SIMTRACTOR V4 Manual - English

Farmer's manual

INTRODUCING SIMTRACTOR

Congratulations!

You are now the ower of the most sophisticated and realistic tractor simulation on the market. SimTractor is the first in a series of farm simulations. This version simulates farming operations with fields, featuring varied terrain and weather conditions. Add to this over several of the worlds most exciting machines, accurately modelled in every detail, combines, sprayer, loader and tractors of course. You have the most complete motor farm game available and the most immersive driving experience possible. I haven't the time to tell you about the history of this game, but i'll do it probably in the future... It all began in the month of August 2000 during a wheat harvest....

Special thanks: Virtools team for their great tools! The SimTractor Forum Team And David (working at INRA) for his help to validate SimTractor versions, and his point of view on Agriculture and today machinery.

Also sorry about my terrible English. If my teachers could read this, they would get Nightmares.

Thank you for choosing SimTractor; I hope you enjoy it ! To get the maximum enjoyment from Sim Tractor we would suggest you read the farmer's Manual in full when you have a spare hour.

For lastest information and register game, go to the web site: <u>www.SimTractor.com</u>

Author, Brabant Benoit

Brabant Benoit © Copyright 2003 - 2007. All rights reserved. SimTractor is a shareware.

ii

Table of contents

Introduction

PART1-GETTING STARTED

5

Introduction - Quick start
Menus – Main Menu
Menus – Game menu
Menus – Machinery menu
Walking to visit or to drive another
machine

PART3-COMMANDS LIST

Keyboard	21
Commands list	22
Joystick	23

PART2-OVERVIEW

6
6
8
16
16
17
17
18
18
19
19

PART

Getting started

Let's face it, when we have a game, most of us just want to get it up and running as quickly as possible. For impatient gamers, follow these simple steps and you will be playing the game within minutes.

Sim Tractor is designed to run on a wide range of PCs but because of its technical advancements it does require a reasonable specification machine with a 3D Card. We would suggest a minimum specification as follows, for optimum performance

RECOMMENDED

SPECIFICATIONS

PIV1.5Gz Processor

512 Mo

3D Graphic card with 64 Mo

(ATI, NIDIA)

Windows XP , Vista

we would recommend a machine of the following specification or higher.

Quick start

• Insert the Sim Tractor CD, which should auto-run or download the install file on the website (contact the support if you have problems to download), then launch

the setup file '.exe', and follow the on screen instructions to install the game.

- After install, launch the SimTractor shortcut in the Windows menu.
- Once Sim Tractor is running, press either the 'enter' or move keys to move from the main menu onto the others. Now, you have also the choice to move the selector with a mouse.
- First create a new game in New Game Menu : enter a farm name (Farm1, ...) and your name and select OK.
- Once your farm is creating, select the Machinery... Menu and select a machine from those available in the machinery, otherwise select the

Business... Menu and buy machines or fields.



- When you are ready, select GO and the game will appear. Have fun!
- Press the ignition key to start the motor and go.. Control the machines with a joystick or the keyboard (move keys,...).

Menus

Main Menu

The Main Menu is the control hub for the entire game. As with all screens, use the cursor keys and 'enter' to move around and select an option. The Main Menu has five available options:

• New Game...

Select this option to start a game. On selecting New Farm you will be taken through the Name sequence, enter a farm name, your name and select OK, then the Game Menu appear and allowing you to select various options including the current date, the Machinery... menu, the Business... menu allowing you to buy new machine and fields, and Save option to save the current game. For more details on Game Menu and Options, please see the relevant sections below.

• Load Game...

Select this option to load a pre-saved game from those available. The top containing file name and the list at the right. Use the mouse to see all your saved game files. As you move onto each file, the game checks if the file exist. Then select OK, and your Game menu appear.

To remove saved game, you need to use the Windows explorer, and delete the files from ..\SAV\ according to the saved game you want to remove.

• Licence registering...

Select this option to enter the key when the game is registered. First enter your login (default is email) and the Key (note that informations are case sensitive).

The game displays a message like "REGISTERED VERSION...." or "UNREGISTERED VERSION....". If the game is unregistered, you can play and test the game for a limit, you need to register SimTractor to get a full access.

