QUICK START GUIDE

T SERIES

N SERIES

VERSU
SmartTouch

EN

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FUSE
SMART FARMING. SYNCHRONIZED.

VERSU – THE POWERSHIFT REVOLUTION

This guide has been assembled to help Valtra operators to quickly become familiar with their tractor. Please note that this is NOT an operator's manual. Before operating the tractor, it is important that you read the operator's manual with all safety points.

It provides information on some of the basic features and functions and pointers on how to operate the tractor. For more detailed information, please consult the user manual or contact your local dealer.

Valtra Versu is the king of powershift transmissions, combining the efficiency and pulling power of a powershift and the flexibility of a CVT. Complete with electronic hydraulic control, hydraulic assistant and smooth operation via drive lever, Valtra Versu really is a powershift revolution.

Features

- Revolutionary Powershift (5PS / 30+30)
- Load-sensing hydraulics with electronical control
- SmartTouch user interface
  - industry benchmark in easy operation
- Intelligent drive lever – drive a powershift like a CVT
- Technology all integrated
- Hydraulic assistant
- AutoTraction
- Engine braking
- Very easy to operate
- HillHold
- Made in Finland by Valtra

Models

- Valtra N135
- Valtra N155eco
- Valtra N175
- Valtra T145
- Valtra T155
- Valtra T175eco
- Valtra T195
- Valtra T215
- Valtra T235
- Valtra T255

YOUR

WORKING

MACHINE

SMART A-PILLAR DISPLAY

The brand new Valtra smart A-pillar display brings all the information you need to exactly where you need it. With the essential information always displayed up top in a clear and easy way you'll never be left searching for what you need to know. The lower drive displays can be configured to show exactly what you want to see.

THE DISPLAY CONSISTS OF SEVERAL DISPLAY TECHNOLOGIES FOR SHOWING TRACTOR´S STATE AND CONTROLLING ITS BEHAVIOR.

1. The uppermost area is a LCD Screen showing: Outside temperature, clock time, Engine RPM, Ground Speed, Fuel & AdBlue level and Engine temperature.

2. Then there are two LED Icon Matrix Contents, upper one showing information marking lights and another one in the bottom of the instrument, showing warning lights.

3. Between them is a large TFT (thin-film-transistor) screen, which can be configured in many ways as well as used for tractor settings.

SMART A-PILLAR DISPLAY

1. Use the wheel encoder and two buttons to navigate screen
2. Via the settings menu select “Drive Display Mode” and select whether you want two, one or zero displays
3. Using the encoder select the desired Drive Display and configure it to display the information you want
4. The brightness of the A-pillar display can be adjusted via the left stalk.
5. Via the settings menu you can activate Auto Dim and set the speed you want the display to automatically darken.

SMARTTOUCH ARMREST

- Driving / transmission
- Hydraulics
- 3-point linkage
- Power Take-Off
- Electrics / programmable

1. Drive lever
2. Hydraulic joystick
3. Programmable hydraulic function e.g. live 3rd valve in loader
4. Selecto 3rd and 4th valve (for front loader)
5. Hand throttle control
6. Automatic/ Manual mode
7. Memory button 3
8. Engine RPM memory 1
9. Engine RPM memory 2
10. Four-wheel drive (4WD)
11. Four-wheel drive (4WD) automatics
12. Differential lock
13. Differential lock automatics
14. Rear linkage lifting, when attaching an implement
15. Rear linkage lowering, when attaching an implement
16. ON/OFF Valve A (via quick couplers)
17. Blue control lever for auxiliary hydraulics
18. Brown control lever for auxiliary hydraulics
19. Green control lever for auxiliary hydraulics
20. White control lever for auxiliary hydraulics
21. Rear linkage depth control with latching settings
22. Radio volume
23. Radio channel
24. Radio mute
25. Rotary beacon
26. Valtra Guide engage
27. QuickSteer engage
28. Master activation (hydraulics, programmable buttons, Valtra Guide)
29. Working lights main switch
30. ON/OFF Valve B (e.g. pick-up hitch push back function)
31. Switch for front PTO (when front PTO is not included: switch for rear PTO)
32. Switch for rear PTO (when front PTO is not included: no switch)

