# VIDEOTRONIC V643.G3.2016 USERES MANUAL



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Fasep 2000 srl Rev. 1.5 Videotronic V643.G3.2016: Users Manual

24 november 2015

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.Prior of the installation of the unit described in this manual, user should read this manual carefully to be instructed properly on installation, use and maintenance of the unit.

# .Failing to read this manual and operate accordingly may cause damage to the user or the unit.

.FASEP 2000 srl shall not be responsible for inconvenience, breakdown, accidents due to uncomplete knowledge of this manual or uncomplete application of raccomendations described in this manual.

.FASP 2000 srl shall not be responsible for inconvenience, breakdown, accidents due to unauthorized modifications of the unit, use of non-original or unauthorized accessories (see Accessories listing in this manual for a list of original accessories available for this model).

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## SYMBOLS AND CONVENTIONS

To speed the retrieval of main information and make easy to understand the instructions, this manual uses the following typing conventions:

<NAME OF THE PUSH BUTTON> Used to indicate name of push-buttons on the control panel.

DISPLAY Used to indicate text or number visible on the displays on the control panel.

**ADVICES** Contain useful advices or solutions, evidence d with respect to the rest of the text.

NOTE Notes contain important information, evidenced to the rest of the text.

**WARNING** Warning messages appears corresponding to procedures that, if not properly observed, may

lead to loose of data or cause damage to the unit.

**CAUTION** Caution messages appears corresponding to procedures that, if not properly observed, may

cause injuries to the user.

# **ORIGINAL INSTRUCTIONS**

# TABLE OF CONTENTS

| WARNI | NG  |   | . i                                    |
|-------|---|---|--|
| SYMBO | LS AND CC   | DNVENTIONS  | . i                                    |
| 1     | PRESEN<br>1.0<br>1.1                                    | TATION Intended Use Definitions   | 1-1                                    |
| 2     | INSTALL<br>2.1<br>2.2<br>2.3<br>2.4<br>2.5<br>2.6       | ATION Moving the unit Assembling the unit Installation Electrical Hookup Compressed air Hookup (PL models only) Power   | 2-1<br>2-1<br>2-1<br>2-1<br>2-1        |
| 3     | USE OF  | CONTROL PANEL   |  |
| 4.0   | CALIBRA<br>4.1<br>4.2                                   | TION OF WHEEL BALANCER  How to calibrate the wheel balancer  How to control the calibration of wheel balancer and position weight   | 2-5                                    |
| 5     | Calibratio  | ation ALU-SE  |  |
| 6     | Calibratio  | ation SME   |  |
| 7     | MEASUR<br>7.1<br>7.2<br>7.3<br>7.4<br>7.5<br>7.6<br>7.7 | Placing the wheel rim on the wheel balancer Input of Rim Dimensions (external measuring system version) Input of Rim Dimensions (ALU-SE or LASER version) Detecting and correcting umbalance How to apply the weight using ALU-SE applicator How to apply the weight using LASER How to use SPLIT Program | 3-7<br>3-7<br>3-8<br>3-8<br>3-9<br>3-9 |
| 8     | HOW TO  | OPTIMIZE UNBALANCE OF THE WHEEL   | 4-1                                    |
| 9     | SPECIAL<br>9.1<br>9.2                                   | FUNCTIONS Language selection Setup  | 5-1                                    |
| APPEN | DIX<br>A:<br>B:<br>C:<br>D:                             | Technical data  Environmental Data, Safety Features and Requirements  Errors and Malfunctions recognized by the Computer  How to remove the battery from the product safely.  | A-2<br>B-1<br>B-2                      |

Fasep 2000 srl Rev. 1.5

Videotronic V643.G3.2016: Users Manual

24 november 2015

# 1 PRESENTATION

## 1.0 Intended Use

This unit is designed to measure and correct static and dynamic unbalance of vehicle wheel, the dimension and weight of which are within the working range of the machine (see ‰echnical Data+appendix for reference)

This unit is meant for a professional use. Operator shall be properly trained before use. Training Course is not included in the price of the unit and must be purchased separately.

