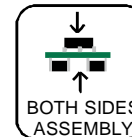
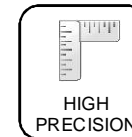


# PICK & PLACE MANIPULATOR

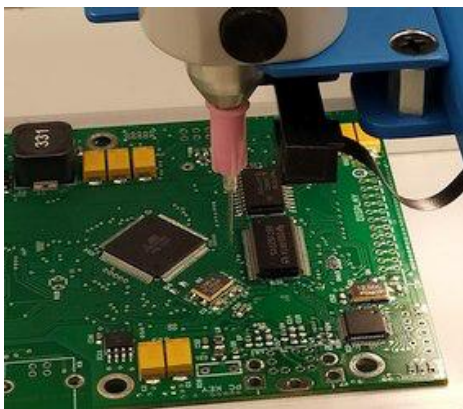
## MAN-32-VLC

CCD Camera and 15" PC Monitor



**NEW !!!**

The manipulator, together with the feeders and the setting table, forms a compact, powerful mounting system for mounting PCB prototypes or for manual PCB mounting of small series. Supplied without feeders, which are optional accessories.

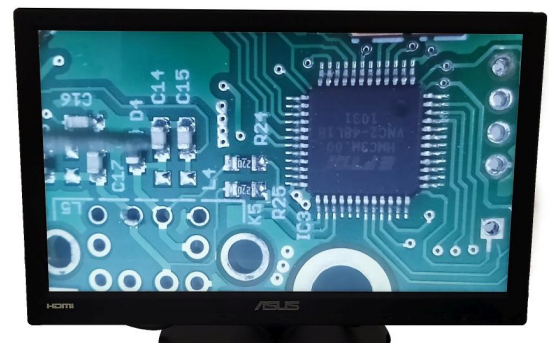


The easy movement of the arm in the X and Y axes allows for comfortable picking of components from the feeders and their placement over the entire work surface. Precise guidance of the placing head in the Z axis means a perpendicular and fine placement of the component into the paste, starting from chip size 0201. The head guide knob simultaneously serves to rotate the needle about its axis.

There is also a small but powerful light source and a vacuum switch integrated in the head. Gently squeezing the placing head is understood as picking-up components and deep squeezing as placing. Vacuum pump with regulation is also included in standard shipment.

A miniature CCD camera is built into the head for mounting small size 0201 chips as well as for precise positioning of very fine pitch ICs. The camera has 2 positions and displays either a setting needle or a dosing nozzle. The magnified image at a low angle is displayed on a large 15" PC monitor.

With an additional dosing head, solder paste, glue or other media can be applied to the PCB. Precise guiding of the hand with the cartridge allows to dispense accurate quantity in the right place.



### Technical specifications:

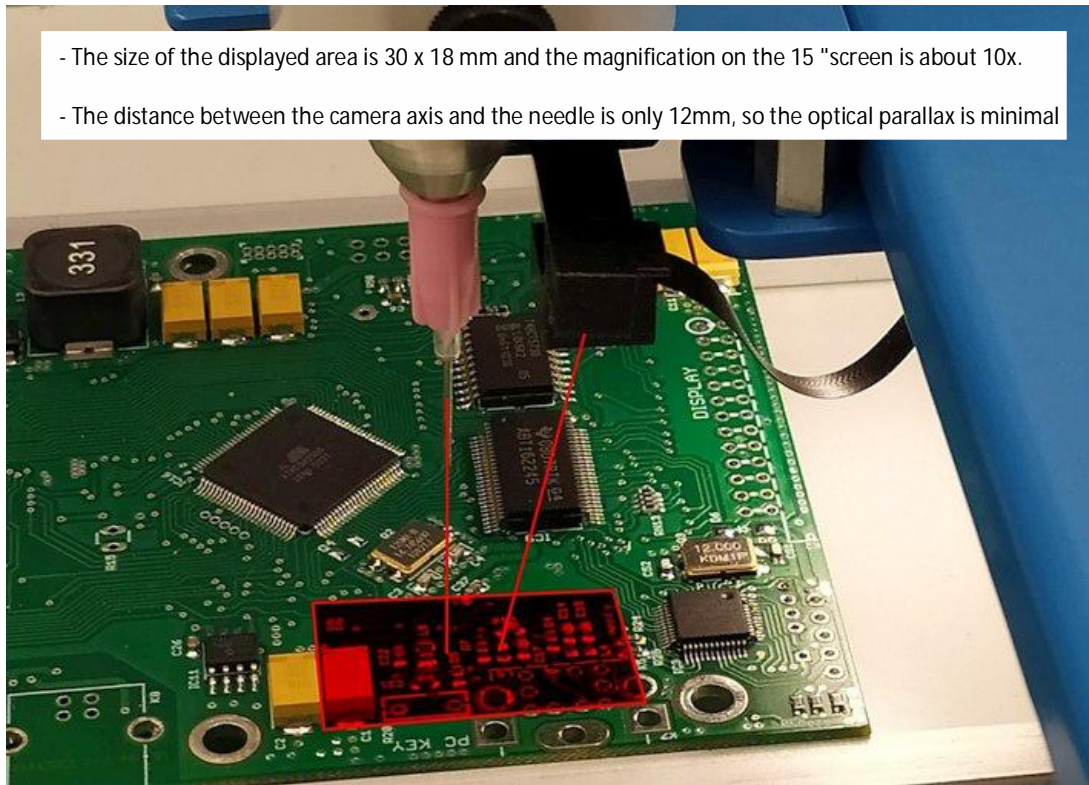
Manipulator dimensions (L/W/H): 790 x 390 x 170 mm  
Max. size with feeders: 1140 x 650 mm  
Arm movement in x / y / z axes: 470 x 230 x 15 mm

