

THE ELECTRIC SCREED BY **MAGIC SCREED**



E-SCREED

BATTERY MANUAL

SAVE ALL INSTRUCTIONS FOR FUTURE REFERENCE

E-SCREED BATTERY MANUAL

Congratulations on your selection of the new **E-Screed HDE-2020** manufactured by Magic Screed. To operate this tool, it is required to use the E-Screed battery pack model

HBE-2020

Any power source other than the **HBE-2020** could permanently damage the electric and electronic component systems of your screed.

Before using the battery, please take time to read and understand this manual and pay special attention on the usage and maintenance instructions.



TABLE OF CONTENTS

Specifications	p. 2	Charger model E-70400	p. 7
Battery environment and conditions	p. 3	Charging procedure	p. 8
Warnings	p. 3	Cable	p. 9
Identification and location	p. 4	Transport and regulations	p. 10
Display	p. 4	Warranty	p. 11
Harness	p. 5	Service	p. 11
		Disposal	p. 11

SPECIFICATIONS

Model	HBE-2020	Cycles	1000+
Voltage	40v	Size	315 x 230 x 85 cm 12,4 x 9 x 3.3 inches
Amperage	26,4Ah	Shell	plastic
Energy	950Wh	Fuse	30A short circuit function
Maximum continuous current	20Ah		

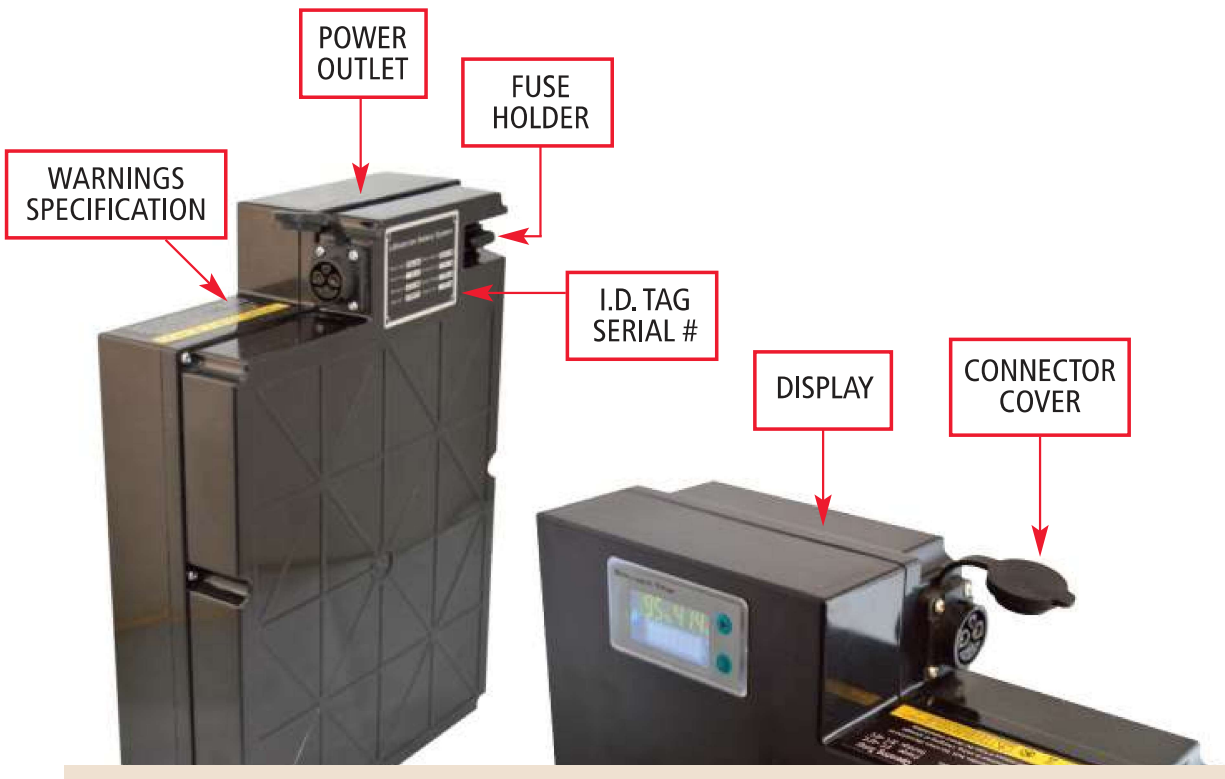
BATTERY ENVIRONMENT AND CONDITIONS

- Charging temperature is 0°C to 45°C.
- Battery discharge ambient temperature is -20°C - + 60°C (When the ambient temperature > 45°C, please pay attention to the ventilation and heat dissipation). Charging temperature is 0°C - + 45°C. Ambient humidity RH is $\leq 85\%$. Make sure there is no water infiltration when ambient humidity is > 85%, at the same time the battery surface condensation phenomenon should be avoided.


