

V4 Service manual



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INDEX
BRAILLE

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1 Model Disassembly instructions

1.1 Electronic modules Everest and Basic

Enter topic text here.

1.2 Basic-D

Enter topic text here.

1.2.1 Remove back plate

- Open the 2 knurled thumb screws at the bottom holding the back plate
- Remove the back plate

1.2.2 Remove side covers

- Remove the 3 screws which holding the cover from each side
- Place the Basic-D upside down and remove the 2 rubber feet holding each panel
- Remove the side cover

1.2.3 Replace embossing head

Remove embossing head

- Remove back plate, see instructions
- Remove the embossing head axle metallic locking ring with a flat screw driver
- Disconnect the embossing head cable
- Release the embossing head locking ring (motor side) from the side panel and pull the axle against you
- Remove the embossing head, locking ring and axle

Insert embossing head

- Place the embossing head with its locking ring on the axle, left side.
- Place the right side of the axle in the holder on the speaker side cover
- Lift the plastic spring with your finger.
- Placed the embossing head on the print head motor gear wheel, at the same time click in axle into the cover (speaker side)
- Place the locking ring in position
- Move the embossing head by hand to check the mechanical movement
- Connect the embossing head cable
- Close the back plate - see instruction

1.2.4 Replace Main Board

Remove Main Board

- Remove the back plate - see instruction.
- Remove embossing head - see instruction.
- Remove all cables from the Main Board
Cables to: Embossing head cable, Embossing head motor, Paper movement motor, Paper sensor 1, Paper sensor 2 and Front panel.
- Pull the main board top edge out, until it releases from the 4 metallic clips
- Remove the Main board

- Remove the SD memory card from the faulty main board.
The Index SD memory card includes embosser specific parameters like serial number, number of embossed pages, page format, embosser settings, etc.

Insert Main Board

- Insert the original SD memory card from the previous main board to the new main board
- Place the new main board in position and make sure it clips in OK
- Connect all cables (see picture)
- Insert embossing head - see instruction
- Connect main board cable
- Insert back plate - see instruction

1.2.5 Replace Paper Tractors

- Remove the back plate - see instruction
- Remove the embossing head - see instruction
- Remove motor side cover - see instruction
- Remove the 3 screws holding locking ring for the tractor feed square axle and remove the axle
- Remove the round axle (flat screw driver) by turning it CCW Contra Clock Wise.
- Disconnect the two paper sensors
- Remove the formula tractors

(PHOTO Position of square axle - dots on the tractor)

When inserting new formula tractors, please note the position of the small dots near the hole for the square axle. These marks has to be on the same side of the square axle.

1.2.6 Replace motor module

- Remove the back plate - see instructions
- Remove the embossing head - see instructions
- Remove the side cover - see instructions
- Disconnect 2 motor cables
- Unscrew the 6 screws holding the motor module
- Remove the motor module

1.2.7 Remove the fan

- Remove the back plate - see instruction.
- Remove the embossing head - see instruction
- Remove side cover - see instructions
- Disconnect the 4 screws holding the fan from the motor module
- Remove the fan

1.3 Everest-D

Enter topic text here.

1.3.1 Clear major paper jam

- Remove the front glass - see instruction
- Cut the paper above and below the embossing head with a sharp thin knife (switch blade knife). Avoid the rubber rollers.
- Remove and clear the the embossing head from jammed paper
- Rotate the rollers for checking and removing jammed paper
- Remove embossing head - see instructions
- Clean the embossing head from jammed paper

1.3.2 Remove front glass

- Remove the 2 knurled thumb screws from the glass
- Press the glass down
- Remove the glass by lifting it up

1.3.3 Remove back plate

- Remove the four screws holding the back plate (picture with four screws)
- Lift up the back plate by twisting a flat screw driver between the lower center of the plate and aluminum profile
- Lift up the back plate carefully

