

**Leading Farmers CZ, a.s.**

**EZ-Boom installations,  
farm vehicles trajectory optimisation,  
farm fleet tracking  
2009**



## EZ-Boom installations

Do you have a customer who wants to install EZ-Boom on a sprayer that is currently not supported by Trimble?

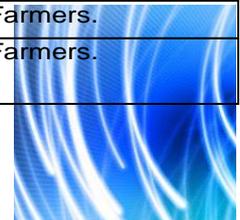
*We might have a solution for you:*

- Either we can send you plug-and-play installation kit for the sprayer brand/model you need, or
- for certain models you will have to send us specified parts from the sprayer, we will make necessary changes in their wiring, connect the installation cable harness to them and send the whole kit back to you for final installation.
- Third option is that you buy from us documentation for the installation you need to carry out. Custom solutions might be developed based on your assignment.



## Table of sprayers/spreaders and controllers supported

sprayer make/type	pulled/self propelled	controller	installation procedure
Hardi/various	pulled	Muller Spraycontrol/Unicontrol	Controller to be sent to Leading Farmers
Hardi/various	pulled	HC 2500	Controller to be sent to Leading Farmers
Hardi/New Commander	pulled	HC 5500	Controller to be sent to Leading Farmers.
Hardi/Alpha	self propelled	Hardi Nova	Joystick to be sent to Leading Farmers.
Hardi/Alpha	self propelled	HC6500 sequential	Joystick to be sent to Leading Farmers.
Tecnomo/Laser	self propelled	Muller Spraycontrol/Unicontrol	Controller to be sent to Leading Farmers.
Tecnomo/Laser	self propelled	Muller TOP, sequential	Joystick to be sent to Leading Farmers.
Berthoud/Boxer	self propelled	DP Tronic/Gestronic	Installation documentation available for on-site installation. Skilled field engineer required.
Mazzoti	self propelled	LH 5000	Installation documentation available for on-site installation. Skilled field engineer required.
Mazzoti	self propelled	No controller, rate contr. EZB	Installation documentation available for on-site installation. Skilled field engineer required.
Mattrot/24	self propelled	TeeJet 860	Complete installation kit available.
Mattrot/Meistria	self propelled	TeeJet 860	Complete installation kit available.
Barigelli-Gambeti/Bargam	self propelled	Bargam (Muller)	Controller to be sent to Leading Farmers.
Agco/SpraCoupe	self propelled	Raven 4000/5000 CanBus	Joystick to be sent to Leading Farmers.
AgCo/RoGator	self propelled	Falcon	Joystick to be sent to Leading Farmers.
Agrio/Napa (Czech Republic)	pulled	Muller Spray/Uni, air operated	Controller to be sent to Leading Farmers.
Agrio/Mamut	self propelled	Muller, air operated	Controller to be sent to Leading Farmers.
MGM (Czech Republic)	pulled	Muller Spraycontrol/Unicontrol	Controller to be sent to Leading Farmers.
Blanchard	pulled		Controller to be sent to Leading Farmers.
Blanchard	pulled	sequential	Controller to be sent to Leading Farmers.
RAU	pulled		Controller to be sent to Leading Farmers.
SAM – pending	self propelled	RDS	?
Amazone spreader	pulled spreader	Amatron	Controller to be sent to Leading Farmers.
Bogballe spreader	carried spreader	Calibrator	Controller to be sent to Leading Farmers.



# Photos of several EZ-Boom installations



Hardi Commander/HC2500



Hardi Alpha/Nova



Hardi Alpha/Nova



MGM/Muller Spray-Control



Berthoud Boxer/Gestronic



Tecnomas Laser/Muller Spray-C.



Tecnomas Laser/Muller Uni-Control



Agrio NAPA



Baricelli-Gambetti/Muller



Spra-Coupe/Raven



Blanchard



Matrott/TeeJet



Mazzotti/LH500GPS



Amazone spreader/Amatron



# OptiTrail

## software for trajectory optimisation of farm vehicles

Lightbar guidance or even autosteer enables to make vehicle passes over the field (almost) perfectly straight and (almost completely) eliminate skips and overlaps. Yet it is not all you can do to achieve real excellence in farm vehicles movement management in fields.

