



FIELD MATE®

Base Area Monitor
+ Shaft Monitor



Users Guide and Installation Manual

FIELD MATE[™] USER MANUAL

If you Need to Call Customer Service
Please complete the following information for future
reference:
Field Mate Model* :.....
Serial Number * :.....
Date Purchased :.....
Place of Purchase:.....

* The serial/Model Number is displayed in the
Information Screens of the meter.

Copyright
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property of G-Tech NZ Ltd. All rights reserved. This
user's guide may not be , in whole or in part, be copied,
photocopied, reproduced, stored, or reduced to any
electronic medium or machine readable form, without
permission from G-Tech NZ Ltd.

IMPORTANT:

To obtain the highest Precision Surface Area / Work done Measurement:

- The Speed sensor must be mounted on a wheel that is not subject to slip or spin during the Surface Area Measurement mode. ie: When not in Hold mode.
- Straight line operation is best suited to surface area measurement as tight turns of implement / vehical will result in a lesser or greater number of wheel turns. High precision measurement is best achieved by working to straight lines.
- Wheel size and implement working width should be measured as required to ensure the sizes used by the meter, reflect the real world sizes of the implement / vehical. It is the users responsibility to ensure the sizes in the meter are correct.
- When Work is not being measured, the meter must indicate this by going into Hold mode. ie: Hold light on, "HOLD" flashing on working screen.

Introduction:

The FIELD MATE Area Meter has been developed to calculate Land area, distance travelled during seed drilling operations. The meter will also record drilling hours and timed stopped. While drilling the meter can display the drilling rate in hectare per hour and if required a low seed alarm can be attached to inform the user that the seed level has reached a certain level. All measurements are in the metric, eg: hectares, kilometers, centimeters, millimeters.

A distance sensor mounted on the input shaft to the colter gearbox. With this single sensor the area meter can work out if the drill is planting or not.

- Enter the DRILLING WIDTH into the meter.
- Enter the DISTANCE TRAVELLED PULSE, which is the distance travelled by the drill each time the magnet on the input shaft to the colter gearbox passes the Distance sensor.

The meter is ready to use when the drill width and distance travelled per distance sensor pulse have been entered, and the meter will measure area drilled, drilling rate, speed etc. When the drill is lifted at the head lands (ie: drilling stops), surface area measurement also stops.

The unit is rugged, reliable, easy to use, fits any seed drill.

Warranty :

1 Year return to factory Warranty on Area Meter, sensors and Downloading support hardware. Please ensure you agree to the warrantry conditions before proceeding to purchase this product, read the warranty form at the end of this user guide. Installation wiring to sensors and wear and tear on connectors not covered.

EMI Emmissio Certification:

Electro magnetic interference emission certification are a series of tests that required to be passed before an electronic device can be sold. These test are related to how much electron magnetic radiation is emmitted by an electronic device.

The Area meter has the following certifications and is suitable for sale in the following countries:

Certification	Countries
C-Tick Z874 Class B	New Zealand, Australia
FCC	USA

ELECTRICAL SPECIFICATIONS

Pin outs 7 Pin plug:

<u>Pin</u>	<u>Colour</u>	<u>Function</u>
1	Black	Earth
6	Yellow	Speed
5	White	Hold
3	Green	Shaft 1
2	Brown	Shaft 2 , Low Seed
7	Red	Shaft 3, Bale count
4	Blue	Power external sensors. Eg:Shaft or seed sensors.

Specifications:

Supply volts	:	5 – 30 Volts
Current	:	25ma
Temperature	:	-5 to 55 degree/C
Input voltages	:	0 to 30 Volts
Area	:	999.99 hect
Distance	:	999.99 km
Speed	:	200 km/Hr
Wheel Size	:	999.9 cm
Width	:	9999.9 cm

Features:

- Large graphically displayed numbers, easy to see.
- 3 button operation, for quick simple operation.
- Reset button is multi functional. It can:
 - A. Reset set the current job totals.
 - B. Shut down the alarm when the alarm is sounding (eg: when low seed sensor has triggered).
 - C. Allows the meter to switch between auto and manual mode when tramlining.
- Backlit display for night time working.
- Dust sealed.
- Mositure resistant.
- Strong Aluminium Case.
- Internal alarm buzzer.
- Bright light indicators.
- Easy fit velco mount. Or option window mount.
- Quick transfer from tractor to tractor.
- Reports all job information on screen.
- Automatic data Backup.
- Help Desk Phone number display.
- Data storage time with out power 20 years.
- All inputs high voltage protected.