WARNINGS


- Do not immerse the battery in water. If accidentally immersed in water or water enters the battery, isolate it immediately and ask a professional to handle it.
- Do not charge, discharge and leave the battery at temperatures over 60°C.
- Do not charge the battery at temperatures below 0°C.
- Do not reverse the positive and negative terminals. Do not short the positive and negative of the battery.
- Do not use the battery in a location where static electricity and magnetic field is strong. Otherwise the battery protection circuit may be damaged.
- Do not open or remove the protection casing.
- Do not break or remove the warranty tag.
- Do not overcharge or over discharge the battery.
- Use only the supplied charger for charging.
- Battery must be recharged within 12 hours after usage.
- **If the battery leaks and liquid splashes into the eyes or skin, do not rub, wash it with clean water, and immediately seek medical attention.**
- **In case of accidental fire, dry powder fire extinguisher or sand should be used.**
- If the battery gives off a strange odour, generates heat, becomes discolored or deformed, or any abnormality appears during use, storage, or charging and using, immediately remove and isolate it from the device in a safe way.


IDENTIFICATION AND LOCATION



DISPLAY

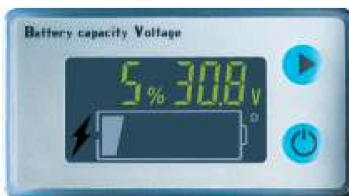
 Press the play button to activate the display.

 Press a second time, display will show the battery's ambient temperature.

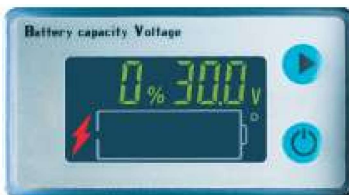
 Press power to shut down the display.



BATTERY FULL 100% 41.4V



RECHARGE WARNING 5% 30.8V BEEPER



BATTERY EMPTY 0% +/-30V
MUST BE RECHARGED WITHIN 12 HOURS

HARNES

The E-Screed harness supplied with your battery pack is designed to comfortably suit most body types and is fabricated with durable, easy to clean material.

Before starting your work day, take a moment to make the necessary adjustments.

Shoulder straps : Adjust the length of the straps so that the preformed backpack rests comfortably on your lumbar.



Waist strap height: Adjust the desired height with the buckle located at the back under the backpack.





Carrying weight
(harness included)

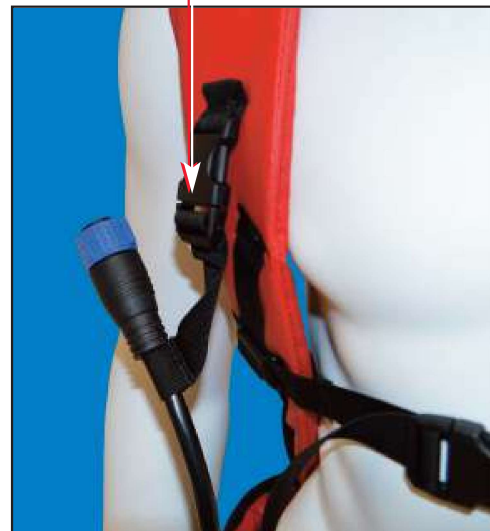
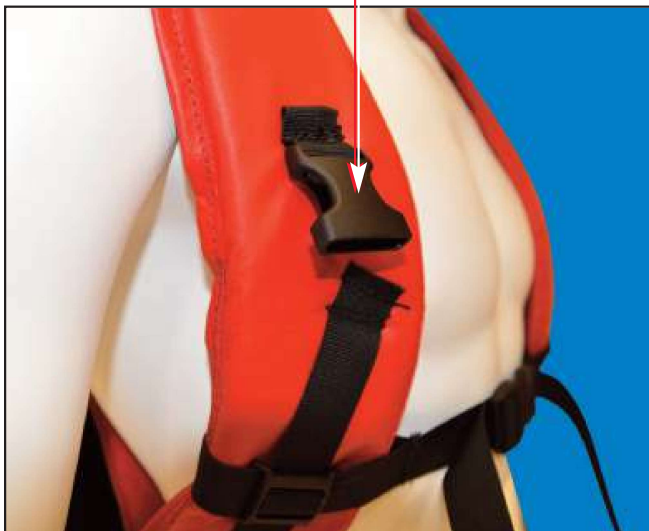
18 lb / 8,2 kg

HARNES

Sternum strap:
Attach and adjust
the sternum strap.

Waist strap:
Adjust the length
of the waist strap.

Cable attachment: When not connected to the screed, attach the cable to the buckle.



CHARGER MODEL E-70400

SPECIFICATIONS:

- **Input** 100-120 VAC, 50/60 Hz, 15A
- **Output** 42V DC 15A

SAFETY INFORMATION:

- Never use the charger in a wet, damp or rainy area.
- Never use the charger in a flammable or explosive area.
- Never use the charger with defective power cord or damaged wires.
- Never cover the vent on the charger and keep the vent 6" (15 cm) away from other objects.
- Never disassemble or modify the charger.
- Always unplug the charger from the AC outlet before attempting any maintenance or cleaning.
- Always place the charger in a clean and ventilated environment while charging.

