

BRAVO TURBO-MAX KIT DRIVER

INSTRUCTION MANUAL

Catalog Number

TURBO MAX DC DRIVER 6130075



WARNING: READ THE TURBOMAX KIT MANUAL BEFORE OPERATING THE PRODUCT

SAVE THIS INSTRUCTION MANUAL FOR REFERENCE

SAVE THESE INSTRUCTIONS

The content in this manual has been carefully prepared and is believed to be accurate, but no responsibility is assumed for inaccuracies. Scoprega reserves the right to make changes without further notice to any products herein to improve reliability, function or design. Scoprega does not assume any liability arising out of the application or use of any product or circuit described herein; neither does it convey any license under its patent rights of others.

WARNINGS:

1. Read these instructions.
2. Keep these instructions.
3. Follow all instructions.
4. Install in accordance with the manufacturer's instructions.
5. Do not exchange polarized DC Power Supply Terminals.
6. Protect the cord from being walked on or pinched.
7. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way.
8. Do not disassemble the product. Incorrect reassembly may result in a risk of Short Circuit.
9. Provide adequate ventilation and refrain from placing items on or around the product during operation.

 **DO NOT SUPPLY THE DC DRIVE HIGHER VOLTAGE THAN 31 VDC**

GENERAL SAFETY RULES

1. **CONSIDER WORK AREA ENVIRONMENT.** Don't expose the drive to rain. Don't use it in presence of flammable liquids or gases.
2. **DON'T ABUSE CORD.** Keep cord from heat, oil, and sharp edges.
3. **WARNING! RISK OF UNSAFE OPERATION.** Do not modify or attempt to repair. Never drill into or make any modifications to the DRIVE.
4. **WARNING! RISK OF FIRE.** Allow the DRIVE to cool 20 minutes if operated for more than 30 minutes.

INTRODUCTION

The TURBOMAX KIT DRIVER is a digital DC servo- drive developed with DSP and high efficient MOSFET technologies controlled by a microprocessor. It is able to control a Brush DC motor pair in terms of speed (velocity control) and current independently from input voltage.

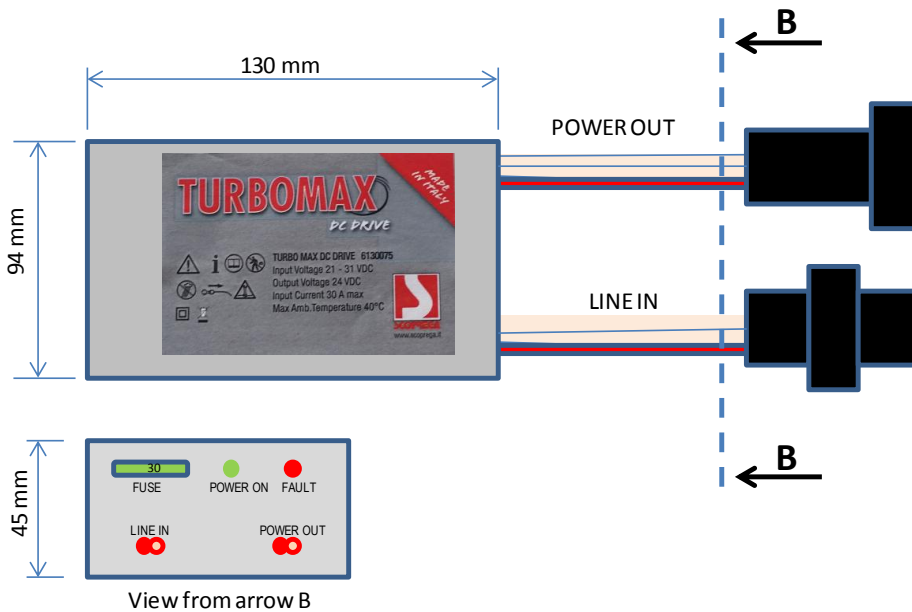
 **THE DRIVE MUST BE USED IN CONJUNCTION WITH A TURBOMAX KIT 24VDC AIR STATION ONLY.**

 **DO NOT SUPPLY THE DC DRIVE HIGHER VOLTAGE THAN 31 VDC.**

FEATURES

- Input Voltage: 21-31 VDC
- Input Current: 25 A (Cont.), 30 A (Peak),
- Control technology: PWM based on DSP and high smooth servo control algorithm.
- Motor Feedback: Armature Voltage

MECHANICAL SPECIFICATIONS



INSTALLATION REQUIREMENTS

- Driver's reliable working temperature shall be LESS than 50°C
- Avoid dust, oil fog and corrosive gases
- Storage Temperature -20°C; 65°C
- Weight Approx. 250 g

⚠ BEFORE CONNECTING THE DRIVE MAKE SURE THAT THE INPUT LINE IS NOT LIVE (NO POWER) CONNECTIONS WITH LIVE POWER CAN DAMAGE THE DRIVER

- **CONNECT THE "LINE IN" CONNECTOR TO THE ELECTRICAL SYSTEM**
- **CONNECT THE "POWER OUT" CONNECTOR TO THE TURBOMAX**
- **TURN ON THE POWER**
- **CHECK THAT THE GREEN LED IS ON**
- **OPERATE THE TURBOMAX AS PER TURBOMAX AIR STATION MANUAL**

USE of TURBOMAX DRIVER

⚠ WARNING: Make sure polarity is correct (Red to Positive). With wrong polarity the Inflator WILL NOT START

⚠ WARNING: Exercise with care when connecting the cord to batteries in order not to short the battery with conducting materials such as rings, bracelets and keys. The battery or conductor may overheat and cause burns.

⚠ WARNING: Check the proper Power Voltage. Do not operate below 21Vdc or above 31 Vdc

- Always fully extend the 12/24 Vdc cord before each use.
- Set the Pressure Knob to the desired limit. **WHEN DEFLATING SET TO 175 mbar**
- Press the Main Switch to **ON**
- Press the Start Switch to **START**

• The inflator will stop automatically when the inflatable reaches the set value

⚠ WARNING: Do not leave the unit running unattended. Over-inflation of items could result in serious injury.

TROUBLESHOOTING

Problem	Possible Cause	Possible Solution
Unit will not Start	24 Volt cord not properly connected	Connect the Power Supply. Make sure polarity is correct (Red to Positive; Black to Negative pole)
	Power supply not live	Check the GREEN LED
	Main ON/OFF switch not ON	Turn main switch to ON
	The Safety Fuse is blown	Replace the fuse with one of the same size (30 A)
	Cord or connectors are damaged	Have switch replaced by BRAVO Service Center
GREEN LED OFF	The DC Driver Fuse is blown	Replace the fuse with one of the same size (40 A)
	Power Supply not present	Connect properly to the Electrical System
RED LED SLOW FLASHING	The Safety Fuse is blown	Replace the fuse of the DC Driver
	The Input voltage is below 21 Vdc	Check the Electrical System
RED LED FAST FLASHING	The Input voltage is above 31 Vdc	Check the Electrical System
RED LED SOLID ON	Over- temperature	Wait for cooling till the red light goes off
	Microcontroller in Stand-By	Disconnect and reconnect the PWR supply connector to reset the unit.
Will not inflate/deflate	Wrong Port connected	Connect the air hose to the proper Port (IN to deflate; OUT to inflate).
	Wrong setting on the Pressure knob	Adjust settings
	Main ON/OFF switch not ON	Turn main switch to ON and then press START

ACCESSORIES

Recommended accessories for use with your inflator are available from your local dealer or authorized service center.

WARNING: The use of any accessory not recommended for use with this inflator could be hazardous.