



## Laser Nova

### Turning learning into fun!

The Laser Nova is the CTOUCH newest interactive touch screen specifically designed to stimulate the development of the 21st century skills in education. It focuses on turning classroom learning and knowledge sharing into fun and preparing students for the ever changing school and work environment of tomorrow. Students and teachers can now enjoy maximum ease of use by wirelessly streaming what's on their phones, tablets or notebooks.

- ✓ State of the art Android 7.1 Rockchip 3399 module
- ✓ COS™ – CTOUCH Operating System
- ✓ Versatile annotation app - annotate over any software
- ✓ Wireless screen sharing with two-way touch functionality with Barco MirrorOp app - including two sender licence keys
- ✓ Built-in JBL® 80 watts speakers, with Live Stage (virtual) surround sound
- ✓ Over-the-air updates - your display will always be up-to-date
- ✓ Wake-on-LAN and Wake-on-wireless-LAN making it Mobile Device Management (MDM) ready
- ✓ Low power consumption - certified with Energy Star

Building further on the successes of the Laser air+, we proudly present the new Laser Nova. The tablet like user experience combined with the Android 7.1 operating system, pre-installed apps and excellent JBL® sound system make it a one of a kind plug and play solution.

### Increased student and teacher participation

The integrated wireless presentation and collaboration solution allows for sharing with any device and all operating systems: Windows/Mac, tablet or smartphone. CTOUCH uses Barco's MirrorOp app to ensure easy and fast wireless sharing. The unique two-way mirroring touch functionality enables easy control of devices (2 licence keys included).

### Easy and efficient use

#### COS™

The CTOUCH Operating System is based on Android 7. Within COS™ we included some really easy to use pre-installed apps including an extensive Whiteboard, APK installer, Aqua Mail, File Commander & Office Suite. You can also easily install your own favourite apps via the CTOUCH app store.

### Controlling the display with just one button

When pressing the button on the front of the display, an on-screen Float Bar will appear. This Float Bar gives you access to the display menu, allows you to change source or to adjust the volume. It also gives access to all other apps on the display as well as to the annotation app. This versatile annotation app enables you to easily annotate over any software.

### Improve communication

#### JBL® Live Stage (Virtual) Surround Sound

The CTOUCH Laser Nova is equipped with a built-in JBL® speaker system. This audio system offers 80 watts sound, enabling you to fully captivate your audience. Experience clear high and mids, plus exceptional bass tones. The integrated 80W JBL® speakers bring Live Stage (virtual) Surround sound, which widens the sound stage and sharpens the location of sound.

### Adaptive Touch

The Adaptive Touch simulates natural handwriting, as it has the power to adjust to the writing speed. When increasing the speed of writing, the touch frame will accelerate the speed of data processing. This creates a fluent line, even when writing fast.

### Dynamic Pen

The dynamic pen enables a natural handwriting experience. It also allows to easily adjust volume, open programs or simply use it as an air mouse.

### Low cost of ownership

#### Mobile Device Management (MDM) ready

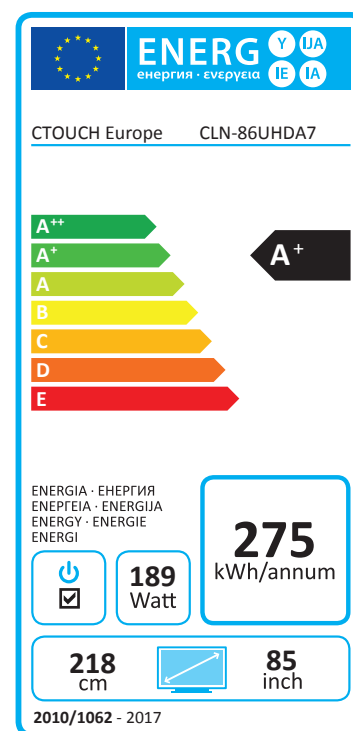
With the Wake-on-LAN and Wake-on-Wireless-LAN functions, the Laser Nova is ready for any MDM software you want to install on the touchscreen. Both on the CTOUCH Operating System as on the Windows OS of the OPS.

### Energy Star

The Laser Nova is certified with the Energy Star certificate, making it a perfect choice for environmentally conscious customers. Topped off by the free Priority Care service programme and the up to 7 year warranty\*, CTOUCH reduces the cost of ownership to one of the lowest in the market.

