

TECHNOLOGY

Do-it-yourself audio hits the high notes

Why pay thousands at a store when you can make it at home for a lot less money?

STEVE CAREY
Times Colonist

Typical buyers go to the mall when they want a stereo. A do-it-yourself audiophile buys a used stereo, breaks it open and cannibalizes the insides to build a better system.

Commercial speakers and amplifiers that produce the sound audiophiles crave can cost thousands of dollars. Do-it-yourselfers (or DIY-ers) will use what's available to them — scraps, modified parts, kits and their own know-how and labour — to try to make a system as good or better than a high-end commercial system.

Unlike headphones or an all-in-one stereo, a quality hi-fi will distinguish each tap on a cymbal or shake of a snare drum through heavy bass; will fill up a room but not overpower it; and will provide an emotional connection to the music, says Dave Dlugos, 54, a Highlands resident and one of many DIY-ers in B.C.

Dlugos is the go-to guy if you need advice on hot-rodding \$20 Radio Shack speakers to get more magic in the midrange, or a vacuum tube from a MiG fighter to soup up an amplifier. His lawn is piled high with broken speaker cabinets and old hi-fi parts, all cannibalized for components.

"A pair of loudspeakers built for \$400 could eat a pair of professional speakers for breakfast, depending on the DIY-er," says Dlugos. He knows what he's talking about — Dlugos worked at Victoria audio-Mecca Soundhounds in the 1970s, at the height of hi-fi popularity. He has been modifying systems since he was 12, when he took his parents fold-down stereo apart.

Dlugos runs an audio business for DIY-ers, Planet10 Hi-fi, with his wife Ruth, business partner Chris Bobiak and a few friends. He sells modified drivers and amps, and also builds loudspeaker enclosures, distributing the plans for free online.

What DIY-ers do is as tweaked and individual as they are. They swap out vacuum tubes and capacitors, scavenge and modify old speakers and build custom cabinets. They even go so far as to paint tiny dots and patterns on the speaker cones.

Scraps and parts are the DIY-ers' lifeblood. Dlugos's basement workshop is the size of a school annex, and loaded with vacuum tubes, turntables, loudspeakers and bits of electric nostalgia from the dawn of sound until now.

Everyone has a different route to DIY audio, Dlugos says, but most are audiophiles sick of high prices for high-end gear.

Jess Gordon is one of three DIY audiophiles in Alert Bay. His wife refers to his garage as "the little shop of horrors." Gordon says that he doesn't know why more women aren't involved with the hobby.

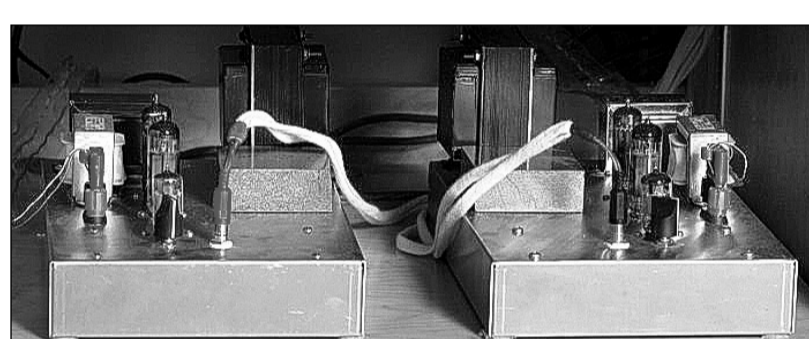
Gordon reads *Hi-fi+* magazine, and he's shocked at the gear prices — \$50,000 amplifiers, \$120,000 speakers.

"There's all this gear that's supposed to reach these astronomical heights of performance, but who can afford it?" Gordon says. "The fun is to build the very best you can."



In the main-floor workshop of his Highlands home, audiophile Dave Dlugos modifies store-bought parts to create a unique stereo driver for custom speakers. Dlugos runs an audio business for DIY-ers, Planet10 Hi-fi. He sells modified drivers and amps, and also builds loudspeaker enclosures, distributing the plans for free online.

DEBRA BRASH, TIMES COLONIST



A completed DIY speaker, such as the one top left made by Dave Dlugos and Chris Bobiak, will contain modified speaker drivers, top right. DIY audiophiles also modify tube amplifiers or build them from kits, like the one above.