DRIVE LEVER

1.	Memory button 1
2.	Memory button 2
3.	Speed range (ABCD) up
4.	Speed range (ABCD) down
5.	Rear lift (AutoControl): Lift / Stop / Lower / Float switch
6.	Hydraulics fingertip lever 1
7.	Hydraulics fingertip lever 2
8.	Power shuttle switch
9.	Max. speed / cruise adjustment

OTHER CONTROLS

1.	Phone holder
2.	Emergency brake
3.	3-pin current socket
4.	3-pin current socket (optional)
5.	SmartTouch Extend connector (optional)
6.	ISOBUS terminal connector (optional)
7.	Implement signal connector
8.	Button for fuel-operated heater (optional)
9.	Double USB port (quick charge) (optional)
10.	2-pin current socket
11.	Power switch for 2-pin current socket
12.	2-pin current socket (controlled with power switch)
13.	Power outlet
14.	Trailer hitch release lever (optional)

SMARTTOUCH TERMINAL

The user interface has two sections: settings and drive displays. You can move between these sections with the Home (4) and Drive display (5) buttons.
The settings have three levels: Home screen, setting screen and pop-ups.
The frequently used settings are in the setting screens and less frequently used in the pop-ups.

Display functions

1. Display mode (Night/Day/Off)
2. OK
3. Back
4. Home
5. Drive display
6. Control wheel
7. USB and ethernet connector

Drive displays show information related to the tractor, implements and work tasks. You can view the drive displays full-sized or in quadrant mode. You can also quickly move from the drive display screen to the related settings and back.

NOTE: You can activate and deactivate pop-ups from the terminal settings.

TIP: In the dark you can turn the display off to get better visibility to your work.

SETTINGS SCREEN SYMBOLS

Access to all tractor functions with less than three taps or swipes in the touch screen.

Front

- Terminal settings
- Steering
- Suspension
- Hydraulics
- Front power take-off
- Front loader
- Engine
- Lights
- Armrest and Isobus AUX
- Transmission
- TaskDoc
- Valtra Guide
- Audio & Phone control
- Go to rear screen

Back

- Tractor health
- Camera
- Hydraulics
- Rear power take-off
- Rear linkage
- Reversible fan
- Implement settings
- ISOBUS universal terminal
- ISOBUS settings
- Go to front screen
- Notes
- Calculator

DRIVE DISPLAY

1. You can access the drive displays from the ▪ button in the terminal.

2. This shows 1 or 4 different displays according to your settings.

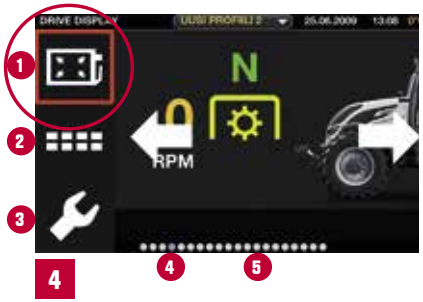
   Swipe one of the screens left or right to view different drive displays.

   Tap the screen you want to modify to open the settings panel.

3. You can widen one of the four drive displays by double tapping it or tapping it once and then tap from the icon ▪. You can change one display to another.

4. Tap the screen you want to modify to open the settings panel.

   1. Change between full/quadrant modes
   2. Open drive display Selection pop-up
   3. Go to settings screen
   4. Active drive display
   5. Visible drive displays



Possible drive displays

Transmission
Front & rear hydraulics
Front & rear PTO
Rear lift
Tractor health
Memory button functions
Safety camera
Map (Valtra Guide)
Counters
ISOBUS implement terminal
Radio & Audio

DRIVING MODES

AUTOMATIC MODE

Intelligent drive lever gives you possibility to drive a powershift tractor like a CVT.

When you start the tractor the automatic driving mode is automatically selected. There are two main ways of driving:

- Pedal driving (no symbol on displays)
- Lever driving – Now even in powershift tractors! (symbol on displays)

You can control the driving speed with the drive pedal or the drive lever. The powershift step (1 to 5) is changed automatically. Speed range changes (ABCD) can be done with the +/- buttons on the lever.

TIP: You can also adjust the engine braking effect in automatic mode (see page16)

DRIVING WITH DRIVE LEVER

When controlling speed with the lever, the symbol shows on the A-pillar display.