### Optional classroom collaboration licence pack

Choose full collaboration for your entire classroom. The collaboration licence pack allows for all the students to wirelessly share and present their content on the Laser Nova, whether sharing from Windows/Mac, tablet or smartphone.



\* go to <http://support.ctouch.eu> for detailed warranty conditions

## Product number

- Laser Nova 86 inch: **10052186**

## Touch system

- Touch System: Adaptive touch
- Touch Point: 32 Point
- Touch tools: Hands or other solid (soft tip) object
- Accuracy:  $\pm 2$ mm
- Effective screen size (mm): 32767 x 32768
- Interface: USB 2.0 compatible (full speed) HID compliant, Plug & Play compatible. Backwards compatible with USB 1.1
- Supported OS: Windows, Mac, Android and Chrome
- Touch driver: Not required for 20 points (under Windows); 32 points needs driver (under Windows), OSX needs drivers for gestures.

## Panel

- Diagonal size: 86" (2184 mm)
- Panel technology: TFT LCD
- Panel resolution: 3840 x 2160
- Frame rate: 60 Hz
- Brightness: 350 cd/m<sup>2</sup>
- Aspect Ratio: 16:9
- Contrast Ratio (Static): 1200:1
- Contrast Ratio (Dynamic): 5000:1
- Response time: 8 ms
- Display Colours: 1.07 Billion (10 bits)
- Pixel pitch (W x H): 0.4935 x 0.4935
- Pixel pitch (WxH): 0.372 x 0.372
- Viewing Angle: 178° / 178°
- Backlight type: Direct LED
- Service Life: > 30.000 Hours
- Installation: Landscape

## Connectivity

- Video input (digital): 3x HDMI 2.0, 1x DP 1.2
- Video input (analog): 1x VGA
- Audio input: 1x Mini Jack
- Audio output: 1x S/PDIF Optical, 1x Mini Jack
- USB: 1x USB 3.0, 1x USB-C, 5x USB 2.0
- Touch: 2x USB-B
- RS232C: 1x DB-9
- LAN port: 1x RJ45 10/100/1000 BaseT
- Wi-Fi module: 1x 802.11a/b/g/n/ac
- Bluetooth: 1x Version 4.1

## Video

- PSM: Warm / Cool / Normal
- Picture Mode: Dynamic / Standard / Soft / User
- Freeze function: Yes
- Backlight mute function: Yes

## Sound - Designed, tuned and built by HARMAN

- Transducers: 2 Stereo JBL® 3-Way Speakers (tweeter, mid-range and woofer)
- Amplifier power: 80 watts
- Frequency range: 60Hz - 20kHz
- JBL® LiveStage (Virtual) surround sound

## Features

- Pre-installed apps: Aqua Mail, File Commander, Office Suite, MirrorOp, Uboard mate
- Internal OPS slot: Yes
- Annotation: Yes, annotate over any software application
- Gesture recognition: Yes, refer to the CTOUCH manual
- HDCP compliance 2.2
- Thickness of safety glass: 5 mm (hardness Mohs 7)
- Network controllable input: 1x RS232C & 1x LAN IN

## Android

- System version: 7.1
- CPU: ARM Cortex A72x2; Cortex A53x4
- GPU: Mali-T860MP4
- Memory: 2 GB
- On-Board Storage: 16 GB

## OSD

- Touch OSD: Yes
- OSD Language Function: English, German, Dutch, French, Danish

## Power

- Power Supply: AC 100-240 V 50 / 60Hz
- Power Consumption (in Operation): 189W
- Power Consumption (in Standby):  $\leq 0.5$  W
- Ambient light sensor: Yes

## Quality approvals

- Regulatory approvals: CE, FCC, Energy Star
- Green approval: RoHS compliant
- ISO Standard: ISO9001 and ISO14001

## Dimensions & Weight

- Product dimension (WxHxD): 1990.4 x 1173 x 113 (mm)
- Product weight: 100 kg
- Vesa Mount (WxH): 800 x 600 (mm), M8 screw

