

MagicBox®

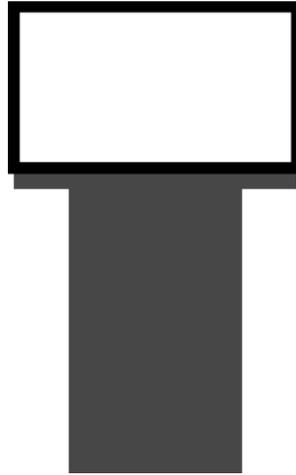
Technical Specification



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1 Overview



The MagicBox® is made of a range of carefully selected high quality materials. The cabinet is made of Aluminum, lacquered in RAL 9005 mat. The pedestal is made from sheet steel and is powder coated in RAL 7016 mat. On request and at extra cost, cabinet and pedestal can be lacquered/powder coated in any available RAL color.

Product description

We believe that technology can pave new ways of learning. By combining the best of paper and pixels, we can reinvent what it means to teach and learn.

The MagicBox® is an astonishing innovation that magically fuses traditional display cases with actual hands-on experience. The technology behind it is a special 43" transparent touch screen that is incorporated in the front glass of the display case. The digital content is not projected *on* the glass, it is seemingly *in* the glass. This makes it possible to superimpose images, videos and 3D models on the exhibited object while keeping the same object visible at all time. Print publications, up to now limited to a look-only display spread, will be fully tangible at the fingertips of the audience. Physical objects can be combined with video and 3D animation to enhance the understanding of their functionality and history.



The MagicBox® enables pulsating windows to a world of wonder, enriching exhibitions not only with valuable information, but by making them truly memorable experiences.

The MagicBox® consists of the following parts:

- An illuminated exhibition vitrine with 4mm laminated safety glass to protect the exhibition item
- LED lighting panels with adjustable light level per enclosed remote control
- A 43" transparent screen with Media Board to superimpose digital content
- An infrared frame to detect the users gestures
- An application software including a Content Management System to edit media material and showcase it on the transparent display
- A high performance PC to run the software in conjunction with the transparent touch screen
- An integrated high-quality soundbar with enclosed remote control

2 Transport Cases

The MagicBox is cased in two customized wooden transport crates. The dimensions of the crates are as follows:

- Crate 1 (pedestal, including PC, soundbar, steel plates for extra stabilization and vacuum grip)
138 cm (W) x 57 cm (D) x 86 cm (H).
190 kg (36 kg pedestal plus 65 kg steel plates plus 89 kg transportation crate)
- Crate 2 (cabinet)
119 cm (W) x 77 cm (D) x 90 cm (H)
95 kg (32 kg display case plus 63 kg transportation crate)

A pallet carrier is needed to navigate the crates on-site.

3 Overall Dimensions & Weight of MagicBox®

Height = 179,0 cm (incl. adjustable feet at default "0" position)

Width = 99,5 cm

Depth = 57,9 cm

Total Weight = 133 kg (incl. extra steel plates for additional stability)

4 Pedestal | Material, color, dimensions & weight

Main characteristics of the pedestal:

- Made from sheet steel
- 5 extra steel plates (13 kg each) for additional stability
- Standard coloring is RAL 7016 (powder coated, mat)
- Height-adjustable feet for pedestal levelling
- Lockable door on the back
- 2 grommets on the back (with strain relief) for headphone cables
- Height = 120,7 cm (incl. adjustable feet at default "0" position)
Width = 55,0 cm
Depth = 38,0 cm
- Weight = 101 kg (incl. steel plates)

5 Cabinet | Material, color, dimensions & weight

Main characteristics of the cabinet:

- Made from aluminum
- Standard coloring is RAL 9005 (mat, lacquered)
- Left and right side with 6 mm grey glass
- Top lid is fixed with 4 screws
- Humidity inside the cabinet is similar to the room environment (although likely a bit warmer and dryer when the LED lights are on). Since there's no humidity control, humidity sensitive objects would require Magic Box to be located in a climate controlled environment.
- Height = 57,9 cm
Width = 99,5 cm
Depth = 57,9 cm
- Weight = 32 kg

6 LED Lighting

Characteristics of the 2 LED panels (top, back):

- 8 mm LED panels with diffuser
- LED color temperature is 2400 K
- Adjustable light intensity per remote control
- Maximum light intensity inside cabinet = 9000 lux

7 Transparent Touch Screen

Main characteristics of transparent touch screen:

- Bonded 43" transparent LCD screen
- Front glass pane made of composite safety glass (white, "low iron")
- FullHD (1920 x 1080 px), contrast 3000:1, pixel distance 0.4902 x 0.4902 mm, viewing angle 178 degrees (horizontal/vertical)
- Infrared frame, 10-points multitouch, frame rate 250 fps, touch accuracy 1,5 mm

8 Computer

The integrated computer is the following:

Dell PreCision T3430 SFF xeon (or similar), Intel Xeon E-2174G, 16 GB RAM, 256 GB SSD, AMD Radeon PRO WX 4100 4GB, OS: Win 10 Pro (64 bit)

9 Soundbar

The integrated soundbar is the following:

Teufel CineBar One, 4 speakers, 4-channel amplifier with a total RMS power of 80 Watt, remote control

10 Power Connection

Characteristics of power connection:

- All internal power supplies are multi-voltage (100 – 240 V, 50/60 Hz)
- Standard power plug for main power connection is European
- power adapter enables usage of enclosed UK, US and AUS power cables

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