Start driving:
When direction has been selected, the tractor starts moving immediately.
Small movement of the lever changes the speed precisely. Longer movement changes the speed faster.
Versu shifts automatically in automatic mode.
Drive lever speed is visible in the driving display. Whenever you use the lever, you are in lever mode. To change to pedal mode, tip the lever left.

MANUAL MODE

Manual mode can be selected with the push button on the armrest. When manual mode is engaged, the gear is displayed on the A-pillar display and the SmartTouch display. The drive lever now works as a gear lever. From Transmission settings you can set if AUTO mode is always ON when starting engine, or if last used mode is used also after engine start. From Transmission settings you can set if AUTO mode is always ON when starting engine, or if last used mode is used also after engine start.

CRUISE CONTROL

Speed cruise control is controlled by the drive lever.
It offers the possibility to maintain a steady speed.

1.	Push the drive lever to the right to engage cruise, hold for 2 seconds to store new speed.
2.	When cruise control is active you can easily adjust your cruise speed with the thumb wheel located on the drive lever.
3.	Reactive cruise speed by quickly pushing the drive lever to the right.
4.	Cruise deactivates by pressing brake pedals or push the drive lever left.
5.	Together with the memory buttons M1, M2 and M3 you have the possibility to save in total four different speed cruise speeds to be used at the same time.

A-B-C-D = FOUR SPEED RANGES

Four speed ranges – less strain = increased efficiency.
Versu has also LA and LB creeper ranges standard.

	40 km/h	50 km/h	
LA	0.4-1.4 km/h	0,5-1,7 km/h	Very low speed E.g. special crop tasks
LB	0.9-3.0 km/h	1,0,-3,7 km/h	Very low speed E.g. special crop tasks
A	2.0-6.9 km/h	2.5-8.6 km/h	High power requirement, low speed E.g. subsoiling and de-stoning
B	4.4-14.8 km/h	5.5-18.5 km/h	Medium/high power requirement, medium speed E.g. ploughing, bed forming, power-harrowing, drilling
C	6.5-22.1 km/h	8.2-27.8 km/h	Medium speed E. g. field transport, mowing, hedge-cutting, drilling, starting with heavy loads
D	14.1-40.0 km/h	17.7-50 km/h (57 km/h)	High forward speed, road transport range

NOTE: Approximate speed ranges between 1400-2100 rpm and 20.8-42 tyres. For exact speed in each gear, please see speed calculator on www.valtra.com

HOW TO
CHANGE SPEED RANGE

TO CHANGE RANGE MANUALLY

1. Simply push + or - button on drive lever.
2. Via transmission menu select “Lever Range Change” and then you can change up & down ranges by just pushing or pulling drive lever.

TO CHANGE RANGE BCD AUTOMATICALLY

3. Via transmission menu activate automatic shifting between speed ranges B and C or C and D
4. While driving in D range with automatics you can prevent the transmission changing to C range for 20 seconds by pressing the + button (useful for junctions and roundabouts)

CREEPER RANGE SELECTION LA, LB

5. Select the creeper by pressing the - button when driving in A range (below 2km/h) and the clutch pedal depressed. Change to neutral by pressing - minus for 1 second when in LA range
6. You will notice that the range will change when the creeper speed range symbol flashes continuously on the A pillar display

POWERSHIFT REVOLUTION
AUTOTRACTION

Autotraction lets you stop the tractor using just the brake pedals! It is the most intuitive and easiest way to drive a powershift on the market!

AUTOTRACTION IS AS DEFAULT ACTIVATED, TO DEACTIVATE IT:

1. Go to the transmission screen.
2. Open the additional transmission settings.
3. Select the tab for clutch adjustments.
4. Engage and disengage the automatic traction control with the button.

HILLHOLD

Hillhold holds the tractor stationary and ensures safe and easy start off with zero roll back even on steep hills!

5. Stop tractor by pressing brakes. (AutoTraction must be active)
6. Keep brakes depressed and place shuttle into P and then select direction
7. Release brakes. Tractor stays stationary
8. Start off by pressing accelerator pedal

ECOPOWER-MODE
(ONLY ON MODELS N155ECO AND T175ECO)

EcoPower is a Valtra innovation for more than 15 years. EcoPower-mode is designed especially for work that requires high torque, but not constant engine revs e.g. pulling work on the field. With EcoPower you get the maximum power and torque at approximately 200 RPM lower than in the normal mode. This allows lower noise levels and lower fuel consumption.