INSTRUCTION FOR BASE AREA METER

Set drill Width and Set Speed Pulse distance



Any questions simply give us a call.

All our contact details are at www.areameters.com

INSTRUCTION FOR BASE AREA METER

Set shaft time out and enable shafts 1 -6

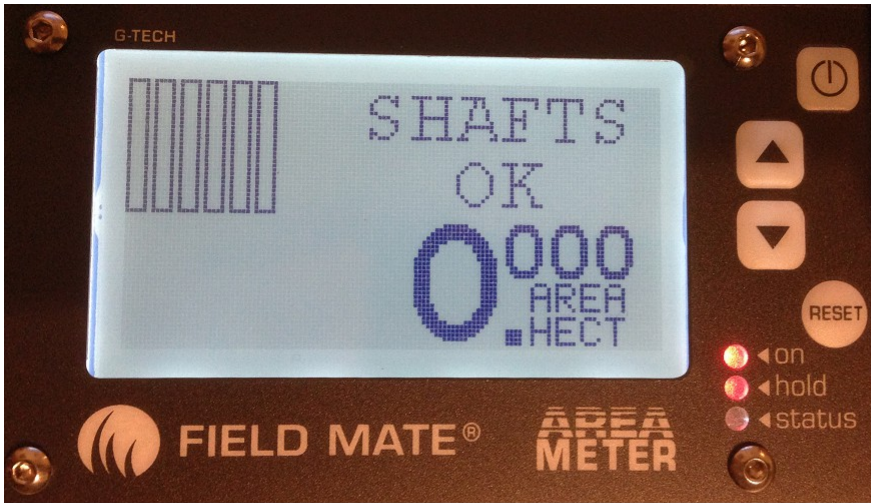
NOTE To access this mode turn the monitor OFF!



Any questions simply give us a call.

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SCREEN SNAPS FOR BASE AREA METER



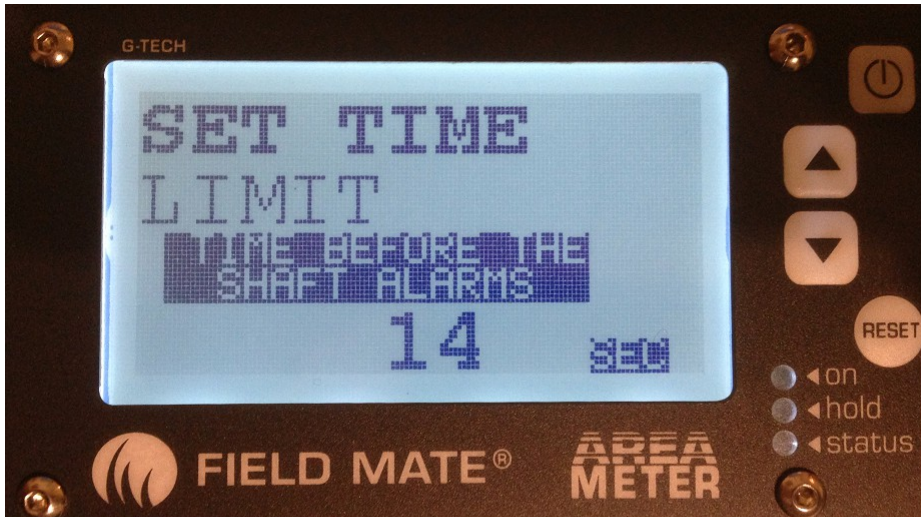
Main Screen
... Bar Graphs move as shafts rotate.
...Press RESET to zero area.