This unit is designed for indoor use only (see % invironmental Data-appendix for reference).

# CAUTION:

This unit is designed to spin vehicle wheels only, within the range of dimensions and weight approved

(see Weechnical Data-appendix for reference). Special adaptors suit this purpose. Do not attempt to use the machine to spin anything else. Unproper locking may cause the part being spinned to be ejected, causing damage to the unit itself, the operator or anything in the in the neighboorhood.

## 1.1 Definitions



- 1. Monitor
- 2. Back-mounted weight-compartments
- 3. Weights and tools trays
- 4. Side flange-holders
- 5. Wheel guard

- 6. EMS External Measuring system
- 7. Quick lock + HD shaft
- 8. Lower wheel guard
- 9. Foot-pedal

24 november 2015

# 2 INSTALLATION

# 2.1 Moving the unit



**WARNING** When the unit has to be moved: never lift balancer by motor shaft or by neighborhood of it.

2.2 Assembling the unit

For ease of transportation, the wheel balancer might be disassembled into units. If necessary, assembling instruction are provided within each package..

2.3 Installation

The wheel balancer must be installed on a firm and level ground.



NOTE: the machine must be secured to the floor. Using four holes in the base and anchor bolts provided

## 2.4 Electrical Hookup

CAUTION:

Failure to follow these instructions can results in damage to unit or create an electrical hazard and will void warrantv..

- 2.4.1 Electrical hookup is to be provided by a qualified electrician.
- 2.4.2 A fusible wall-mounted switchbox is required at the installation site. This switch should provide on-off control and overload protection for your wheel balancer only. The switchbox should be fused with time-delay fuse(s) in accordance with the power rating specified on your wheel balancer.
- 2.4.3 Electrical connection of the machine should be by plug connectors.
- 2.4.4 The balancer must be effectively connected to ground. The electric cord is regularly provided with a ground terminal.
- 2.4.5 Make sure that Power Rate Specifications for your wheel balancer (refer to nameplate on the wheel balancer) comply with those provided by the external power source.



After electrical hookup has been performed unit is ready to operate. Always observe pertinent safety precautions when operating the unit (see Appendix tables for an overview of relevant Safety requirement).

# 2.5 Compressed air Hookup (PL models only)

CAUTION Failure to follow these instructions can result in damage to unit or create a hazard and will void warrantv.

- Compressed Air hookup is to be provided by a qualified technician, under the local safety requirements, in line with relevant national standards and regulations. All fitting and hoses must conform to local codes.
- 2. A wall-mounted lubricator and water-separator is required at the installation site.
- Compressed Air circuit to the balancer shall be regulated to a maximum pressure of 7 atm.
   Overpressure could compromise cylinder operation.

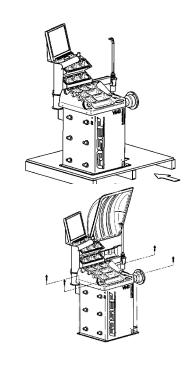
## 2.5.1 CONNECT TO AIR SUPPLY:

The machine is fitted with a universal connector and therefore no other special or additional fitting is required. Push all the way onto the connector a high pressure rubber air-hose and secure it.

## 2.6 Power

Plug the wheel balancer into a 220V socket. To switch on the wheel balancer press the red button (power) untill it light up. To swicth off the wheel balancer press the red button (power) untill it light off.