ENGAGE THE ECOPOWER-MODE THROUGH THE SMARTTOUCH DISPLAY

1. Go to the engine screen with the engine button
2. Select the EcoPower-mode to engage the EcoPower mode

When using Eco-mode, the engine revs will not exceed 1900 r/min. Both the highest power and the highest torque will be reached by much lower engine speed.

TIP:

Pulling work: The low revs can be best tested in heavy pulling work. Most of the competitors´ tractors cannot pull effectively with such low engine revs like 1000 rpm.
Transport (uphill): With Eco-mode, the tractor can be driven with higher powershift ”gear”-lower revs
PTO work: With 540E & 1000E PTO’s also PTO work is an easier task

ENGINE SPEED MEMORY

Valtra VERSU has an Engine Speed memory that will keep engine RPM constant regardless of ground speed.

1. Go to the engine screen with the engine button.
2. You can easily preset Engine Speed memory 1 and 2: Change the value by selecting the appropriate memory and sliding it to the correct position or use the encoder wheel.
3. Alternatively, you can set your engine speed cruise directly to the speed currently in use by pressing 3 seconds the Engine Speed memory buttons 1 or 2.
4. Push the engine RPM cruise control button to engage and disengage the RPM memory function.

TIP: Engine brake is available and adjustable in powershiftmodels as well.

There is no need to change to manual model to create engine braking by manually shifting down.

By pulling drive lever back engine braking is activated. If engine braking is set aggressive, the automatics will shift lower powershiftsteps by keeping engine revs high.

System works and is set similar way than in CVT transmissions.

MASTER ACTIVATION

Hydraulics, steering valve, memory buttons and isobus aux can all be actived via the master activate button on the smarttouch armrest. When starting up the tractor simply press the button on the armrest and then select from the screen which functions you want to activate. You can easily deactive all functions by pressing the button again, bringing extra saftey on the road.

1. Press button on armest
2. Select from pop-up which functions you want to be actived. (If nothing pressed, previously selected functions activate)
3. Press button again to deactivate

PROGRAMMABLE FUNCTIONS

MEMORY BUTTONS

You can add one-action programmes or sequence (U-Pilot) action programmes to the memory buttons. You can program almost any function in the SmartTouch to the memory buttons.

1. Open the Armrest screen
2. Tap the desired memory button
3. Tap the one-action programme selection icon.
4. Tap add action icon.
5. Tap the action or action category to select it.
6. Tap ✓ to add it.
7. Tap ✓ to accept the one-action programme.

To change the one-action programme:

- Delete the current one-action programme.
- Add new one-action programme.

Programmable function examples: PTO start/stop
Speed cruises (up to 4 speed cruise memories),
Valtra Guide activation

TIP: With different profiles you can easily change usage of Memory buttons according to your settings per profile.

U-PILOT
HEADLAND AUTOMATICS

1. Open the Armrest screen.
2. Tap the desired memory button.
3. Tap the sequence icon.

RECORD A U-PILOT PROGRAMME

4. Tap the record icon.
5. Perform the operations in the required order.
6. Tap the record icon to end the recording.

PROGRAM A U-PILOT PROGRAMME

7. Tap add action icon.
8. Tap the action or action category and select it.
9. Add the rest of the actions alike.
10. Change order of the actions by sliding with your finger (if needed).
11. Edit the time and distance between actions.

TIP: U-Pilot sequence is saved to the profile in use (e.g. ploughing). When changing the task, change the profile and all the settings and sequences are there ready when you do programming once!

You can easily fine-adjust your U-Pilot via touchscreen, also while driving.

PROGRAMMABLE FUNCTIONS
HYDRAULICS

There are totally 9 different programmable hydraulic controls in the SmartTouch armrest. The auxiliary hydraulic controls are positioned on the armrest. The joystick, fingertip levers and linear levers are programmable, thus you can select which lever controls which valve.

