A BLUEPRINT FOR

Incorporating Ultrasound into Veterinary Practice

The Machine, The Curve, the "Me Too" Industry, and The Reality
WHAT TYPE OF SYSTEM IS RIGHT FOR ME?
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This article will outline some of the different options you have as a consumer, questions you should be asking and what to be mindful of while you shop.

Of course there are exceptions to everything you will read below, but after having managed about 70 ultrasound machines over the years from sticker to wearing the tread off the tires, this is my global statement on machine reliability.

Not all machines are created equal. You get what you pay for.
LOW-END UTILITY MACHINES

If you are just looking for a ‘cysto getter’, fluid vs. non, utility machine then $10-15k or less should be fine; however, don’t do the industry an injustice and think you will do any significant diagnostics with these machines, as you will need your own personal “imaginascopy” to diagnose anything in mid-sized to larger animals especially.

This low-end diagnostic approach other than utility sonography can impede the process with misdiagnosis and harms the diagnostic integrity of clinical sonography especially for the patient.

FAST scan protocols looking for fluid and consolidations have bridged the need for high-end machines somewhat, but at the same time, image quality is paramount. Spend as much money as you need to in order to get solid diagnostic images (like the ones below) and forego the “bells and whistles” that you don’t need but inevitably pay for in the machine price.

Investigate what all those features are in the sales breakdown and shave some of the unnecessary functions that pad the price so you have what you require and don’t pay for more than that. Just like the smart phone industry, the ultrasound industry is always competing on new features which are selling points and resultantly increase the price you pay for a machine.
PRE-OWNED MACHINES

If you want a semi-solid unit for the next few years then used machines that are 3 years old or so can be helpful. This is similar to buying a used car with the same criteria. The car loses its value rapidly the second you drive it off the lot. This concept is very valid with new machine sales.

Benefits

• Presets are likely already stable and optimized and the settings are plug and play.
• Big expenses don’t typically occur for a couple of years depending on how the unit was driven and of course how it was built.

Risks

• Avoid units with scratches and dents as this usually reflects how the unit was handled.
• Warranties vary and diminish.
• If it’s like a garaged motorcycle (bought new and collecting dust) expect to play around with it a bit or pay to have it serviced to optimize.

Shopping Tips

• Every model varies in reliability and quality based on lot number and software version. Do some digging and read reviews.
• Be mindful to purchase the exact same probes and machines you may be looking at elsewhere.
• Target established reputable sonographers, mobile sonographers or sellers with good seller reviews on eCommerce sites.
• Arrange to drive the machine for a week or two to confirm the unit is not a lemon and that you like the work flow and image aspects.

Costs

• Expect to pay $18-25k for a semi-solid unit that's 3 years old depending on how many probes it has.
• Probes typically add $3-5k new or $1500-4k refurbished onto the value of the ultrasound machine per probe.
NEW MACHINES

Pre-owned machines aren't for everyone. Some people like to have the newest technology and the security a new machine warranty brings.

**Benefits**

- No issues regarding inappropriate use or defects in the machine **acquired from the use of someone else**.
- Latest technology and software systems.
- **Warranty** - assuming the seller supports the warranty in an efficient and rapid format.
- May be able to **incorporate the cost** in with your laboratory, digital radiography or other capital equipment purchases.
  - *This type of purchase would provide negotiating value*

**Trade-Ins**

- Just like trading in a used car, **you typically won’t get the value you’d get on the open market**.
- Advertising, word of mouth, or **eCommerce sites** are the most effective ways to get the word out.
- Often it **may be tax beneficial to keep the machine as a back-up or donate it to a shelter/501c3** as opposed to trading it in for $8-10k.
- I advise you to **ask your tax advisor** to help you decipher which option is the best.

**Risks**

- **Even new machines can come from a defective production line** as each line can vary as much as a software version.
- **Don’t ever buy a machine on sight.** The images sales reps show are always “best case scenario” scans given to them usually by someone like me, a seasoned sonographer that knows how to optimize an image for artistic sonography.

**Costs**

- **Expect to pay $35-50k for a solid new machine.**
- The lower end of the price range may have difficulty imaging larger animals owing to poor processor capacity and other inherent technical issues that are less apparent in the higher priced models.
- **Probes typically add $3-5k new** or $1500-4k refurbished onto the value of the ultrasound machine per probe.
It is quite interesting what you dig up when you look attentively at what goes into the machine:

- How IS IT sold
- How IT IS supported
- How YOU supported afterwards over the following weeks, months and years until you are ready for an upgrade.

- The companies and their representatives that are in it for the long term will be there for you through an upgrade so ask them about that time frame and see what they say and ensure you are honestly satisfied with the answer.