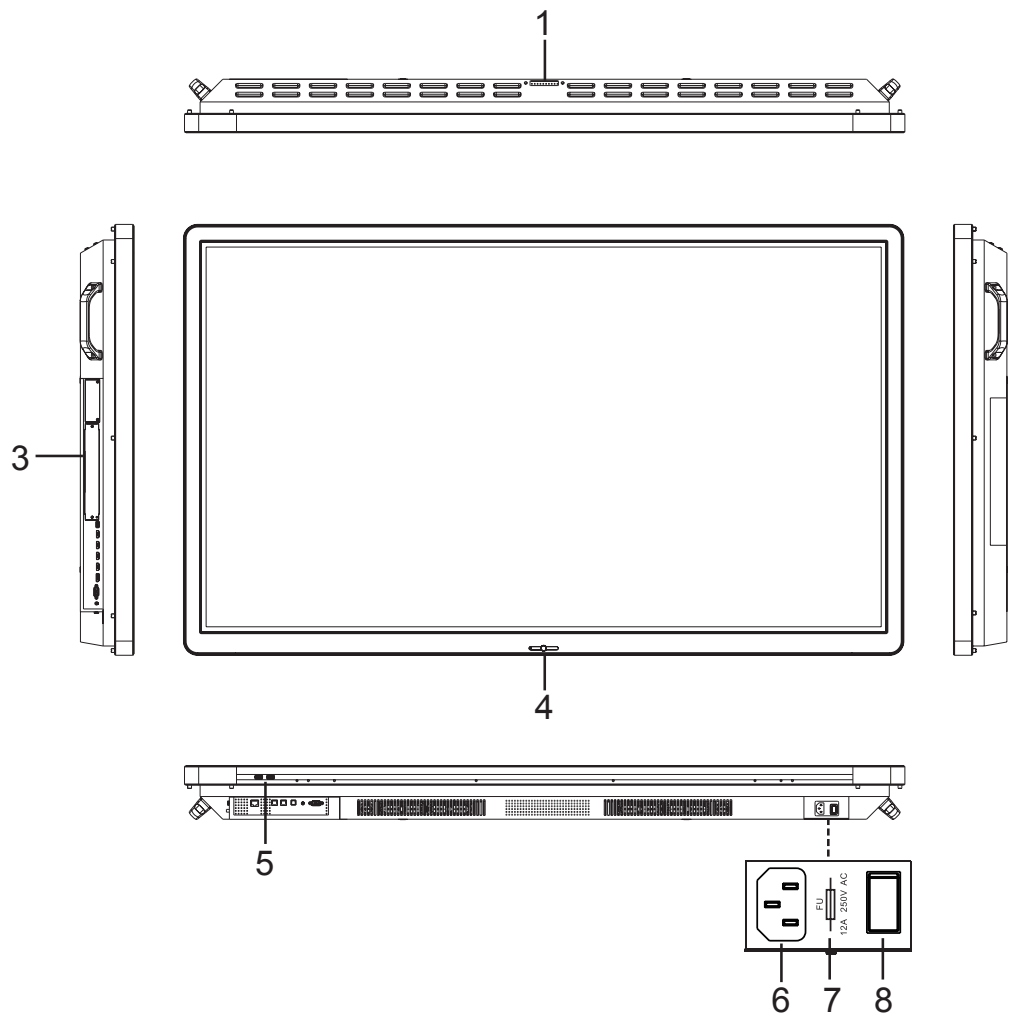
## Product accessories included

- Accessoires pack: Power Cable, USB cable, HDMI cable, remote control, dynamic pen, 2 passive pens, Quick Start Guide & Warranty card.

