

Alba Medical DR200 Holter Monitor

ALBA Medical is the largest and most trusted Veterinary Holter Monitoring Company in the world. The DR200 is the company's newest digital model.

DESERT HARBOR DOBERMAN RESCUE
(602) 492-8139
Contact@azdoberescue.org

The Process:

- Rent holter through contact@azdoberescue.org - pick it up or have it shipped. Holter rental available to only active volunteers and adopters at this time.
- Use holter immediately and ship back or return immediately (rental periods are 4 days)
 - After data is collected, you will send your information digitally to Alba, using the level of service you prefer. At that time you either will leverage the information yourself, or share it with your cardiologist.
- Included in rental:
 - Holter Monitor, wires, SD card
 - Large vest (30"-38" girth), belt, and pouch
 - Five new electrodes and patient diary
 - Battery
 - Tape & VetWrap
 - SD Card Reader (in the event your computer does not have a port)
 - Alcohol wipe and tape removal wipe (do not return)



Costs:

- Four days: \$50
- Shipping to you if you opt not to pick it up: \$14 (you are required to cover cost of properly shipping it back)
- Alba charges \$30-\$80 for analysis of results, depending on what level of service you prefer. This transaction does not involve DHDR.

Details and Instructions Table of Contents:

- What is a Holter Monitor, why do I need it, when should I do it?
- Hook up instructions
- Data transmission instructions
- Your responsibilities

What is a Holter Monitor, why do I need it, when should I do it?

Most Veterinary Cardiologists agree that the Holter monitor provides the earliest detection of occult, or hidden, DCM (Dilated Cardiomyopathy) in dogs. Holtering your dog is a painless, simple, and easy to hook-up. It's a **cost effective** way to test your dog for heart disease. It can be used when issues arise in conjunction with your cardiologist, or on your own for early knowledge purposes. From pre-breeding and pre-surgical needs to annual adult and senior wellness care, Holter monitoring offers invaluable information regarding possible underlying heart disease. That information is **power**. The power that increases life expectancy through medication.

The Holter monitor records 24 hours of continuous heart rhythm (EKG or ECG) and heart rate (HR), while the dog goes about its normal daily activity in a home environment. The Holter is found to be a far superior test when compared to the 5-minute EKG, simply because of its 24-hour recording time.

The report generated from Holter data details the number of VPCs (Ventricular Premature Contractions), sometimes called PVCs (Premature Ventricular Contractions), present during the 24-hour period. Occult DCM is defined as 50 or more VPCs in 24 hours. Ideally, we are looking for a VPC score of ZERO or very close to zero. When needed, results can be reviewed by a Veterinary Cardiologist who may recommend further testing, or possible medications, to your Veterinarian.

A birthday month is a great time to Holter your dog! Celebrate each birthday with a Holter report.

Hook Up Instructions



*Shaving/Clipping is recommended though **not** required to Holter your dog. The biggest issue with not shaving is early electrode detachment due to primary contact with hair instead of the skin. The act of shaving also insures the best possible electrical contact and thus the fully desired recording time. The more active the patient, the better contact we will need with the skin to allow for a complete recording. With thick coats, removing the guard hairs with a number 10 blade may assist in better skin contact yet allow a less obvious shaved box on the dog. Dogs with a thinner coat may very well get away with no shaving at all. Areas that are shaved typically appear fully coated in about 30 days. Use alcohol and gauze or cotton to degrease the area after clipping or shaving.*

1. Watch this video:
<https://www.facebook.com/sunsetdobe/videos/10207522759611271>
2. Trim/clip/shave (or don't)
3. Wipe the general area of electrode placement with alcohol swabs or alcohol on gauze.
4. Placement is one "clipper length" away from elbow. The video does a much better job of describing how to place. The website explains the following, however this may be a bit confusing for some: *Locate electrode sites by counting forward from the last (13th) rib. Make a dot with a Sharpie or magic marker once you have located the spot. On the dog's left, mark the first electrode site at the space between the 6th and 7th ribs just next to the sternum (the sternum is in the center of the chest and facing the ground). The second electrode will go directly above the first at the costochondral junction, also in the space between 6th and 7th ribs. The third electrode will be placed anywhere behind these (location is not critical). On the dog's right side, mark the first electrode site between the 6th and 7th ribs near the sternum and the second site immediately behind the first.*
5. Open sealed electrodes packet. Left-over pieces should NOT be saved for use at a later time. These electrodes will dry out and could be non-operational.

