Manual for
Autostart Speed Control

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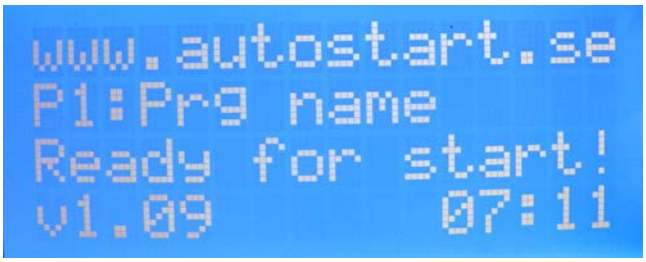
Start the Autostart Speed Control

The Autostart Speed Control is started by pulling the red main switch button on the instrument cluster marked with "Autostart".
When the text "Ready for start!" is shown in the display, the equipment is ready to use, see picture below.



Screen 1 - Main screen, Ready for start!

The last program used will automatically be selected after startup.

Buttons

The Autostart Speed Control unit has three buttons (Program, Print and START) and one scroll knob with a push function.

Scroll knob

The Scroll knob has several functions.
It can be turned clockwise or counterclockwise to move the > marker in menus or the _ cursor in edit mode, see picture below:

Picture 1 - Operating the Scroll knob

When the scroll knob is pushed down (Enter), the current menu (where the > marker is located) is chosen.
If the > marker is located at an editable row (see chapter *Program edit*), the _ cursor will appear at the row. To move the _ cursor on the selected line use the scroll knob.
In edit mode the data can be changed by pushing the Scroll knob down and simultaneously turning

it, when the data is changed release the Scroll knob.
Exit the edit mode by moving the _ cursor to the beginning or the end of the row.

Choose race program

The Autostart Speed Control unit can have eight different predefined race programs (P1-P8).
To choose race program press the blue button marked "Program". The current active race program name and number is shown in the display, "Px: Program Name" where x is a number between 1-8.

Start a race program

1. Place the car in the start position on the race track.
2. Make sure the correct race program is chosen (see chapter *Choose program* for instructions how to choose program).
3. Press the brake pedal.
4. Choose gear, normally D (drive) or 2.
5. Release the brake pedal.
6. Press the red button marked "START".

During an ongoing race program the driver shouldn't use the accelerator pedal or the brake pedal. Pressing the brake pedal during an ongoing race program will abort the race.

Abort a race

To abort an ongoing race program press the brake pedal or press the red main switch button on the instrument cluster marked with “Autostart”.
It is also possible to drive faster then predefined speed by using the accelerator pedal, but it will not abort the current race.
The race is automatically ended 100 meters after the last defined meter/speed setting.

Emergency stop

The Autostart Speed Control is emergency stopped by pressing the red main switch button on the instrument cluster marked with “Autostart”.

Printer

The Autostart Speed Control equipment is delivered with a printer. The printer can be used for printing the speeds of the latest race. To print the latest race program press the yellow button marked “Print”.

It is also possible to print the program settings and the basic settings for the Autostart Speed Control unit This is done from the Settings mode. The printouts could be kept as a backup in case of unit failure, theft etc.

Settings

Enter Settings mode

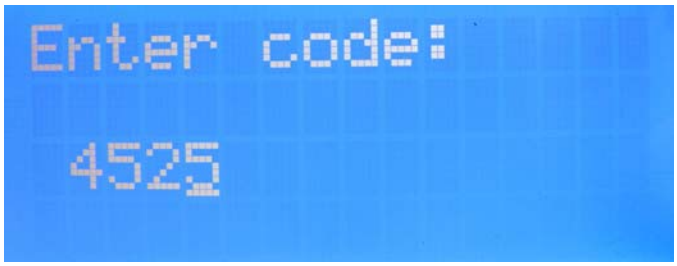
Press the blue (Program) and yellow (Print) buttons simultaneously and release them to enter the Settings mode of the Autostart Speed Control unit, see picture below.

Picture 2 - Enter Settings mode

To enter the settings mode you will need to enter a four digit code, 4525. This code is preventing unauthorized users to change the settings of the Autostart Speed Control unit.

