Information Alignment

GuidEx

Application User guide

SOFTWARE LICENSE AND SERVICES AGREEMENT

This Software License and Services Agreement (License Agreement) is entered into by and between Information Alignment Pty Ltd ABN 41 102 630 535 (Supplier), and the customer specified in the Software Order Form or Quote (Customer), and is effective as of the date specified in the Software Order Form or Quote (the Effective Date). The License Agreement consists of the terms and conditions set forth in this agreement including any attachments or exhibits.

The Agreement permits the Customer to purchase software licenses and services from the Supplier pursuant to the Supplier order forms or quote referencing this License Agreement (Order Form(s) or Quote) and sets forth the basic terms and conditions under which those products and services will be delivered. Unless otherwise specified herein, each Order Form or Quote shall be independent from, and have no impact on, any other Order Form or Quote. This Agreement shall govern Customer's initial purchase on the Effective Date as well as any future purchases made by Customer which reference this Agreement.

The Customer accepts the License Agreement available for download from www.inapl.com and agrees to be bound by the currently posted License Agreement. Acceptance (as defined in the License Agreement) of the Software Order Form or Quote by the Customer constitutes a binding, legal agreement between the Customer and the Supplier. Any additional or different terms or conditions in any communication by the Customer are rejected and shall be null and void, irrespective of the means of Customer's Acceptance.

By accepting the Order Form or Quote verbally, by email or by providing a purchase order you represent that you are an authorised representative of the Customer and that you have the authority to commit the Customer legally and financially.

1. **Definitions and Interpretation**

In this Agreement:

Acceptance means confirmation from the Customer verbally, by email or by providing a purchase order to proceed with the offer made by the Supplier in the Software Order Form.

Affiliate means any entity which is under the control of or common control with Customer where "control" means the right or power, directly or indirectly, to direct or cause the direction of the management and policies of such entity whether through the ownership of voting security, by contract or otherwise; and the term "controlled" shall have the same meaning. The Affiliate rights granted in this Agreement shall not apply to any "enterprise wide" licenses unless Affiliate usage is designated in the applicable Order Form.

Agreement means the agreement entered into by the Supplier and the Customer (either solely or with another person) which incorporates this document and any schedules and special conditions, and any other document stated in the Agreement or Software Order Form to be part of the Agreement.

Claim means any claim, demand, action, proceeding, litigation, or judgment whether based in contract, tort, statute or otherwise.

Contractor means any third party engaged by Customer to perform services on behalf of Customer.

Gross Negligence means such reckless and wanton conduct as constitutes an utter disregard for the harmful, foreseeable and avoidable consequences which result from that conduct.

Liabilities means all liabilities, losses, damages, outgoings, penalties, fines, costs and expenses of whatever description.

Willful Misconduct means any intentional act or omission by a Party carried out with disregard for the foreseeable and harmful consequences for the other Party, but does not include an error of judgment, mistake, act or omission, whether negligent or not, made in good faith.

1.1. Subject to all of the terms and conditions of this Agreement, the Supplier grants to Customer a royalty-free, irrevocable (except for in the circumstances of uncured material breach of this Agreement by the Customer, after the Customer has been given written notice of such breach and a reasonable opportunity to remedy such breach, being not less than 14 days), non-transferable, non-sub licensable, non-exclusive license from the Effective Date to use the software products specified in a Software Order Form (**Software**) internally, but only in accordance with (a) the technical specification documentation generally made available by the Supplier to its customers with regard to the Software (**Documentation**), (b) this Agreement and (c) any term, user, CPU, site, computer, website, field of use or other restrictions set forth in the applicable Order Form.

1.2. Customer may copy and install on Customer's and, subject to Section 1.3 below, its Affiliates' computers for use only by Customer's and its Affiliates' employees, directors, officers and contractors as many copies of the Software as is designated in the applicable Order Form. Customer may also make a reasonable number of copies of the Software for back-up and archival purposes.

1.3. Subject to the terms and conditions of this Agreement, Customer's Affiliates and Contractors and their respective employees, directors, officers and contractors (**Personnel**) may use the licenses granted to Customer together with the applicable Documentation, provided that (a) such use is only for Customer's or such Affiliate's benefit, (b) Customer agrees to remain responsible for each such Affiliate's and Contractor's and their Personnel's compliance with the terms and conditions of this Agreement and (c) upon request Customer will identify each such Affiliate and Contractor. Use of the Software by the Affiliates, Contractors and Customer in the aggregate must be within the restrictions in the applicable Order Form.

1.4. License Restrictions

Customer shall not (and shall not allow any third party to):

(a) decompile, disassemble, or otherwise reverse engineer the Software or attempt to reconstruct or discover any source code, underlying ideas, algorithms, file formats or programming interfaces of the Software by any means whatsoever (except and only to the extent that applicable law prohibits or restricts reverse engineering restrictions, and then only with prior written notice to the Supplier);

(b) distribute, sell, sublicense, rent, lease or use the Software (or any portion thereof) for time sharing, hosting, service provider or like purposes;

(c) remove any product identification, proprietary, copyright or other notices contained in the Software;

(d) modify any part of the Software, create a derivative work of any part of the Software, or incorporate the Software into or with other software, except to the extent expressly authorized in writing by the Supplier. the Supplier expressly authorizes the Customer and its Affiliates and their respective Personnel to create reports, modify reports and build their own reports using the Software and to use such reports without restriction; or

(e) publicly disseminate performance information or analysis (including, without limitation, benchmarks) from any source relating to the Software except as authorised under this Agreement or with the Supplier's prior approval. For clarity, this restriction, and this Agreement generally, relates to the Software and not the data and information stored or accessed using the Software. The Customer may freely use, disclose and disseminate such data and information, which is the property of the Customer and Confidential Information of the Customer for the purpose of clause 9.

2. **Ownership**

Notwithstanding anything to the contrary contained herein, except for the limited license rights expressly provided herein, the Supplier and its suppliers have and will retain all rights, title and interest in and to the Software (including, without limitation, all patent, copyright, trademark, trade secret and other intellectual property rights) and all copies, modifications and derivative works thereof. Customer acknowledges that it is obtaining only a limited license right to the Software and that irrespective of any use of the words "purchase", "sale" or like terms hereunder no ownership rights are being conveyed to Customer under this Agreement or otherwise.

3. **Payment and Delivery**

3.1. All payments are non-refundable (except as expressly set forth in this Agreement) and shall be made in currency as specified in the applicable Order Form. Customer shall be responsible for all taxes, withholdings, duties and levies arising from the order (excluding taxes based on the income of the Supplier).

3.2. All Software and Documentation shall be delivered by electronic means unless otherwise specified on the applicable Order Form.

4. **Term of Agreement**

4.1. This Agreement is effective as of the Effective Date.

4.2. Either party may terminate this Agreement (including all related Order Forms) if the other party: (a) fails to cure any material breach of this Agreement within 30 days after written notice of such breach; (b) ceases operation without a successor; or (c) seeks protection under any bankruptcy, receivership, trust deed, creditors arrangement, composition or comparable proceeding, or if any such proceeding is instituted against such party (and not dismissed within 60 days thereafter). Termination is not an exclusive remedy and the exercise by either party of any remedy under this Agreement will be without prejudice to any other remedies it may have under this Agreement, by law, or otherwise. The Customer may, with effect from the next anniversary of the Effective Date, terminate this Agreement in whole or in part, at its absolute discretion, by giving the Supplier not less than one month's written notice, in which case the Supplier will be entitled to payment under this Agreement up to the effective date of termination but will not be entitled to any further payment.

4.3. Sections 1.4 (License Restrictions), 2 (Ownership), 3 (Payment), 4 (Term of Agreement), 5.8 (Disclaimer), 7 (Limitation of Remedies and Damages), 8 (Indemnification), 9 (Confidential Information), 10 (Public Statements) and 11 (General) shall survive any termination or expiration of this Agreement.

5. **Representations, Warranties and Covenants**

5.1. Each party represents and warrants to the other that it has the corporate capacity to enter into this Agreement and to perform each of its obligations hereunder.

5.2. Each party represents and warrants to the other that it has duly authorized, executed and delivered this Agreement and this Agreement constitutes a legally valid and binding obligation of it enforceable against it in accordance with its terms except as such enforcement may be limited by applicable bankruptcy, insolvency and other laws of general application affecting the enforcement of creditors' rights and subject to general equitable principles.

5.3. The Supplier represents and warrants to Customer that it is the legal and beneficial owner or authorized licensor of the Software, and the Supplier has the full power and authority to grant the license to use the Software herein contemplated without the consent of any other person.

5.4. The Supplier represents, warrants and covenants to Customer that the Software, when and in the form provided by the Supplier from time to time (including any updates or patches thereto), and its use by Customer and its Affiliates in accordance with this Agreement does not infringe the intellectual property rights of any person. The Supplier's sole liability and Customer's sole and exclusive remedy for any breach of the foregoing representation and warranty shall be the intellectual property infringement indemnity set forth below in Section 8.

5.5. The Supplier represents, warrants and covenants to Customer that no portion of any Software, when and in the form provided by the Supplier from time to time (including any updates or patches thereto), contains any active disabling mechanism or protection feature designed to prevent its use, including any clock, timer, counter, computer virus, worm, software lock, drop dead device, Trojan-horse routine, trap door, time bomb or any other codes or instructions that may be used to access, modify, replicate, distort, delete, damage or disable such Software, Customer's or its Affiliates' software, Customer's or its Affiliates' computer systems or other software or hardware up to date, reputable, and widely, except as specifically designed into the Software and of which Customer has actual knowledge. Notwithstanding the foregoing and for greater certainty, the Supplier represents, warrants and covenants that nothing designed into any Software is intended to prevent the Software from functioning in accordance with its Documentation at any time.

5.6. The Supplier warrants to Customer that for a period of 90 days following conclusion of implementation and configuration services for the Software or, when the software has been delivered and is at a 'Go Live' stage (the **Warranty Period**), the Software shall operate in a manner consistent in all material respects with the Documentation. The Supplier does not warrant that Customer's use of the Software will be uninterrupted or error-free or that any security

mechanisms implemented by the Software will not have inherent limitations. The Supplier's sole liability (and Customer's exclusive remedy) for any breach of this warranty shall be, at the Supplier's election to either: use commercially reasonable efforts to promptly provide Customer with an error-correction or work-around which corrects the reported non-conformity, to promptly replace the non-conforming Software with conforming Software, or if the Supplier determines such remedies to be impracticable within a reasonable period of time (but in any event within sixty (60) days from the date on which it received notice of the warranty claim), to terminate the Agreement and refund the license fee paid for the Software. The Supplier shall have no obligation with respect to a warranty claim unless notified of such claim within the Warranty Period.

5.7. The above warranty shall not apply:

(a) if the Software is used with hardware or software not specified in the Documentation without the prior approval of the Supplier, to the extent that such use directly causes the warranty to be breached;

(b) if any modifications are made to the Software by Customer or any third party without the prior approval of the Supplier, to the extent that such modifications directly cause the warranty to be breached;

(c) to defects in the Software due to accident, abuse, or improper use by Customer; or

(d) to items provided on a no charge or evaluation basis.

5.8. This section 5 is a limited warranty and except as expressly set forth in this section 5 the software and all services are provided "as is." neither the Supplier nor its suppliers makes any other warranties, express or implied, statutory or otherwise, including but not limited to warranties of merchantability, title, fitness for a particular purpose or non-infringement. customer may have other statutory rights. however, to the full extent permitted by law, the duration of statutorily required warranties, if any, shall be limited to the limited warranty period.

6. **Support & Maintenance**

The Supplier shall provide the support and maintenance services for software modules as specified in the applicable Order Form. All support and maintenance shall be provided pursuant to this Agreement read together with Software Maintenance Services Terms and Conditions and which shall prevail over this Agreement to the extent of inconsistency that relates to software support and maintenance.

7. **Limitation of Remedies and Damages**

7.1. Subject to section **Error! Reference source not found.**, neither party s hall be liable for any loss of use, lost data, failure of security mechanisms, interruption of business, or any indirect, special, incidental, or consequential damages of any kind (including lost profits), regardless of the form of action, whether in contract, tort (including negligence), strict liability or otherwise, even if informed of the possibility of such damages in advance.

7.2. Subject to section **Error! Reference source not found.**, the Supplier a nd its suppliers' entire liability to customer in connection with this agreement shall not exceed the amount actually paid by customer to the Supplier under this agreement.

7.3. This section 7 shall not apply with respect to any claim arising under the sections titled "grant of license," "license restrictions," "confidential information" or "indemnification".

7.4. The software is not fault tolerant and is not designed, manufactured or intended for use in life support, medical, emergency, mission critical or other strict liability or hazardous activities ("high risk activities"). The Supplier specifically disclaims any express or implied warranty of fitness for high-risk activities. customer represents and warrants that it will not use the software (or permit it to be used) for high risk activities and agrees that the Supplier will have no liability for use of the software in high risk activities. customer agrees to indemnify and hold harmless the Supplier for any damages, liabilities or other losses resulting from such use.

7.5. The parties agree that the limitations specified in this Section 7 will survive and apply even if any limited remedy specified in this Agreement is found to have failed of its essential purpose.

7.6. The limitations in Sections 7.1 and 7.2 do not apply to the extent that:

(a) the liability cannot be limited at law; and/or:

(b) the liability arises as a result of the Gross Negligence, fraud, Willful Misconduct or criminal conduct of the Supplier or its Affiliates or their respective directors, officers, employees, contractors, representatives or agents.

8. **Indemnification**

The Supplier shall defend, indemnify and hold harmless Customer and its Affiliates together with their respective officers, directors and employees and Contractors from and against any claim of infringement of a patent, copyright, or trademark or other intellectual property right asserted against any of them by a third party based upon or in connection with Customer's or its Affiliates' or Contractors' use of the Software in accordance with the terms of this Agreement, provided that the Supplier shall have received from Customer:

(a) prompt notice of such claim (but in any event notice in sufficient time for the Supplier to respond without prejudice);

(b) the exclusive right to control and direct the investigation, defense, and settlement (if applicable) of such claim to the extent that the claim is not directly against the Customer and/or its Affiliate; and

(c) all reasonable necessary cooperation of Customer. If Customer's use of any of the Software is, or in the Supplier's opinion is likely to be, enjoined due to the type of infringement specified above, or if required by settlement, the Supplier may, in its sole discretion:

(i) substitute for the Software substantially functionally similar programs and documentation;

(ii) procure for Customer the right to continue using the Software; or if (a) and (b) are commercially impracticable,

(iii) terminate the Agreement and refund to Customer the license fee paid by Customer as reduced to reflect a five year straight-line depreciation from the applicable license purchase date. The foregoing indemnification obligation of the Supplier shall not apply:

a. if the Software is modified by any party other than the Supplier without the prior approval of the Supplier, to the extent that such modification causes the alleged infringement;

b. to the extent the Software is combined with other non-Supplier products without the prior approval of the Supplier, to the extent that such combination causes the alleged infringement;

c. to any unauthorized use of the Software;

d. to any unsupported release of the Software; or

e. to any third-party code contained within the Software. This section 8 sets forth the Supplier's and its suppliers' sole liability and customer's sole and exclusive remedy with respect to any claim of intellectual property infringement.

9. **Confidential Information**.