Here are some key questions to ask on the phone or on the website with ultrasound distributors:

**How long has the company been in business?**

- The industry is always in flux and distributing companies:
  - Come and go
  - Lose their distributor license
  - Move to a different machine for technical reasons
  - Change corporate affiliations
  - Sell to larger entities
  - Acquire new affiliations
  - Undergo personnel changes
  - and the list goes on and on...

In this “gold-rush” world of veterinary consolidation the companies selling ultrasound machines are often changing hands, operational control and policies. Hence, the functionality of the supporting company changes often and spans from solid to inept.
**How many people do they have in their U/S tech support and what hours are they available?**

It’s important to investigate who you will be dealing with when you need to call with questions or problems after you buy the machine and how efficient that process is.

You want to seek a steadfast consistent organization behind your purchase with referenced individuals who represent your region and ensure those higher on the food chain are similarly reputable.

**I can’t emphasize enough how important it is to do your research in who you will have an ultrasound relationship with.**

It’s not as much about the machine as it is about those that stand behind the machine and their work history. I always say the “box” is driven by the personalities behind it.

**Ask the sales representative and possibly his/her superior and get it in writing: “My machine crashed and burned and is non-functional. How soon do I have a solid functional plug and play loaner in hand?”**

Without a functional machine your diagnostic workflow will slow considerably, will brew team frustration and you will simply hemorrhage money.

**If you charge $350/scan with no machine and you do 10 scans/week you just lost $3500 in revenue if it takes a week to get your machine back.** Therefore, you have to calculate that into your purchase.
Service contracts are high profit centers for companies like they are for electronic stores.

• Choose a company that offers a solid extended service contract included in the price of purchase that is comparable in price to competitor machines that don’t offer that extended contact.
  • Guarantee you have a warranty up front on any new machine that covers everything bumper to bumper for at least 1 year and drive it hard until about 10 months and then have it serviced to ensure it’s in good shape.
  • Then decide if the service contract makes sense and ask what charges there would be for a failed hard drive or replaced motherboard which are big expenses.

• Create your own fund and pay a la carte for repairs.
  • A personal “ultrasound dysfunction fund” may be the best option. I run 6 machines in my operations and I do exactly this; I have revealed one of my secrets here. I like to roll the dice, I know the personalities of my machines, and can repair the basic software issues myself generally by just reinstalling the software (which comes with the machine usually in a thumb drive); this is the first thing to do if odd behavior begins.
  • Make certain your sales rep shows you how to reload the software and video it or take notes for the future, as the software comes with the machine on purchase. Comparing the numbers over the years I have never spent more than ½ of the maintenance contract price. It’s still a roll of the dice; but I like my odds as long as I and my staff are being vigilant on machine care then the risks are calculated in my favor.
HELPFUL REMINDERS

• **Not driving the machine enough before buying is THE number one mistake I see veterinarians make on a regular basis.**
  • **Insist on it.** If the representative doesn’t afford you the luxury, then move on to the next machine.

• **See if your hospital insurance covers accident damage for your ultrasound machine.**
  • The 120-pound Rottweiler knocking the machine over into dysfunction is an every day risk we all run.
  • Your hospital insurance may cover that or **may require a minor increase** in your policy to cover it which is more cost effective than a service contract.

• **Consider getting a used utility machine just for back-up.**
  • **You have to have a viable probe and driver on the floor for every hour your facility is open.** This backup safety net utility machine ensures workflow viability and profitability.
  • Remember how important work-flow and economic losses are every day that the probe is not moving over an animal not to mention the loss in diagnostic efficiency for your patients.


“Buy what your eye likes. Every eye is different in preference so there is inherent personal preference on the image type of every machine out there.”

– Eric Lindquist, DMV, DABVP, Cert. IVUSS

Dr. Eric Lindquist, DMV, DABVP, Cert. IVUSS has provided high-volume mobile veterinary clinical sonography as a specialist in New Jersey since 2001. He boarded ABVP (Canine & Feline) in 2003 and re-certified in 2015.

Founding SonoPath.com in 2008, Lindquist leads a team of boarded specialists who provide Educational Teleconsultation™ Services. He also owns and manages two mobile ultrasound companies.

As the three-time president of International Veterinary Ultrasound Society (IVUSS), Dr. Lindquist has a passion for ultrasound and has created the SDEP™ Protocol. The SonoPath Diagnostic Efficiency Protocol™ is an innovative instructional ultrasound technique used for full and efficient scanning.
WHAT ELSE DO YOU NEED TO KNOW ABOUT BUYING AN ULTRASOUND MACHINE?

• Learn how to evaluate and grade your sales representative
• Caveats on moving image sets around the internet and in-house with respect to different machines and teleconsultation companies
• Get a summary overview on the capital equipment sales process for the inside out