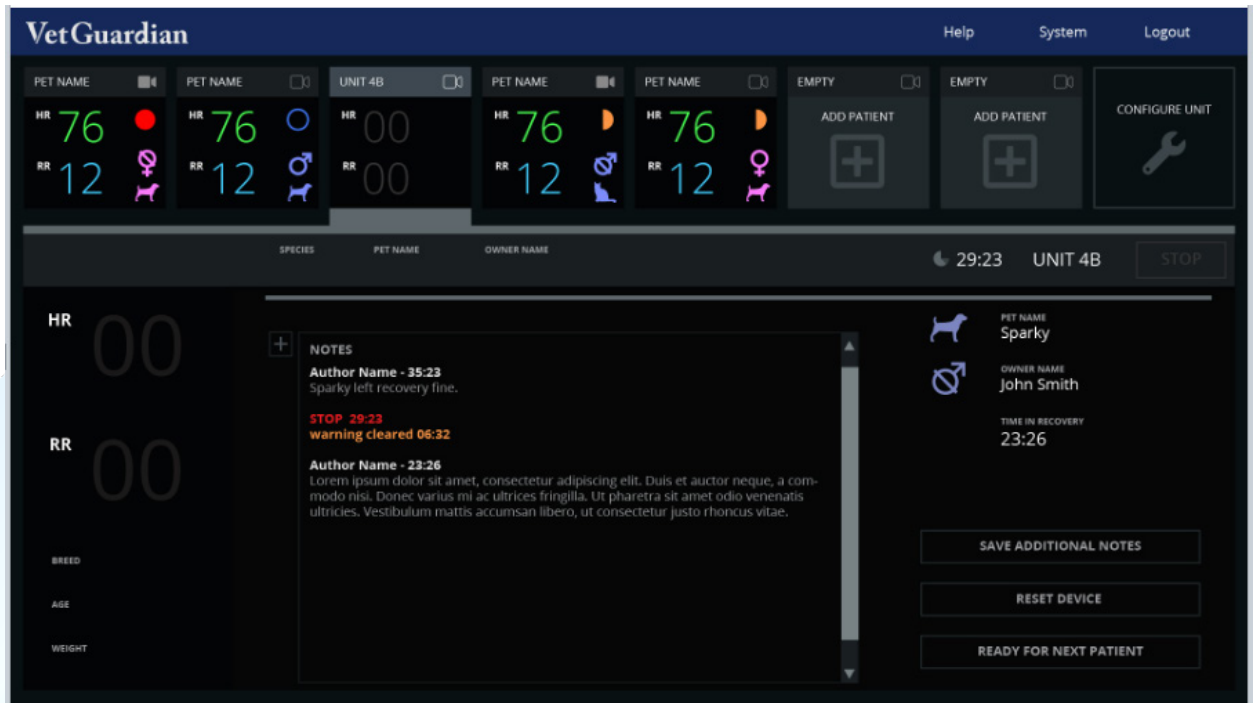
10. After the Calibration is completed, focus the device on the cat in the cage.

11. Enter the animals name and click on Start Monitoring

12. You will be now able to see HR and RR of the Subject

13. To complete Monitoring, click on Stop Monitoring.

- After stopping notes ,etc can be entered



14. To open the Saved animal file

15. Choose the file to open and view the saved HR and RR readings

16. To see the physical location of the files, open this Root Directory: **C:\DataCapture**. All Pictures are saved at every minute and stored in this folder.