1.3.4 Remove side covers

- Remove the front glass
- Remove the back plate
- Remove the side covers
 - 8 screws on left side cover (top front = smaller 3.5x13)
 - 7 screws on right side cover

1.3.5 Replace sheet feeder

- Remove the two screws on the top of the sheet feeder
- Lift up the sheet feeder
- Disconnect the sheet feeder cable

1.3.6 Replace main board

- Remove back plate - see instruction
- Release the main board from the 4 upper click connectors
- Remove all cable from the main board
- Tilt the main board to a 45 degrees angle
- Lift the main board towards you.
- Remove the SD memory card from the faulty main board.
The Index SD memory card includes embosser specific parameters as for example: serial number, number of embossed pages, page format, embosser settings.

When inserting a new main board please Insert the original SD memory card before powering on the unit.

1.3.7 Replace embossing head

REMOVE EMBOSSING HEAD

- Remove front glass - see instructions
- Remove the Embossing head locking ring (left side)
- Release the embossing head axle by pulling left side (locking ring side) towards you
- Remove the embossing head from the embosser
- Disconnect the embossing head cable

REPLACE EMBOSSING HEAD

- Insert the embossing head axle in the embossing head
- Insert the embossing head locking ring on the embossing head axle with the larger diameter side against the plate
- Connect the embossing head cable please note the direction (picture)
- Insert the right side of the embossing head axle in the holder
- Lift the plastic spring which holds down the embossing head with a screw driver, at the same time push the print head+axle in position between the stepper motor gear wheel and plastic spring.
- Insert the left side of the embossing head axle in the holder by pressing it towards the embosser until it click in position
- Press the embossing head locking ring to the left against the holder
- Move the embossing head by hand to check the mechanical movement
- Insert the front glass - see instructions

1.3.8 Replace roller module

- Remove the front glass - see
- Remove the back plate - see
- Remove motor side cover - see
- Remove the paper movement driving belt from gear belt wheel on the roller axle
- Remove the 4 screws holding the roller module bearing
- Take out the roller module by sliding it out

1.4 Braille Box

Open issues, this will be completed when tested on the prototypes.

Service tasks:

Clearing paper jam

Remove/insert embossing head

Replace paper sensor

Paper tray

Remove Braille

Check paper out flip flop mechanism

Check paper

Braille tray

Technical corner

Top plate

1.4.1 Open the Service door

1. Open the Braille out tray
2. Open the lock on the right side of the service door by rotating it by hand
3. Open the Service door

1.4.2 Remove Braille tray

1. Open the Braille tray
2. Release the plastic locks on the Braille tray guides, right = down, left = up
3. Remove the Braille tray from the guides

1.4.3 Dismounting Braille Box

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1.4.3.1 Plates

Noise sealing

The corners between the outside plate, inner front plate and technical corner plate is sealed with silicone.

After working with this plates it is necessary to re-seal them again. Please add silicon sealing in the same way as originally shipped from Index Braille.

1.4.3.1.1 Top plate

- Remove the Service door: see
- Remove the Braille tray: see
- Disconnect 1 cables the speaker
- Disconnect the front panel flat cable
- Disconnect 2 cables to flip flop
- Disconnect 1 cable to the LED
- Remove the cables from acoustic damping material
- Unscrew 9 black screws on the black inner front plate
- Unscrew 3 screws on mid plate back
- Unscrew 5 screws on mid plate left
- Lift up the top plate.

1.4.3.1.2 Mid plate back

- Remove the Top plate: see instructions
- Unscrew 4 screws connected Inner front plate
- Unscrew 4 screws connected to Technica corner
- Unscrew 3 screws connected to Bottom plate
- Lift up the Mid plate back

1.4.3.1.3 Mid plate left

- Remove the Top plate: see
- Unscrew 4 screws connected Inner front plate
- Unscrew 4 screws connected to Technica corner
- Unscrew 5 screws connected to Bottom plate

- Lift up the Mid plate left

1.4.3.1.4 Technical corner plate

- Remove the CPU Board: see
- Remove the Top plate: see
- Remove the Mid plates: see
- Remove the power plug cables
- Disconnect the cable to LED PCB
- Lift up the Technical corner plate.