• Credits

Show credits about game, giving you the opportunity to change your mind. Press "Echap" to exit.

• Exit

Select this option to exit SimTractor and return back to Windows.



Farm Menu

The Game Menu is the control hub for your farm, either load farm or new farm. So all options in this menu or sub-menu are saved.

• Current Month

Show the number of months since your farm creation. It's fix on the menu, you can only speed up the game time on your farm with a PDA. Note that the PDA must be open to change this value.

• Business . . .

The time in the game when you may purchase property is during the winter, between and including Christmas and Spring Planting. Winter is the time to plan and prepare for the coming crop season, and any desired purchases not made before Planting must wait until the following winter.

Borrow money up to an amount based on your equity. Go to the Business Menu, allowing you to buy machine or fields with your money and also to check all the value in your farm (silo, bank,...).

- Machinery . . . Go to the Machinery menu
- Options . . .

Select this option to modify details like visual fx preferences, and controller settings, multiplayer options. If frame rate is slow, turn off the visual fx preferences (in particular 'smoke fx'). If frame is very slow, choose a low resolution (for example 640 x 480) and low crops.

• Save

Save the current game. Increment number saving is automatic.

Machinery Menu

• Machine

Select with cursor keys the machine you want use, the machine informations to the right of the screen is red if it's for sale, then you must get it before in the Business Menu. The machine informations windows displays the fuel level, contents (for seeders), product,...

• Init Position

Select this option to get your vehicle at the f arm origin (0,0,0).

• Go

Go to the game, in the machinery place or at the position where you leave the machine in the past. Another way allows you to get inside of vehicles with a "character" (nammed visitor in the machinery list), please see the revelant section below.

When you're in the game, back to this menu by press 'Esc' a few seconds until the menu is displayed.

Walking to visit or to drive another machine



To visit or to move to a specific machine on the farm, use the move key on keyboard. Vehicles are driven by you. To drive a vehicle, first you need to touch the machine you want to be the driver. Next, press the same key that 'IGNITION' key (using to start a vehicle). The character will jump and a loading bar will appear to prepare the machine for you, then you are inside of it. Once you are in the vehicle cab, you may press again the 'IGNITION' key to start the engine.

To exit the vehicle, press one time the 'ECHAP' key to go outside of the machine as a character, to walk to another vehicle. Or press few seconds the same key 'ECHAP' to go back to the menu.

Overview

To understand a entire farming operation; to understand some of the steps involved in producing corn and wheat.... If you live in or near farming areas, you will probably be familiar with much of the material presented. If, on the other hand, you live in large cities, they may not even be familiar with how food plants grow or with where meat and dairy products come from.



Long ago most people in the farms were farmers and that farms were run by individual families. Nowadays most farms are still owned and run by individual families but that a large number of the biggest and richest farms are now owned and run by big businesses.

Although most farms are still small family farms many farms are very big;

some of these big farms are owned by families while others are owned by big businesses. These big farms produce most of the food we buy in the supermarket. A big farm uses many machines: these machines are very expensive. A big farm specializes in one or two products. One of the reasons why the big farm specializes in one or two products is that different products need different machines; as indicated above these machines are very expensive. The big farm produces its products in very large quantities. A large farm sells its products both at nearby markets and to markets that are a long distance away.

CROPS

By growing crops, you can harvest and sell the grain for a profit. Your equipment will cost you money up front, but you'll be able to pay it off if you continue to grow crops each year.

SIMTRACTOR - FARMER'S MANUAL

You have a choice of planting corn, wheat, raygrass, and sugar beet.

Corn

Plant corn in May and harvest it 6 months later. You don't need to repect theses dates, you can plant when you want, it depends of your country.
Use the row planter implement for corn. No plowing is needed, but you could use the mulch tiller or disc ripper or the plow to prepare the field. Fill the seeder on your silos or in nearby towns silos, or with bags.





Wheat

• Wheat can be planted in the fall and harvested **8 months** later. This lets you use your tractor and combine at different times of year to make more efficient use of them.

