

## FREQUENTLY ASKED QUESTIONS:

### 1. Do I need an export licence?

*ANSWER:* The HydroPACT range of products are free of export control.

### 2. What is the anticipated lead-time for new systems?

*ANSWER:* 2-6 weeks, dependent on current demand.

### 3. What is the anticipated lead-time for repairs?

*ANSWER:* We aim to complete all repairs within 15 days of receipt of a customer purchase order.

### 4. How often do I need to have my detection equipment calibrated?

*ANSWER:* The range and accuracy of measurements available from the 440 system vary with the type of target and its size, therefore it is recommended that you have Teledyne TSS determine exact target scaling factors for each target type by means of Target Scaling tests.

### 5. What is the cost of calibration?

*ANSWER:* Please contact [TSS Customer Services](#) for prices related to training and calibration of our products.

### 6. Where is the reference point on a 440/660?

*ANSWER:* Measurement datum: All measurements are reported with the respect to the centre of the bottom face of the coil array.

### 7. Are there recommended spare parts lists available for HydroPACT products?

*ANSWER:* Yes - there is a list of sub-assemblies, refurbished pods, coils and cable as well as some ancillary parts.

### 8. Does Teledyne TSS offer training for the HydroPACT product range?

*ANSWER:* TSS can offer training on any of these products on request and subject to availability. Please contact [TSS Customer Services](#) with your requirements.

### 9. What does a training course at Teledyne TSS include?

*ANSWER:* Basic product theory, installation and operation addressed in the following topics:

- System overview
- Principles of operation
- Initial installation
- Software overview and interfacing with other equipment
- Operational considerations and limitations
- Practical demonstration (where applicable)
- Use of the system as part of a Dualtrack installation (where applicable)
- Regular maintenance procedures
- System test parameters

**10. We currently have a full 440 system, is the topside unit compatible with the 350 system?**

*ANSWER:* The current SDC 10 unit is compatible with all current HydroPACT products. If your equipment is more than 10 years old, please contact [TSS Customer Services](#) department for confirmation of compatibility.

**11. Do you offer a Tone Generator?**

*ANSWER:* No we do not offer a tone generator. A suitable unit (model 5915) may be purchased from Tinsley at [www.tinsley.co.uk](http://www.tinsley.co.uk)

**12. Does the 350 system require background compensation?**

*ANSWER:* No, due to the technology used, the 350 system does not require separate background compensation (as employed on the 440). During initial set up, the 350 is configured to detect a specific frequency and all other signals are automatically rejected.

**13. If background compensation is not done, how much will the depth of cover measurement drift by?**

*ANSWER:* Providing that the frequency and amplitude of the signal (tone) applied to the target cable is stable, we would not expect to see any drift exhibited in the output of the 350 system.

**14. Is it necessary to perform land based target scaling trials for the 350 system?**

*ANSWER:* No - the 350 system does not require a target scaling factor.

**15. Can the 440 system be used with just one or two coils?**

*ANSWER:* When used for its intended purpose, all three coils of the 440 should be kept within range of the target pipeline/cable in order to ensure optimal performance. However, the system will continue to provide depth of burial information providing at least two of the coils are still within range.

If using the system for purposes other than pipeline/cable survey/tracking, a differing number of coils/configurations may be employed. Please reference our application note on UXO detection which can be found on our website.

**16. Can the 440 system be used with 4 coils?**

*ANSWER:* Whilst the 440 system does contain 4 channels, only three channels can be used at any one time for pipe tracking.

**17. Can the 440/660 system be used to detect live power cables?**

*ANSWER:* If used to survey live power cables, it is possible that the 440/660 system may be subject to some interference. If the interference falls within the sample measurement windows of the 440/660, it could result in random errors in the output measurements.

In order to ascertain if the 440/660 is being impacted by interference, the DeepView oscilloscope function should be used to make regular checks on signal quality.

**18. Can the 350 system be used to track live power cables?**

*ANSWER:* In theory, the 350 system could be used to survey a live power cable as the native (mains) frequency of the majority of live AC power cables falls within the range of the 350. In practice however, this may not be possible or desirable for the following reasons:

- The tone must be single-phase
- There may be many local sources of interference at the same frequency

Whilst in theory it would not be possible to track 3-phase or DC cables in practice with residual signals present as a result of an imperfect system or the transformation processes can in cases facilitate survey of these lines.

In order to establish suitability, pre-survey trials should be conducted.

**19. What is the lateral performance of the 440 and 350 systems?**

*ANSWER:* For the tests detailed within the product manual, lateral measurement accuracy was found to be within 5cm or 5%.

**20. Can the 660 system be used in conjunction with the 350 system to form a Dualtrack system?**

*ANSWER:* No, the Dualtrack systems are combinations of the 350 and 440 systems only.

**21. Why are the majority of 440/660 installations fitted to the front of an ROV?**

*ANSWER:* Initially, it is best to utilise the detection system the same way as the vehicle's cameras and lighting enabling the best possible vision for operation.

Often, the ROV's umbilical, at the rear, creates noise causing detection issues.

**22. What is the best position to install either a 440 or 660 coil array on a ROV?**

*ANSWER:* Teledyne TSS recommends the installation of a 440 or 660 should be a minimum of 1m in front of the ROV due to the potential noise issues coming from the ROV itself.

**23. We are seeing a lot of noise on our 440. What is causing this noise?**

*ANSWER:* This is likely due to the installation of the system. The recommended installation of a 440 is a minimum of 1m in front of the ROV.

The Background Noise Profile feature in the DeepView software allows the surveyor to measure spurious signals in the surveying vicinity and identify if they will have an effect on the quality of the survey data. It also allows for identification of areas that could be problematic during the survey. Please contact [TSS Customer Services](#) in this instance.

**24. What is the best system to track pipes?**

*ANSWER:* The 440 and 660 are the best system for pipe tracking, dependent on vehicle in use.

In situations where the water depth is shallow and changing, manual compensation may be required. Please contact [TSS Customer Services](#) for advice on this point.

**25. What is the best system to track cables?**

*ANSWER:* The 350 is the best solution for cable tracking. For smaller vehicles and shallower depths, the 440 or 660 may be an option but a manual compensation may be required. Please contact [TSS Customer Services](#) for advice on this point.

**26. Can I use more than one coil array on the 660 system at one time?**

*ANSWER:* No