1.4.3.1.5 Right lower cover plate

Unscrew 4 screws behind the Inner front plate (x mm nyckel?)
Remove the Right lower cover plate

1.4.3.1.6 Inner front plate

Remove the Top plate: see
Remove the Mid plates: see
Remove the Braille tray: see
Remove the Right lower cover plate
Unscrew xx? screws at the lower edge of the Inner front plate
Lift up the Inner front plate. It may be connected with silicon sealing. Carefully remove the silicon mechanically

1.4.3.1.7 Braille tray cover plate

Enter topic text here.

1.4.3.1.8 Braille tray guides

- Remove the Braille tray: see
- Unscrew the 8 screws holding the Braille tray guides against the sheet feeder
- Remove the Braille tray guides

1.4.3.2 Mechanical modules

Enter topic text here.

1.4.3.2.1 Front glass door

Release the hinges with a flat screw driver (Picture?)

1.4.3.2.2 Embossing tower

- Remove the Top plate: see
- Remove the Mid plates: see
- Remove the Braille tray: see
- Disconnect all cables to the Embossing tower
- Unscrew the 4 rubber connections with (xx mm fast nyckel)
- Lift up the Embossing tower

1.4.3.2.3 Replace embossing head

REMOVE EMBOSSING HEAD

- Open the service door - see
- Remove the Embossing head locking ring (picture)
- Release the embossing head axle by pressing it against you (picture)
- Disconnect the embossing head cable

INSERT EMBOSSING HEAD

1. Open the Braille out tray
2. Insert the embossing head axle in the embossing head
3. Insert the embossing head locking ring on the embossing head axle (Bild)
4. Connect the embossing head cable please note the direction (picture)
5. Press the plastic sprig up, to give room for the print head profile with gear bar during step 6-8 (Bild)
6. Insert the embossing head in the position between the stepper motor gear wheel (picture + video)
7. Insert the right side of the embossing head axle in the holder
8. Insert the left side of the embossing head axle in the holder by pressing it against the embosser until it click in position
9. Press the embossing head locking ring to the left against the holder
10. Move the embossing head by hand to check the mechanical movement
11. Close Braille out tray
12. Close the service door

1.4.3.2.4 Replace roller module

- Open the Service door - see instructions
- Remove the paper movement driving belt from gear belt wheel on the selected roller axle
- Remove the 4 screws holding the axle bearing
- Take out the roller module

1.4.3.2.5 Replace paper out flip flop

Remove

- Remove Braille tray - see
- Disconnect the cables for both DC motors
- Unscrew the two screws holding the front flip flop motor module and remove the motor module and arm
- Unscrew the two screws holding the back flip flop motor module and remove the motor module and arm

Insert

- Insert the back flip flop arm horizontally, place the motor module in position and tighten the two screws
- Insert the front flip flop arm horizontally, place the motor module in position and tighten the two screws
- Connect the two cables to the flip flop motors

1.4.3.2.6 Replace ventilation module

- Open the Braille out tray
- Disconnect the 2 fan cables
- Unscrew 4 screws in the technical corner from the outside
- Unscrew 4 screws holding the ventilation module against the outer plate

1.4.4 Sheet feeder

Enter topic text here.

1.4.4.1 Replace pick up roller

- Remove the paper tray: see
- Pull the pick up roller against you until it clicks out of position

1.4.4.2 Replace sheet feeder

- Remove the paper tray
- Unscrew 4 screws holding the Sheet feeder from below
- Remove the Sheet feeder

1.4.5 Electronic modules

Overview picture with all boards, cables, motors and sensors.