## Logistics information

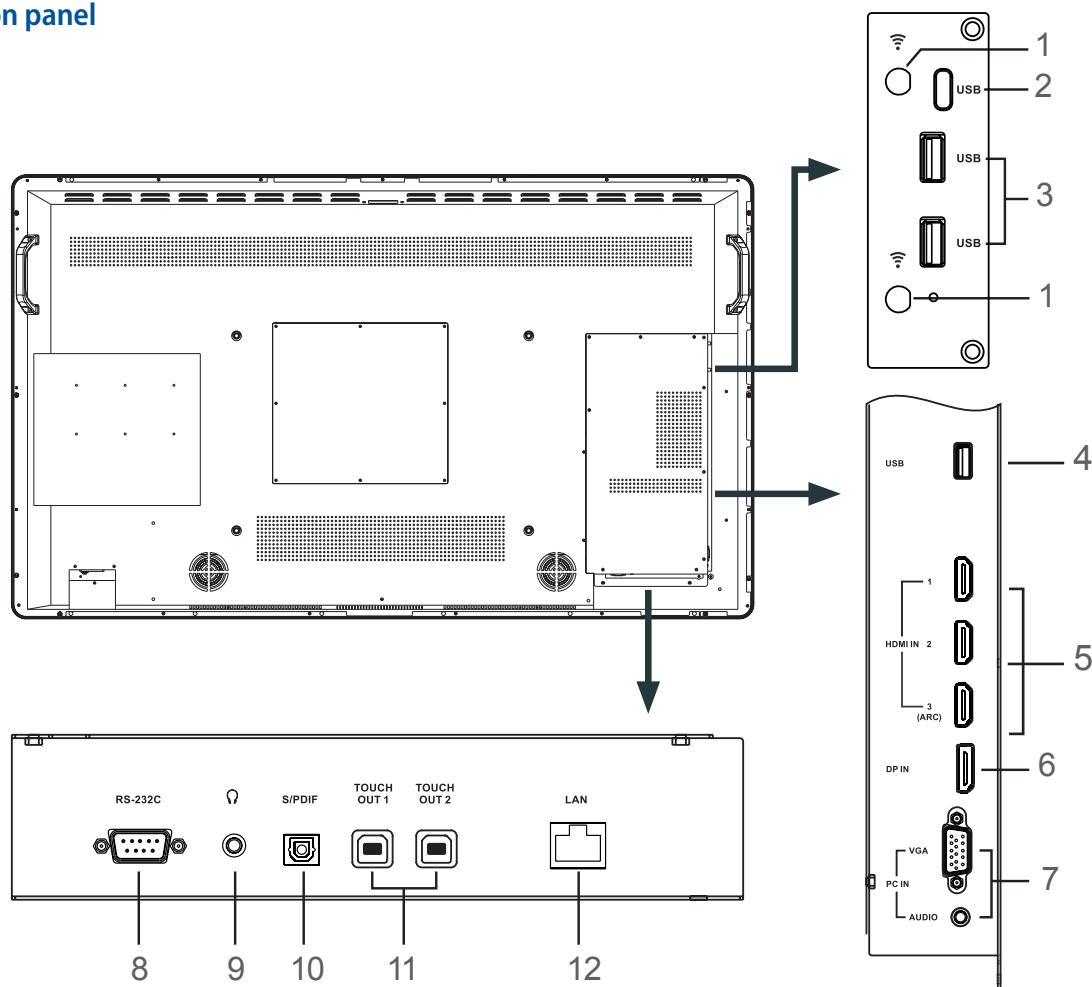
- Box size (WxHxD): 2118 x 1324 x 290 (mm)
- Gross weight: 112 kg
- EAN no.: 8719481480318

Control panel



nr.		Description
1	USB(2.0)(for camera)	<p>This port is for connecting a camera.</p> <p><b>Notes:</b></p> <ol style="list-style-type: none"><li>1. Please open the dust cover before being used.</li><li>2. It can perfectly support cameras up to 720p.</li></ol>
2	N/A	
3	OPS module slot	<p>Insert an OPS module (Optional).</p>
CTOUCH Button	Power LED	<p>Red: In standby mode. Blue: In power on mode.</p>
	Remote control sensor	<p>Aim the remote control towards this spot on the CTOUCH interactive display.</p>
	Power	<p>Press to switch the CTOUCH interactive display on or off.</p> <p><b>Note:</b> When the CTOUCH interactive display is turned on, press the button in the middle to show the Float Bar. Press the button for about 2 seconds and the screen will go into stand-by mode.</p>
5	USB	<p>Connect USB devices to this port for OPS and Android.</p>
6	AC IN	<p>Plug the AC cord into this jack and into a power outlet. (AC 100-240V 50/60Hz)</p>
7	Fuse	<p>12A 250V</p>
8	Power Switch	<p>Push (I) to turn on the power, push (O) to cut off the power.</p> <p><b>Note:</b> Don't cover the power switch.</p>