• Use a **seed drill** to plant wheat. No plowing is needed, but you could use the mulch tiller or disc ripper or the plow to prepare the field. Fill the seeder on your silos or in nearby towns silos or with bags.

• Use a combine with a **wheat head** to harvest.



Raygrass

• Raygrass can be planted April and harvested 2 months later.

• Use a **seed drill** to plant Raygrass like the wheat. No plowing is needed, but you could use the mulch tiller or the disc ripper or the plow to prepare the field. Fill the seeder on your farm with the white bags stock.

• Use the **mower implement** with a tractor to harvest, or **let the crop on fields** for your livestock (pasture).



Sugar Beet

• Sugar beet can be planted April and harvested 7 months later.

• Use a **row planter** to plant Sugar beet like the wheat. No plowing is needed, but you could use the mulch tiller or the disc ripper or the plow to prepare the field. Fill the seeder on your farm with the white bags stock.

• Use the Sugar beet harvester to harvest, and let the sugar beets along your fields to sell them.



I'm going to describe some of the equipment and steps involved in producing these crops.

FARMING OPERATIONS

• Tilling/Plowing

The first thing a farmer must do is get the fields ready for planting. The wheat farmer knows that the wheat will grow best in fine, loose soil. So most farms will use mulch-tillage to get the fields ready. He/she will attach the tiller to a tractor and the tractor will pull the tiller back and forth across the fields. The mulch-tiller will dig deep into the soil, it provides many benfits. It disturb the surface as little as possible, to leave the surface rough in order to absorb moisture or warm the soil, and to retain varying levels of the residue that was in place prior to the tillage pass.



Press 1 / 2 and 5 / 6 to open/close the tiller.



Press 3 /4 to lower/raise the tiller.

• Seeding

Now the farmer is ready to plant seeds. He/she uses a machine called a seeder to do this. The seeder is attached to the tractor and the tractor pulls it across the ground. The seeder can plant many seeds in the soil at one time. It drops the seeds into the soil (sometimes with Air assistance named Air Seeder : turn ON/OFF either with the PTO (or a hydraulic switch) and then it covers the seeds with soil. You need to turn on the silos to fill the seeders or place the seeders near the big bags and press always the same key "Silo".



Use silos or big bags to fill your seeder.



Press 1 / 2 to open/close the seeder.



Press 3 / 4 to lower/raise seeders parts.



Press 0 to turn On/Off the fan seeder.



You could use the PDA to see the tank level, and guidance system.

• Spraying

Now that the seeds are planted, there is very little that the farmer can do to help the crop. One thing he/she can do, however, is to use a sprayer to spray the crop while it is growing. Chemicals in the spray from the sprayer will kill weeds (with a weeds-killer). This way, there will be - more room and food for the growing crop. To fill the tanks of these machines, place the sprayer near the weeds-killer, turn on the pump and open the valve.

You need for this operation fine weather (sunny). Be aware to the weeds attack beginning after the harvest.



Press 3 / 4 and 5 / 6 to open/close the sprayer arms. Press Lower/Raise to move down/up the ramps.

To spray: press 0 to turn On/Off the pump, and press 1 / 2 to open/close the booms valves.



To fill the sprayer : Press 0 to turn on/off the sprayer pump, and press 7 to open the main valve.

• Harvesting

When the crop appears and his color changing and ready to be harvested and the tops of the wheat stalks are very dry, the farmer uses a machine called a combine. One part of the combine picks up the wheat and carries it to another part on a conveyor belt.



harvested grain to grain elevators in farm or in nearby town silos.

The grains in farm silo could be used to fill your seeders, and to feed the livestock. It is worth taking care not to empty the farm silo because the grains in nearby town silos are more expensive.

Some of these vehicles and commands (For a full commands list, please see the relevant sections below) :



Press 1 to turn On/Off the rotor.

Press 2 to turn On / Off the header.

Press Lower/raise to move up/down the header.

Press PageUp/PageDown to speed up/down engine.



Press Auger to open/close the auger.

Press 0 to empting grains.



Press 3 to turn on/off the straw chopper



Take care about the grain loss with the monitor at the right.

