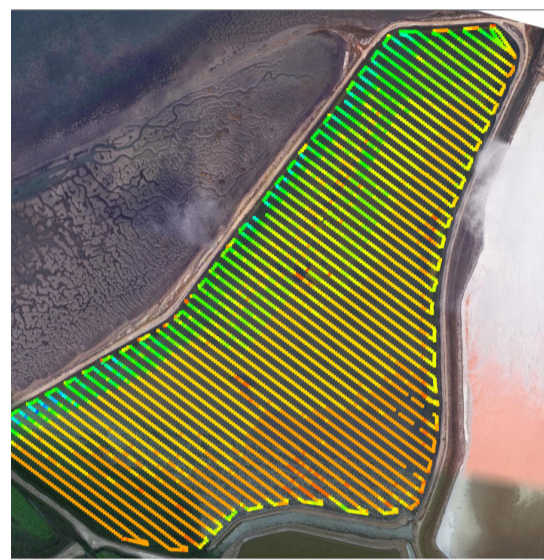




Bathymetry Solutions for Robots, Drones, Boats and Kayaks

You are unlikely to find a more unusual vehicle than the innovative HELIX robot, one of the latest unmanned systems to use CEE sonar solutions. Take a look at this unique vehicle in the customer news below. Even for more conventional small craft like kayaks, PWC / Jet Skis, and regular survey USVs, CEE can offer unique solutions that present performance benefits that are only possible with our dedicated shallow water equipment. If you have any unmanned survey challenges, are making a "DIY" survey drone or PWC, have a small boat or kayak to fit out for surveying then please get in touch.

Customer News



CEE-USV Unmanned Action: Salt Pond Surveys

For a reclamation project in San Diego, USA the CEE-USV™ was used to collect remote, autonomous bathymetry in a shallow water first stage salt evaporation pond. Next to the San Diego Bay, the exposed location meant high winds during most of the survey. With manual control of the boat, this might have gotten very tedious but fortunately not with the CEE-PILOT™ autopilot on board. To learn more about the survey job click [HERE](#).



Amazing "Go Anywhere" Robotic Surveying

Canadian robotics firm Copperstone Technologies have revived an unusual form of locomotion with their HELIX robot. The HELIX is designed principally for mine tailings ponds and locations where traditional vehicles cannot access. The HELIX can drive out over the mud and onto the water, allowing the potential for bathymetric surveys where no other method can succeed. Owing to the particular suitability of the CEE ECHO™ and CEESCOPE™ echo sounders for remote operation, Copperstone opted for the dual frequency CEE ECHO™ for the HELIX. With a special mount raising the transducer out of the water, there are few parts the HELIX cannot reach. Take a look at the unique launch procedure at the start of a tailings pond bathymetry survey below. To learn more read the [CASE HISTORY HERE](#).



Product Watch



CEESCOPE-R™ for PWC Jet Ski Surveys

For a simplified approach to surveying in the surf zone on a personal watercraft (PWC) the CEESCOPE-R is a CEE package uniquely suited for the task. With a special 24V powered Ethernet port added to the CEESCOPE, the CEESCOPE-R is turned into a fully wireless system using a waterproof WiFi radio "access point". Simply use a waterproof tablet to monitor the survey, with data stored either on the CEESCOPE or on the tablet with software such as HYPACK or Hydromagic. Exact time stamped data ensures perfect consistency over the WiFi link.

Adding a motion sensor? This is made easy with the CEESCOPE-R, just plug in the SBG Ellipse and data are merged with soundings. The Ellipse is powered by the CEESCOPE, making for a neat and very effective solution.

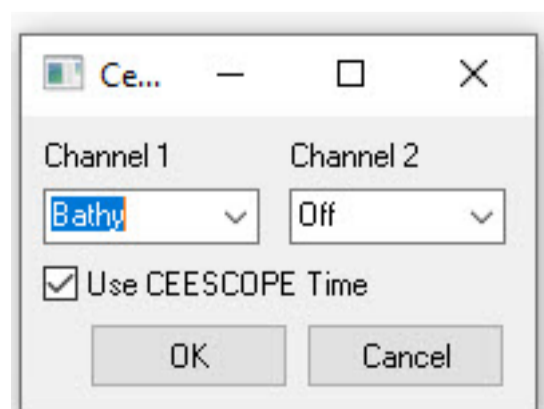
REMINDER: Don't Forget this HYPACK Check Box!