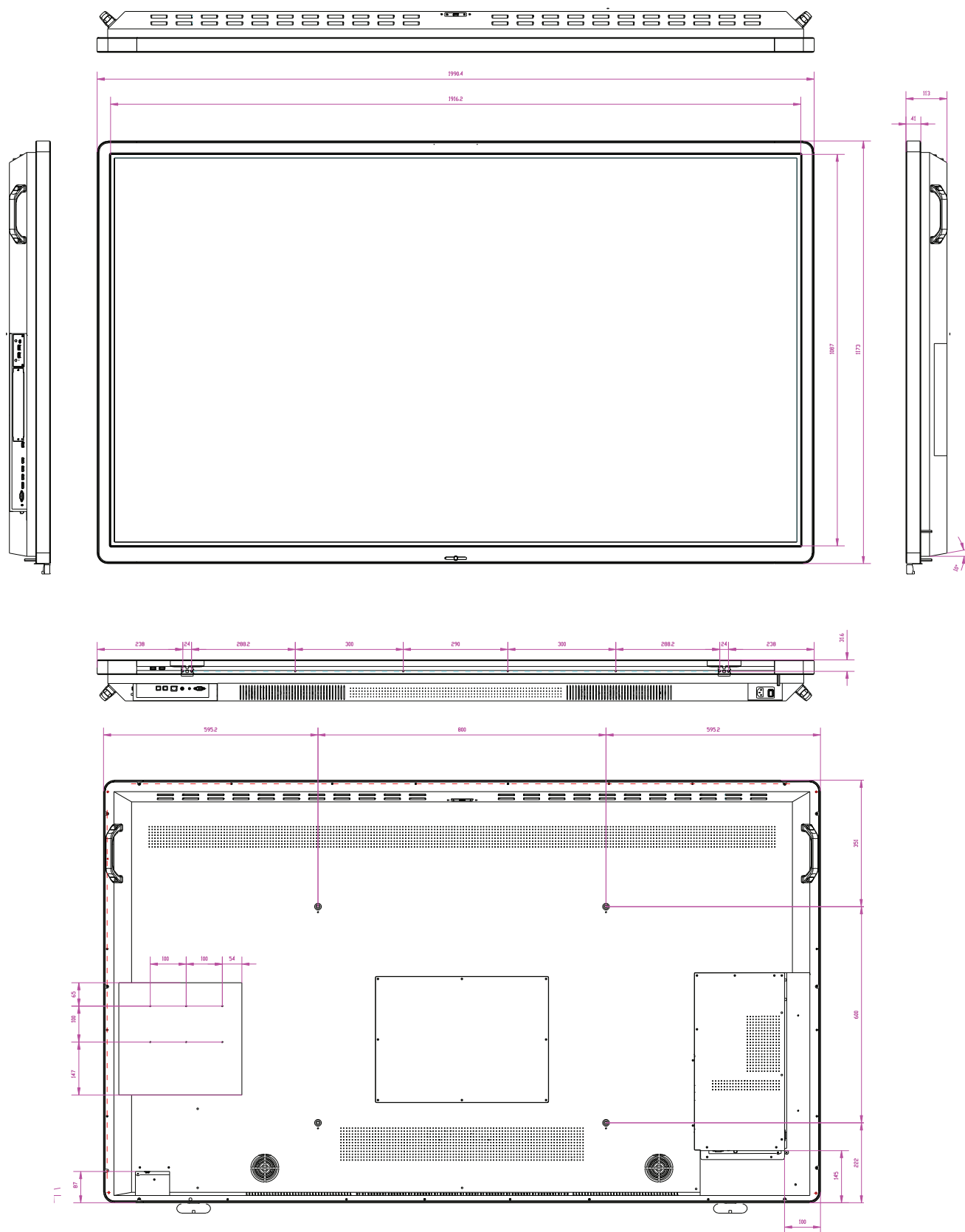
## Connection panel



nr.	Description
1 Antenna	WiFi antenna. (Tighten the WiFi antenna in clockwise direction).
2 USB (Type-C)	Connect USB devices to this port for Android.
3 USB	Connect USB devices to these ports for Android.
4 USB	Connect USB devices to this port for the Android. <b>Note:</b> use this USB-port for software updates.
5 HDMI1/2/3 IN	Connect an HDMI or DVI device to this HDMI port. HDMI 3 (ARC): Connect an ARC enabled home theater receiver to this HDMI port.
6 DP(DisplayPort) IN	Connect a DP device to this DP port.
7 PC IN	Connect the video/audio of a computer to these ports.
8 RS-232C	For remote control, service and other uses.
9	Connect headphones to this jack. The current selected source is audible.
10 S/PDIF digital audio OUT	Connect a digital sound system to this S/PDIF jack.
11 TOUCH OUT 1/2	Output for external devices connected to PCx, HDMIx or DP ports, which support touch systems.
12 LAN	Connects the external network or router.

**Note:** If the CTOUCH display is on the VGA source and does not get any signal, it will go into stand-by mode after two minutes.  
When the CTOUCH display is on others sources and does not get any signal, it will go into stand-by mode after 10 minutes.

## Technical drawings



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Specifications CTOUCH Laser Nova 86 inch (UHD)

[www.ctouch.eu](http://www.ctouch.eu)

**CTOUCH<sup>®</sup>**  
The power to engage

***Stützpunktpartner für Norddeutschland***



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