1. Joystick
2. Joystick fingertip lever
3. Upper button (Selecto 3)
4. Lower button (Selecto 4)
5. Hydraulics fingertip lever 1
6. Hydraulics fingertip lever 2
7. On/off valve A
8. On/off valve B
9. Blue linear lever
10. Brown linear lever
11. Green linear lever
12. White linear lever
13. Master activation switch

PROGRAMMABLE HYDRAULICS

You have two ways to configurate your hydraulics and hydraulic controls with the SmartTouch armrest:

1. FROM MEMORY BUTTONS SETTING YOU CAN PROGRAM A VALVE TO ANY CONTROL

1. Open the memory buttons setting.
2. Select control you want to program.
3. Tap the front or rear valve, front or rear linkage, front loader or ISOBUS function to select it.
4. Select ✓ to accept changes.

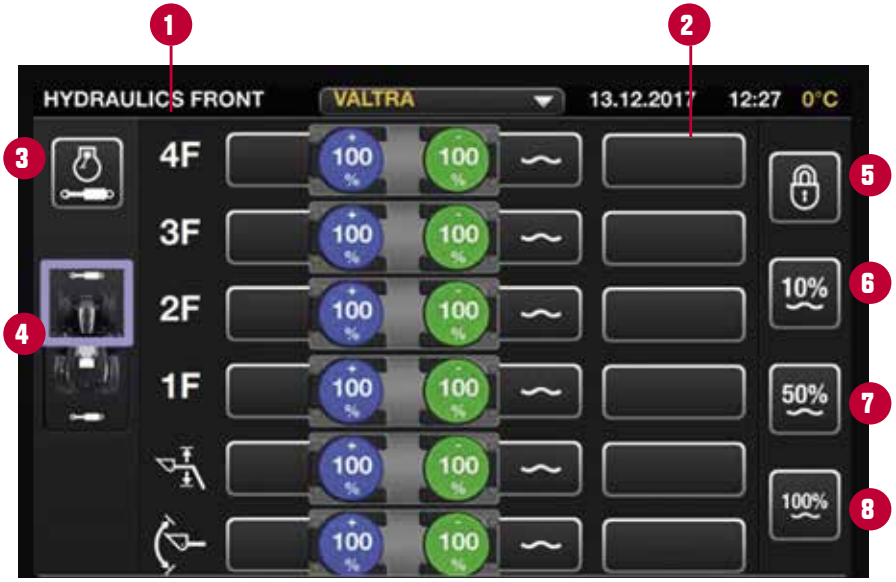
2. FROM THE HYDRAULIC SETTING YOU CAN SET A CONTROL TO ANY VALVE

1. Open the front or rear Hydraulics screen.
2. Tap the icon of the valve control device from the desired valve row.
3. Tap the control device to select it
   NOTE: You can select multiple control devices for the same valve.
4. Select ✓ to accept changes.

HYDRAULIC SETTINGS

You can easily change between front and rear hydraulic setting view with just one swipe in the touch screen.

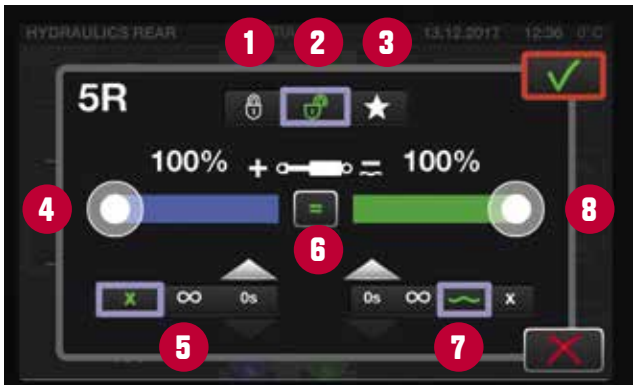
Easy access to hydraulic settings



1.	Front valves The number of front valve and F for front and R for Rear valve
2.	Valve control Opens a pop-up window to select the control (9 possibilities)
3.	Hydraulics assistant
4.	Front/rear hydraulics selector Select between front and rear valve settings.
5.	Lock all valves Lock/unlock all valves from setting changes.
6.	Flow setting of 10% and floating for all valves
7.	Flow setting of 50% and floating for all valves
8.	Flow setting of 100% and floating for all valves

HYDRAULIC PROGRAMMING
VIA HYDRAULIC SETTINGS

All settings per valve done via single pop-up.
Swipe or tap functionality available.