Each party agrees that all code, inventions, know-how, business information and production data, supplier, customer and prospective supplier lists and requirements, financial information and technical information including information relating to a party's processing facilities, operational techniques and methods that it obtains (**Receiving Party**) from the disclosing party (**Disclosing Party**) constitute the confidential property of the Disclosing Party (**Confidential Information**), provided that it is identified as confidential at the time of disclosure or should be reasonably known by the Receiving Party to be Confidential Information due to the nature of the information disclosed and the circumstances surrounding the disclosure. Any software, documentation or technical information provided by the Supplier (or its agents), performance information relating to the Software, any Evaluation Software, and the terms of this Agreement shall be deemed Confidential Information of the Supplier without any marking or further designation. Any information not in the public domain regarding the business affairs and operations of Customer, its relationship with its suppliers, customers and/or employees and such other information not in the public domain as may be helpful to its competitors or detrimental to Customer, its customers or employees if publicly disclosed shall be deemed Confidential Information of Customer without any marking or further designation. Except as expressly authorized herein, the Receiving Party will hold in confidence and not use or disclose any Confidential Information. The Receiving Party's nondisclosure obligation shall not apply to information which the Receiving Party can demonstrate: (a) was rightfully in its possession or known to it prior to receipt of the Confidential Information; (b) is or has become public knowledge through no fault of the Receiving Party; (c) is rightfully obtained by the Receiving Party from a third party without breach of any confidentiality obligation; (d) is independently developed by employees of the Receiving Party who had no access to such information; or (e) is required to be disclosed pursuant to stock exchange rules or regulation, law, order or legal process (but only to the minimum extent required to comply with such rules or regulation, law, order or legal process and with advance notice to the Disclosing Party, to the extent permitted by law). The Receiving Party acknowledges that disclosure of Confidential Information may cause substantial harm for which damages alone may not be a sufficient remedy, and therefore that upon any such disclosure by the Receiving Party the Disclosing Party may be entitled to seek appropriate equitable relief in addition to whatever other remedies it might have at law. At the Disclosing Party's request, or upon termination of this Agreement, the Receiving Party agrees to turn over to the Disclosing Party or destroy all Confidential Information of the Disclosing Party and any copies, extracts or notes regarding the foregoing, in its possession or control, and the Receiving Party agrees not to retain any copies thereof, whether printed, on electronic media, or otherwise (except copies made for archival or back-up purposes, which the Receiving Party shall destroy in accordance with its document retention policy and copies retained to comply with professional obligations, standards or practices of legal advisers and other professional advisers of the Receiving Party).

10. **Public Statements.**

Except to the extent required by applicable law or regulation or an order or judgment of a court, administrative agency or other governmental body of competent jurisdiction, neither party shall disclose or permit any of its Affiliates or personnel to disclose any information regarding the existence or terms of the Agreement, nor issue any press release or public statement mentioning the name of the other party or any Affiliate of the other party, without the prior written consent of the other party. Any party proposing to make any such disclosure shall first consult with the other party.

11. **General**

11.1. Assignment

This Agreement will bind and inure to the benefit of each party's permitted successors and assigns. Neither party shall assign this Agreement (or any part thereof) without the advance written consent of the other party, except that either party may assign this Agreement in connection with a merger, reorganization, acquisition or other transfer of all or substantially all of such party's assets or voting securities. Any attempt to transfer or assign this Agreement except as expressly authorized under this Section 11.1 will be null and void.

11.2. Severability

If any provision of this Agreement shall be adjudged by any court of competent jurisdiction to be unenforceable or invalid, that provision shall be limited to the minimum extent necessary so that this Agreement shall otherwise remain in effect.

11.3. Governing Law; Jurisdiction and Venue

This Agreement is governed by the law of Western Australia and each Party irrevocably and unconditionally submits to the non-exclusive jurisdiction of the courts of Western Australia.

11.4. Notices and Reports

Any notice or report hereunder shall be in writing to the notice address set forth above and shall be deemed given:

(d) upon receipt if by personal delivery;

(e) upon receipt if sent by certified or registered mail (return receipt requested); or

(f) one day after it is sent if by next day delivery by a major commercial delivery service.

11.5. Amendments; Waivers

No supplement, modification, or amendment of this Agreement shall be binding, unless executed in writing by a duly authorized representative of each party to this Agreement. No waiver will be implied from conduct or failure to enforce or exercise rights under this Agreement, nor will any waiver be effective unless in a writing signed by a duly authorized representative on behalf of the party claimed to have waived. No provision of any purchase order or other business form employed by Customer will supersede the terms and conditions of this Agreement, and any such document relating to this Agreement shall be for administrative purposes only.

11.6. Entire Agreement

This Agreement is the complete and exclusive statement of the mutual understanding of the parties and supersedes and cancels all previous written and oral agreements and communications relating to the subject matter of this Agreement.

11.7. Audit Rights

Upon the Supplier's written request, Customer shall certify in a signed writing that Customer's use of the Software is in full compliance with the terms of this Agreement (including any copy and user limitations). No more than once every three years, and with at least sixty (60) days prior written notice to Customer, the Supplier may gain access (subject to compliance with the Customer's site access requirements) to Customer's premises for the limited purpose of conducting an inspection to determine and verify compliance with the terms of this Agreement including but not limited to usage of the Software within the required usage restrictions. The Supplier will conduct such inspection during normal business hours and such inspection shall be restricted in scope, manner and duration to that reasonably necessary to achieve its purpose and not disrupt Customer's operations. In the event that such inspection identifies Customer's usage of the Software in excess of the relevant restrictions under this Agreement, then Customer must immediately pay to the Supplier (at the Supplier's then current list price) the additional license fees and maintenance fees to reflect Customer's actual use of the Software. Customer's new license will become effective upon payment of such invoice. The Supplier will bear the costs associated with the inspection (including the fees of any professional advisers instructed by the Supplier to assist in the inspection)), unless the inspection reveals a discrepancy in excess of fifteen percent (15%), in which case the inspection costs shall be paid by Customer.

11.8. Independent Contractors

The parties to this Agreement are independent contractors. There is no relationship of partnership, joint venture, employment, franchise or agency created hereby between the parties. Neither party will have the power to bind the other or incur obligations on the other party's behalf without the other party's prior written consent.

11.9. Force Majeure

Neither party shall be liable to the other for any delay or failure to perform any obligation under this Agreement (except for a failure to pay fees) if the delay or failure is due to events which are beyond the reasonable control of such party, including but not limited to any strike, blockade, war, act of terrorism, riot, natural disaster, failure or diminishment of power or of telecommunications or data networks or services, or refusal of approval or a license by a government agency.

11.10. Export Compliance

Customer acknowledges that the Software is subject to export restrictions by the United States government and import restrictions by certain foreign governments. Once in its control, Customer shall not allow the export or re-export of any part of the Software or any direct product thereof:

(a) into (or to a national or resident of) any embargoed or terrorist-supporting country;

(b) to anyone on the U.S. Commerce Department's Table of Denial Orders or U.S. Treasury Department's list of Specially Designated Nationals;

(c) to any country to which such export or re-export is restricted or prohibited, or as to which the United States government or any agency thereof requires an export license or other governmental approval at the time of export or re-export without first obtaining such license or approval; or

(d) otherwise in violation of any export or import restrictions, laws or regulations of any United States or foreign agency or authority. The Software is further restricted from being used for the design or development of nuclear, chemical, or biological weapons or missile technology, or for terrorist activity, without the prior permission of the United States government.

11.11. Third-Party Code

The Software may contain or be provided with components subject to the terms and conditions of "open source" software licenses (**Open-Source Software**). Open-Source Software may be identified in the Documentation, or the Supplier shall provide a list of the Open-Source Software for a particular version of the Software to Customer upon Customer's written request. To the extent required by the license that accompanies the Open-Source Software, the terms of such license will apply in lieu of the terms of this Agreement with respect to such Open-Source Software, including, without limitation, any provisions governing access to source code, modification or reverse engineering.

11.12. Anti-Bribery Compliance

(a) Neither the Supplier, nor any person acting on behalf of the Supplier, has made or committed to make, nor shall they make or commit to make, any payment of money, or gift of anything of value, directly or indirectly, to any Government Official (as defined below), for the purpose of securing or inducing the act, decision, influence, or omission of such Government Official to obtain, retain, or direct business, or secure any improper advantage, for any person in connection with this Agreement. The prohibition on indirect payments or commitments includes any situation where the person making the payment knows, believes, or is aware of the high probability that the person receiving the payment will pass the payment through, in whole or in part, to a Government Official in the circumstances set forth above. **Government Official** means any official, agent or employee of the government, any political party or an official thereof, any candidate for political office, any official or employee of any public international organization, or any immediate relative (spouse, son, daughter, or parent) of any of the foregoing, including, without limiting the generality of the foregoing, any employee or official of any company which is majority-owned or controlled by the government, any employee or official of any company which is in the process of being privatized in whole or in part, and any person who is purporting to act in a private capacity, but who otherwise is a Government Official within the meaning of this definition.

(b) The Supplier covenants that it shall not pay or commit to pay any expense for the benefit of a Government Official without the prior written approval of Customer and that, if applicable, it will keep and maintain all documentation and receipts for any expenses of Government Officials that it has paid. All expense reimbursement requests will be deemed to include the Supplier's certification that it has abided by all of the terms of this Section of the Agreement.

11.13. Insurance

The Supplier must affect and maintain, for the term of this Agreement, at its own expense, the following insurance policies:

(a) Workers' compensation and employers' liability insurance covering all Claims and Liabilities under any applicable law, and where common law claims are allowed outside of the statutory scheme, for employer's liability at common law, for the death of or injury to:

(i) any person employed by the Supplier in connection with this Agreement; and

(ii) any person who is a worker of the Supplier or any of its sub-contractors in connection with this Agreement and who may be deemed under statute to be a worker of the Customer.

(b) General public and products liability insurance with a limit of liability of not less than $10,000,000 for any one occurrence, covering liability for:

(i) personal injury, disease, or illness (including mental illness) or death; and

(ii) loss of, damage to, or loss of use of, real or personal property and consequential loss,

arising out of the performance of this Agreement.

(c) Motor vehicle insurance covering all mechanically propelled vehicles that are registered, or are capable of being registered for road use, and which are used in connection with this Agreement, including insurance that is compulsory under applicable Laws governing the use of motor vehicles and liability for personal injury or death; and

(d) liability insurance for third party property damage with a sum insured

of not less than $20,000,000 per occurrence.

The Supplier must:

(a) observe and perform all terms and conditions of such insurances and pay all deductibles;

(b) provide certificates of currency and such other evidence that the Customer may require regarding the insurances at any time (including prior to the issue of a Purchase Order), if requested to do so;

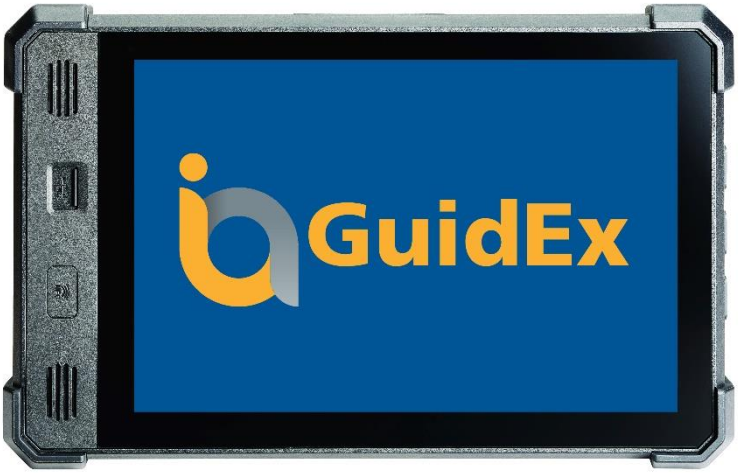
(c) ensure that all insurances arranged by the Supplier are effected with reputable financially secure insurers (with a Standard and Poor's (or equivalent) rating of not less than A minus; and

(d) notify the Customer in writing as soon as practicable after receiving any notice of cancellation or any change in any policy of insurance that will have a material effect on the cover required to be taken out by the Supplier in accordance with this Agreement.

Contents

1. About the Information Alignment GuidEx Software

The INA GuidEx software is a machine navigation system for stakeless surveying for resource exploration operations, and other field operations where precise machine positioning, navigation, and awareness is required.



GuidEx

The GuidEx software provides machine navigation and pad work task tracking capabilities. It uses a map capable of depicting imagery draped over 3D terrain as well as routes and exclusion/inclusion zones. Various information tables enable the user to specify operator, machine characteristics, reasons for standby, and task descriptions. Specific abilities include but are not limited to:

- Definition of single-line SHP files as route lines for navigating.
- Navigation to point targets from either a CSV file or Point SHP file.
- Navigation to pad targets (defined via a custom pad database).
- Definition of tasks to work/track along with pad workflows.
- Recording of culture points.
- Extensive logging based on time/distance, exclusion/inclusion zone ingress/egress, point recordings, route progress, tasks performed, and so forth.
- Loading any number and combination of point, polyline, and polygon SHP files, as well as any size/format of raster imagery
- Loading of a Digital Elevation Model (with imagery and SHP files draped over it)
- Use of an Inertial Measurement Unit (IMU) for pitch/roll/yaw & antenna lever arm offsets (virtual reference points)

Optional equipment includes UHF radio for RTK corrections, and an Internet Gateway for wireless data sync.

GuidEx Simulator

Fully featured GuidEx software, locked to simulation mode only (no live GNSS accepted). Enables you to import projects to verify settings before deploying projects to field units. Also serves as a training platform. The GuidEx Simulator is available for anyone to download at any time. Screen Controls

To start the GuidEx software, tap on the GuidEx. To open the user guide, tap on the GuidEx User Guide icon.

To add the icons to the **Home** screen:

- **TD520:** Tap on the eight-dot icon at the bottom of the home screen to display all software, long press and hold on the software icon required to move to the **Home** screen.
- **TD540:** Swipe up from the bottom of the screen to display all software, long press and hold on the software icon required to move to the **Home** screen.

Status bar

Located at the bottom of the screen, the status bar enables you to do the following:

Back  Tap to return to a previous view. If a keyboard is displayed, this is shown as a down arrow, and can be tapped to dismiss the keyboard.

Home  Tap to return to the **Home** screen.

Recent  Tap to see all open apps or recent (and still open) dialogs as thumbnails. Tap on a thumbnail to display that app or screen. You can close it by swiping the thumbnail down.

Touch Screen Basics

If you are unfamiliar with using a touch screen, this section contains the basics of using a touch screen and how to clean it.

Interactive controls

Use your fingers to interact with buttons, maps, lists and selectors.

> **CAUTION –** Do not press on the screen with a sharp item, such as a pencil, as you may damage the surface of the screen.

Item	Action	Explanation
Buttons and selectors	Tapping 	Tap means to touch a point on the screen and then remove your finger from the screen. A tap is a single touch. You do not move your finger while touching the screen. You tap buttons, items in lists, points on a range, and so on.
Lists	Scrolling 	When a list has more items than fit on a screen or in a box, you can move the list to see all items by scrolling up or down. To scroll: 1. Touch anywhere in the list and hold your finger on the screen. 2. Move your finger in the direction that you want to move the list—left, right, up, or down.
Home screen **Run** screen	Zooming in and out 	You can enlarge the view to see more detail (zoom in) or reduce the view to see less detail but more area (zoom out). To zoom in: 1. Touch the screen where you want to see more detail with your thumb and a finger close together (or you can use two fingertips). 2. Move your fingers apart while still touching the screen. To zoom out: 1. Touch the screen where you want to reduce the level of detail with your thumb and a finger an inch or more apart (or you can use two fingertips) 2. Move your fingers together while still touching the screen. Remove your fingers from the screen when you are satisfied with the zoom level.