Enter code

Use the Scroll knob to enter the digits, refer to chapter *Scroll knob* how to do this. When the code 4525 is entered, move the _ cursor to the beginning or end of the row to enter the Settings menu.



Screen 2 - Enter code for Settings mode

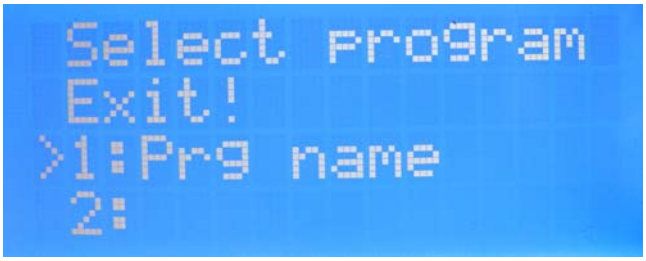
Settings menu

The Settings menu contains the following choices:
Exit
Programs
Settings
Pulse count
Throttle test
Regulator test
Clock settings
Print settings

Exit is used for returning to the main screen. When the main screen is present in the display the Autostart Speed Control unit is ready for use (e.g. ready to run races).
Program is where the eight different program races are defined.
Settings are the basic settings for the Autostart Speed Control unit (normally only changed during installation).
Pulse count is used to count number of pulses per 1000 meter (normally only used during installation).
Throttle test is used determine minimum throttle (normally only used during installation).
Clock settings is where the date and time is changed.
Print settings is used to print all the current settings of the Autostart Speed Control unit.

Programs

The Autostart Speed Control unit can have eight different programs (P1-P8). These program races are defined by choosing the menu choice “Programs” in the Settings menu. Move the marker > to the row Programs and push Enter (the Scroll knob). The “Select program” screen will be shown, see picture below:



Screen 3 - Select program

The following menu choices are available in the “Select program” menu:
Exit
1:Prg name
2:Program Name 2
3:
4:
5:
6:
7:
8:

Exit is used for returning to “Settings menu”.

1:-8: are the different program races, the ones without a name is undefined and available for creating new program races.

To change or create a new program, move the marker > by turning the Scroll knob clockwise to one of the programs 1-8 and push Enter. The “Program edit” screen will be shown see below:

Screen 4 - Program edit

Program edit

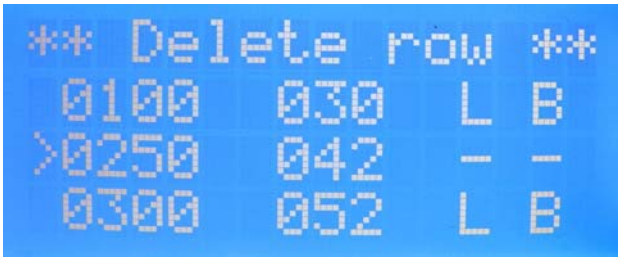
The following menu choices are available in the “Program edit” menu:
Exit
Prg name
Delete row
Insert row
Delete program

Exit is used for returning to “Select program” menu.
Prg name is the name of the program (race) defined by the user.
Delete row – delete a single row in the program
Insert row – Insert a row in the program
Delete program – remove the program (race). The program will not be shown on the main screen, and therefore not selectable when pressing the “Program” button.

Program name

Delete row

To delete a single row in a program, move the > marker to the menu choice “Delete row” and push Enter (Scroll knob), then move the > marker to the row that should be deleted and push Enter. The row is deleted. See picture below:

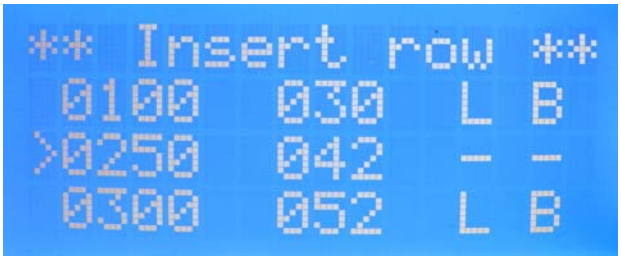


Screen 5 - Delete row 0250

Insert row

To insert a new row in a program, move the > marker to the menu choice “Insert row” and push