1.	Valve settings locked
2.	Valve settings open
3.	Priority setting - Sets priority to ensure sufficient oil flow to the valve
4.	Flow rate of the + port
5.	Function selection of the + port x = no function active ∞ = position lock continuously on 0s = timed duration of the position lock
6.	Flow rate adjustment - Separately or both at the same time
7.	Function selection of the – port 0s = timed duration of the position lock ∞ = position lock continuously on ~ = floating position x = no function active
8.	Flow rate of the – port

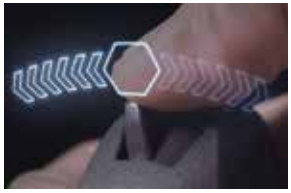
TIP: Hydraulic settings are saved to the profile in use. When changing the task, change the profile and all the settings are there ready when you do programming once!

FRONT LOADER

Using the hydraulic joystick is the easiest way to control the front loader, but you can also control the front loader from e.g. the drive lever's mini linear stick or any other hydraulic control.

1. Open the front hydraulics screen by tapping the hydraulics symbol.
2. Select the control devices of the front loader (e.g. joystick).
3. Save your settings by tapping on the green check mark.
4. Activate the auxiliary hydraulics.
5. Pull the joystick rearwards to lift the front loader;
   push the joystick forwards to lower the front loader.
   Pull the joystick to yourself to tilt the loader rearwards;
   push the joystick away from yourself to tilt the loader forwards.

TIP: With the live 3rd function mini linear stick on top of the hydraulic joystick extremely precise movement is possible: the more you press the more flow you get.



PICK-UP HITCH AND LINKAGE

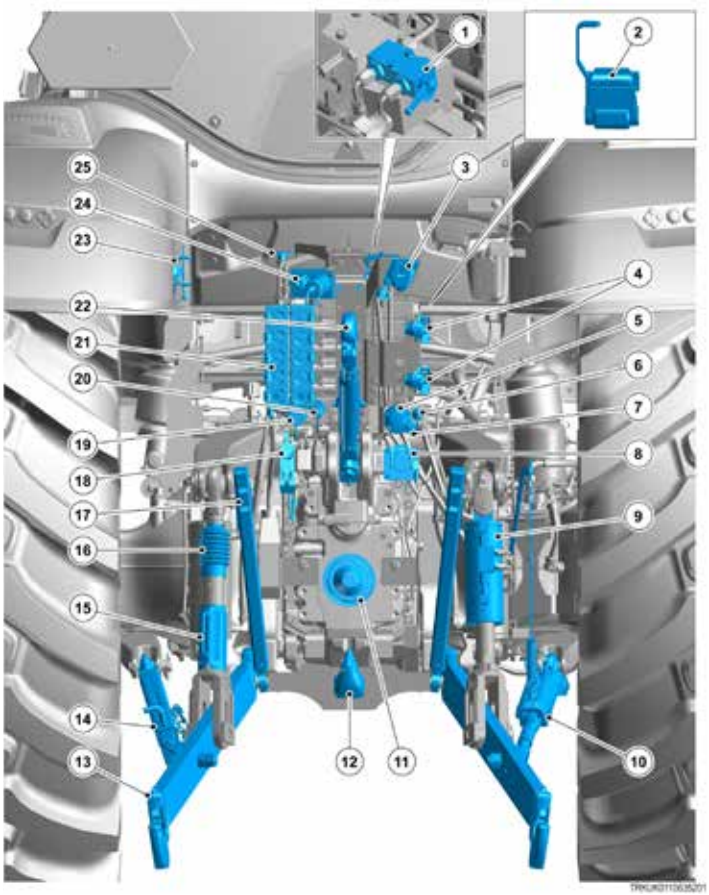
TO UNLOCK THE PICK-UP HITCH

1. Push the lifting button to fully raise the linkage.
2. Pull the hitch latch lever to unlatch the hitch. Keep the lever pulled.
3. Push the lowering button to lower the linkage. Release the hitch latch lever when the hitch has passed the locking latch.

TO LOCK THE PICK-UP HITCH

4. Push the lifting button until the hitch latches. You can hear a click and the trailer hitch release lever jumps a little.
5. Push the lowering button to lower the linkage slightly.