The grain loss is depending of your speed and yields on the fields.

• Balling

A machine named baller can be use to make bales for your livestock. Carry the bales to your farm with a loader or sell them in nearby town's silo. Place the bales on a bale feeder to feed the Livestock. In nearby town silos, just carry your bales trailer on the weigh to get cash in your Bank (your bales disappear).



Press 0 to turn On/Off the PTO and baler.



Press 1 / 2 to open/close the baler door.

• Carrying

And when the market is good. The farmer takes the harvested grain to grain elevators in nearby towns, or he decides to sell the mature livestock or bales. Grain elevators are tall storage places with machines inside them that lift the grain up into bins. The owners of these big grain elevators buy



the wheat. Then the farmer's work is done. Other people will now take over the job of getting the wheat ready for people to eat. The wheat will be taken to flour mills where it will be ground into flour and made ready for use. The livestock is sent to the slaughterhouse, and the bales are sold for others farmers who have livestock but nothing to feed them.

You could weight your grain at arrival and departure in nearby town silos.

• Spreading

Crops has certain fertility requirements, to increase the grain quality and quantity (≥ 2).

You need a fertilizer: a mineral or organic fertilizer. The livestock produce organic fertilizer "manure" for free. This manure is stocked eachtime your cows eat something.



Press Manure to turn on/off the manure pump.



Press 0 to open/close the fertilizer tank.

• Corn silage

Corn in which the entire plant, including the cob, is chopped up. You have to use a forage harvester to do that. A Forage Harvester (also known as a Silage Harvester) is a farm implement that creates silage. Silage is hay or corn that has been chopped into small pieces, and



compacted together in a silo (bunker silo) to provide feed for cattle. Push the silage bricks in front of the fences; the cows will come to eat them.

DIESEL OIL

The tractors need fuel "diesel oil' to work. See the fuel level on the cab consol (press the 'Information' key to toggle to these informations like speed, RPM,..). Check out this consol before farming.



The tank is filled when your vehicle is near the fuel pump. The pump doesn't work if you haven't cash.

BUY/SELL



To buy machine or field, click the Business... option from the game menu. Select the purchase you want to do (either field or machine). Then on the next screen, you will see a list of all the vehicle or field you can buy/sell.. Select an item from the list, then click BUY/SELL, that's all ! If you don't have enough money in your bank account, the transaction is refused.

The machines you buy need memory and resources on your computer, so it's usually ingenious to sell the machines that you don't need for your current job before you go to your farm for the first time (= just after loading a saved game file). Then, these machines will not be loaded on the farm and you'll increase

your FPS (Frame Per Second), and result a better performance of the game and machines.

The number of vehicles that you can use in the same time depends of your computer (processor, memory, graphic card).

PDA (Personal Digital Assistant)

To help you in the management of the farm, most of the farmers have a PDA which inform you about the Game Time (Calendar) - The real time for one Day (100 ms to one hour) – The market for the current month - Money in the bank - Money in the farm silo - Livestock money (cattle value) and manure available - Weather- forecast (the next week weather).



Game time moves at an accelerated rate, which can be adjusted using the "Time +" / "Time –" on keyboard. This is frequently useful when you want to speed up the game while you wait for crops to grow or other like the weather.

The calendar is also shown at the top of the screen so you can see the current time of year. You can play year after year, continually. But you will have a time limit to accomplish your farming objectives.

The weather refrain you from working in fields, for example the combines do not work when the weather is cloud. So, choose the best moment to go in fields. The weather-forecast give you the weather for the next week (Sunny or

Cloudy, Snow).



Map show you the fields (crop, maturity, yield, weeds killer,..).

* Maturity progression: Mature: Yellow Immature: Green

* Drag and drop icons on the field (crops, weeds killer or fertilizer) to seed, kill weeds,...

Tractor show you information about your tractor (fuel,..) and implement (seeds, fertilizer, quantity,..).

Tractor	88		ווו	
(Product :	-)			5
(Level :	0)			
Implements	-			
(Product : R	aygrass			
(Level :	0)			-
		100		
11 - 11 - 11 - 11 - 11 - 11 - 11 - 11	10100	No. of Concession, Name		



Guidance, it provides an easy-to-follow, on-screen light-bar and steering needle.