Distance Pulse Adjust..
...Use arrows to adjust width number.
...Quick press power switch to exit



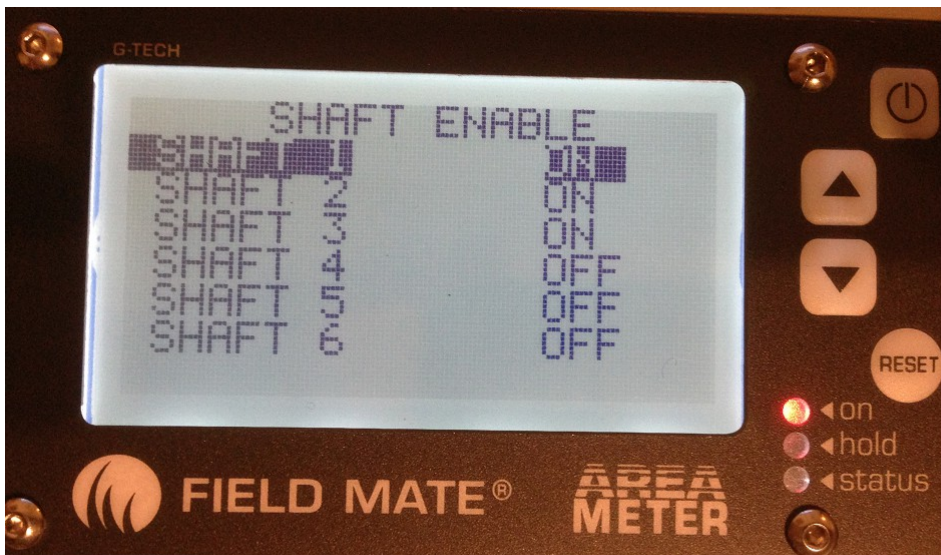
Width Screen Adjust
...Use arrows to adjust width number.
...Quick press power switch to exit



Shaft time out limit

...Use arrows to adjust width number.

...Quick press power switch to exit



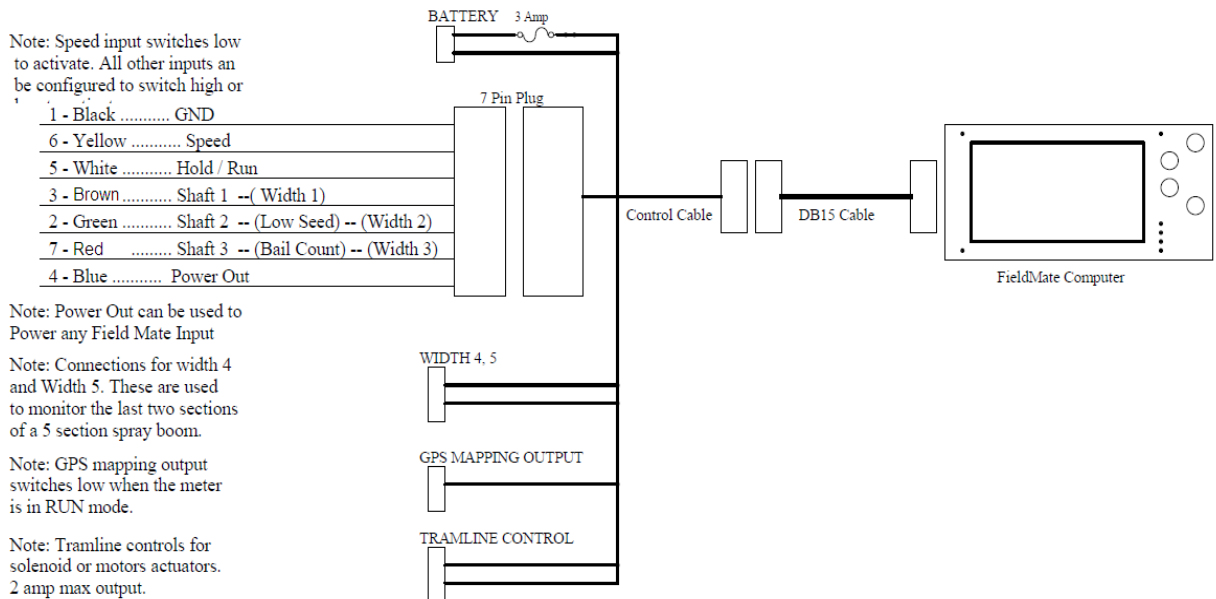
Shaft enable screen

... Quick press arrows to select a shaft.

... Hold the arrow key to change between shaft enable/disable.

Field Mate Wiring Diagram

Version 2.0



Speed Sensor connects between SPEED and GND.

Shaft 1 sensor connects between SHAFT_1 and GND.

Shaft 2 sensor connects between SHAFT_2 and GND.

Shaft 3 sensor connects between SHAFT_3 and GND.