PHOTOS BY DEBRA BRASH, TIMES COLONIST

DIY-ers become engineers, electricians and woodworkers in the quest for hi-fi excellence. Online, they share information, design speakers, and distribute plans and advice free. DIYaudio.com, an online forum, has more than 96,000 members and more than 1.5 million posts.

Dlugos's business partner Bobiak, 57, estimates there are thousands of DIY audiophiles in B.C., tens of thousands worldwide.

In stark contrast to Dlugos's parts-graveyard lawn, speaker-maker Bobiak's is perfectly manicured and shows no signs of DIY audiophilia.

When he talks about music and

hi-fi, though, his eyes give him away.

"Some people are passionate about music, but some of us get more passionate about the equipment than the music," Bobiak says. "There's a set of cliques, and subgroups, like any society."

Some of the people in the DIY scene can get eccentric, downright crazy, Bobiak says, but everyone has the music in common.

Bobiak uses different speakers for different music — he's got four sets of handmade speakers and several tube amps on his rack — but for now Bobiak is satisfied with a prototype he and Dlugos are working on.

No bigger than a shoebox, the

D-I-Y MODS AND TWEAKS

- Take an old loudspeaker and build a new cabinet. There are plenty of designs available online, and some require only 90-degree cuts. You might have to get creative and find something that works for you.

- Make your own speaker cable out of Cat-5 cable, normally used for phone or network wiring, by stripping it and wrapping each copper wire inside two pieces of packing tape.

- Do a bit of surgery on your speaker drivers and install Phase Plugs, small wooden or metal plugs that reduce audio discoloration and improve sound quality.

- Use the "EnABling" pattern — those little dots with model railroad paint — to reduce standing waves and discoloration of sound. Patterns can be found online, and kits are available with cone treatment, patterns and paint.

- Instead of mp3s, import your files into your computer in a lossless format, such as FLAC or Apple Lossless.

The files will be larger, but the sound quality will be better, even through headphones or a car stereo.

- Play your music from your computer via a digital-to-analog converter, or DAC. A proper DAC will be a vast improvement over the standard PC sound-out jack, and will have less signal noise.

- The very brave can heavily modify an old Sony Playstation into a decent CD player. Resources are available online.

- Cut tennis balls in half and use them underneath your equipment, such as a CD player. It will isolate the gear and will make it sound better.

- Clean your connections by pulling them out and plugging them back in. It'll help.

- Don't bundle your signal wire cables up together, and ensure your signal wires are away from your AC wires, only crossing at 90 degrees.

Sources: Dave Dlugos, planet10-hifi.com, and diyaudio.com forums

veneered speakers wouldn't look out of place in a high-end shop. They would lose a "loudness" contest against a store-bought speaker, but by sacrificing big sound and pairing them with a subwoofer, they can round out the six-string bass and electric banjo on a Béla Fleck and the Flecktones album to rival any store-bought system for tonality, colour and depth of sound.

How good a home-built system can sound is also a toss-up. DIY hi-fi systems still require amps, pre-amps, phono-stages, subwoofers and the like, and too many modifications on a system or speaker could ruin it.

Bobiak says many a DIY-er gets "proud-papa" syndrome about his first projects even though they may not sound or look too good, which doesn't help the "wife's living room" factor.

"Guys [who] ignore that wind up

with speakers in their 'man cave' and not in their living room," Bobiak says.

DIY still costs money in components and tools. Certain things, like modifying high voltage tube amps, should be sent to those with the skill to do it (who may even be another DIY-er).

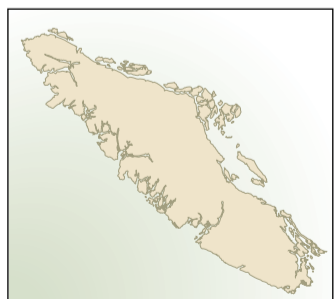
Victoria audiophile Seth Cooper, 28, isn't a DIY-er, but owns a pair of speakers built by a DIY-er up-Island that are loaded with Dlugos's modified drivers. He says a lot of the modifications are "voodoo" and "snake oil," but some of the gear sounds fantastic.

Black magic or not, the DIY-ers are happy with what they do.

"It's the goofy smile you get on your face when you sit there listening to something you built," Bobiak says. There's a lot of pride in that. That's what it's about."

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Shakespeare gets a gentle update in Mill Bay staging



ISLAND ROUNDUP

DAVID KARP
Special to the Times Colonist

More than half of Vancouver Islanders live outside Greater Victoria. This summer, we bring you their stories each Sunday in Monitor.