Enter (Scroll knob), then move the > marker to the row where you would like to insert a new row and push Enter. The new row will be inserted before the row where the > marker is placed, see pictures below:



Screen 6 - Insert row between 0100 and 0250 rows

Screen 7 - The new inserted row

Delete program

It is possible to delete a whole program by selecting the menu choice “Delete program”. Place the > marker at “Delete program” and push Enter (Scroll knob). The program will not be shown on the main screen, and therefore not selectable when pressing the “Program” button.

Edit row

Each row in a program specifies the desired vehicle speed at a given distance from the starting point of the vehicle.

The first four digits (first column) on a program row are the distance in meters from the vehicle's starting point.

The next three digits (second column) is the speed in km/h which the vehicle should have at the distance defined in the first column.

The third column specifies if the measured speed that the vehicle has at the distance defined in the first column should be logged to memory. If the speed is logged it will be printed on the printout when pressing the yellow “Print” button. Enable logging for the specific distance by setting third column to L (Logging enabled).

The fourth column specifies if the Autostart Speed Control unit should beep (make a sound) when passing the distance defined first column. To enable a beep for the specific distance set column four to B (Beep enabled).

The program below is an example how a program can be defined.
At 0 meter the vehicle should have a speed of 6 km/h, just to get the vehicle rolling. No logging or beep is defined for this row.
At 100 meters the vehicle should have a speed of 30 km/h. Logging is enabled, so the actual speed

of the vehicle will be printed to the printer if the yellow “Print” button is pressed after the race is finished.
At 200 meters the vehicle should have a speed of 40 km/h, logging and beep enabled.
At 300 meters the vehicle should have a speed of 52 km/h, logging enabled and the Autostart Speed Control unit will also beep when the vehicle is passing 300 meters after the vehicle starting point.

Meter	Speed	Log-ging	Beep
0000	006	-	-
0100	030	L	-
0200	040	L	-
0300	052	L	B

At 300 meters (the starting line of the horses) the driver of the vehicle should manually give full throttle (using the accelerator pedal). The Autostart Speed Control unit, however, will keep the speed 52 km/h for another 100 meters.

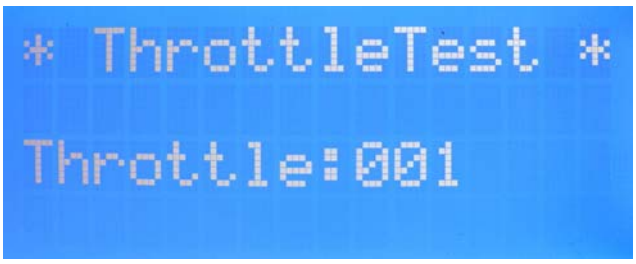
Pulse count

The Pulse count measures number of pulses from the vehicle's speed sensor.
How to use Pulse count:
1. Place the vehicle on a know position
2. Enter the Pulse count via the Settings mode
3. Drive 1000 meters, then stop the vehicle
5. Note Pulse count setting, this setting should be entered under Settings->PPKm:

Throttle test

The throttle test is aborted by pressing the brake pedal or by pressing the red main switch button on the instrument cluster marked with “Autostart”.

Steps for throttle test:
1. Set the gear to Neutral (N)
2. The engine should run on idle R.P.M.
3. Enter the Throttle test via the Settings mode
4. Turn the Scroll knob slowly clockwise until the engine R.P.M. is changing
5. Turn the Scroll knob slowly counterclockwise until the engine R.P.M. is back to idle again
6. Note the Throttle: setting, this setting should be entered under Settings->Min Thr:



Screen 8 - Throttle test, current throttle setting is 1

Clock settings

The date and clock is used on the printout.

Screen 9 - Year and month settings

Screen 10 - Day, hour and minute settings

Print settings

Print settings prints all the program settings and the basic settings for the Autostart Speed Control unit. The printouts could be kept as a backup in case of unit failure, theft etc.