1.4.5.1 Replace CPU BCP V4

- Remove the two knurled thumb crews from the CPU Board located in the technical corner
- Pull the CPU Board out from the embosser

1.4.5.2 Replace Driver PCB V4

1. Open the Braille out tray: see
2. Remove the protection plate from the click in holders
3. Remove all cables from the Driver Board (picture)
4. Remove the Driver Board from the click in holders

1.4.5.3 Replace Sheet feeder PCB V4

The Sheet Feeder PCB V4 is located on the left side of the sheet feeder.

Remove the sheet feeder to get access to the Sheet feeder PCB, see instruction "Replace Sheet feeder".

The sheet feeder PCB has sensors and connector to the pick up motor.

The sensors are Paper tray position in/out, paper out and for detecting paper size A4, A3, 11x8.5 inch letter, 11x17 inch and 11x11.5 inch. The paper size is presented by the clearly marked LED:s in the front corner of Braille Box. The DC feeding of the pick up motor is also included in the Sheet feeder PCB.

1.4.5.4 Replace LED PCB V4

- Open the service door
- Unscrew the front LED PCB
- Disconnect the LED PCB cable
- Remove the LED PCB

1.4.5.5 Replace Power supply

- Remove the Braille tray: see
- Remove the Back Braille tray guide: see
- Unscrew 4 screws holding the power supply from below
- Remove the Power supply

1.4.5.6 Replace fan

- Open the Braille out tray
- Unscrew 4 screws to disconnect fan
- Fan direction i blow out

1.4.6 Sensors

Enter topic text here.

1.4.6.1 Reflectiv light Sensor All V4

Use in Basic-D V4

The Paper edge sensor is displayed with the Green LED at main board

The Paper movement sensor check the movement of the pin fed holes and is displayed with the Yellow LED on the main

Use in Everest-D V4

The Paper edge sensor is displayed with the Green LED at main board

Use in Braille Box V4

The Paper edge sensor is displayed with the Green LED at Braille Box CPU PCB

Out of paper - front corner LED

Braille tray open - front corner LED

Service door open - front corner LED

2 General Service tasks

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2.1 Embossing head

The embossing head is designed with 6 male and 7 female hammers. This hammers are designed for a life cycle above 1.000 000 000 strokes corresponding to about 1.000 000 Braille pages. Both the tips of the hammers and the anvils is made in hardened steel for maximum life cycle.

The most significant improvements in V4 embossing heads are:

- Individually easily removable hammers
- Paper is guided by aluminum profile, no longer any plastic profiles
- The Embossing Head PCB V4 has click on montage and clearly marked hammer number
- The hammer number is clearly marked on the embossing head and on the Embossing Head PCB V4
- Hammers with longer life cycle

2.1.1 Replace hammer

- Print a hammer test page by pressing HELP+ON. It printout squares of all hammers with corresponding number.
- Remove the embossing head PCB from the click connectors
- Disconnect the faulty hammer cable
- Remove the hammer holder by pressing it down and sideways. See video at www.youtube.com
- Insert the new hammer in the same way
- Connect the new hammer cable to the PCB

2.1.2 Replace anvils

- Remove the 4 clips holding the anvil profile
- Remove the rubber strip
- Remove ALL 13 (7 female and 6 mail) anvils

2.2 Power supply Specification

Switched power supply

Input voltage: 90-264 VAC or 135-370 VDC

Input frequency range: 47-63 Hz

Output voltage: 48 V

Working temperature: 0 to +40°C (32 to +104°F)

Working humidity: 20% - 90% RH non-condensing

2.2.1 Basic and Everest

Switched Power supply 160W (Mean Well GS160A48-R7B)

Output voltage: 48V

Output current: 3.34A

Efficiency 94%

Power plug: See figure 1

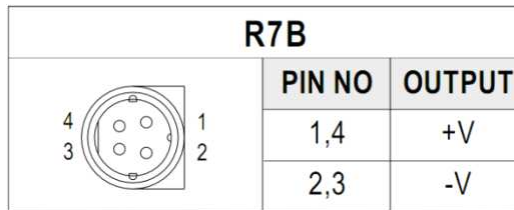


Figure 1

2.2.2 Braille Box

Braille Box power supply Mean Well 600W Single Output with PFC function
Model: HRP6-600-48