### **USE OF CONTROL PANEL** 3



Fig. 6 Panel V643

### 3.1 Meaning of the icons on the screen



Select balancing mode

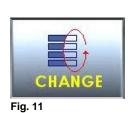


Delete last character in input activation code



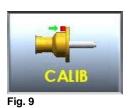


**APS** Function



Change selection

Fig. 8



Calibration



Fig. 12

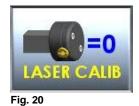
Fig. 10

Set default values





Diagnostic



Laser calibration

Fig. 13



Key down



Fig. 21

Put in the rod laser in rest position

Fig. 14



Position calibration

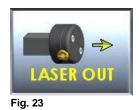


Start laser

Fig. 15



Go to previous page

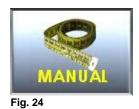


Extract fully rod laser

Fig. 16



Fine resolution



Manul input measures

Fig. 17



Access to Information center

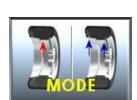


Fig. 25

Fig. 26

Set Dynamic/Static

Mode moto

Fig. 18



Access to page measures



Fig. 19





Fig. 34







Double operator



Go to setup menù

Fig. 28



Optimize



Skip current operation

Fig. 29



Restart software

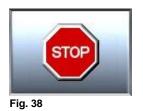


Split function

Fig. 30



Reset partial statistics

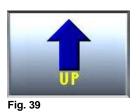


Stop turning wheel

Fig. 31



Reset variation in page Sensor



Key up

Fig. 32



Save



View menù and selection (UP/DOWN)

Fig. 33



Automatic flange calibration

Fig. 41

# 4.0 CALIBRATION OF WHEEL BALANCER

# 4.1 How to calibrate the wheel balancer (USER)



NOTE:

the following symptoms indicate need for calibration::

- a) check calibration program fails.
- c) indicated point of unbalance constantly wrong
- b) constant low or high weight readings.
- d) more than 2 spins required to balance wheels repeatedly.



Fig. 42

Switch on the wheel balancer.

Select SET UP > CALIBRATION > SET/OK > CALIBRATION > SET/OK.

Spin with no wheel on shaft (Fig. 42)

Close the wheel guard or press **<START>**.

At the end of the spin, put a wheel (Fig. 43) and close the wheel guard or press **<START>**.

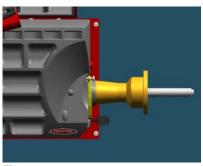


Fig. 43

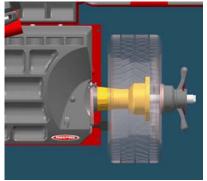


Fig. 44

At the end of the spin, put the calibration weight (Fig. 44) and close the wheel guard or press **<START>**.

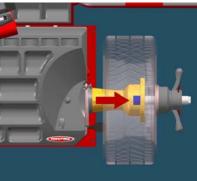


Fig. 45



NOTE

technical calibration is only available for qualified personnel.

### 4.2 How to control the calibration of wheel balancer and position weight (USER)



Fig. 46

Switch on the wheel balancer.

Select SET UP > CALIBRATION > SET/OK > CHECK CALIBRATION > SET/OK.

Put a wheel on the shaft and press <START> (Fig.46).

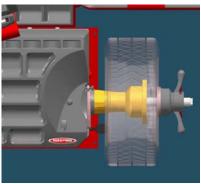


Fig. 47

Put the calibration weight (Fig.47) and press <SET/OK>.

Close the wheel guard or press **<START>**.

At the end of the spin, 160-0 will show on the video (tolerance allowed is ±10).

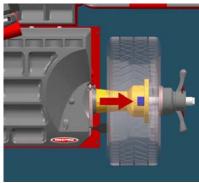


Fig. 48

Put the weight at 6h o'clock: the weight indicators of internal side must be both green.

If not, press <6h>.

Put the weight at 6h o'clock and press <SET OK>.

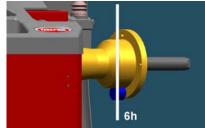


Fig. 49



NOTE

technical calibration is only available for qualified personnel.

### 5 **Calibration ALU-SE**

Switch on the wheel balancer.

 $\begin{array}{lll} \mbox{MAIN MENU} > \mbox{MENU} > \mbox{RESET} > \mbox{CALIB} > & \mbox{ALU-SE} \\ \mbox{CALIBRATION} > \mbox{SET/OK} \ (\mbox{fig}..49). \end{array}$ 

Put the rod on rest position (fig.49) and press SET/ OK.

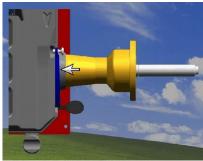


Fig. 50

Put the rod on the flange (fig.50) and press SET/OK.