Item	Action	Explanation
On the **Run** screen	Panning 	Panning in a map on the **Run** screen moves the map left or right. Panning means you can shift the view to show information that is not in view on the screen. 1. Touch anywhere on the screen with your finger and hold it on the screen. 2. Move your finger in the direction that you want to move the map. 3. Remove your finger when you are satisfied with the position of the map.
Settings shortcut	Swiping down 	Swipe down on the upper right area of the screen to quickly access the brightness control and display settings.

Cleaning the touch screen

Use the following supplies to clean the touch screen of the display:

- Ammonia-free glass cleaner
- Soft, lint-free cotton cloth
- 50% isopropyl alcohol

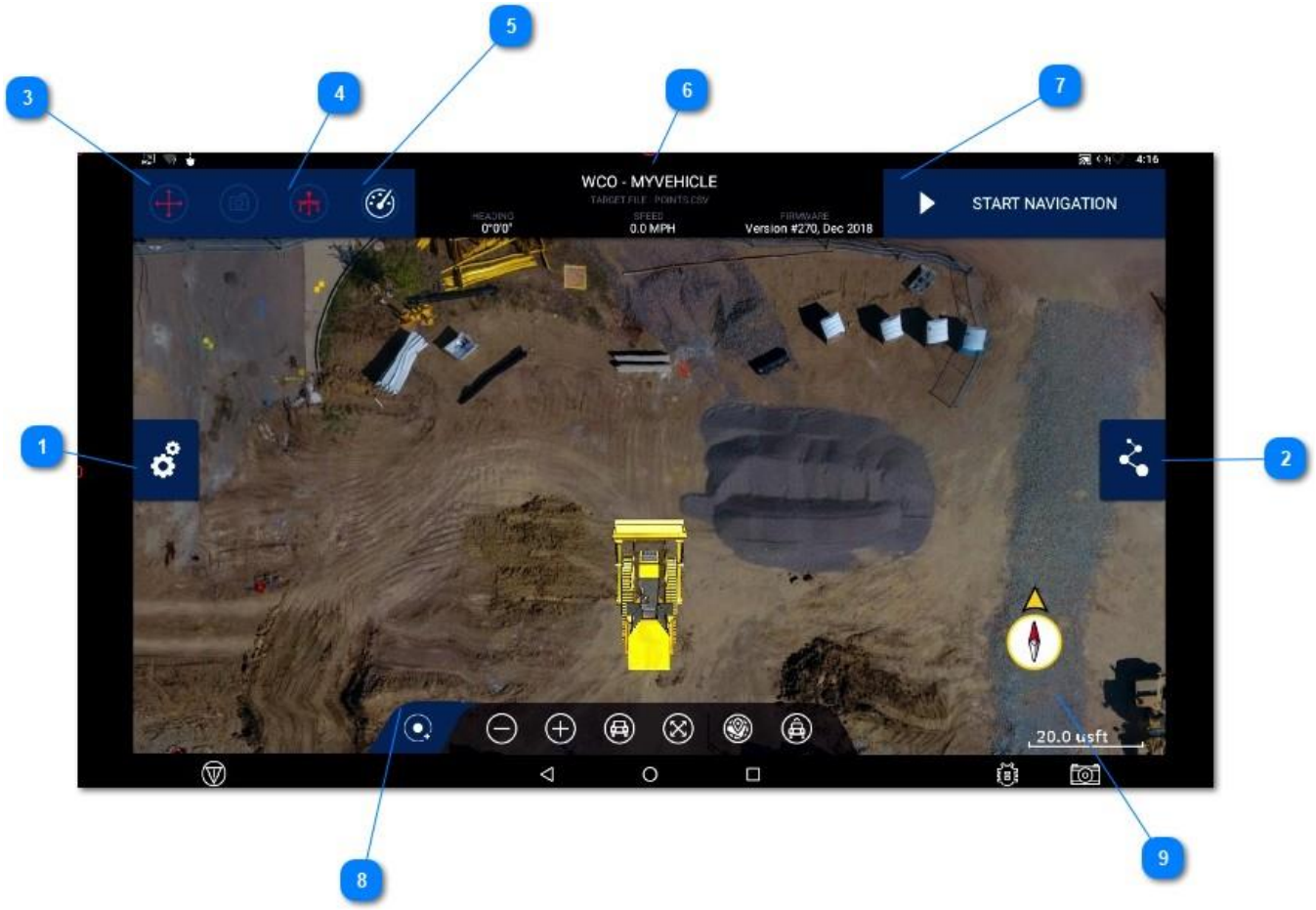
> **CAUTION –** Do not apply glass cleaner directly to the touch screen.

1. Apply a small amount of ammonia-free glass cleaner to the cloth.
2. Gently rub the touch screen with the cloth.
3. To remove stains or smudges, use a cotton cloth dampened with 50% isopropyl alcohol.

> **TIP –** Clean the touch screen while it is powered down. It is easier to see dirt and fingerprints when the touch screen is dark.

3. Run Screen Controls

When you open the INA GuidEx application, the **Run** screen displays a vehicle in its current location with any loaded project data in this region. All tasks are performed from the **Run** screen, including loading project data, navigation to points or pads, machine, GNSS configurations and so forth.



1 Left Drawer

Tap on this button on the left side of the screen to slide out the left drawer, that contains a list of various configuration dialogs concerning your map, project, machine, etc. See Left Drawer – Settings.

2 Right Drawer

On the right side of the screen, you can slide out the right drawer that will allow you to select targets for navigating. This includes line/corridor guidance, design points/pads for point navigation. See Right Drawer – Task and Navigation.

3 Precision

Displays the **Precision Information** dialog. In either GNSS Setup or with a Config_machinename.xml file, horizontal and vertical precision thresholds can be defined. When correction data falls outside of either (or both) of the thresholds, you are warned with the **Precision Information** dialog. The icon indicates which threshold has been exceeded in red; green denotes within tolerance. You can specify in this dialog how many minutes should elapse before this warning is displayed again. The indicates that no positions being received from GNSS (only applicable in GuidEx, not GuidEx Simulator).

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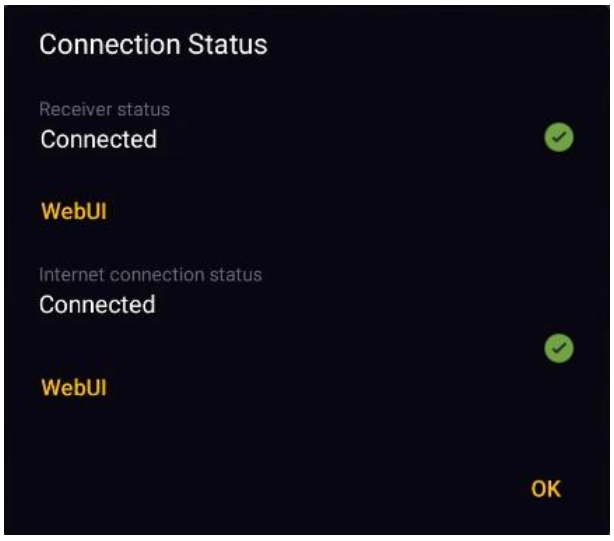
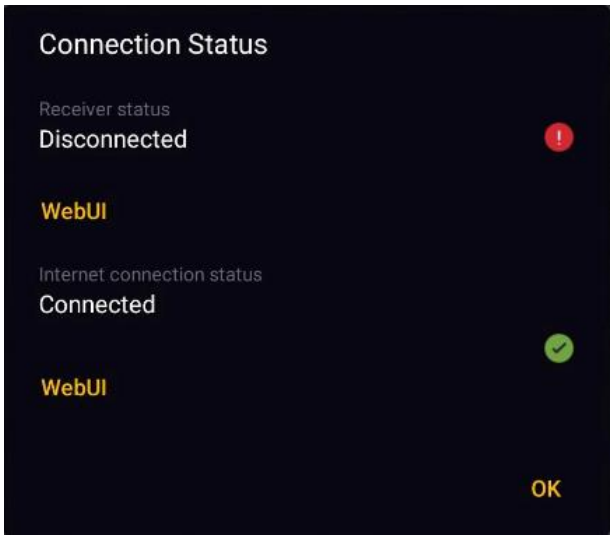
4 Connection Status

Displays the communication status dialog where you can view hardware connection statuses. Communication between GuidEx hardware components is via 4 wire ethernet, typically on the 192.168.89.* network.



When an ethernet connection is established to a component, the status will read "Connected" In this example, we have established connections to both the Receiver and the Internet Gateway.



When an ethernet connection to a component has failed, the status will read "Disconnected" In this example, we have an established connection to the Internet Gateway, but not the Receiver. This would result in no positioning data with obvious symptoms being a black screen, and GNSS Quality indicators of 999.

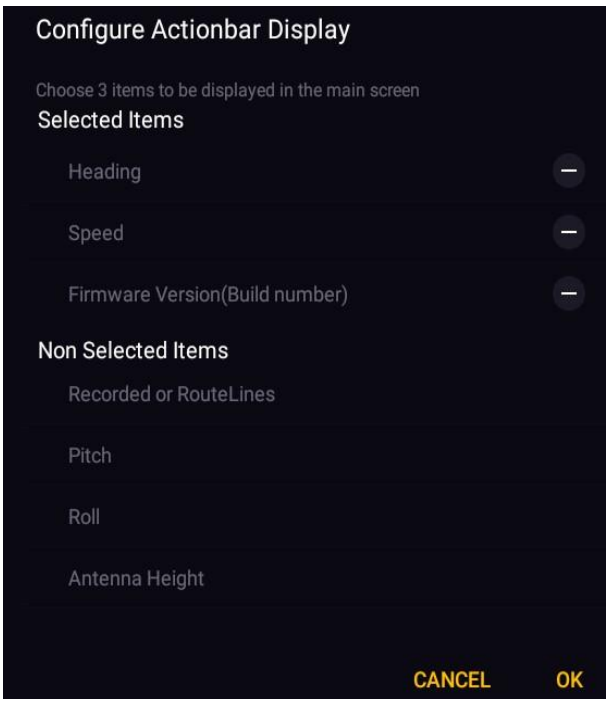
5 Widget

Displays the widget selection dialog. Widgets are small semi-transparent panels that can be displayed on the screen, which contain additional information that you might want to know about (such as GNSS status and INS info). See Widgets.

6 Navigation Display

Displays information about the machine, including navigation details:

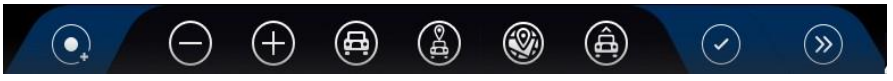
When not actively navigating you will see your project and machine name, as well as three pieces of information. By tapping the action bar display area, you can select what items to display. Deselect an item by pressing '**-**' and select an item by pressing '**+**'.



7 Start Navigation

Begins navigation to a selected point or pad.

8 Navigation Bar



From left to right:

- Record a culture point.
- Zoom out.
- Zoom in
- Zoom to machine.
- Zoom to extents.
- Toggle between chase and overhead views

- Toggle orientation view between north up or course up
- Record current target point (visible only during point navigation)
- Manually increment point (visible only during point navigation when auto-increment option is disabled)

9 Compass

This widget indicates the grid north direction relative to the machine direction. For example, if in north up mode, the inner compass is always pointed towards the top of the screen while the outer yellow arrow moves around to indicate the direction of the machine. In machine up mode, the outer circle (machine) always faces towards top of screen while the inner compass moves to indicate grid north.

This widget is always displayed (it cannot be toggled from the Widgets list), however, it can be moved anywhere on the screen, like any other widget.

4. Alert Messages

In the project preparation, users can specify a polygon SHP file to be used as either an Exclusion zone (avoid entering) or Inclusion zone (avoid leaving), in addition to a proximity distance to warn prior to breach (enter/exit) event. Both visual and audible alarms are provided on the display, and events are recorded to the local log file. When an event occurs, a corresponding dialog will display with the following information:

1. Type of alarm event
2. Name of the corresponding shape file
3. Shape file DBF field (if defined) of the file's attribute defined for labeling.
4. User comment (if defined)
5. For proximity alerts, the distance to the zone boundary is displayed in the top corner, which updates in real time as the machine moves.

GNSS Precision

In either GNSS Setup or with a Config_machinename.xml file, horizontal and vertical precision thresholds can be defined. When correction data falls outside of either (or both) of the thresholds, you are warned with the **Precision Info** dialog. The icon shows which threshold has been exceeded in **red**; **green** denotes within tolerance. You can specify in this dialog how many minutes should elapse before this warning re-appears.

This icon indicates that no positions are being received from GNSS (only applicable in GuidEx, not GuidEx Simulator).

The **Precision** dialog can also be displayed by tapping the **Precision Threshold** icon to the left of the screen

Proximity Alarms

Exclusion zone proximity warning: When the machine has not yet breached the boundary of an exclusion zone, but is within this proximity distance, a yellow caution sign appears. To remove the alert, tap **DISMISS** at the bottom of the alert.

Exclusion zone breach warning: When the machine breaches a zone boundary of an exclusion zone, a red stop sign appears displaying the same labeling information as the proximity alert. A breach condition automatically closes any proximity caution sign. A **DISMISS** button is optional, based on how the layer is defined in the project setup.

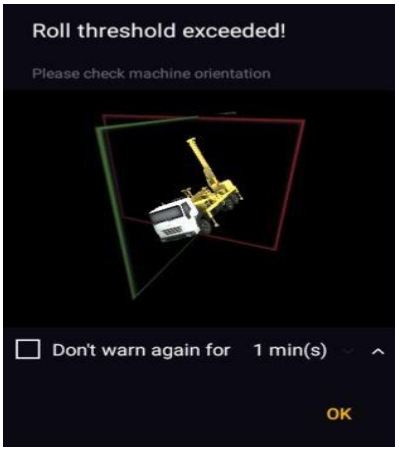
Inclusion zone proximity warning: When the machine has not yet breached the boundary of an inclusion zone, but is within this proximity distance, an orange caution sign appears. To remove the alert, tap **DISMISS** at the bottom of the alert.

Inclusion zone breach warning: When the machine breaches a zone boundary defined to within, a red stop sign appears displaying the same labeling information as the proximity alert. A breach condition automatically closes any proximity caution sign. A **DIMISS** button is optional, based on how the layer is defined in the project setup.

Zone Lockdown: If the exclusion or inclusion zone has the **Allow Override** setting disabled, the operator is forced to enter a password when a zone breach event occurs. The standard breach warning message is used in an enlarged state and centered on the screen to block the operator's view of the map until a password is entered. Tap **Enter Password** at the bottom of the warning dialog.

Roll Threshold Alarm

When using an IMU, if the pitch or roll exceeds the configured threshold levels, the dialog above appears. Attitude warnings pop up at the time of the event, regardless of the task actively being performed.