* Press Setup to modify the working width.

A few working width examples :

Chemical Sprayer : 24m Kuhn Venta : 7m Cover Crop : 6.5m Row-Crop Planter : 8m Seed Drill 1530 : 6.3m 1890 No-till Air Drill : 10m Big tiller : 16.5m Liquid/Manure Sprayers : 6.5m Disco mower : 8.5m Cougar mower : 14m STS combine : 9m

Store/Sell grain

Your farm has grain silos on it, but if you prefer to carry your grains in nearby town silos, your harvest will be sold immediately as you harvest it, at whatever the current market price is. This is an easy way to harvest, but it doesn't allow you to always get the best price, since you can't control when to sell the grain.



You can store your grain after harvest and then watch the

market prices. If you want to hold the grain for a while, in hopes that prices will go up (check out the PDA), you can sell it at a later date.

If you decide to store your grain, you must transfer the grain from your combine to the farm silo. You could use either the grain cart or the truck. Fill them with the grain that was harvested.

You could store multiple grain types in your silos.



YIELD / CROP ROTATION

You must fertilize the soil and rotate your crops if you want to have healthy plants year after year. Before working on fields, the farmer must plan which product he could plant in the soil: "the crop rotation", changing the type of crop grown on the same land from year to year or periodically to control weeds, insects, disease, and replenish soil nutrients or reduce erosion, and result a better yield. The yield is displayed on the combine consol.

Some examples of crops rotation (and yield) :

Year N => Wheat (0.45) Year N+1 => Wheat again (0.25) Year N+3 => Corn (0.45) Year N+4 => Wheat + Manure spreading (0.45 x 2) Year N+5 => Corn (0.45)

LIVESTOCK

Year $N + 6 \dots$



When you begin a new farm, you have cattles. Most of them are immature, and the immature price is a fraction of the mature price (\$300), the price also depends of the market. To feed them, you have pastures (ray grass or the

SIMTRACTOR - FARMER'S MANUAL

livestock barn with grains and the milking system (be aware that you need grains in your silos to get your cows to the milking system). As you feed the cattle, and time passes, they will gain weight and give milk and new cows.

The cows could give milk at this weigh: 485

So, we suggest you to separate mature cows from young ones with the PDA (it displays information about your cows).



You could use the bucket or the feeder door to take your bales, press 5 and 6 to open/close the door.

Press 0 to turn on the feeder, and press 1 and 2 to move the bales on the floor.



Press 3 and 4 to move the blower arm.



To place the cows on the cattle trailer, you need to push them. And open the door to get them outside.



You can sell them as immature, but the sale price will still be the reduced amount.

Note that you need to drive the cattle trailer to sell these cattles in nearby towns silo. Just place the trailer on the weigh to sell your cattles. If you hold the cattles until maturity, you will get full market price for them and will be more profitable. You don't have to sell them as soon as they mature, you can keep feeding them to reproduce, adding more immature cattles...

GAME OBJECTIVE

You've just inherited an entire farming operation with house, barn, fields, tractors and implements, livestock, and even cash. At the begin, you have several machines and fields. You can harvest, till and drill. You are a "Weekend Farmer", farming early mornings, nights and weekends, trying to get the best harvest; to finally farm big enough to afford to buy new machines and fields and grow up your farm.

When you begin a new game, the date is first july. So you prepare the wheat harvest.



So you begin to harvest with 'STS', after you can buy the 'STSCorn' to harvest the corn. Then, you will have to till and seed these fields. And in the winter, you should buy as soon as you can a sprayer to spray your crops with a weedskiller...

CHEAT CODE TO GET MONEY : press CTRL + ALT + B

CHEAT CODE TO GET MANURE : press CTRL + ALT + M

PART

Commands list

You have to control the machines either with the keyboard or a joystick. A joystick is highly recommended to control the machines, also a throttle or slider to command the hydrostatic of several machines (like the combines) is really appreciate..