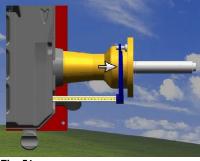


Fig. 51

Select width of wheel

Put the rod on internal side of the rim (fig.51) and press  $\mbox{\bf SET/OK.}$ 

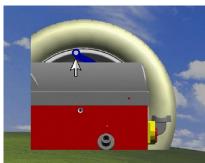


Fig. 52

Press **<ESC>** to go back to standard use.

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### **Calibration SME** 6

Switch on the wheel balancer.

Put the rod on rest position (fig. 52) and press SET/ OK.

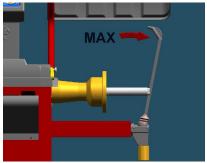


Fig. 53

Put the rod (fig. 53) and press SET/OK.

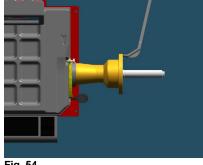


Fig. 54

Press **<ESC>** to go back to standard use.

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# 7 MEASUREMENT AND CORRECTION OF UMBALANCE

# 7.1 Placing the wheel rim on the wheel balancer

7.1.1 Select the cone or flange suitable for the wheel to be balanced. Specific mounting instructions are delivered with each flange



**NOTE:** the operation of centering and tightening of the wheel on the flanges is of basic importance for correct balancing. Good results depend on proper performance of these procedures.

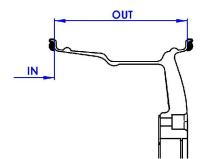
To accurately clean up the superficial ones of connection before whichever operation.

CAUTION: Always make sure flanges are correctly locked on the motor shaft and wheel is correctly locked on the flange being used.

# 7.2 Input of Rim Dimensions (external measuring system version) for V65x, V64x, V55x-D (automatic input of all data)



NOTE: AUTOSELECT function admit to choose automatic selection of balancing system (Dynamic, ALU-S1, ALU-S2)



# **MAIN MENU**

Insert the distance (fig.55).

Insert the width (fig.56).

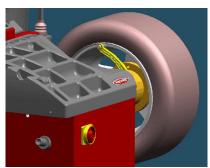


Fig. 56: Distance

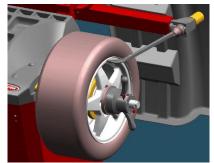


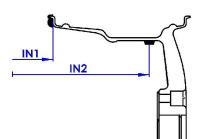
Fig. 57: Width

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### 7.3 Input of Rim Dimensions (ALU-SE or LASER version)

# CAUTION:

Laser installed on wheel balancer is of class 2, so special protection are not required. It is however recommended to avoid the continuos view of the direct beam.



# MAIN MENU > INPUT

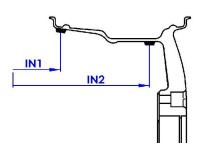
Press ALU MODE untill the required position of weight is on the video (fig.57).

24 november 2015

Insert the distance (IN1).

Insert the distance (IN2).

Fig. 58



Press ALU MODE untill the required position of weight is on the video (fig.58).

Insert the distance (IN1).

Insert the distance (IN2).

Fig. 59

## 7.4 Detecting and correcting umbalance

- 7.4.1 After setting wheel dimensions, press <START> or close the safety cover to spin the wheel and start the measurement run.
- ! **CAUTION:** wheel start automatically when safety cover is closed.
- 7.4.2 At the end of the spin the wheel will brake automatically and the display will show the weight position and weight requirement to correct the wheels umbalance.
- 7.4.3 Apply the weights (fig.59, fig.60). If umbalance shown is 0, press **<FINE>** to show residual umbalance.







Fig. 61

### 7.5 How to apply the weight using ALU-SE applicator

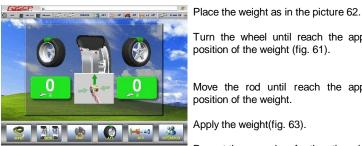


Fig. 62

Turn the wheel until reach the application position of the weight (fig. 61).

Move the rod until reach the application position of the weight.

Apply the weight(fig. 63).

Repeat the procedure for the other side.