UI Lockdown

If the project defines a User Interface (UI) lockdown password, you can prevent operator access to most configuration/setting screens. UI lockdown can either be initiated when the software is started or by long tapping anywhere on the map screen, which shows a circle with four segments. Keep holding the tap until all four segments are lit up and the **Enter Password** dialog appears. Enter your password. Use the same long tap sequence and the same password to unlock. When in UI lockdown, the target settings in the right panel are disabled, and the left panel changes to only show two options:

1. Export log file.
2. View PDF files.

Fig. 1 - Standard Run Screen Layout

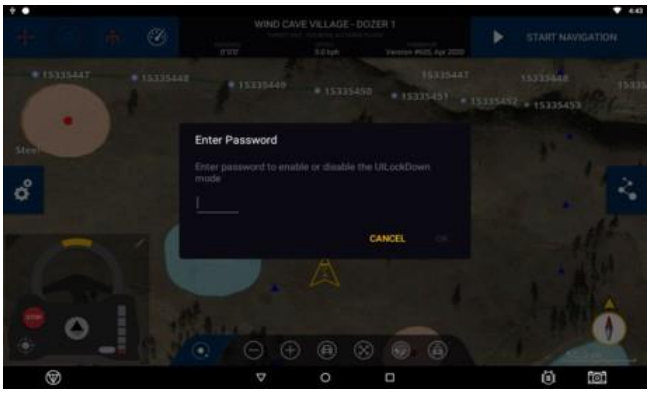


Fig. 2 - UI Lockdown Password Entry

Fig. 3 - Lockdown Run Screen Layout

5. Left Drawer – Settings

Tap the left drawer icon to display the following options:

- Map Layers
- Project Setup
- Machine Management
- GNSS Setup
- Message Setup

Reset Setup	Tapping **Reset Setup *seven times*** opens a dialog with a list of all configuration files available for that project, allowing you to change your machine, GNSS, and messaging settings. If you update a project with new/updated XML file(s), you must then perform a reset setup with that XML for the new settings to take effect.
User Documents	User Documents are enabled if you have one or more PDF files included with the project data. This starts the Foxit PDF viewer to view PDF files.
User Manual	Opens this manual.
System Settings	Opens the tablet's **System Settings** dialog.
Diagnostics	**Performance**: View connected hardware device serial number and firmware version. **Logging**: with a USB attached, system logs can be exported by tapping the lower right icon  . This system log can then be sent to support team for detailed troubleshooting.
Logout	This option is only enabled if logged in using a GuidEx Pad database. In this instance, the operator can logout (and export daily logs using via this option.

Map Layers

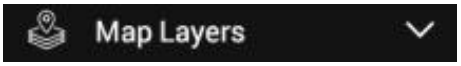


Fig. 1 – Collapsed Map Layers Menu

To toggle map layers, tap the left drawer icon and then tap **Map Layers** to open the **Map** menu. Map layers that can be turned on or off include route lines, lines, areas, points, and terrain (imagery and 3D Elevation model). Tap one of these categories to view. Select or clear the check box by the item you want to turn on or off. If polygon SHP files defined as exclusion or inclusion zones are turned off, the warnings are still applied; changes in the left drawer only relate to rendering.

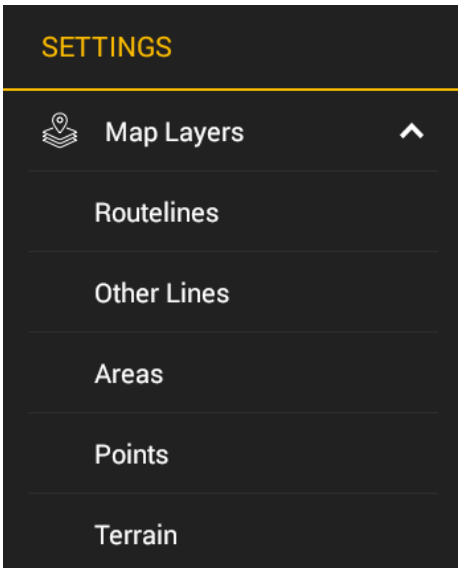


Fig. 2 – Expanded Map Layers Menu

In the case of **Route Lines**, the line width is an editable value. Tap the pencil icon next to any route line and use the screen keyboard to enter a new width value. You can change all route line widths at once by tapping the pencil icon at the top of the list.

Fig. 3 – Configuration Window

Point notes consist of points, labels, and tracking points (also known as *snail trail points*). By default, tracking points, which are the points logged to the database (time events), are turned off. Points can be scaled by using the slider at the bottom of the **Point Layer** drawer

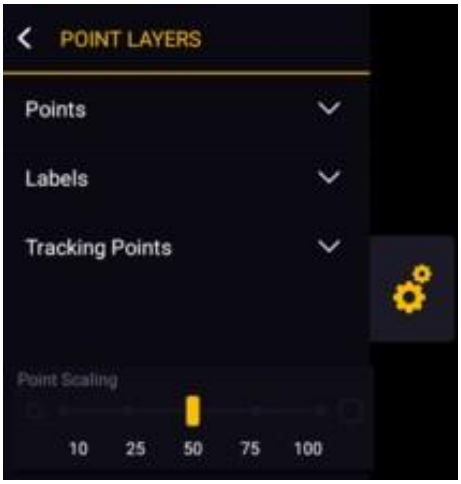


Fig. 4 – Point Layer Configuration Window

Project Setup

To configure projects, tap the left drawer icon, then tap **Project Setup** to access the **Project Setup** menu.

A list of all projects that are on the tablet are displayed on the left; the current project is highlighted:

Fig. 1 – Project Setup Menu

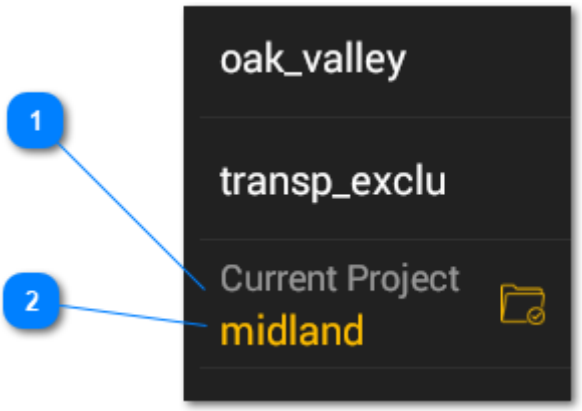
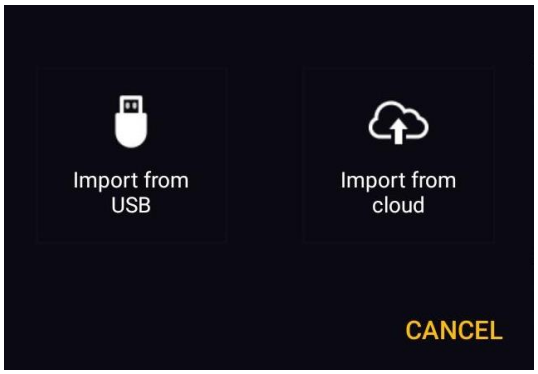


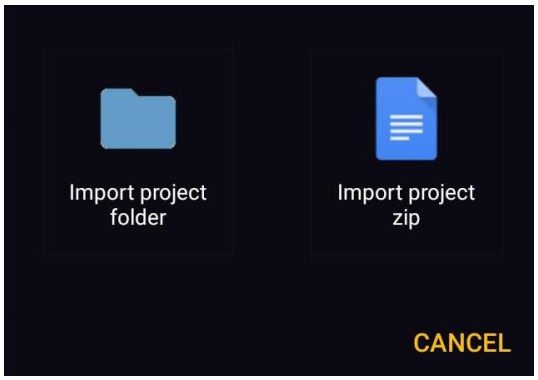
Fig. 2 – Two types of button press to access different features

1 Import Project

Select "Import Project" if a USB is inserted or the system is connected to the internet.



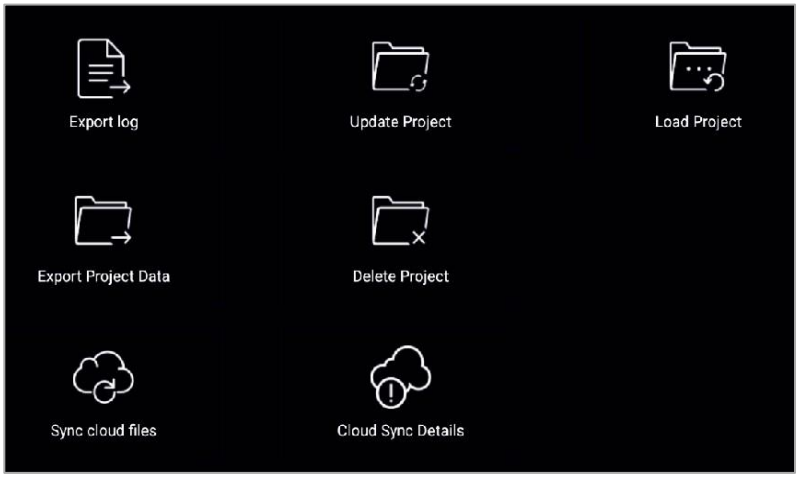
Choose the method of file transfer by tapping on the relative icon. Note, USB is the default transfer method. This screen will not be displayed if an internet connection is unavailable.



If using USB file transfer, select either the project's folder or zipped project file. If an incorrect selection is made, simply use the tablets "back" button to exit the navigation window and back to this page.

2 Select Project (short tap)

Select a project and you will see various options associated with that project:



Available for all projects. Provides a dialog that you can use to export all or selected log and image data.

Available for all projects when a USB is connected. A progress bar will be displayed as the project data is exported. All project files are placed in a folder as they would have been imported.

Available for all non-current projects (unless current project is only project on tablet). Deletes the project from the tablet.

Available for all projects when a USB is connected. Allows you to update project files via USB (select folder containing updates to import).

Available for all non-current projects. Used to load the project thereby making it current.

Available when GuidEx Connect credentials are defined, and network connectivity is available. Used to manually check for updates from cloud to machine.

Available when GuidEx Connect credentials are defined, and network connectivity is available. Used to check sync history

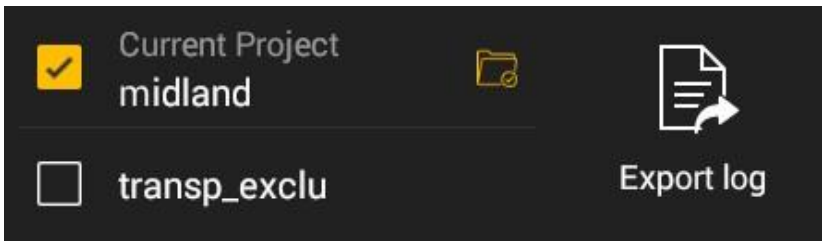
The following items are enabled when the **PROJECT SETUP** option at the top of the dialog is tapped ***seven times***:

Deletes the current project log file. Used to start a new, unpopulated log.

Exports the backup log. Used if exporting primary log is unsuccessful. Enabled if a USB memory stick present.

Deletes the backup log.

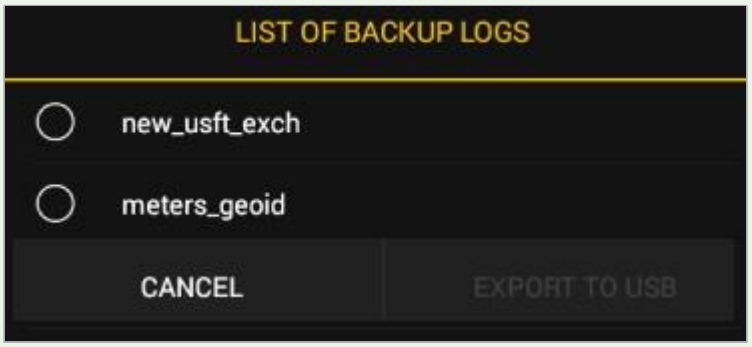
3 Multi-Select Projects (long tap)



If needed, you can export recorded data for all projects. Hold down on any project for a long period (two to three seconds), you will see a list of all projects. Select as many check boxes as you want

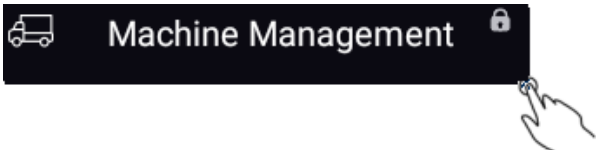
Export Log (Recorded) Data

When you export recorded data, a folder is created on the attached USB that is named for the project and date (for example, MyProject_day_month_Year). The folder contains the specified log data and all images captured by the camera when that project was current.

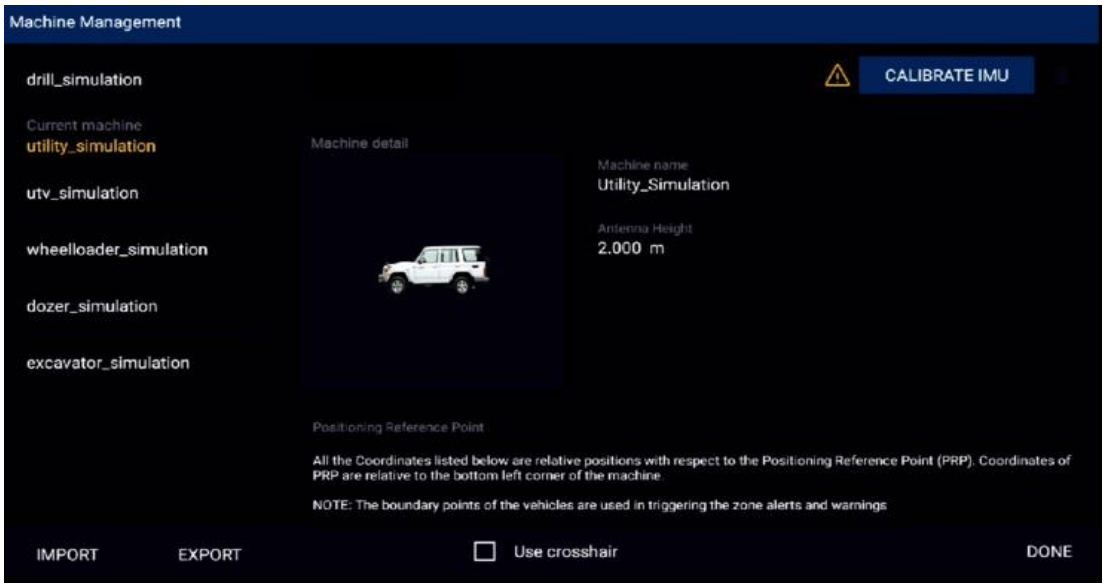
1	Export Outstanding	An option to export outstanding log records which have not previously been exported. Once used, the log records exported will not be exported again using this option.
2	Export All	Exports all log data. **TIP –** If you cannot export the log data using this or other methods, there is a backup log file that you can export. When displaying projects, tap **Project Setup** seven times and you are prompted to export the backup logs. 
	Export Today	Exports all data recorded on the current day
	Export By Date	Exports the log data by a specified date range using controls such as:  Tapping the calendar icon pops up a calendar that makes date selection simple.

Machine Management

To select and configure a machine, tap the left drawer icon, then tap **Machine Management**.



> **NOTE –** This is a locked item. As with all locked items, must tap the button ***seven times*** in rapid succession to access the **Machine Management** dialog. A machine must be present before receiving GNSS corrections.



On the **Machine Management** dialog, you can select or delete any existing machine or import/export configuration files, which contain machine configuration details, to/from a USB or add a new one.

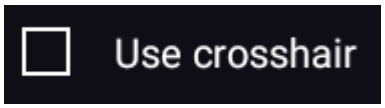
Selecting a machine – Existing machines are listed at the left of the dialog. Tap on the machine name to select it. What you can do with the project depends on whether this is the current project or not.

A machine can be deleted from the list by pressing the  button, so long as it is not configured as the current machine.

You can add a machine by importing it if the defining XML and PNG files exists on an attached USB stick. You are prompted to browse the USB to the folder where the XML file(s) are contained.

You can export any/all current machines to the USB stick if required. The XML files are placed in a 'machines' folder of the USB.

Once imported, select the desired machine from the list and press this button to make it the current machine.