Keyboard

Use the Up/Down and Left/Right move keys for direction, RPM and brake. About the others keys to manage the game (time...), please see the section later in this page or the control options menu in SimTractor. You can personalize the keyboard keys as you want.



Anti-aliasing reduces the prominence of jaggies by surrounding the steps, this reduces the jagged appearance of the lines, you need to switch SimTractor to

windows to see the changes.

Far clipping sets the distance of view, changes this value according to your computer resources.

These setting are automatically saved when they have changed.

Commands list

English language (Qwerty) / Keyboard key

Ignition :]
Lower implements :	I.
Raise implements :	\backslash
Forward gear :	М
Backward gear :	,
Shift up :	•
Shift down :	/
Silo :	[
Manure :	\backslash
Cab / Auger :	=
Lights :	-
0:	0
9 :	9
8 :	8
7 :	7
6 :	б
5 :	5
4 :	4
3 :	3
2 :	2
1 :	1
RPM Up :	Pg. préc.
RPM Down :	Pg. suiv.
Detach 1 :	Suppr
Attach 1 :	Inser
Detach 2 :	END
Attach 2 :	HOME
Machine informations :	``
PDA Display :	TAB
Time + :	0
Time - :	Ã
Far Clipping - :	F9
Far Clipping + :	F10
Antialias - :	F11
Antialias + :	F12
Camera 1 :	F1
Camera 2 :	F2
Camera 3 :	F3
Camera 4 :	F4
Camera Zoom-:	F5
Camera Zoom+:	F6
Day/Night :	F7
Mirror Rear View :	F8

French language (Azerty) / Keyboard key

Démarrage :	\$
Descendre outils :	ù
Monter outils :	*
Vitesse Avant (inv) :	,
Vitesse Arriere (inv) :	;
Vitesse +1 :	:
Vitesse -1 :	!
Silo :	^
Lisier :	<
Cab / Vis vidange :	=
Lumières :)
0 :	à
9 :	Ç
8 :	_
7 :	è
6 :	-
5 :	(
4 :	
3 :	п
2 :	é
1 :	&
RPM + :	PG.PREC
RPM - :	PG.SUIV
Detacher 1 :	SUPPR
Attacher 1 :	INS
Detacher 2 :	FIN
Attacher 2 :	ORIGINE
Machine informations :	2
Affichage PDA :	TAB
Temps + :	A
Temps - :	Q
Far Clipping - :	F9
Far Clipping + :	F10
Antialias - :	F11
Antialias + :	F12
Camera 1 :	F1
Camera 2 :	F2
Camera 3 :	F3
Camera 4 :	F4
Camera Zoom-:	F5
Camera Zoom+:	F6
Jour/Nuit :	F7
Retroviseur :	F8

Joystick

Use the X/Y joystick axis to steer a machine for direction, RPM and brake. About the others keys to manage the game (time...), please see the appropriate section later in this page or the control options menu in SimTractor.

The joystick device will need to be set-up in Windows control panel, you can't change the buttons order in game, just use your joystick program to change the buttons configuration.

Here are the settings in **Control Options menu** (*Main menu**Game menu**Options**Control Options*) :

Keyboard as controller (default) :

Keyboard
Off
Off
Off
Off
On

One Joystick as controller :

Controller	Joystick
Two Joysticks	Off
Reverse ID	Off
Reverse ID only	Off
Z Axis *	Off
Slider *	On

* 'Z axis' and 'Slider' settings depend on your throttle type. Either use 'Z axis' or 'Slider' (but don't turn ON the two settings).

If you haven't throttle on joystick, turn off this settings and use the 'UP,DOWN' keys of keyboard.



Two joysticks as controller :

You can use two joysticks for more realistic experience (for the combine and telehandler)...

Controller	Joystick
Two Joysticks	On
Reverse ID *	Off
Reverse ID only	Off
Z Axis *	Off
Slider *	On

* Use 'Reverse ID' setting to reverse joystick ID without quit game.
Use 'Reverse ID only for combine' setting if you prefer to change the joysticks order when you drive the combine.
'Z axis' and 'Slider' settings depend on your throttle type (like the one joystick configuration).