Working area max: 350 x 210 mm  
Power supply: 12 V adapter, 800 mA  
Vacuum pump: 230 V, 6 W

Video Camera  
Viewing angle: 78°  
CCD sensor: 1/4" size, 8 Mpix  
Video resolution: 1080p30 - Full HD

Monitor  
Display dimensions: 15.6" widescreen 16:9  
Resolution: 1366 x 768 pixels  
Dimensions with stand: 378 x 281 x 189 mm

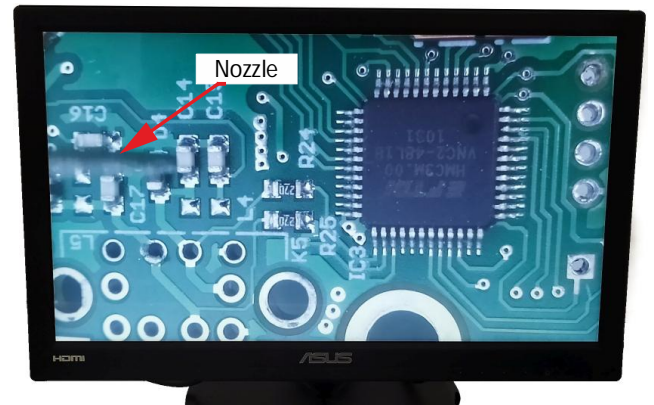
# Differences between MAN-32-VLC and MAN-32-VIS



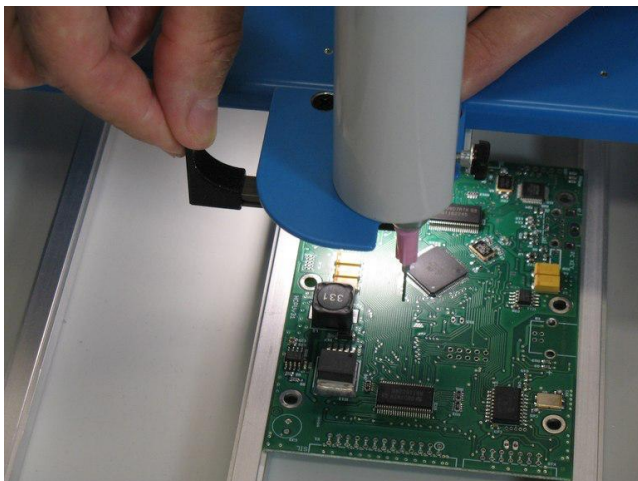
- The size of the displayed area is 30 x 18 mm and the magnification on the 15" screen is about 10x.
- The distance between the camera axis and the needle is only 12mm, so the optical parallax is minimal



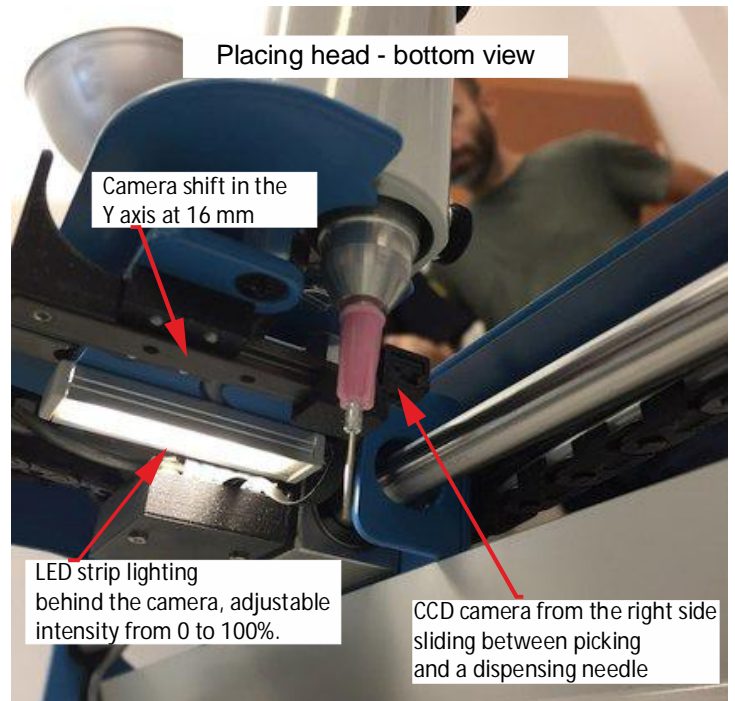
The power switch turns off the display, processor, and lighting. LED strip lighting is adjustable by potentiometer from 0 to 100%.



On the 15.6" screen with 344 x 193 mm display size the image is magnified about 10x. You can also connect any a larger monitor with HDMI input and optical magnification will increase.



Moving the camera 16 mm allows viewing and install ICs up to 30 x 30 mm



Placing head - bottom view

Camera shift in the Y axis at 16 mm

LED strip lighting behind the camera, adjustable intensity from 0 to 100%.

CCD camera from the right side sliding between picking and a dispensing needle