Use a crosshair instead of 3D machine model when in map mode

Calibrating the IMU

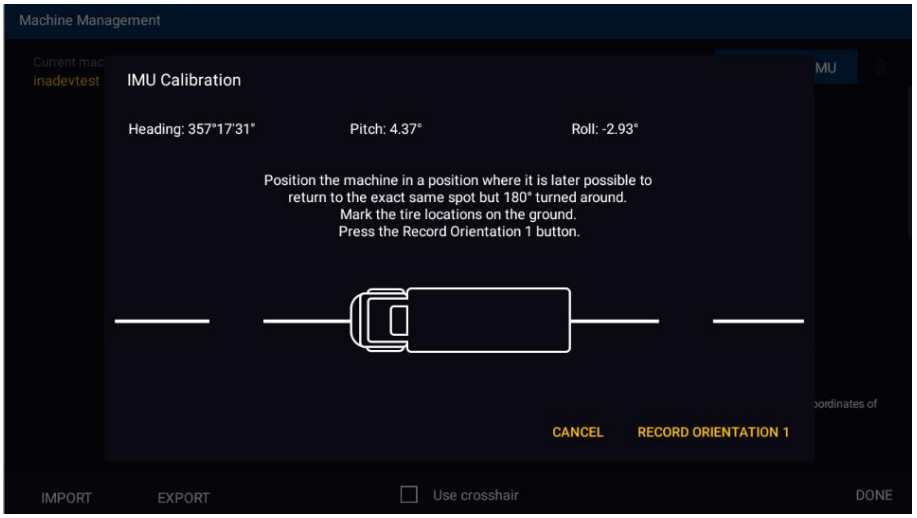
Once the current machine has been set, the "Calibrate IMU" button will replace the "Set as Current Machine" button. To calibrate the IMU mounting and sensor bias, tap the **CALIBRATE IMU** to initiate a calibration routine.

- *To eliminate any minor mounting and hardware biases, INA recommends performing a calibration after installation and before using the system.*

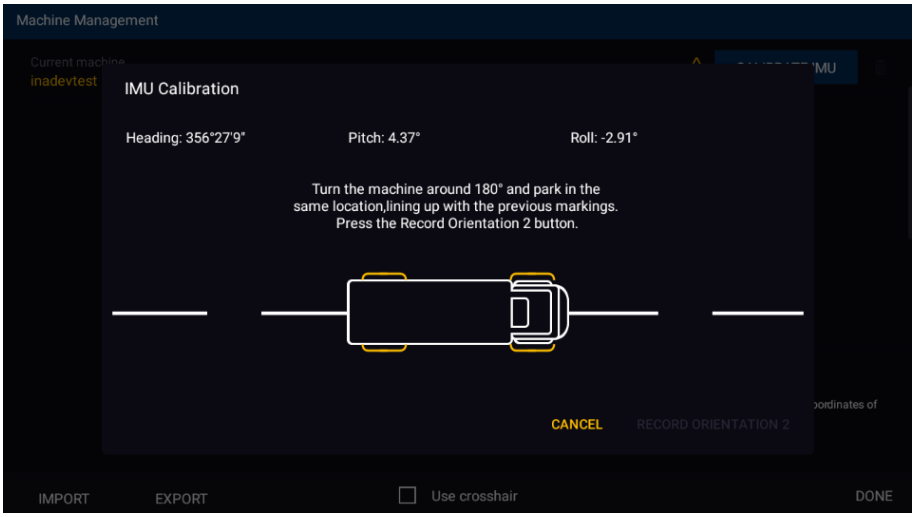
The routine will guide you through a procedure for determining any bias that exists. You will be required to drive the machine to a location that you can return to pointed in the opposite direction.

For the calibration, you first need to drive forward slightly (for the IMU to align), then stop, mark the tire locations, and tap **Record Orientation 1**.

GuidEx will then record the IMU orientations for 15 seconds.

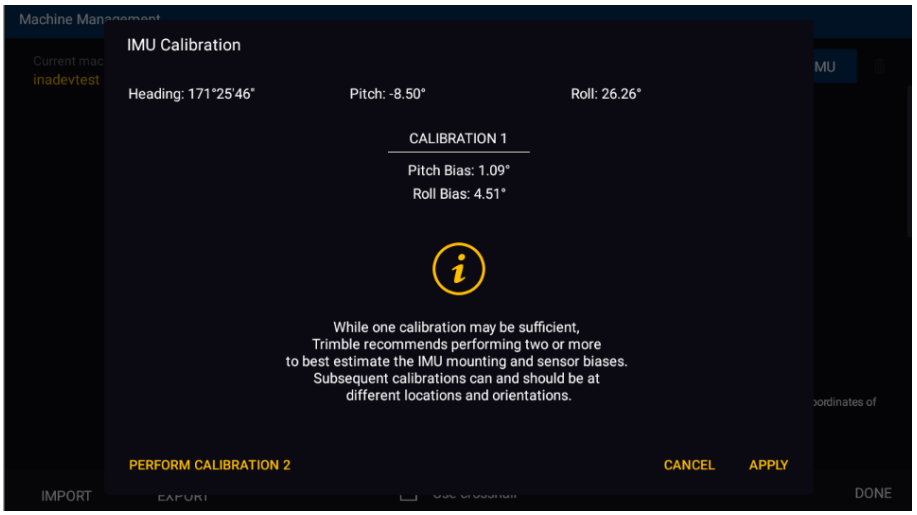


Once complete, drive forward and circle back around to place the wheels back on the tire marks facing 180 degrees of the first orientation recording and press **Record Orientation 2.**



- Note that the Record Orientation 2 icon will not become enabled until the machine's heading has changed at least 100 degrees from the heading of orientation 1.

Once orientation 2 has been recorded, a dialog appears showing the biases applied. You can then either apply these settings and be finished, or perform a second round of calibrations, repeating the same steps.



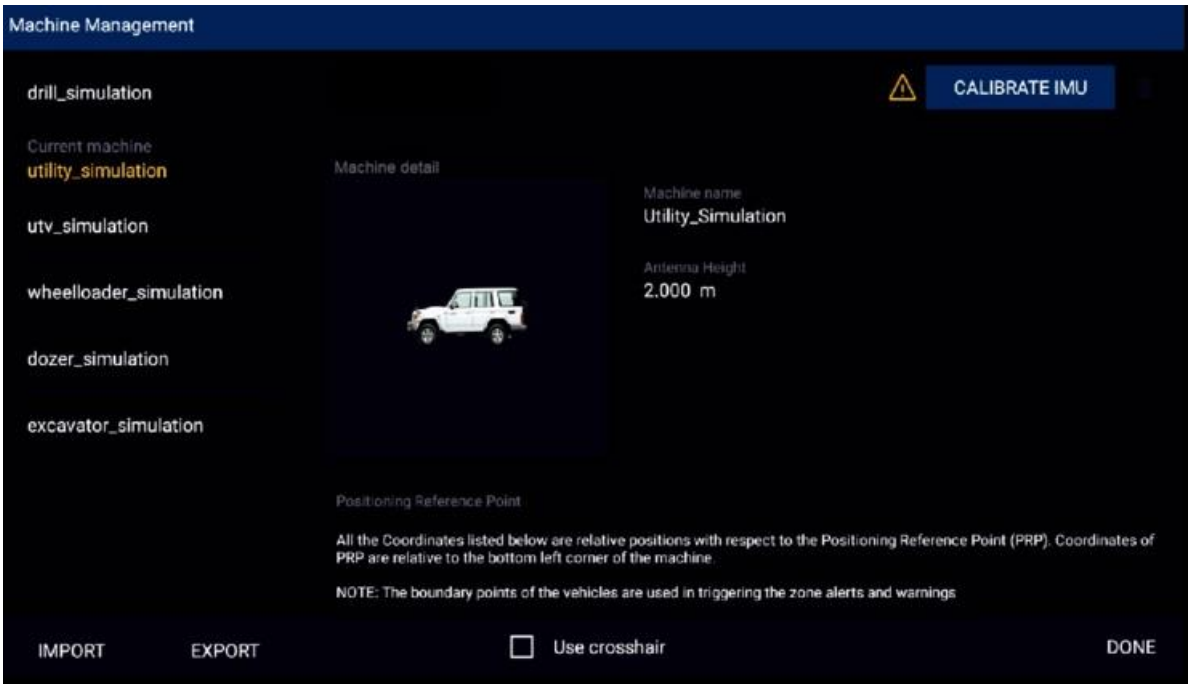
- You can perform up to three calibrations. Each additional calibration performed improves the overall averaging and applied biases to the IMU for more reliable data during operation.
- These calibration values are tied to the machine name of the model used during calibration. If you perform the calibrations and then add a new current machine model, the calibration needs to be performed again for that new machine; calibrations are tied to the machine name.

Viewing Machine Settings

When you select a machine, you can scroll through several characteristics:

Machine detail

Machine Model, Name, Antenna Height:

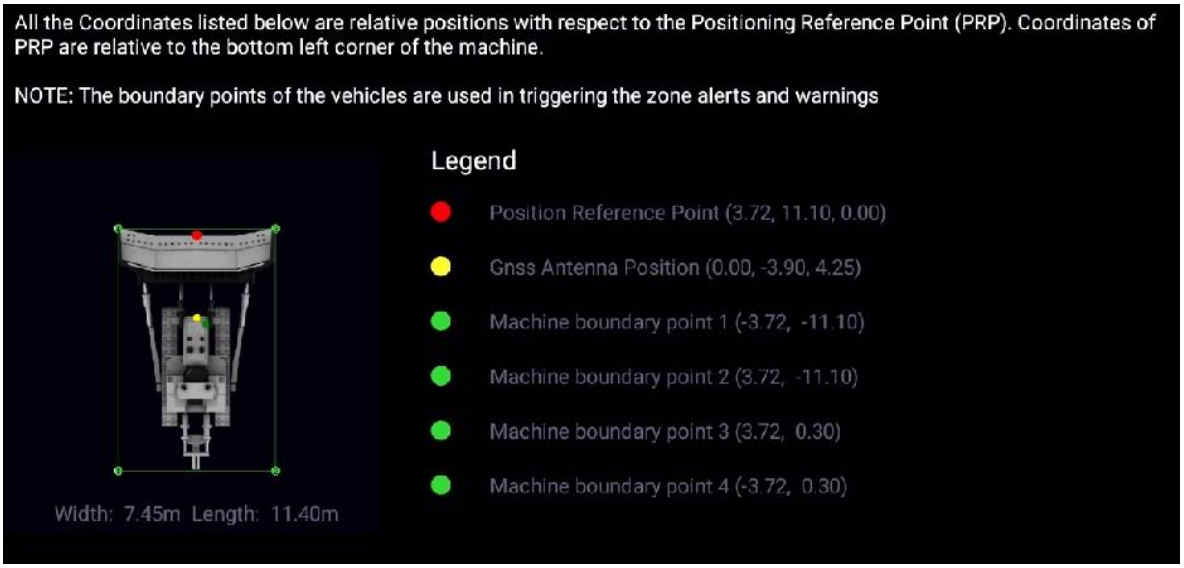


Machine Geometry

The values describing machine geometry are created in the GuidEx Manager office software and saved in a Config XML file. They describe the location of the GNSS antenna, IMU, and the Position Reference Point (PRP) on the machine. The PRP is the point of interest on the machine and might or might not be at the location of the GNSS antenna. Because there is an IMU providing constant pitch, roll, and yaw, it is possible to offset the GNSS position to the PRP.

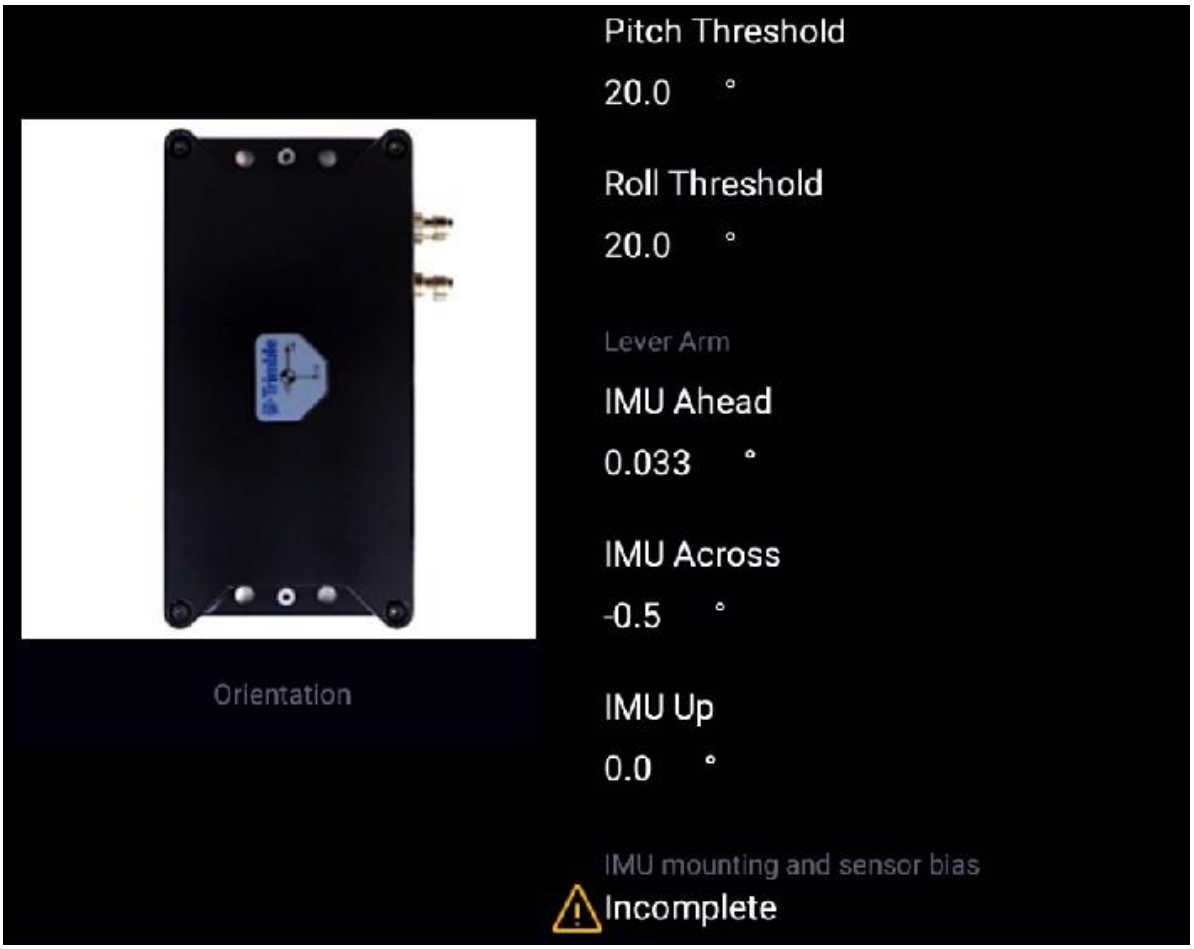
Machine Geometry also includes four points describing the machine outline. These points are used to determine when a machine enters an exclusion zone.

This example shows the machine geometry where the GNSS antenna is the yellow point, IMU is the green point, PRP is the red point and the four points defining the machine outline are in green.