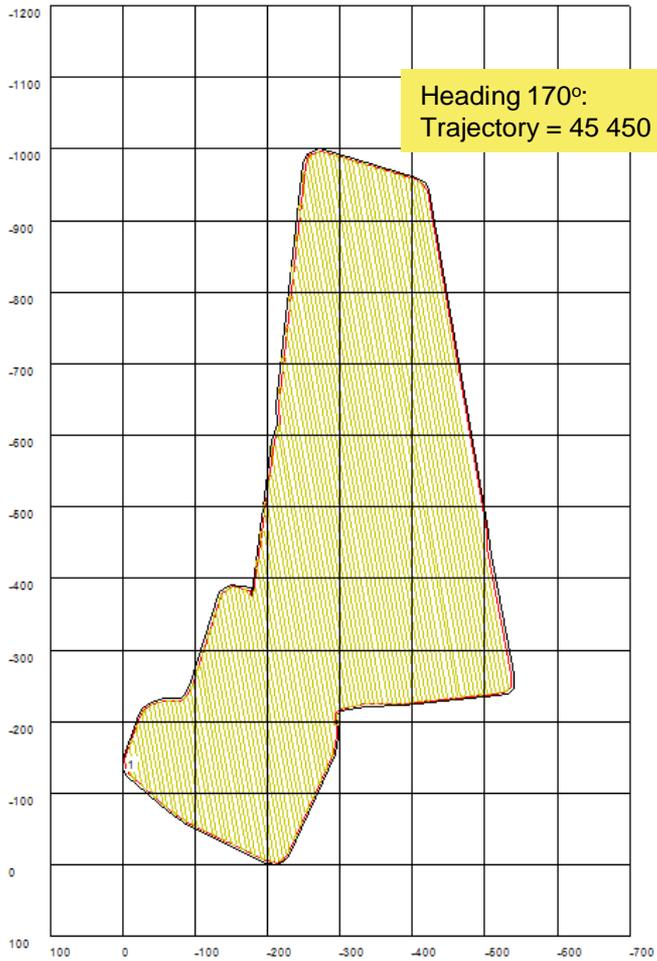
Total trajectory length on given field with given swath width varies based on heading and starting point with relation to the field boundaries shape. It is, of course, easy and intuitive solution to decide the heading of your swaths if the field has regular rectangular or central pivot shape. Nevertheless, many fields have very odd shapes.

*Our OptiTrail software generates the optimal trajectory with the shortest length for any shape of field.* You can compare the optimal trajectory with the one you have been used to use for years and calculate the savings. The output of the calculations is a table with various alternatives and highlighted optimal one and a shape file with the optimal trajectory shape, including the headland passes. The system even offers splitting of very complicated fields with many spurs into smaller evenly shaped fields and creates separate trajectories for the new fields.

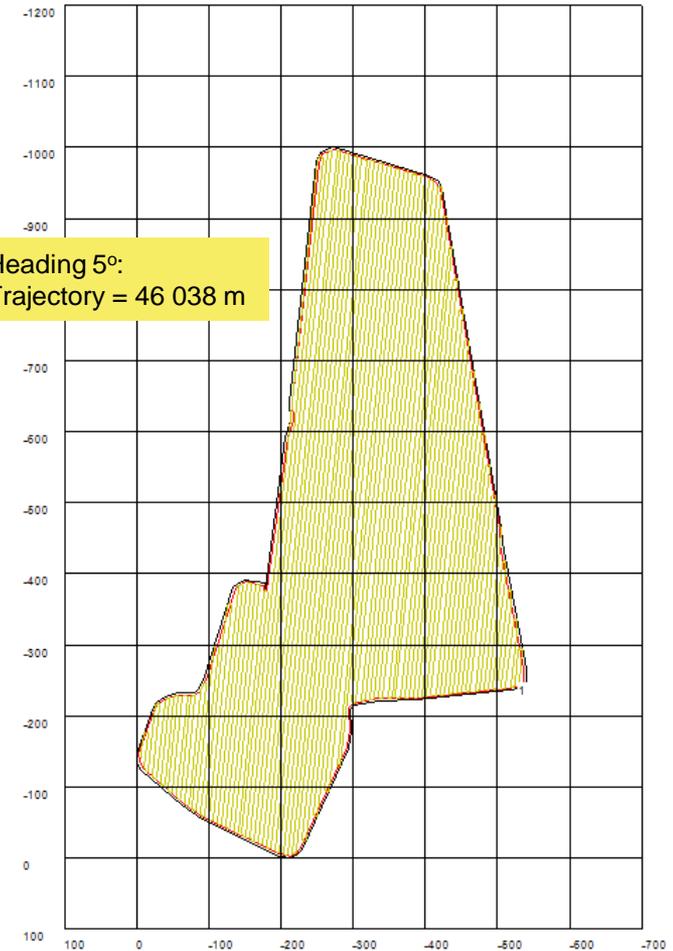


# Comparison of 2 trajectories, 6 m swath width

Počátek v JTSK ( 655186.07, 1159578.79)



Počátek v JTSK ( 655186.07, 1159578.79)