Fig. 63

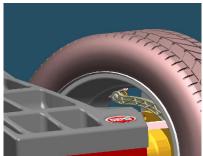


Fig. 64

### 7.6 How to apply the weight using LASER



Fig. 65

Turn the wheel until the position weight indicators of one side are both green (fig. 64).

The laser come out to show the point of application of the weight (fig. 65).

Apply the weight on the laser dot.

Repeat the procedure for the other side.



Fig. 66

## 7.7 How to use SPLIT Program

After the measurement spin

Press **<SPLIT>** to select the program.

Turn the wheel until first spoke (green position) is at 12 0' clock.

Press <SET/OK> to confirm.

Turn the wheel until second spoke (red position) is at 12 oqclock

Press **<SET/OK>** to confirm the red position.

Balance the wheel applying weight on green and red positions.

### 8 HOW TO OPTIMIZE UNBALANCE OF THE WHEEL

## 8.1.1 MAIN MENU > OPTIMIZE

Measure the unbalance of the rim only (fig. 66).

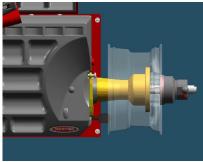


Fig. 67 first spin, rim only

Mount the tire on the rim and put the wheel on the shaft (fig.67).

Spin the wheel

Select the optimization and follow the video instruction.

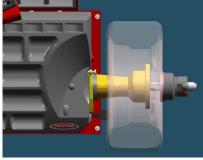


Fig. 68 second spin, complete wheel

Balancing with flanges, put the accessories assembled to the rim during the complete operations.

Selection of optimization: the green solution is the advised from the machine. The user can be choose also one of the other.

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## **SPECIAL FUNCTIONS** 9

## 9.1 Language selection

- 9.1.1 9.1.2 MAIN MENU >SET UP > USER SET UP > LANGUAGE > SET OK >. Select the language and press SET OK.

## 9.2 Setup

- 9.2.1 MAIN MENU >SET UP > USER SET UP .
- 9.2.2 Select item and press SET OK.

# **APPENDIX**

A: **Technical data** 

> Power requirement 400W

**Speed Balancing** 98RPM

Measuring time 4-15 s.

Accuracy ±1grammo (±1/28 once)

Diameter Rim diameter 8 Rim Width (with wheel-guard) Wheel Weight **Wheel Dimensions** 

8" (200 mm) - 26" (650 mm) 4) max 16" (415mm) max 90 Kg (198Lbs)

# Wheel balancer dimensions

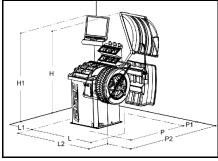


Fig. 69: Measures

|           | V643 |
|-----------|------|
| L (mm)    | 1160 |
| L1 (mm)   | 500  |
| L2 (mm)   | 1240 |
| P (mm)    | 960  |
| P1 (mm)   | 200  |
| P2 (mm)   | 1360 |
| H (mm)    | 1680 |
| H1 (mm)   | 1530 |
| Peso (kg) | 137  |

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## B: Environmental Data, Safety Features and Requirements Environmental Data

[Operating conditions]

This unit is designed for indoor use only.

Temperature: 0 to 45°C Relative Humidity: 5 to 80% a 40°

[Storage conditions]

Package is designed for indoor storage only.

Temperature: -25° to 70°C Relative humidity: 5 at 95% to 40°C

## **Safety Features**

 The Balance Weights Holder may be removed for servicing. It is secured to the machine body through screws so that only voluntarily it may be removed. Removal of this protection is therefore restricted to Authorized Service Engineers.

The Control Panel may be removed for servicing. It is secured to the machine body through screws so that only voluntarily
it may be removed. Removal of this protection is therefore restricted to Authorized Service Engineers.

. (

**CAUTION:** The safety cover is anyway required when using the motorcycle adapter.

M

WARNING FASEP 2000 srl shall not be responsible for any inconvenience, breakdown, accidents caused directly

or indirectly by unauthorized service. Service to any parts by unauthorized engineers will void warranty

24 november 2015

and will any right of the owner of the unit..