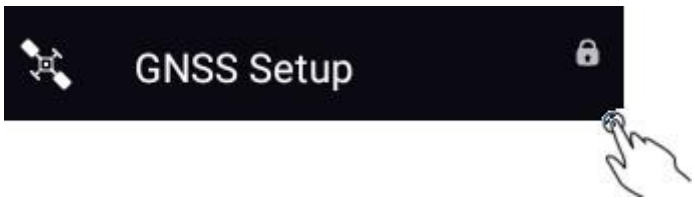


Inertial Measuring Unit (IMU)

This section displays pitch and roll thresholds, IMU location and orientation, as defined in the Config XML file, as well as the calibration biases being used (or an incomplete warning message if IMU calibration has not been performed).



GNSS Setup



To configure GNSS, tap the left drawer icon and then tap **GNSS Setup**.

> **NOTE –** This is a locked item. As with all locked items, you must tap the button **seven** times in rapid succession to access the **GNSS Setup** dialog.

GNSS is initially configured in GuidEx using the Config_machinename.xml file. However, to change the GNSS correction source, you can access the **GNSS setup** dialog and configure the required corrections source and precision levels. No matter what correction source you choose, the horizontal and vertical precision threshold values you enter will apply. When you select more precise correction sources, the default values to be used here will be smaller.

Correction Sources

> **NOTE –** System descriptions obtained from various sources including ESA Navipedia. Accuracies obtained from provider's published information.

RTK

Corrections are generated at a nearby reference station and transmitted to the vehicle. The RTK system can be augmented using Trimble xFill. This service extends RTK positioning for four minutes when the RTK correction stream is not available. Trimble xFill corrections are broadcast by L-band satellite, so they are generally available within covered areas wherever the GNSS constellations are visible.

Settings:

Configure a frequency of 450 or 900 MHz. If set for 900 MHz, then a network ID (1 to 40) and on/off setting for xFill use can be defined. If set for 450 MHz, frequency list (tap on the frequency to see the list), Protocol and on/off setting for xFill use. If xFill on, frequency and baud rate of satellite used for correction source can be selected; Automatically Selected is recommended. If more than one frequency is defined in the list, from home screen you can long tap & hold on the Precision Threshold icon to prompt the frequency list and quickly change the frequency.

RTK VRS

A Trimble Virtual Reference Station service where the corrections are delivered by IP/cellular. Horizontal accuracy is < 2 cm. VRS can be augmented using Trimble xFill (see above).

Settings:

Username, password, Server host name, Port and Mountpoint, on/off setting for xFill use. If on, frequency and baud rate of satellite used for correction source can be selected; Automatically Selected is recommended.

RTX Services Trimble RTX services include the following:

- RTX IP (Standard Convergence)
- RTX Satellite (Standard Convergence)
- RTX Satellite (Fast Convergence)

The receiver either tracks a Trimble RTX (L-band) satellite or obtains corrections from the cellular network. The receiver obtains a Trimble RTX correction stream that allows the receiver to provide positioning to 2 cm horizontal, 5 cm vertical RMS (satellite) or 2.5 cm (1") horizontal @ 95% (cellular).

Settings:

For satellite-based corrections, the frequency and baud rate of satellite used for correction source. Automatically Selected is recommended.

A padlock appears next to the RTX options if an active subscription is not detected on the receiver.

SBAS A Satellite-based Augmentation System (SBAS) is a civil aviation safety-critical system that supports wide-area or regional augmentation through the use of geostationary satellites which broadcast the augmentation information. A SBAS augments primary GNSS constellation(s) by providing GEO ranging, integrity and correction information. While the main goal of SBAS is to provide integrity assurance, it also increases the accuracy with position errors below 1 meter (1 sigma).

Settings:

Geostationary satellite to use for augmentation. Normally set to 'Auto' for automatic selection.

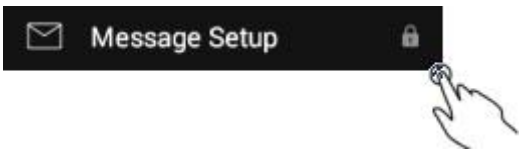
Autonomous This selection uses the GNSS receiver derived coordinates without benefit of any correction source.

Settings:

None.

Enable machine simulation – If selected, enables the system to enter a simulation mode.

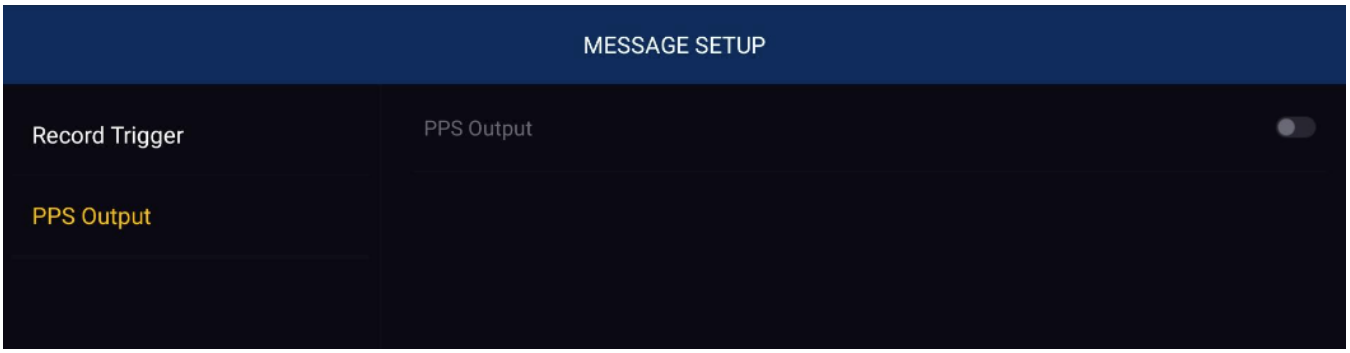
Message Setup



To configure messaging protocols, tap the left drawer icon and then tap **Message Setup**.

> **NOTE –** This is a locked item. As with all locked items, you must tap the button ***seven*** times in rapid succession to access the **Message Setup** menu.

This dialog has two sections: **Record Trigger** and **PPS Output**



Record Trigger

The **Record Trigger** dialog enables the ability to have an external device send a signal to initiate the record point operation. To enable this, either define the setting in Config XML file, or in the GuidEx software, slide the switch to the right. Then, when a point target file is loaded, the **Record Trigger** option becomes visible in **Message Setup**; if no point target list is loaded, Record Trigger does not appear, as this setting is only used for recording points.

Define the polarity at which the signal will be sent. This requires a voltage >2 volts to work. This signal is to be sent through the "Event" lead on cable P/N 122205.

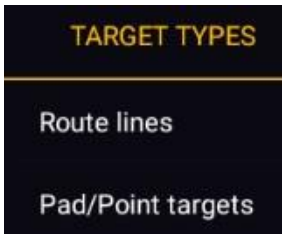
PPS

When PPS is enabled, messages can be sent from the receiver to a 3rd party device, using the PPS lead on the cable.

6. Right Drawer – Task and Navigation

Route lines Point Targets

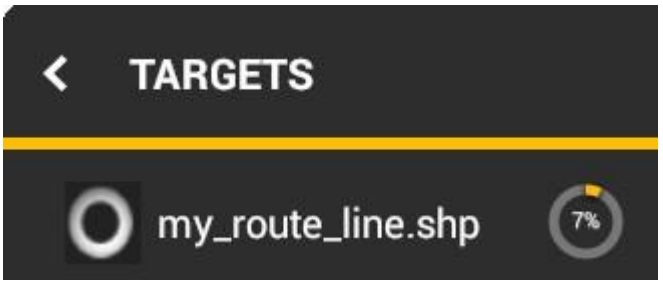
To access navigation controls, tap the icon at the right of the display. This slides out the right drawer:



There are two navigation methods, Route lines and Pad/Point targets. Tap on one to access its controls.

Route lines

Route lines are single-line shape files that are included in the project. All route lines in the project are listed on the route line drawer. To select a route line, select its option button.



As you navigate a route line, the percentage of the line you have navigated appears at the right of the route line name:

Route lines are depicted on the map differently:

If it is the currently selected route line

If it is an un-selected route line

If it is a selected route line being actively navigated.

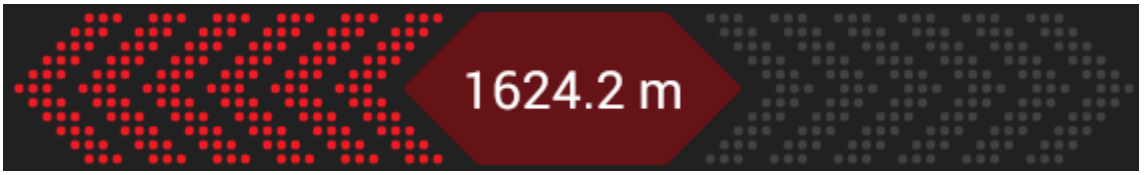
Once you have selected a route line, tap:

Route lines are single-line shape files made up of several vertices. When starting navigation, the line is evaluated, and you are prompted for which direction to steer it:

Route lines use line navigation. In line navigation, the action bar is a crossline light bar where the arrows indicate the direction you need to turn to get to the centerline of the route:

> **NOTE –** The further you stray from the centerline, the more arrows are shown. At the bottom of the display, the horizontal distance gauge shows the distance remaining to the next vertex (next turn) in the line. This gauge automatically resets as you move along the route.

When a project is configured and a route line is added, a user-specified line width is assigned to it. When navigating, if this width is exceeded, the steering display changes to indicate that the vehicle has exceeded the route width:



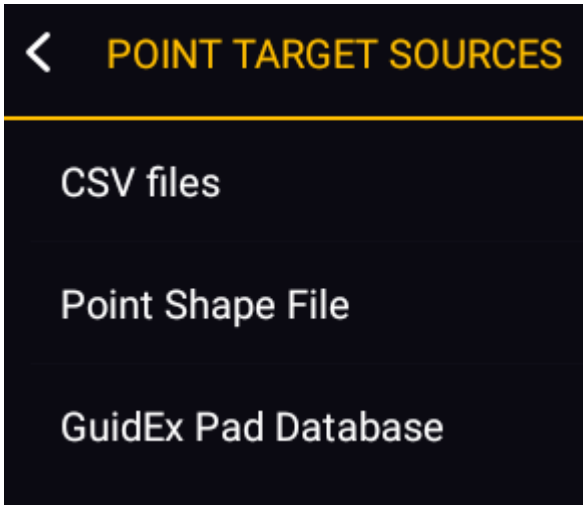
You can change the width of the route line in the **Left Drawer - Map Layers** dialog.
See Map Layers.

Point Targets

Point targets can be imported from three sources:

- CSV file
- Point SHP file.
- GuidEx Pad Database.

Once imported, you are prompted with various dialogs depending on the imported file type. Note that Vibe Array includes a fourth type of point target in which the points are located in a GPSeismic database.



Point targets have various symbols assigned to them on the map and in the right drawer, depending on their status:

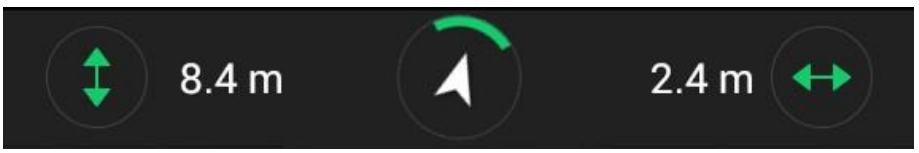
	Unrecorded target points
	Currently selected point being navigated to (which has a user-defined target tolerance green bubble)
	Recorded target points

There are several utilities to allow you to select a point to navigate to. This includes a simple 'nearest' feature and many more sophisticated point selection methods. There is also a point offset method that allows you to create a point that is offset from a selected point; the new point will be named (originalpointname)OS.

Point Navigation Notes

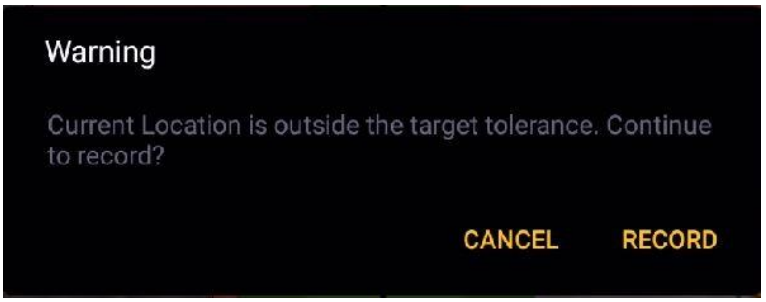
You can define the *tolerance of a point*. This describes a distance from a target point that the operator should breach before recording the point.
Until the point tolerance is met, you will see a yellow and black navigation aid. The value on the left indicates the distance the point is ahead of the vehicle (negative if behind). The value on the right is the distance the point is right of the vehicle (left if negative). These values are relative to the current heading of the vehicle

Once the point tolerance is achieved, the navigation aid turns to green and black.

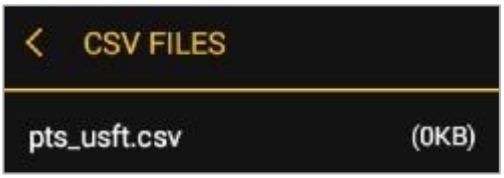


Alternatively, if the **Enable Guidance Inside Target Tolerance** setting is disabled (via **Target List Settings - Navigation**), the navigation aid changes to read Arrived at Target when tolerance achieved.

If you try to record a point but are outside the target tolerance, you are prompted for whether to record or not. This warning can be disabled via enabling the **Do not warn when target tolerance is exceeded via Target** setting.



Using CSV Files



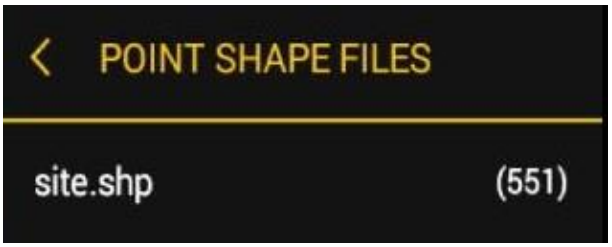
Under the **CSV Files** option, simply select the CSV file to import. The format of the CSV file is expected in a format of: Station, Easting, Northing, and optionally Height, Descriptor.

Once points have been imported, a point list appears displaying all points that are available to target. Select the option button of the point you want to navigate to. For more ways to select a target, see Refining Point Targets.

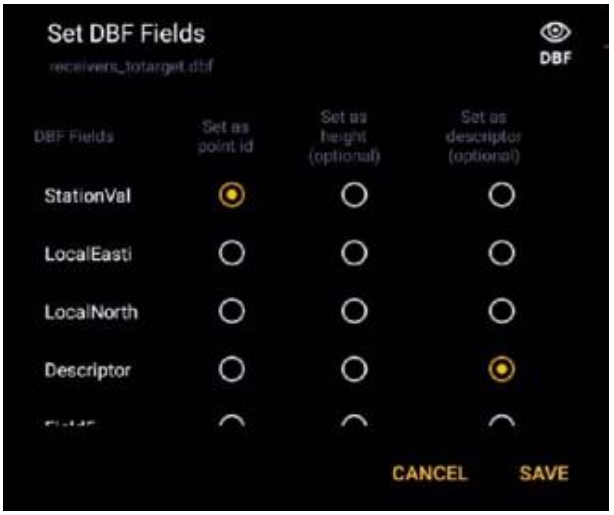
Target CSV files can be deleted from the list using a long tap and hold. The currently loaded file cannot be deleted.

Using Point Shape Files

Under the **Point Shape Files** option, select the SHP file to import. Note the point count on the right side of the screen.



You are then prompted to define the **Point Identifier** field from the underlying database of the shape file (the DBF file). You can optionally define **Height** and **Descriptor** fields here.