LIGHT:

- **Red** Charging
- **Flickering Green** Charged 95%
- **Green** Fully Charged



CHARGING PROCEDURE

To ensure the life expectancy of your battery pack, follow these simple guidelines.

- Remove your battery from its carrying harness.
- Your charging station should be in a well ventilated, dry and tempered area.
- Use only the supplied charger model E-70400.
- Place the charger on a flat surface ensuring not to block the ventilation fan.
- Plug the charger in a grounded 100-120 VAC 20,0A power source.
- Inspect the cable for any damage, wear or tear.
- Connect the charger directly to the battery.
- Red light indicates that the battery pack has been detected and charge will resume.
- Blinking green indicates a 95% charge.
- Steady green means fully charged.

WARNING:

- Do not charge the battery below 0°C (31F).
- Do not charge, discharge and leave the battery at temperatures over 60°C (140F).
- Do not overcharge or over discharge the battery.
- Do not leave the battery connected to the charger when fully charged. Otherwise, the battery may be damaged or cause danger.
- If the battery gives off a strange odour, generates heat, becomes discolored or deformed, or any abnormality appears during use, storage, or charging and using, immediately remove and isolate it from the device in a safe way.

MAINTENANCE:

Your battery pack should be charged within 12 hours after usage

The battery is equipped with **passive protection**: over charge protection, over discharge protection, temperature protection, balanced functions. Those protections require a certain amount of energy and necessitate to:

- Store unused battery in a fully charged state.
- In order to prevent over self discharging, the battery should be charged periodically on a TWO MONTH CYCLE to maintain a certain voltage range 39V to 40V.

A more shallow charge and discharge of the battery ensures that the battery can be used economically. Over charge and over discharge may cause the battery to overheat, fire, function failure and shorten battery life.

CABLE

All E-Screed connectors are twist lock.
Insert and follow the arrows on the connector.
No force should be applied.

Make sure that the connector is securely locked.



Battery cable
#E-70230

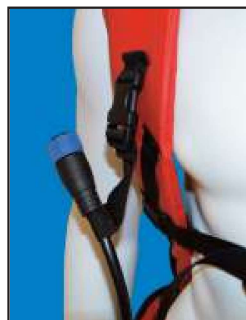
IDENTIFICATION Both connectors are blue

Tool side : 8 pins

Battery side : 2 pins



- Always use the E-Screed OEM power cable supplied with your battery.
- Always keep the connectors clean, dry and free of debris or concrete.
- Never use a defective cable.
- Never use a kinked, skinned, burned or cut cable.
- Never use a cable with damaged connectors.



When disconnected from Screed, always attach the cable to your harness to prevent it from falling into concrete or getting tangled onto surrounding element.

TRANSPORT AND REGULATIONS

The regulations in transportation of lithium-ion batteries vary from one jurisdiction to another and whether the battery is transported in a personal vehicle or shipped via a commercial carrier.

Generally, the transportation of Li-Ion battery pack in a personal vehicle is safe and allowed when done in accordance with these warning instructions:

- Remove the power cable.
- Place the battery pack in a safe, dry and tempered location where the pack is protected from shock or damage.
- Place the connector protective cover on the connector or protect the connector with non-conductive material such as electrical tape.

Li-Ion battery packs are subject to special attention when shipped with a commercial carrier

- Proper packaging, protection, labelling, marking and documentation must be performed.
- Must be shipped under regulation UN3480 (battery only) or UN3481 (if the battery is packed with equipment).
- Subject to Class 9 hazardous material.
- Must be shipped with state of charge > 30%.

NOTES:

- Damaged or defective battery pack cannot be shipped.
- Battery pack cannot be shipped on a passenger aircraft, only cargo planes.

WARRANTY

E-Screed battery pack and charger are warranted from defects to the original purchaser only in material and workmanship. Subject to certain exceptions, **Magic Screed** will repair or replace the battery pack or charger which, after examination, is determined by **Magic Screed** to be defective in material or workmanship for a period of one (1) year starting at the date of purchase. Proof of purchase must be provided. *The warranty does not apply if there is any physical damage on the battery pack casing* or if the warranty seal located on the side of the casing is altered. **Magic Screed** warranty does not cover damage determined to be from unauthorized repair, alteration, misuse, abusive normal wear and tear, lack of periodic maintenance or accidents.

SERVICE

Due to the regulations of commercially shipping any type of damaged battery pack, repair or service should be performed locally by an authorized E-Screed service center. Replacement parts for battery pack are available upon special request. After evaluation of the damaged parts and defects, replacement or repair should be performed by a professional electronic technician. Most repairs will require to follow specific directives and will require welding.

DISPOSAL

At the end of any battery's useful life or if a battery pack has been evaluated not to be usable, always dispose of your pack according to federal, state, provincial or local regulations. Contact a recycling agency in your area for a recycling facility.

Reminder: in any of the above situations, connector and terminal should be protected with the connector cover or with non-conductive material such as electrical tape to prevent any shortage.



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