Input

Voltage range 85-264 VAC

Frequency range 47-63 Hz

AC current 8.5 A/115 V 5A/230V

Output

DC Voltage 48V

Rated Current 13A

Rated power 624W

Voltage tolerance +/- 1%

Efficiency (typical) 89%

2.3 Electronic PCB, cables

G:\Projekt\Braille Box\Elektronik\Shema-KP

2.3.1 Main Board PCB V4

Internal connectors

P1 = Embossing head

P2= Stepper motor paper feed

P4 = Stepper Motor embossing head

P5 = Front Panel

P7 = Fan

P9 = Paper edge sensor Everest/Basic/Braille&Print

P27 = Paper jam sensor Basic

P10 = Sheet feeder Everest/Braille&Print

P14 = Speaker

C300 = Battery CR2032

External Connectors

J1 = Power in 48V

J6 = Service serial port

J5 = Serial port

P16 = USB interface

J2 = Network interface

J3 = Micro SD Memory (4GB)

J4 = Headphone connector

SW1 = Reset quick press/ 5 seconds = System reset

LED 1 - internal only for development

LED 2 - Green Paper sensor

LED 3 - Yellow Paper jam sensor Basic-D

Development ports, switch etc - not for public use!

P21 = Internal programming port. (Pin x-2 -> changed power up function)

SW2 = Boot strap loader (Development)

SW3 = Reset (Development)