“FIELD MATE” EXPRESS LIMITED WARRANTY AND LIMITATION OF LIABILITY AGREEMENT

Where the word “FIELD MATE™” Area Meter appears it means the “FIELD MATE™” Area Meter circuit board which includes a hard ware component and a leased Firmware component and/or Field Mate Download Application, enclosure and wiring assembly only. Does not refer to any additional wiring added to the “FIELD MATE™” Area Meter system during installation. The Firmware running in the “FIELD MATE™” Area Meter and/or Field Mate Download Application is a zero fee leased copy and is not part of the “FIELD MATE™” Area Meter purchase agreement. The Firmware and/or Field Mate Download Application lease runs for the life of the product. G-Tech NZ Ltd remains the sole owner of the Firmware running in the “FIELD MATE™” Area Meter and/or Field Mate Download Application.

Express Limited warranty.

G-TECH NZ LTD warrants the “FIELD MATE™” Area Meter to be free from defects in materials and workmanship for a period of 12 months from the original date of sale to the end user or for a period of eighteen months from the date of factory shipment, whichever is sooner. If the product fails, customers should at their cost return the “FIELD MATE™” Area Meter to G-TECH NZ LTD. At the exclusive option of G-TECH NZ LTD , to either :

- (a) Repair the “FIELD MATE™” Area Meter .
- (b) Replace the “FIELD MATE™” Area Meter .
- (c) If G-TECH NZ LTD is unable to replace / repair or correct firmware or hardware errors, G-TECH NZ LTD will refund the price paid for the “FIELD MATE™” Area Meter .

These are your sole remedies for any breach of warranty.

The warranty does not apply to “FIELD MATE™” Area Meter’s which have been improperly installed, subjected to extremes beyond the limits of G-TECH NZ LTD specifications, or which have been physically damaged. Nor does it apply to “FIELD MATE™” Area Meter’s found to be defective due to abuse, electrical discharge, under temperature, over temperature, improper power application , damage resulting from acts of war or any damage incurred due to acts of nature, salt or fresh water immersion or spray, or improper or unauthorized repair. Freight charges for products returned to G-TECH NZ LTD should be pre-paid by the customer. G-TECH NZ LTD will prepay freight charges for returning the “FIELD MATE™” Area Meter to the customer, provided that the “FIELD MATE™” Area Meter proved defective under the terms and conditions of the warranty.

Note:
Non G-TECH NZ LTD authorized individuals are discouraged from performing repairs on G-TECH NZ LTD products. Opening of the product by unauthorized individuals will void the product warranty. Damage incurred as a result of non G-TECH NZ LTD service attempt will be considered abuse and repairs will not be covered under warranty or standard repair pricing by G-TECH NZ LTD .

Limitation of liability

In no event will G-TECH NZ LTD or any person involved in the creation, production or distribution of the G-TECH NZ LTD “FIELD MATE™” Area Meter be liable to you on account of any claim for any damages including any lost of profits , lost savings, or other special, incidental, consequential, or exemplary damages, including but not limited to any damages assessed against or paid by you to any third party, rising out of the use, liability to use, quality or performance of the G-TECH NZ LTD “FIELD MATE™” Area Meter , even if G-TECH NZ LTD or any such person or entity has been advised of the possibility of damages or for any claim by any other party. ***G-TECH NZ LTD total liability under any provision of this agreement is in any case limited to the amount actually paid by you for the “FIELD MATE™” Area meter.***

Description of other rights and limitations.

Limitations on reverse engineering, Decompilation and Disassembly. You may not reverse engineer, decompile, disassemble or upload the Firmware.

Rental. You may not rent or lease the “FIELD MATE™” Area Meter .

Copyright. All title and copyrights in and to the “FIELD MATE™” Area Meter , the accompanying printed material and copies of the firmware are owned by G-TECH NZ LTD. You may not copy the printed material accompanying the “FIELD MATE™” Area Meter . All rights not specifically granted under this agreement are reserved by G-TECH NZ LTD.

ACCEPTANCE OF TERMS

I the under signed Purchaser of the “FIELD MATE™” Area Meter computer have read the above Warranty and Limitations of liability Agreement and agree to the conditions and limitations as stated above.

Unit Serial Number :

Start Date of Agreement :

Purchaser Company Name :

Purchaser Address :

Purchaser Name Printed :

Purchaser Signed :