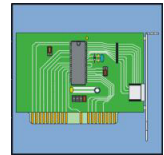## 1 Intended use

The HOMAG CUBE is a mini-computer that is used for assistance systems, e.g. to control LED strips for an edgeband shelf, or to identify material for a label printer.

Features	Values	
Connection voltage	24 V	DC
Connections	2X Ethernet	
	2XUSB	
	I/OS	
Operating temperature	10–35	°C
	50–95	°F

Contents

2 Functions / sequences

The HOMAG CUBE is used in various assistance systems. For example:

Cutting Production Set

The cutting assistant provides support when cutting with the saw and labeling parts.

Sorting Production Set

Each part has its place. The assistant helps with the sorting of parts in the workshop

Edgeband Management Set

This edge assistant organizes all edge material in the workshop.

For the individual applications, e.g. control of LED strips **1.1** or a label printer for identifying workpieces and edge material **1.2**, one HOMAG CUBE with the associated components is required in each case.
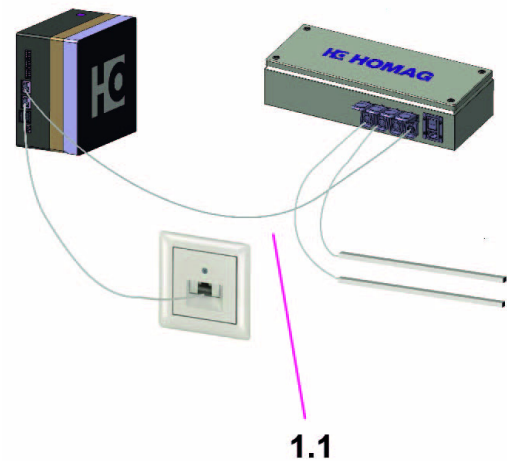
| 1.1 | LED strip control |

The corresponding APP from HOMAG can be downloaded from Google Play Store or Appstore. The app is needed to control the CUBE.

➔ See the chapter entitled "Commissioning"

You can also find more information in the APP.

The HOMAG CUBE must be supplied with power using the power supply unit provided.

➔ See the chapter entitled "CUBE power supply"

The CUBE can be connected to the network and to the device to be connected, e.g. an LED box, via the two Ethernet interfaces.
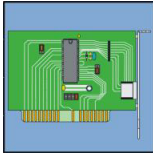
There is also a status display on the HOMAG CUBE. The meaning of the individual colors and flash codes are listed in the "Meaning of status display" table.
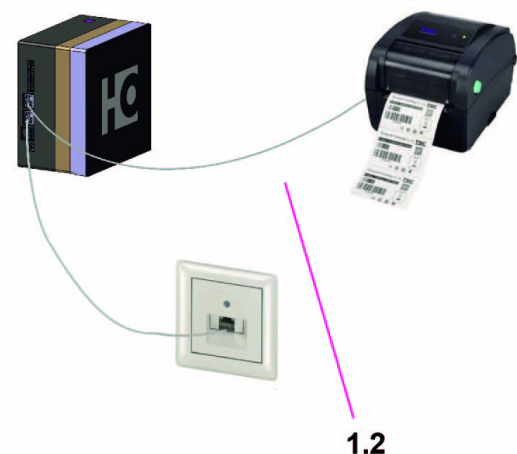
| 1.2 | Printer control |
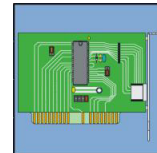
3   Operation

3.1 Connections/display/buttons

Plug connector for plug-in power supply unit **2.1**

Ethernet IN RJ45 plug connector for Ethernet cable from the Internet **2.3**

Ethernet OUT (2.4) RJ45 plug connector for Ethernet cable for connection to the corresponding peripherals (e.g. LED box) **2.4**

USB interfaces, e.g. for printer **2.2**

! Caution

The device may be damaged

- Only devices that require a maximum current of 100 mA may be connected to the USB interface.
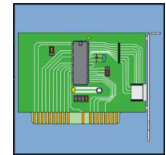
Note

- The HOMAG CUBE may be used in indoor spaces only.
- It should not be exposed to direct sunlight or heat radiation.

2.1	Connection for power supply unit
2.2	2xUSB
2.3	Ethernet IN (Internet connection)
2.4	Ethernet OUT
2.5	I/Os
2.6	Status display
2.7	Button for functions

3.2 Supply

A plug-in power supply unit is required to supply the HOMAG CUBE with power.

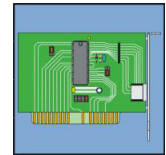The power supply unit is included in the sales package.

Note

- Only connect the power supply unit for the CUBE to suitable power supplies.
- For this purpose, note the specifications on type plate **3.1** of the power supply unit.