P17 = Connector to Braille & Print

P28 = Connector to Braille & Print

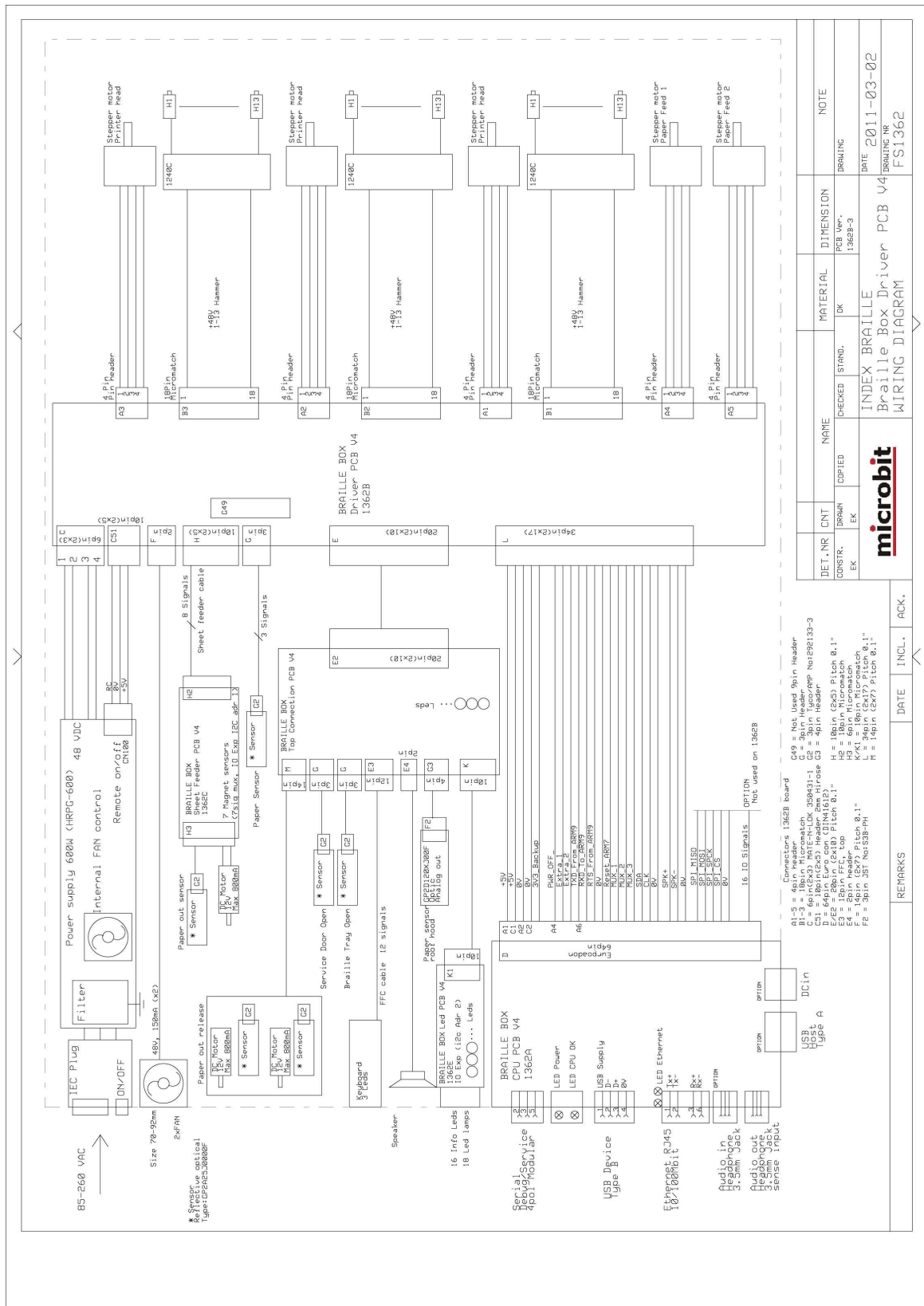
P15 = Development port

P11 = Development port

P19 = Not used port

2.3.2 Braille Box Electronics

Connection schematic of Braille Box boards, sensors and motors.



2.3.2.1 Braille Box CPU PCB V4**Internal Connectors clearly specified**

Bus cable connector to Braille Box Driver PCB V4
Micro SD Memory (4MB?)

Connectors Specified

Network interface
USB interface
Headphone connector

Keys

SYSTEM RESET on the backside of the embosser
- Reset (software)
- System reset press the key for more than 5 seconds

RESET

- Reset - (Hardware).

BOOT STR

Internal bottom should only be used by Index Braille Service. It is used for reloading the internal boot strap loader which controls the programming of the embosser.

2.3.2.2 Braille Box Driver PCB V4

Pictures on the boards with:

Internal Connectors clearly specified

Bus cable connector to Braille Box CPU PCB V4
Bus cable to Braille Box Top Connection PCB Vr
Stepper Motor low embossing head
Hammers embossing head low
Hammers embossing head mid
Hammers embossing head high
Stepper motor paper feed 1-3
Stepper motor mid paper feed 4-5
Sheet feeder connector
Fan out connector
Fan in connector (not in use)
Paper sensor 1
Paper sensor 2 (not in use)

Connectors Specified

Power in 48V

Keys

SYSTEM RESET on the backside of the embosser
- Reset (software)
- System reset

RESET

- Reset - (Hardware).

BOOT STR

Internal bottom should only be used by Index Braille Service. It is for reloading the internal boot strap loader which controls the programming of the embosser

2.3.2.3 Braille Box Top Connection PCB

Bus cable connector to Braille Box Driver PCB V4
Paper arm DC-motor glass side
Paper arm sensor glass side
Paper arm DC-motor fan side
Paper arm sensor fan side
Paper distance sensor
Braille tray sensor
Service door sensor
Front panel
Speaker
Connector to Braille Box LED PCB

2.3.2.4 Braille Box Sheet Feeder PCB V4

The Braille Box sheet feeder include functions sensor for paper size, paper tray position, paper out sensor and is connected to the Braille Box Driver PCB V4. The value of this sensors are presented in the LED PCB in the interface corner.