Shakespeare in summer

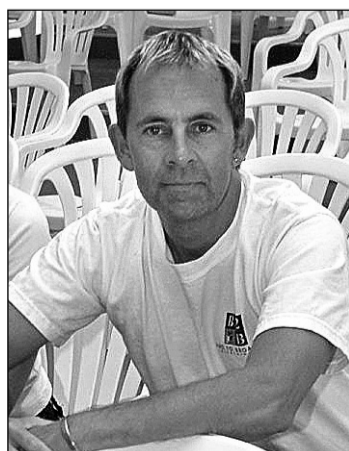
MILL BAY — Shakespeare's famous "Shall I compare thee to a summer's day?" may have outlived its usefulness as a pickup line, but his plays still charm many.

Mill Bay residents will have

the opportunity to be charmed once again when the Bard at Brentwood Shakespeare Festival kicks off on Tuesday with *Much Ado About Nothing*, a comedy about — what else? — love. Director Keith Digby is setting the comedy in the 1920s, after the First World War. Brentwood College also hosts the festival's other play, *The Merchant of Venice*.

But if you're not into the Shakespeare thing, you're not alone. Bard to Broadway, an annual theatre series which moved to Parksville after residing in Qualicum Beach for the past eight years, is more Broadway than Bard this year. The series opened last weekend with *Charlie Brown*, and also includes *Annie Get Your Gun*, *Leading Ladies* and *The Love List*.

"Directing Shakespeare is a huge challenge," artistic director Gary Brown told the *Parksville Qualicum Beach News*. "I'd love to do *Midsummer Night's Dream* or *Twelfth Night*, but you have to remember Shakespeare also wrote for casts of 40 or 50 people."



DEBRA BRASH, TIMES COLONIST
Artistic director Gary Brown's Bard to Broadway playlist in Parksville this year includes *Charlie Brown*, *Annie Get Your Gun* and *The Love List*.

Salmon escape farm

CAMPBELL RIVER — Canada Day proved to be lucky for 30,000 salmon, who escaped from a fish farm near Campbell River.

Approximately 120 tonnes of Atlantic salmon swam away from Marine Harvest Canada's

Frederick Arm fish farm at 9 a.m. on July 1. More than 535,000 fish were housed at the farm before the accident, according to data on the company's website.

The escapees make up a small fraction of the 42,000 tonnes of fish the company produces in B.C. each year. The company has 13 fish farms in the Campbell River area alone.

According to news stories, employees quickly patched up the pen and were able to recover a few of the escaped fish, but the vast majority made their way into open water.

Major-league designs

PARKSVILLE — New York City may be 4,000 kilometres from Parksville, but when the New York Mets start playing at Citi Field next year, it will be with the assistance of a Parksville company.

Tech firm Detailed Design Drafting Services Ltd. recently completed a roughly \$1-million contract to design trusses and girders for the stadium's

rotunda, the *Oceanside Star* reported. The company specializes in designing steel products, and its 55 Parksville employees work on everything from elementary schools to airports.

Mad hatters recruiting

NANAIMO — If you see a group of crazy women in Nanaimo wearing big red hats, you're probably not hallucinating. The Rambling Roses of Nanaimo, the local chapter of the Red Hat Society, is hunting for new recruits.

The society is a group of women over 50 who, according to a posting on Harbour Living.ca, try to reshape the way older women are viewed by society. All members must wear a red hat and purple dress (unless they're under 50, in which case it's a pink hat and lavender dress).

"Occasionally we do madly crazy stuff like inner tubing down Mount Washington or tubing down the river in summer or kayaking in crazy outfits," the posting said.

The society calls itself a "dis-organization" and has no rules except for its stringent dress code.

Holberg's big day

HOLBERG — It was a big weekend for Holberg, a town of 200 people near Port Hardy, which hosted its annual Logger Sports Day last week.

Holberg, settled by Danish immigrants, started as a floating logging camp, but is now an entirely land-based logging community with many residents working for Western Forest Products. Logger Sports Day, which takes place at the local baseball field, featured traditional and modern events for both kids and adults and crowned the town's best logger.

Of course, no competition would be complete without awards and a party afterwards, which were held at the Scarlet Ibis pub, the only eatery in town.

Is there someone or something in your community we should know about? E-mail Islandroundup@gmail.com.