REAR CONTROLS
AND CONNECTIONS



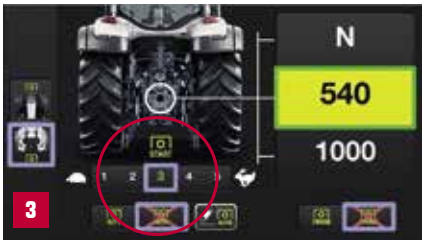
The pick-up hitch is optional with many alternatives.

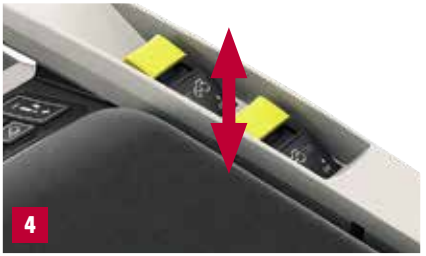
1.	Front linkage shut-off valve (optional)
2.	Trailer coupling, Duo-Matic (optional)
3.	Trailer socket for trailer with ABS brakes
4.	Trailer coupling, 2-line system (optional)
5.	Trailer socket
6.	Quick coupling for air pressure devices (optional)
7.	Power outlet (12 V)
8.	ISOBUS connector (optional)
9.	Hydraulic levelling link (optional)
10.	Automatic side limiter (optional)
11.	Power take-off (PTO) shaft
12.	Pick-up hitch (optional)
13.	Lower link
14.	Side limiter
15.	Levelling screw
16.	Lift link
17.	Pick-up hitch lift links (optional together with the pick-up hitch)
18.	Quick coupling for hydraulic trailer brakes (optional)
19.	Auxiliary hydraulics system return coupling
20.	Case drain coupling for Power Beyond (optional)
21.	Quick couplings, auxiliary hydraulics
22.	Top link
23.	Top link/lower link ball storage bracket
24.	Power Beyond couplings
25.	Auxiliary control device for parking brake

PTO

You can use the power take-off (PTO) to transmit power from the tractor to an implement.

1. Start the engine and tap the PTO symbol on the SmartTouch screen to open the PTO settings.
2. Select the PTO speed. The value stays even in memory when you turn the ignition off.
3. Adjust the setting for the PTO start aggressiveness if needed. Higher value gives you a shorter engagement time.
4. You can control the start and stop of the PTO with the switches on the armrest.
   Push the switch down and pull it back to start the PTO.
   To stop the PTO, push the PTO switch down and forward.





TIP: You can program PTO start and stop to M1, M2 or M3 buttons as single operation or as a part of headland management (U-Pilot) sequence.

PTO Cruise: when activated you can get correct PTO speed automatically with press of engine speed memory button, see next page.

AUTO PTO

With the automatic power take-off (auto PTO), you can set the limits for the automatic start and stop of the PTO. You can give a different limit for when you lift the rear linkage or lower the rear linkage. The auto PTO controls the start and stop of the PTO in these conditions:

- auto PTO is engaged
- rear PTO is in operation
- ground speed PTO (GSPTO) is not engaged
- rear hitch is in the working mode or the floating mode
- driving speed is at least 1 kmh
- headland management is not used.

1. Open the PTO rear screen.
2. Engage the auto PTO with the auto PTO switch on the SmartTouch display.
3. Set the limit when the PTO starts when you lower the linkage.
4. Set the limit when the PTO stops when you lift the linkage.

PROFILE

All settings of the SmartTouch display are stored in profiles. Every setting you change (except terminal settings) is automatically saved to the active profile.

You can create different profiles according to:

- User
- Specific work
- Implement
- User + implement combinations
  (when multiple operators per tractor)