2.3.2.5 Braille Box LED PCB V4

Braille Box LED PCB V4 is placed in the front glass corner. It is used to display the the sensor positions and error messages. These messages is clearly market on the plate in front of the LED PCB V4.

2.3.3 ATC Braille & Print PCB

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2.4 Fuse

Braille Box has one fuse 5x20 millimeter 10 Amp, slow blow, located in the power input by the technical corner.

Basic-D and Everest-D has no fuse.

3 LED feedback

Enter topic text here.

3.1 Braille Box LED

		PAPER SIZE
1	Green	A3
2	Green	A4
3	Green	11x17
4	Green	11 x 8.5
5	Green	11x11.5
6	Orange	Braille tray
7	Yellow	Braille tray
8	Green	Braille tray
		ACTIVE SENSORS
9	Yellow	Paper
10	Yellow	Paper arm left
11	Yellow	Paper arm right
		ERROR SENSORS
12	Red	Paper jam
13	Red	Out of paper
14	Red	Paper tray open
15	Red	Braille tray open
16	Red	Service door open

4 Appendix

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4.1 Esc sequences

Edit Files with ESC Sequences The easiest way to create a file with esc sequences is to download a HEX editor from the Internet. Each esc sequence starts with HEX 1B as described in the first table. Sometimes, as in the case for the Temporary setting of document properties, the esc sequence is complemented with additional information. See the tables that follow and the example below the tables.		
Description	Decimal	Hexadecimal
Activate six-dot graphics	27 1	1B 01
Deactivate six-dot graphics	27 2	1B 02
Activate general graphics	27 3	1B 03
Deactivate general graphics	27 4	1B 04
Activate four-dot graphics	27 6	1B 06
Deactivate four-dot graphics	27 7	1B 07
Activate six-dot graphics	27 49	1B 31
Temporary Setting of Document Properties See the following table.	27 68	1B 44
Activate WinBraille printing	27 87	1B 57
Transparent mode (y * 256 + x) number of characters	27 92 x y	1B 5C x y
Deactivate six-dot graphics	27 93	1B 5D
Transparent mode – one character	27 94	1B 5E
Activate / Deactivate Letter graphics	27 252	1B FC

Temporary Setting of Document Properties			
Function		Valid values	Comments
Page Length	PL	See Page Length Value below	Calculate page layout
Page Width	PW	See Page Length Value below	Calculate page layout
Inner Margin	IM	0-10 characters	
Outer margin	OM	0-10 characters	
Top margin	TM	0-10 characters	
Bottom margin	BM	0-10 characters	
Multiple copies	MC	2-10,000 copies	
Page mode, (duplexing)	DP	1 = single sided 2 = double sided 3 = Z-folding double sided 4 = Saddle stitch binding 5 = Z-folding single sided	
Line Spacing	LS	0 = 2.5 mm 1 = 3.75 mm 2 = 4.5 mm 3 = 4.75 mm 4 = 5.0 mm 5 = 5.25 mm	

		6 = 5.5 mm 7 = 7.5 mm 8 = 10.0 mm	
Graphic Dot Distance	GD	0 = 2.0 mm resolution 1 = 2.5 mm resolution 2 = 1.6 mm resolution	
Braille Dot Distance	TD	0 = 2.5 mm normal Braille cell inter point 1 = 2.0 mm Japanese Braille, interline 2 = 3.2 mm Jumbo Braille inter point	Embossing speed is maximum for 2.5 mm Braille cell mode.
Page Number	PN	0 = None 1 = Top 2 = Top-left 3 = Top right 4 = Bottom 5 = Bottom-left 6 = Bottom-right	Requires a corresponding top or bottom margin.
Braille Table	BT	0 = Index default Braille table 1 = Own Braille table no 1 2 = Own Braille table no 2 3 = Own Braille table no 3 4 = Own Braille table no 4	

Everest-D Page Length - PL

The Page Length Parameter is defined in millimeters in Everest-D, the minimum value is 100 and maximum value is 585.