- [Tabulka]  
Soubor

směr	pracovní linie	nepracovní oblouky	přejezdy	celkem
-0	44276.47	1790.78	0.00	46067.25
5	44289.07	1749.30	0.00	46038.37
10	44327.40	1695.14	635.77	46558.31
15	44314.97	1660.55	650.34	46526.16
20	44354.89	1590.73	1519.19	47444.91
25	44381.49	1518.34	1629.66	47829.99
30	44323.34	1675.21	1587.72	47586.27
35	44298.40	1657.74	1603.66	47559.79
40	44302.88	1668.47	1292.69	47204.04
45	44290.58	1712.24	1595.83	47598.30
50	44262.34	1737.29	706.69	46706.31
55	44301.68	1729.06	1599.70	47624.43
60	44290.12	1717.24	896.56	46902.92
65	44326.34	1710.14	919.55	46956.51
70	44264.31	1744.66	1496.90	47505.87
75	44282.56	1665.33	914.39	46862.27
80	44319.63	1632.45	1322.76	47174.85
85	44305.30	1701.46	99.60	46046.97
90	44259.04	1800.81	17.29	46077.14
95	44252.42	1776.97	646.03	46875.43
100	44264.00	1790.44	16.89	46071.02
105	44269.53	1917.47	0.00	46081.10
110	44268.76	1677.74	0.00	45943.50
115	44269.15	1762.39	15.91	46047.44
120	44264.09	1800.80	0.00	46064.89
125	44250.58	1764.38	0.00	46014.96
130	44268.18	1782.51	21.28	46018.94
135	44257.05	1811.75	0.00	46089.80
140	44254.92	1793.47	29.80	46062.18
145	44246.22	1809.40	0.00	46055.62
150	44240.17	1825.80	0.00	46169.66
155	44246.89	1856.76	0.00	46102.66
160	44244.91	1782.19	0.00	46027.10
165	44255.26	1697.02	0.00	45942.29
170	44222.51	1863.11	0.00	45958.63
175	44241.99	1665.13	0.00	45907.12

Optimální trasování : směr = 170, délka celkem = 45995.63



# AgroZoom

## fleet tracking and management system for European farms

There are thousands of GPS fleet tracking systems in the world. AgroZoom was developed with focus on agricultural needs. It consists of hardware vehicle module and web based tracking and logging application.

Features:

Current position of a vehicle is shown over two layers: road/cities map and map of individual fields.

The map screen shows also trajectory of the vehicle in selected period. The movement of the vehicles can be animated for selected time period.

Log book reports all usual data on vehicle activity. Moreover, it distinguishes between working passes and transfers between fields. The working passes are reported towards the particular field number the vehicle works on.

Logging of various on/off data (up to 8 channels) from vehicles and implements is available.

Fuel consumption reports and charts, suspicious decline of fuel in tank warnings, Geofencing, etc.



# Screen previews

Prosím pozor! Účastné upozornění s platností od 1.8.2008: U jednotek Teletonk OH120x a Filox je potřeba v konfiguraci změnit IP adresu serveru na: 77.93.246.94  
GPS souřadnice: 49°32,75'N, 17°21'28,72"E

Mapa zobrazuje pozice vozidel v reálném čase. Vozidla jsou označena ikonami a jejich aktuálními pozicemi na mapě. Vozidla jsou rozdělena do skupin podle majitele nebo typu vozidla.

Skupina	všechny	Výběr	Právo	Název vozidla	Popis vozidla	Místo	Název místa	Rychlost	Stav
				MOO-9664	Jurča František	6	CZE, Velký Týmec, Bystřická	48 dmh	zastaven
				Náves	Náves Jurča	22	CZE, Velký Týmec, Bystřická	51 dmh	22 km/h
				Náves	Náves Petr	4	CZE, Velký Týmec, Bystřická	4 dmh	6 km/h
				MOO 0471	Petr Jaroslav	4	CZE, Velký Týmec, Náves	48 dmh	zastaven
				Rozmetadlo	Rozmetadlo Jurča	6	CZE, Velký Týmec, Bystřická	53 dmh	6 km/h

Mapa zobrazuje detailní pohled na pozici vozidla a jeho pohyb. Vozidlo je označeno ikonou a jeho aktuálními pozicemi na mapě. Vozidlo je rozdělena do skupin podle majitele nebo typu vozidla.

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				Rozmetadlo	Rozmetadlo Jurča	6	CZE, Velký Týmec, Bystřická	53 dmh	6 km/h

Podrobné informace o vozidlech a jejich jízdách. Vozidla jsou rozdělena do skupin podle majitele nebo typu vozidla. Zobrazeny jsou také detaily o jízdách, včetně datu, času, rychlosti a stavu vozidla.

Datum	Čas	Prostředí	Účel	Obec	Číslo	Doba	Vzdálenost	Rychlost	Číslo jízdy	Pracovní/leisure	Název
01.09.2008	17:25	0.4	0.4	0.4	0.4	3 min	0.3	1716	3.4	Pracovní	(0 + 5)
01.09.2008	17:28	3 min	0.4	0.4	0.4	5 min	0.2	612	-	Pracovní	(0 + 0)
02.09.2008	08:35	0.8	0.8	0.8	0.8	18 min	0.1	2941	-	Pracovní	(0 + 0)
02.09.2008	08:51	0.4	0.4	0.4	0.4	2 min	0.3	1417	2.7	Pracovní	(0 + 5)
02.09.2008	09:33	0.4	0.4	0.4	0.4	3 min	1	1417	-	Pracovní	(0 + 0)



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