(and

NOTE: As this unit runs at speed below 100rpm, a safety cover is not required. However a safety cover is

recomended when balancing wheels with diameter bigger then 20".

## **General Safety Requirement**

[before using/servicing this unit]

1. Read this instruction sheet and the whole users manual before operating or servicing the wheel balancer.

 Make sure electrical power source conforms to requirements shown on nameplate (see also model identification chart for reference).

3. Make sure the unit has a stable position.

[when using the unit]

4. Protect power leading to the unit from damage.

When work area is being washed, make sure unit is adequately protected.

6. Remove all stones and mud lodged in tire treads before balancing the wheel.

7. Do not touch spinning wheel. Always use Safety Safety cover to be protected.

8. Make sure counterweights are securely attached before checking residual umbalance. [when servicing the unit]

9. Make sure power sources are disconnected before service on the unit is performed.

Service to PCB, electrical and mechanical parts should be done only by an Authorized FASEP 2000 Service Center.

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## C: Errors and Malfunctions recognized by the Computer

Errors may apply to some model only.

ERR 1: Shaft does not rotate ERR 2: Rotation Direction is wrong ERR 3: Rotation speed is not ready

**ERR 4:** Rotation speed is wrong (too low or too high) **ERR 5:** Position Sensor or Position Disk failure

ERR 6: Safety Safety cover is open ERR 7: Measuring cycle was interrupted ERR 8: Calibration weight was not inserted. ERR 9: Activation code not correct

ERR 9: Activation code not correct ERR 10: Overflow in calculations ERR 11: Serial number is wrong ERR 12: Serial number not inserted

ERR 13: Reserved

ERR 14: Uncorrect password ERR 15: E²prom error

ERR 16: Calibration memory error ERR 17: Rod in uncorrect position ERR 18: Excessive weight detected

ERR 19: Reserved ERR 20: Reserved

ERR 21: Error in inputting data

ERR 22: Brake error

ERR 23: Substance change due to shakes

24 november 2015

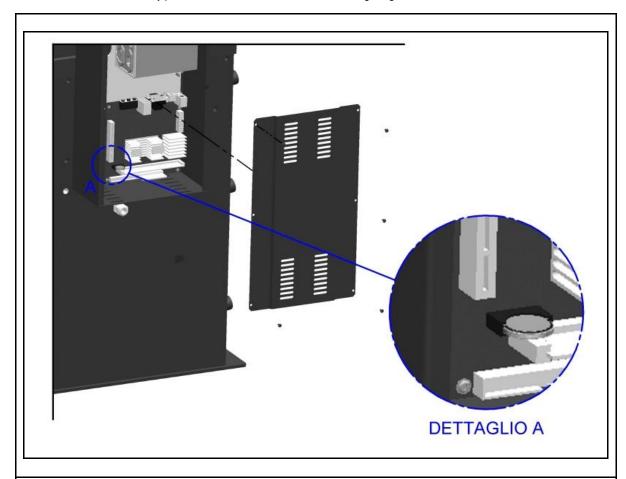
ERR 24: Reserved ERR 25: Reserved ERR 26: Reserved

ERR 27: Insufficient pressure

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#### D: How to remove the battery from the product safely.

To remove the battery please follow the instructions on the following image



In the balancer is included n.1 battery lithium 3V 200mAh



Disposal of waste batteries (applicable in the European Union and other European countries with separate collection systems)

This symbol on the battery or on the packaging indicates that the battery provided with this product shall not be treated as household waste. By ensuring these batteries are disposed of correctly, you will help prevent potentially negative consequences for the environment and human health which could otherwise be caused by inappropriate waste handling of the battery. The recycling of the materials will help to conserve natural resources.

In case of products that for safety, performance or data integrity reasons require a permanent connection with an incorporated battery, this battery should be replaced by qualified service staff only. To ensure that the battery will be treated properly, hand over the product at end-of-life to the applicable collection point for the recycling of electrical and electronic equipment. Hand the battery over to the applicable collection point for the recycling of waste batteries. For more detailed information about recycling of this product or battery, please contact your local

Civic Office or your household waste disposal service.