Basic Page Length - PL for Basic

Page Length in Basic is defined in whole and fractional inches.

Paper Length PL	Syntax = XXY XX=1-17 Y = 0, 1, 2, 3, 4, 5, 6
11 inch	110
11 1/4 inch	111
11 1/3 inch	112
11 1/2 inch	113
11 2/3 inch	114
11 3/4 inch	115
12 inch	116
etc.	120

Example 1: Setting a temporary page length for Everest

Set the page length for an Everest to 500 mm:

```
<1B><44><PL><500>
```

Example 2: Setting a temporary page length for Basic

Set the page length for a Basic to 11.5 inches:

```
<1B><44><PL><113>
```


5 Specifications

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5.1 Basic-D V4

Weight and sizes

Net size	52x25x12 cm
Net weight	8.0 kg
Shipping size	60x28x43 cm
Shipping weight	12.0 kg (?)
Noise level dB	Ska vi ange det?

Paper characteristics

Paper Weight	120-180 gsm (Gram per Square Meter)
Paper length max	17 inch
Paper length min	1 inch
Paper width max	330 mm
Paper width min	120 mm

Braille characteristics

Embossing Speed	280 pages per hour	Corresponding to 100 cps
Braille forming technology	13 Hardened hammers and anvils for best Braille quality and long life cycle	

Braille dot size	High 0,35 mm, max diameter xx
Braille fonts	2.5 mm, 2.2 mm and 3.2 mm
Braille cell	6 and 8 dots
Text to Braille tables	List of standard tables for most languages and up to 10 user Own Braille tables

Max characters per line	42
Tactile graphic resolution	Up to 50 DPI (Dot Per Inch)
Power, stand by	x W
Power, eco mode	0,5 W
Power, embossing	up to 140 W

Interface

USB	USB 2.0 standard
Network Interface	100 MB XX standard
Serial interface	Pin configuration specified in (link to cables, serial cable)

Headphone plug	Standard xyz
Speech feedback menus	Multiple language included in the embosser

Available language:
December 2010 English, Swedish
March 2011: French German,
Italian, Portuguese, Russian,
Spanish, Japanese.

Serial Service Interface	For distributor service access
--------------------------	--------------------------------

Power Supply	Switched 48 Volt, acceptable incoming voltage range 97-290 Volt
--------------	-----------------------------------------------------------------

5.2 Everest-D V4

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5.3 Braille Box V4

Weight and sizes

Net size HxWxD 52x57x75 cm

Net weight 50.0 kg

Shipping size

Shipping weight

Noise level dB 60-65 dB(A)

Paper characteristics

Paper Weight 120-180 gsm (Gram per Square Meter)

Supported paper sizes A3, A4, Letter, 11x17 inch

Braille characteristics

Embossing Speed 800 pages per hour Corresponding to 250 cps

Braille forming technology 3 embossing modules with x 13 Hardened hammers and anvils for best Braille quality and long life cycle

Braille dot size High 0,35 mm, max diameter xx

Braille fonts 2.5 mm

Braille cell 6 and 8 dots

Max characters per line 42

Tactile graphic resolution Up to 50 DPI (Dot Per Inch)

Power, stand by x W

Power, eco mode 5 W

Power, embossing up to 400 W

Interface

USB USB 2.0 standard

Network Interface 100 MB XX standard

Serial interface Pin configuration specified in (link to cables, serial cable)

Headphone plug Standard xyz

6 Service information sources

Link to

Knowledgebase

Knowledgebase for distributors

Support form

Spare part list (log in as distributor)

Replacement modules

Sprängsskisser (Service manuals)

3D modeller

Download software (drivers, WinBraille etc)

Download manuals

Forum Braille Box

Forum V4 Basic and Everest

Back Cover