If you are not sure which **DBF** field to select, tap the 

icon in the upper right corner to view the the DBF file.

Once points are imported, a point list appears, displaying all points that are available to target. Select the option button of the point you want to navigate to. For more ways to select a target, see Additional Point Target Settings and Refining Point Targets.

Target point shape files can be deleted from the list using a long tap and hold. The currently loaded file cannot be deleted.

Additional Point Target Settings

There are various settings associated with point navigation.

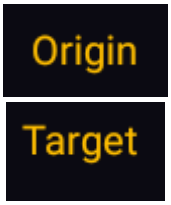
Tap this icon to enter a specific station number. If found, it appears in the list below

If you tap this icon, the following dialog appears:

Use this dialog to change the current point increment and the direction. For example, if your stations are 1,2, 3... and you enter '+1' for the increment, once station 1 is surveyed, station '2' is automatically targeted. If you enter '+2' then after station 1 is surveyed, station 3 is targeted and so on. A minus value reverses that logic. For example, if you enter '-2' and you have just surveyed station 5, then the next targeted station is 3. Values can be defined as integers or decimals. Note that '0' and '-0' (without the single quotes) are special values that will simply sequence down the list and up the sorting of the list respectively, no matter what the station value or text is.
If the station has alpha and numeric characters, the alpha characters are ignored.
For example:

- 1234test uses 1234 for increment calculation
- test1234 uses 1234 for increment calculation.
- te123st uses 123 for increment calculation


To access additional point/pad target settings, tap on the gear icon in the upper right corner of the right drawer. This opens the **Target List Settings** window. Some of the settings available may differ based on what you are targeting (points or pads):



Origin shows display information only and indicates the file name and file type which the target points originated from.

Point Count – Information concerning how many points are in this set of targets and how many have been recorded.

Target Tolerance – This number draws a circle around the target with the specified radius. Recording is enabled when the vehicle enters this circle. To change the value, tap the pencil icon.

Do not warn when target tolerance is exceeded – This is an off/on setting. If it is off, if you record a point outside the target tolerance above, a warning

appears. If it is on, this warning is not issued.

Record Point

Increment – This value can be set at the top of the right drawer or here by tapping the pencil icon.

Enable auto sequence of targets – This is an off/on setting. If it is on, as soon as a point is recorded, the next point will be targeted as dictated by the increment you have entered.

Sequence Tolerance – ***Visible only when Enable Auto Sequence is disabled.*** If the vehicle exceeds this entered distance from the current recorded point (without sequencing to next point), a warning appears asking you to select the target (by either using previously recorded point or sequencing to next point).

Enabled delayed record – This is an off/on setting. If it is on, a pencil icon appears that you can tap to enter a recording delay values in seconds. Implementing a delay initiates a countdown of the selected number of seconds before a point is recorded. The **log** dialog displays the countdown timer. You can force it to record before the countdown is over.

Enable target information entry on point record – If enabled, upon recording a point a dialog appears so you can add a comment to be stored with the point record in the database. If this option is disabled, you can still retroactively add a comment to points that have been recorded via long tap & hold on the point in the right drawer. If the point has not been recorded yet, the long tap & hold prompts the **Offsets** dialog to appear instead.

Enable auto stop navigation on record point – This is an off/on setting. If it is on, as soon as a point is recorded, navigation is stopped. You might want to use this if you do not have a viable point sequence, that is, when you record one point, neither adjacent point in the list is the next target. In this way, you can manually select the next point to navigate.

Alert when receiving record point information from other machines – This is an off/on setting. If it is on, you are alerted upon reception of point logging from other vehicles in the array. This is a visual and audio reminder to you to record your own position at a survey point. The alerts consist of a green flash and ding (not dong) sound.

Do not warn about previously recorded points – This is an off/on setting. If it is on, you are not alerted to the fact that a point might have been previously recorded. If off, the warning is issued.

Navigation

Enable guidance inside target tolerance – This is an off/on setting. If it is on and you enter the target tolerance, values to the target center remain. When off and you enter the target tolerance, the guidance indication simply states you have arrived.

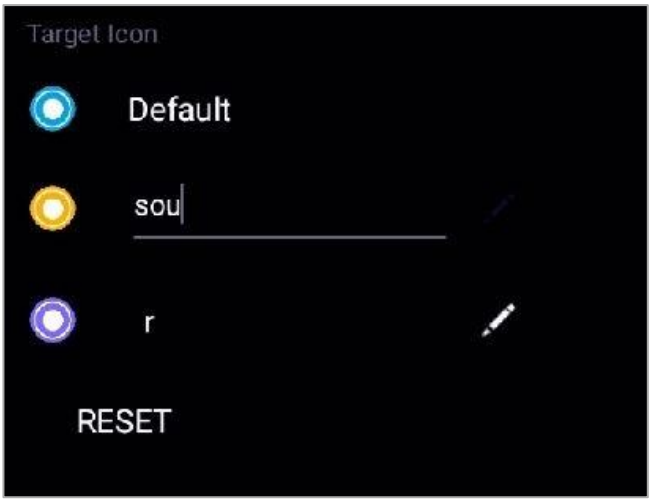
Enable auto zoom to target – This is an off/on setting. If it is on, Machine Guidance automatically zooms in as you approach the target.

Always display connector between vehicle and target – This is an off/on setting. If it is on, a semi- transparent path is drawn between vehicle and target.

Target Icon

Target Icon – The default appearance of targets on the map are light blue. However, you can dictate the color by a descriptor you assign in the descriptor field of the target file. For example, if a CSV has a fifth column with descriptors, or a point SHP file DBF has a descriptor field defined, these can be read and defined (either in exchange db., or in this dialog) to change the point color rendering.

> **EXAMPLE –** If the word 'source' is in the **Descriptor** field and you want to make these targets appear green, then click the pencil icon next to the green icon and type in 'source'; this uses a 'like' logic, so you could also simply define 's' etc. for the same to occur. The **Reset** button becomes enabled if the descriptors are altered from what is defined in the project database, at which point you can reset back to the project database definitions.



Always display targets (pre-plot) on map – This is an off/on setting. If off, after a point is shot, it disappears from the screen. If it is on, it remains.

Display recorded points from other vehicles – This is an off/on setting and assumes you have the communication option. If it is on, points that are shot by other vehicles appear on the map.

Logging

Enable rapid logging – This is an off/on setting. If it is on, logging of track points takes place at one second intervals as you are moving. If it is off, track points are logged every 10 meters of movement.

Enable target recording inside of tolerance boundary – When enabled, a duration appears to define. This feature records a point to the database every x duration when the machine is stationary when inside of a target tolerance. This is well suited for operations where a machine will occupy a point for a long period of time, and operators may forget to record the point; this setting serves as a backup for plotting where a machine was positioned during this period.

Refining Point Targets

The **NEAREST TO MACHINE** option selects the target point closest to the vehicle's current position in the list.

Tap the **NEAREST TO TAP LOCATION** to zoom and/or pan throughout the map and define a point to target closest to your screen tap. Both this and the **NEAREST TO MACHINE** option will scroll to and select the appropriate point in the list.

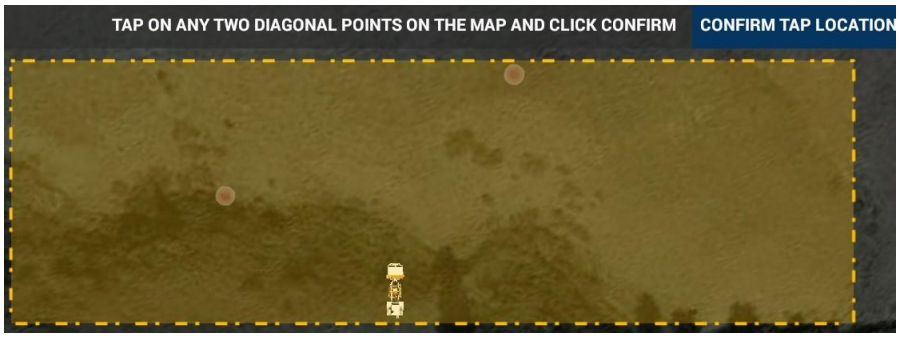
Once a set of target points has been imported, several methods are available to find specific targets. Start by tapping **Filter**.

Tap **Targets Around a Machine Radius** to enter a radial distance (in project units) around the machine location, which then refines the target list to only show points within this radius.

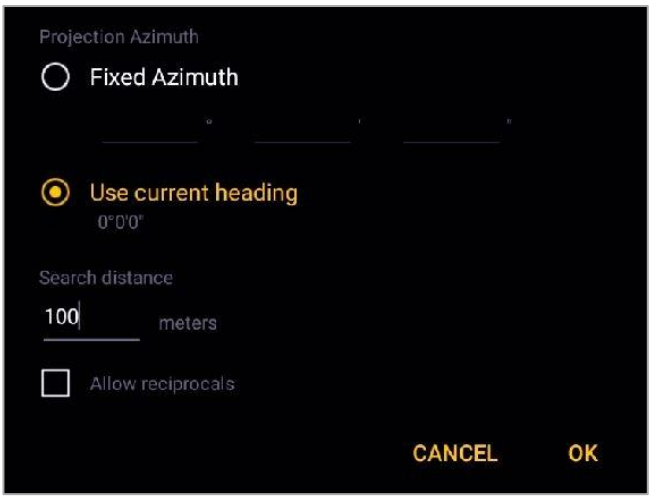
Tap **Targets Around Tap Location** to zoom/pan around the project, tap on the screen and enter a radial distance in project units. This refines the target list to only show points that match the entered criteria. When initiated, you will see this at the top of the map:

If you want to back out of this option without tapping anywhere on the screen, simply tap the back button  at the bottom of the tablet. As with targets around a vehicle, you enter a value in project units:

Tap **Targets Within Bounding Box** to zoom/pan around the project, then tap two locations on the screen diagonally from one another to draw a box around an area of interest. When the required area is covered within the box, tap **Confirm Tap Location**. This refines the target list to only show points that match the entered criteria. If you want to back out of this option without tapping anywhere on the screen, simply tap the back button  at the bottom of the tablet.



Tap **Targets Within Projected Rectangle** to define a rectangular beam from the vehicle given an azimuth and distance. The **Projection Azimuth** dialog defines what azimuth the rectangle should project from the current location of the vehicle. The search distance is the width the rectangle should be, that is, a search distance of 100 m would project a rectangle 50 m out of each side from the center of the vehicle. With these parameters, the **Targets Within Projected Rectangle** option searches for points that fall inside the rectangle in an infinite distance, providing an easy way for drivers to view only points on their current line:



To select the azimuth, either enter a fixed azimuth or use the current machine heading. Then, select a search distance to use to refine the list. Select the **Allow reciprocals** check box to include points in the direction that is the reciprocal to the chosen azimuth.

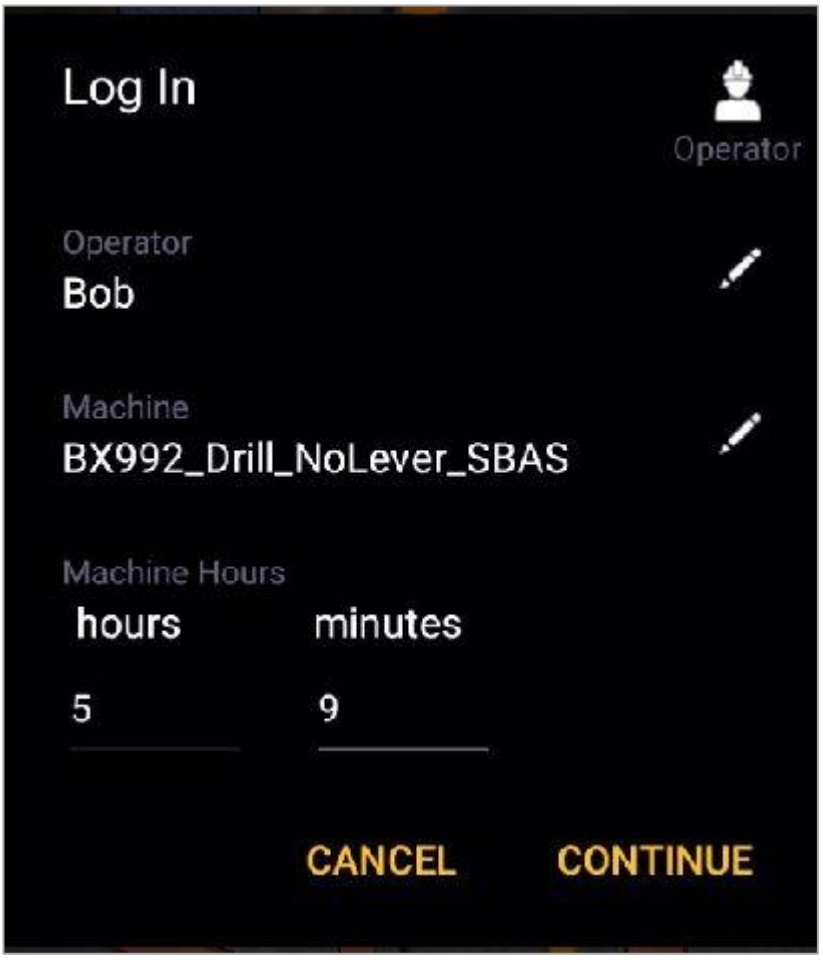
Offsetting Points

To create an offset point, do a long tap on the point you want to offset from. The following dialog appears:

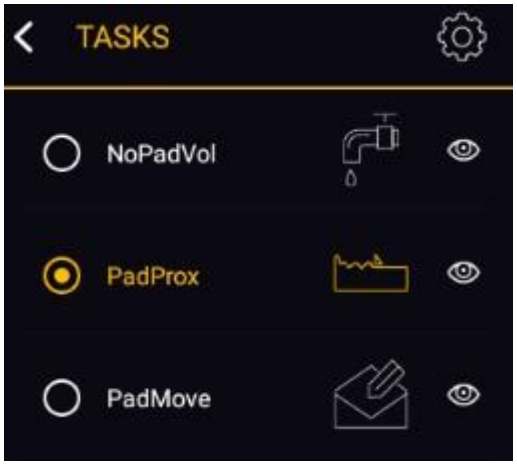
1	Selected Point	The point you chose. On this dialog you can create a point by entering offset values from this point.
2	New Offset Point Name	The name of the new offset point. A default name appears but can be changed. Tap inside the text box and a keyboard pops up.
3	Offsets From Machine	The offsets of the selected points from your present vehicle location.

Using GuidEx Pad Databases

When you select a GuidEx database, you are first prompted to login:

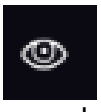


Once logged in, you are presented with a lists of tasks, as defined in the GuidEx Pad database:

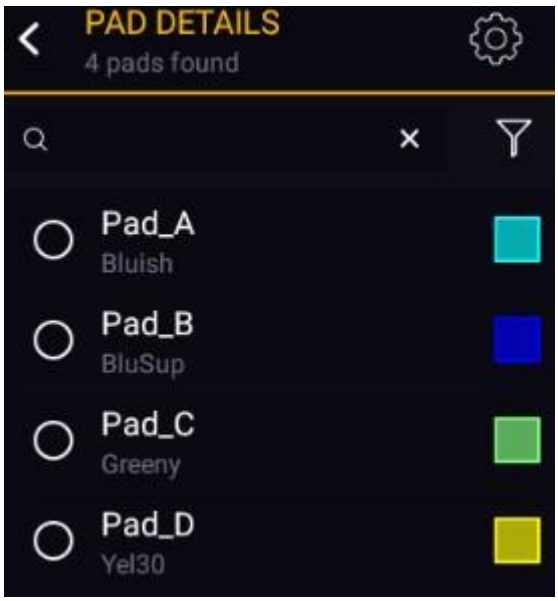


The number of tasks and what they refer to is dictated by the contents of the pad database. Some tasks do not require a pad (for example, a simple volume task in which the machine is filled with fuel), and some do require a pad. To select a task, tap the option button next to it.