CREATE A PROFILE

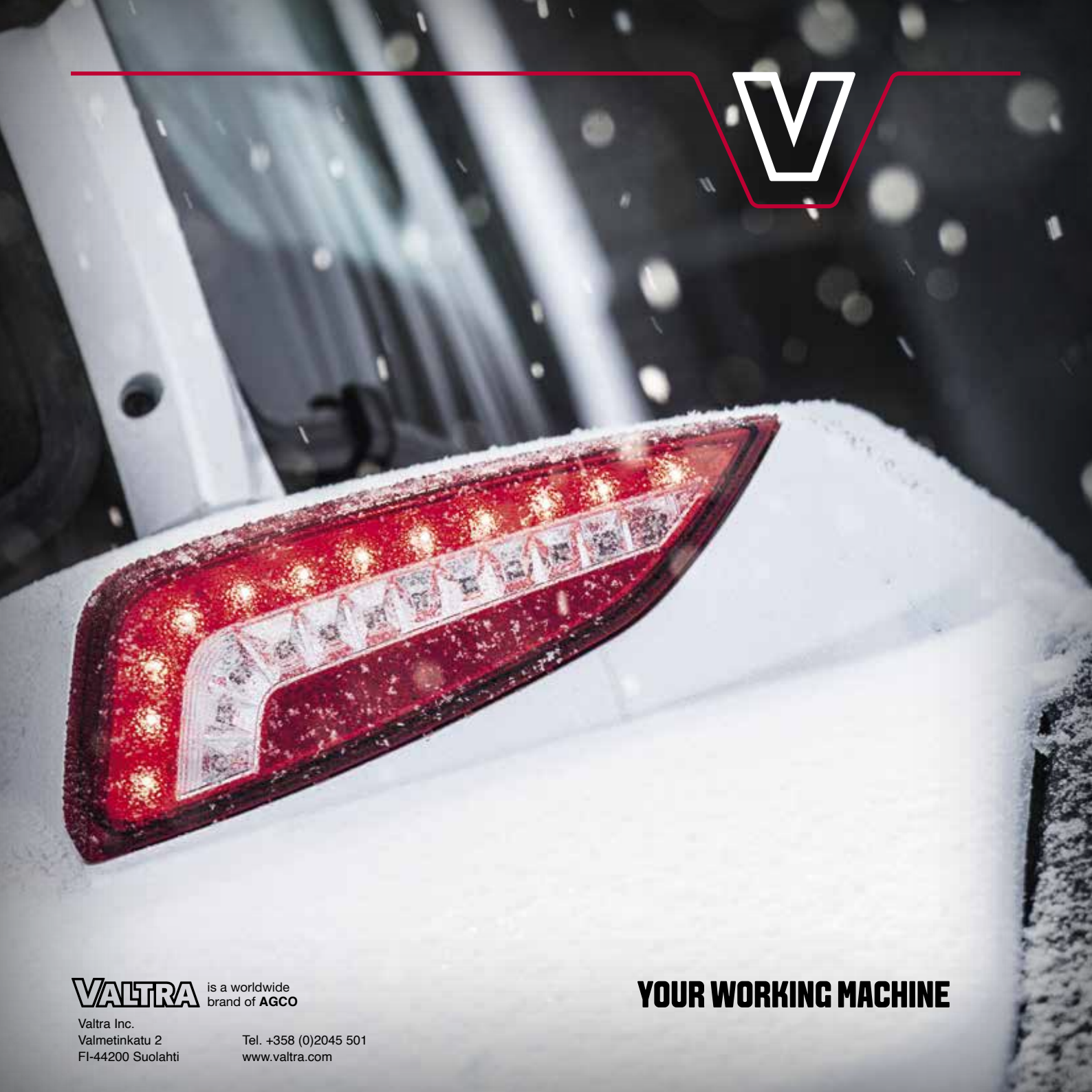
1. You can enter the profile settings from every terminal menu by tapping on the top bar.
2. VALTRA is your default profile you cannot delete or change. Copy the default profile.
3. Rename the new profile and modify the settings.
4. Tick the box in front of the new profile´s name and activate the profile.
5. Modify the settings, which are saved to the profile in use.

TIP: There is no limit of profiles you can create.

QUICKSTEER
OPTIONAL

QuickSteer is a steering system controlled by an electrohydraulic steering valve. The adjustable steering ratio gives you the possibility to alter the reaction speed between moving the steering wheel and the tractor turning which is helpful whenever the driver needs to steer a lot, for example when driving in a small yard or when doing front loader work.

1. Engage QuickSteer with the button in the rear key pad of the armrest. The light on the button goes on.
2. Go to the steering setting screen by tapping the button.
3. Adjust the QuickSteer sensitivity slider for your drive direction (forward or reverse). The influence on the steering ratio can range from small (1) to big (5).
4. Disengage QuickSteer by pushing the button on the armrest. The light on the button goes off.



VALTRA is a worldwide brand of **AGCO**

YOUR WORKING MACHINE

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