The HYPACK CEESCOPE driver for sounding data MUST use the same timebase as the GPS driver selected in the project. When using the CEESCOPE or CEE ECHO there are two timebase options, CEESCOPE TIME or PC TIME. If using the standard GPS-NMEA-0183 driver then **DO NOT CHECK THIS BOX**; you should use PC TIME. Only check this box if using the custom GPS-CEE driver in which case the special CEE time stamps will be used instead. The custom driver and CEE TIME should ALWAYS be used with the CEE-USV but this is not mandatory for regular surveys on a manned boat. To learn more, take a look at the cheat sheet [HERE](#) or the detailed technical review [HERE](#).

If you upgrade to a newer version of HYPACK always check this menu (CEESCOPE DLL Hardware SETUP) in case the box is checked by default and you are using the GPS-NMEA driver. If this happens, you will have unnecessarily high latency that might cause data issues.

And Don't Forget the GNSS Terminal Viewer!

For a couple of years, the CEE ECHO has featured a very useful GNSS data input terminal window, showing the incoming (or not!) GPS data from your connected receiver. This is a great



troubleshooting tool and many people don't know it is there or have not updated their firmware to reveal this magical new feature. If your CEE ECHO does not have a terminal window on the last screen of the GNSS menu then [CONTACT US](#) with the serial number and we can send you the firmware. If you are still not sure what this is all about, watch the video [HERE](#).



Software

Hydromagic 10 Version Released

The latest Hydromagic software update is here; important additions are a very useful new sounding editor function, and for Autopilot users the ability to drag and drop waypoints instead of having to redraw section lines. There are more new features for CEE-USV™ operators but to try out the new version (if you have an up to date maintenance plan) download [HERE](#).

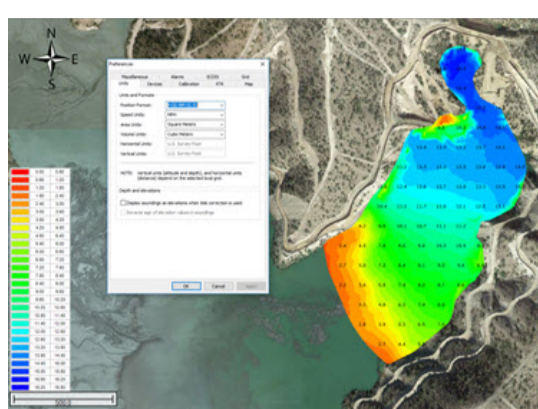
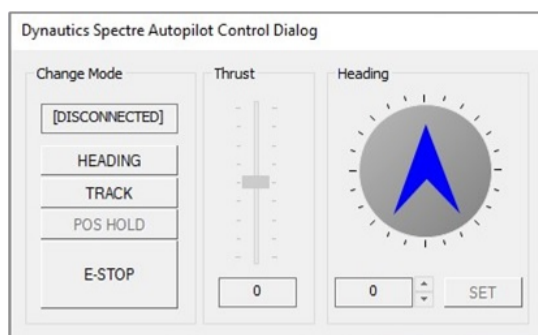
!NEW! Hydromagic V10 Training Videos

The CEE training videos were getting a little long in the tooth, so a brand new set of training videos are now available to customers. With HOURS of training covering the setup, acquisition and editing process these are a great tool for ongoing support. A new video focuses on the operation of the CEE autopilot system. [CONTACT US](#) to get the download links.

Call for Videos and Photos

Photos, Videos and Application Notes

If you have any photos or videos, or interesting, unusual, or completely routine survey applications related to CEE equipment then please let us know. We are always looking for case history candidates - often that presents a nice opportunity to generate some useful and informative promotional material for everyone. And we do all the work. [CONTACT US](#) if you want to share.



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