To get information about a task, tap the eyeball icon next to it. You can then browse the contents of the tasks and TaskPrompt tables of the database.

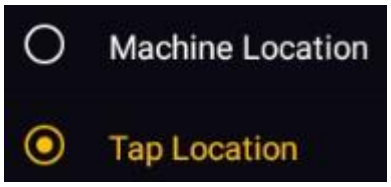


If a task is selected that requires a pad, a list of all pads contained in the database are shown:

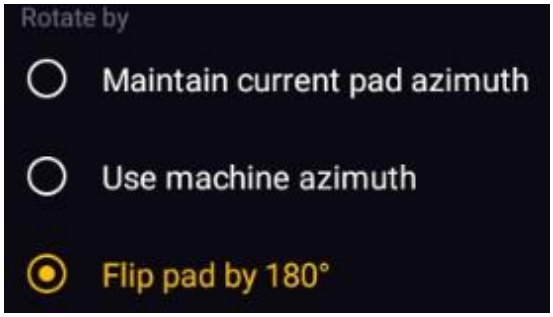


A specific pad is selected by selecting the option button next to it.

	If you want information about a pad, press the pad icon next to it. You can then browse the contents of the PadList table of the database.
	If there are many pads, you can search for a pad by pressing the search icon and typing in its name.
	Alternatively, you can tap **Nearest To Machine** or tap the filter icon to use additional tools to refine the target.
	Press for additional task related settings.
	Once a pad is selected, you can change its characteristics by tapping **Pad Status**. A list of names appears that define a set of characteristics, which were assigned when the database was created. This can include azimuth, color, and sump assignments
	If a task has been selected that allows for pad move, then this icon will be visible. Tap it and you can move the currently selected pad to either the current machine location or a location you tap on the map:



You will also have the following options regarding the pad azimuth:



Additional Task Related Settings

There are a number of settings available for tasks that can be configured by the operator. To access these settings, tap the gear icon on the right drawer task panel once a GuidEx Pad Database has been loaded:

Navigation

- **Enable guidance inside target tolerance –** Provides guidance inside the value specified for pad proximity.
- **Enable auto zoom to target –** As you enter pad proximity distance, turning this on zooms the display in.
- **Always show the connector between vehicle and target –** As you enter pad proximity distance, a connector from the vehicle to pad is shown.
- **Prompt with list of pad related tasks when machine enters the pad in standby or while performing non-pad task –** If you navigate inside a pad, prompt to select a task.
- **Display standby reason prompt when machine is in standby and stationary –** Displays a list of reasons if the machine is stationary and in standby mode.

Pad Settings

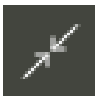
- **Re-prompt standby reason dialog after N minutes –** Time interval to display message above.
- **Auto dismiss standby reason prompt –** Automatically dismiss the dialog above instead of the operator manually doing it.
- **Enable screen flashing when the machine starts moving in standby –**Display flashes in psychedelic manner if you start moving in standby.
- **Render canceled pad as –** Enables the operator to set the color and opacity of a canceled pad.

Logging

- **Enable rapid logging** – This is an off/on setting. If it is on, logging of points takes place at one second intervals as you are moving. If it is off, track points are logged every 10 meters of movement.

8. Widgets

Widgets are small (often semi-transparent) moveable panels of additional information that can be displayed on the main Machine Guidance map. You can position these widgets by holding down on them and dragging.



At the top right of most widgets, you will see an icon that is used to minimize or maximize the widget

You can hold down on a widget and drag it to the required location on the screen. If the widget turns red, it means there is not enough room to drop it at that location (due to an overlap with another widget). If this happens, try displaying less widgets.

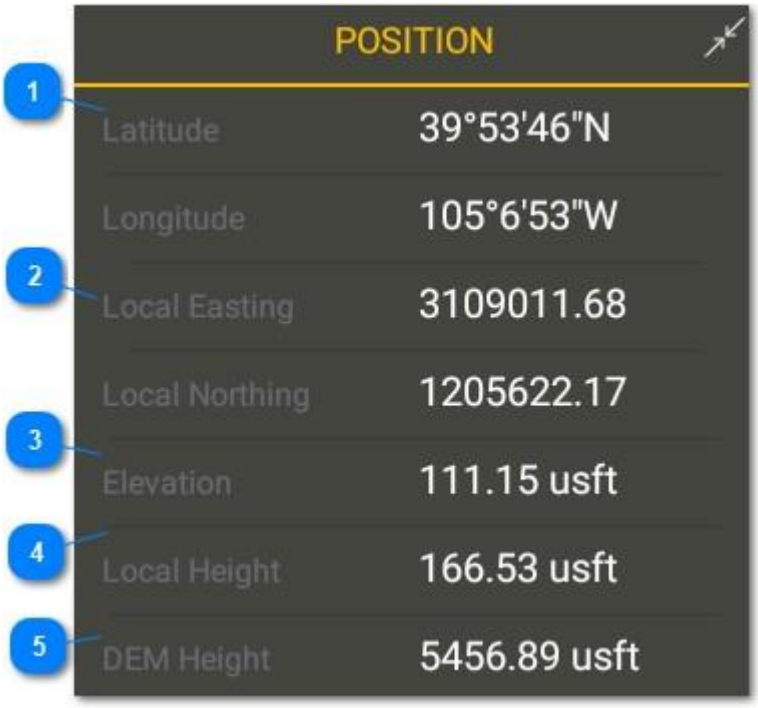
Tap the widgets icon to display the entire list of available widgets.

Select the boxes of all widgets you want displayed and tap **Done**:

☐ Position	Displays information concerning the current position
☐ GNSS Quality	Displays information concerning the quality of the GNSS
☐ Cloud Sync Status	Displays GuidEx Connect cloud sync status
☐ Pitch Roll Heading	If using an IMU, displays machine pitch roll heading

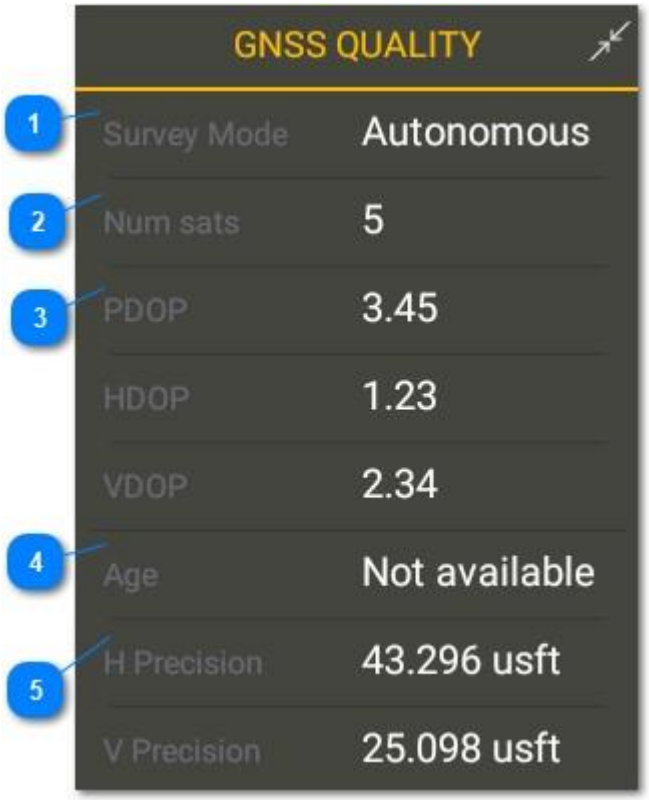
Other widgets might be available based on your system configuration.

Position



1	WGS-84 Geographic Coordinates	Primary position WGS-84 geographic coordinates.
2	Local Grid Coordinates	Local Grid coordinates in project units.
3	WGS-84 Height	Primary position WGS-84 height in project units.
4	Local Height	If your project contains a geoid model, then this is your local height in project units. Otherwise, it is not available.
5	DEM Height	If your project includes a Digital Elevation Model (DEM), then the computed DEM height in project units is displayed here.

GNSS Quality

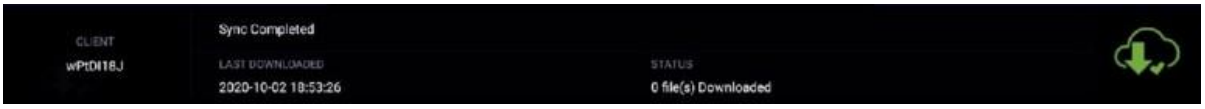


1	Survey mode	Current survey mode
2	Satellites	Number of satellites being used by the GNSS receiver
3	DOP	In general terms, the multiplicative effect of current satellite geometry on the precision of the position
4	Age	If supported by the survey mode, the age of corrections in seconds
5	Precision	Horizontal and Vertical precision—in general terms, the position precision based on a function involving of range precision and satellite geometry.

Cloud Sync Status

Only available to enable if Wi-Fi is turned on/connected. This widget is used to display the connectivity status to GuidEx Connect. It is displayed when actively logged into GuidEx Connect.

Tapping on the widget when logged in, opens the following status bar. To close this info bar, tap the inside of the bar.



Displayed when previously logged into GuidEx Connect, but then connectivity is lost.

Displayed if there is a failure in logging into GuidEx Connect due to a credentials issue. Tapping on the widget when log in has failed, opens the following status bar, which shows the **RETRY** option to retry the login. However, this often requires validating the login credentials in the XML file.

Pitch Roll Heading

Used to display the machine's heading, pitch, and roll information that is being reported by the Inertial Measuring Unit (IMU).

> **NOTE –** If the IMU is not aligned, all fields will read IMU Not Aligned. To align the IMU, simply drive a short distance in order for gyros in the IMU to align, then proper values will begin reporting. Use the **Reset** button if the behavior of the IMU becomes troublesome. This resets the IMU to 0,0,0; it will then take a few moments to adjust

In machine management, pitch and roll threshold values can be viewed. These values are defined in Config XML files. Also, the axis depiction around the vehicle on the widget changes from green to red. Regardless of whether the widget is displayed or not, you will receive a warning each time a threshold is exceeded.

9. Troubleshooting

USB Ports

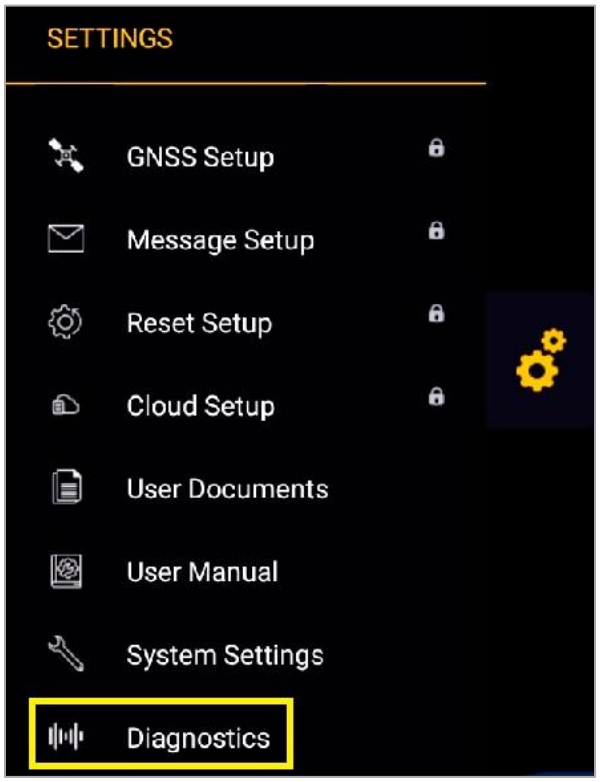
If you believe the USB port is not behaving properly (for example, when transferring project data or updating firmware), follow these steps to verify whether or not the port is operational:

1. Connect a USB drive USB port:
    - On the GFX-750™ display, if you have the engineering unlock license applied, the bottom of the two side ports works normally, but the top port is reserved for developer troubleshooting.
    - On the TD5*0, there is only one USB port available.
2. From the home launch screen, tap  at the bottom of the screen, or swipe up from the bottom of the screen if it is a TD540.
3. Find and tap  .
4. Scroll to and tap **Storage & USB**.
5. Verify if the rear USB information appears and indicates proper operation.

> **NOTE –** This small icon can be used to mount/unmount the USB stick on a port. It is normally not used in operating the machine guidance apps.

Retrieving the System Log

If you are asked by technical support to provide a GuidEx system log, you can provide retrieve the log file in two ways:



Once in the diagnostics window:

1. Start the GuidEx software, then open the **Left Drawer** and then tap **Diagnostics**:
    a. Open the **Logging** tab (left side) and tap the export icon in lower right corner .
    b. Browse to where you want to save the file on the USB stick and tap **Select** to save it.
    OR
    c. If you are synced to GuidEx Connect, the logs can be uploaded over the air without the need for a USB drive.
2. The output file will be named GuidEx_SysLogs_Build_****.zip. Send this file to technical support for further troubleshooting.

Clearing Application Data

If you are in a situation where you are forced to clear the machine guidance application data, follow the steps below:

1. From the **Home** screen, tap at the bottom of the screen.
2. Find and tap 

.
3. Look for and tap Apps.
4. Scroll down until you see the GuidEx software. Tap the icon.
5. Find **Storage** and tap it once.
6. Tap **Clear Data** and follow the prompts. When you restart the GuidEx software, it will be as if you are starting for the first time (settings wise), with the exception that the projects previously imported are still available to load.

Factory Reset

> **CAUTION –** This should not be done unless you have copies of your unlock licenses, project data, and logs. Once a hard reset is done, you need to apply your license unlocks and re- import your projects.

1. From the **Home** screen, tap on at the bottom of the screen.
2. Find and tap 

.
3. Look for and tap. Backup & reset
4. Look for and tap **Factory data reset**.

> **NOTE –** A warning appears to show you what settings will be deleted. To proceed, tap **Reset Tablet**.

Exporting Backup Logs

Normally, you export your logs by accessing the **Project Setup** menu and then selecting your project. There are various options for exporting all data or a specific time period.

If you cannot export your log data using these methods, use the following steps:

1. Insert a memory stick in the USB port.
2. 

Tap **Project Setup** in the left drawer to open the **Project Setup** dialog:

3. Tap **Project Setup** at the top of the dialog ***seven times***.
4. The **Export Backup Log** icon becomes enabled:

5. Tap **Export Backup Log** to save your backup log to the USB memory stick.

TIP – If you deleted your project but want to export the backup log that was associated to it, try reloading the project (with the same name) and using the steps above. Backup logs are not deleted when you delete a project.

NOTE – If the backup procedure above doesn't work, try to export the system logs. Point records are stored there and GPSQL can import and append these to an SQLite database. The GPSQL application imports both backup log files and system log files and appends them to the LOG table of the currently open database. Point to the zip file and GPSQL will import all records it finds.

Version	Task	Responsibility	Reason	Date
1	Author	Z. Dredge	First INA branded document version	17/10/2023
2	Author	Z. Dredge	Re-branded	25/11/2024
2.1	Author	Z. Dredge	Updated IMU Calibration section	1/4/2025
2.2	Author	Z. Dredge	Additional information for project loading and connection status	12/5/2025