6. Start with the left side, and then move to the right side, placing the electrodes as the video recommends. Hold your hand over the electrodes for a minute to allow them to really solidify. Remember the electrodes should be independent and not touching. Poke at them a bit to be sure they are all secure.
7. Carefully snap leads to electrodes - be positive the colors are on the same side and same order as the Boxer photo above.
8. Apply a piece of tape to double-secure each lead to each electrode.
9. Snug, yet safe, wrap the vetwrap around to keep everything tight.
10. Put the vest on (does not have to be perfect yet).
11. Connect the wire bundle to the monitor.
12. Confirm an SD card is in the monitor.
13. Put the battery into the monitor and close the housing.
14. The Holter Monitor will start up, allow it to boot. Press ENTER when prompted.
15. Press ENTER to select NEW PATIENT.
16. Enter the patient ID (name or number) using the green arrows, selecting enter for another digit. Press EVENT when done. You can not go back and change.
17. Look at the ECG signals on the screen to check for a clean tracing for recording. There should be three, and they should all be between 3-5 Also check that battery life is above 50%.
18. If all looks good, press and hold EVENT for 3 seconds to begin recording. Write down the time you started.
19. Place the Holter Monitor in the plastic bag, and secure it in a way that wayward moisture can not enter. Tape if needed. Then, place it all inside the pocket. Press the pocket to the top of the back, lined up with the electrodes.
20. Adjust the vest more formally to be sure it is snug.
21. Wrap the strap/belt around the pocket, which will also wrap around the electrodes.



Electrodes can and do come off, so understanding how they transmit information is helpful. Just because we have lead detachment does not mean the test is invalid. The leads communicate to each other thru the chest cavity according to the channels listed above. Remember, we only need one channel operational to produce the Holter report.

Black lead detached: channel one operational, continue recording and re-attach black lead if possible. The black lead serves double duty in channel two and three.

Black and white detached: channel one operational, continue recording and re-attach black/white leads if possible

Black and brown or red detached: no channels recording. One will need to re-attach all electrodes. Depending on time completed, may want to redo entire 24hrs.

If you ever lose ALL the electrodes on one side of the dog, there will definitely not be any signal recorded during that time. Depending on how long the wires were disconnected, the test may need to be repeated.

Check electrodes for moist contact, dry electrodes do not transmit information.

AFTER 24 HOURS OF RECORDING

1. Remove battery from Holter.
2. Push chip in to release it from machine.
3. Transmit chip to ALBA Medical by following transmission instructions. **DO NOT START THIS PROCESS UNTIL YOU HAVE READ ALL TRANSMISSION INSTRUCTIONS FIRST.**

Data Transmission Instructions

Before you transmit, register your credit card on shop.albamedical.com. You will see a 1 cent charge, but your card will not actually be charged. You must do this to prevent a delay in getting your report scanned.

1. Remove the SD card from the device.
2. Insert the SD card into your computer/SD card reader.
3. When you insert your flash card in a properly installed card reader and look at the files on that card, you will notice there is only one file on each Holter card called "flash.dat". The concept of online Holter transmission is to get us this file (the 24-hour recording), and also the patient demographics and other important information. NEVER delete the flash.dat.
4. Open an internet browser and type <https://dropbox.yousendit.com/AlbaMedical>
5. Click the My Computer button, and navigate to the SD card, selecting the .dat file for upload.
6. The screen will change, and you can enter your full name, your email and subject (should be "Canine Holter Transmission *Your Full Name Here*"), your message (should be your name and phone number, the dog's name, the dog's age, the dog's breed, and anything else you want to add about the recording period).
7. Click Upload, which will send the file to Alba Medical.
8. Alba will match your name back to your registered credit card, and will charge you \$30, unless you indicate you want an additional analysis by a cardiologist, which is \$90. Most DHDR users select the \$30 option and work with a local cardiologist as needed.

*****Do not erase the flash card using the "My computer" or "Windows Explorer". If the flash.dat file is not present, the Holter will not function. Leave your card full. The next time you (or Christy) are hooking up another dog, insert the card, and the Holter will prompt you to erase the card.*****

ALBA Medical Tech Support 877-482-1001

Your Responsibilities

It is highly recommended that you select a 24 hour holter period in which you can be home and observing your dog. If you will be separated from the dog, even when still at home (such as taking a shower, doing laundry, etc) you must place a cone or type of e-collar on the dog and ensure other dogs can't come into contact with the machine. Not only can you ensure nothing goes wrong with the components, you can ensure none of the equipment is destroyed. If any of the equipment is destroyed, you are responsible for prompt payment to cover the cost of repairs and/or replacement. Costs, not marked up, include:

- Wires: \$70
- Vest: \$150
- Broken LCD Screen: \$175
- Broken Chassis: \$70
- Entire Machine: \$1,200

This vest was purchased with the intent to improve Doberman health, and not to generate profit. Please adhere to the honor system in not sharing the vest and returning it on time.

Before returning the vest, please use a lint roller and spot clean. If the vest became dirty (ie got mud on it, smells strongly of food, etc), please wash it (the vest is machine washable).