3.1

| 3.1 | Type plate |

3.3 Button functions

Button **2.7** can be used to execute different functions through different actions.

By pressing or holding the button, you can jump into or exit the menus or submenus. The button can also be used to execute the various options in the menus or submenus.

The menus and options are displayed with different colors and LEDs on the status display of the CUBE. For some options, the color also indicates whether they are activated or deactivated.

If the operator does not interact within 30 seconds, the CUBE returns to its initial state.
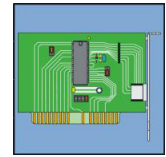

| 2.7 | Sensing device |

CUBE restart

The HOMAG CUBE can be restarted as follows:

Press and hold the button for 4 seconds.

When the button is released, the CUBE is restarted immediately.

3.3.1 Navigating through menus and executing options with the button

3.3.1.1 Starting the main menu

➢ To get to the main menu, press button **2.7** once.

⇨ This will take you to the first option.

⇨ The color of the HOMAG logo on the front changes to blue and the first LED on the corners of the status display lights up white.

➢ Press the button once more to switch through the various options of the main menu.

3.3.1.2 Executing an option or changing to a submenu

To execute an option or to change to a submenu, the procedure is always the same.

➢ Press and hold the button for 2 seconds.

⇨ The logo on the front and the entire status display light up white.

➢ You have 2 seconds to release the button.

⇨ The option is then executed or you change to the selected submenu.

As long as a selected function is being executed, the icon lights up white. The LEDs on the status display show a running light until execution is finished.

Note

If the processing time is very short, the running light is not visible.
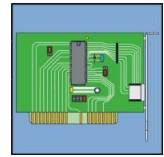
Once the option has been successfully executed, the logo and status display light up green. The status display flashes.

If an error has occurred during execution, both are displayed in red and the display flashes.

After execution, the CUBE returns to the last selected menu or submenu.

3.3.1.3   Exiting the menu

- ➢ To exit the main menu or a submenu, press and hold button **2.7** for more than 4 seconds.

    - ⇨ During these 4 seconds, the display changes its status twice.

    - ⇨ After 2 seconds, the display changes to the status for executing the current function.

- ➢ Do not release the button at this point, otherwise you will execute the selected function. Keep the button pressed for another 2 seconds.

    - ⇨ The display now changes to the color of the higher level menu or, if you were already in the main menu, to the initial state.

- ➢ You can now release the button again.

Note

To exit the menu, do not release the button after 2 seconds, otherwise the currently selected option will be executed.

If the operator does not interact within 30 seconds, the CUBE returns to its initial state.
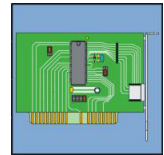
3.3.2 Menus and options

Display for the main menu

The main menu is displayed with a blue logo. When you jump to the main menu, the first option is always preselected.

Option: Remote diagnostics

The second option in the main menu allows you to activate or deactivate the remote diagnostics connection.

You can thus switch between the two statuses activated and deactivated.

When the remote diagnostics connection is deactivated, the second LED of the status display lights up white.

When remote diagnostics is activated, the second LED of the status display lights up blue.

Option: Restore factory settings

With the sixth option, you can restore the factory settings. Executing the sixth option resets the password to the initial password.

When this option is selected, the sixth LED lights up white.

Note

The password for the factory setting can be found on the type plate of the CUBE. This is located on the rear.
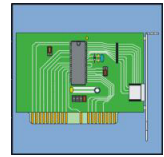
4 Assembly

Note

The sales package includes instructions for mounting and installation.

Depending on the application, different mounting variants are possible for the CUBE:

- Stand-alone, e.g. on the desk

- Cabinet mounting

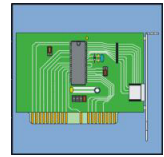- Wall mounting

- Integration into a saw
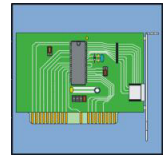
4.1 Stand-alone

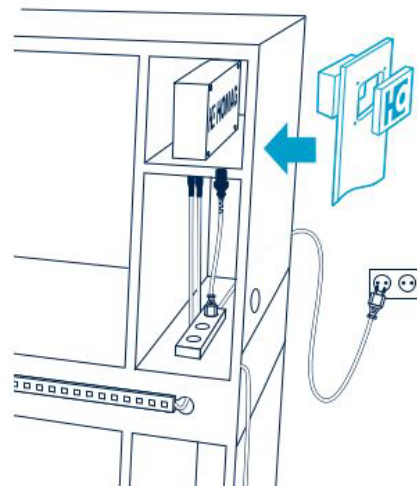Free-standing, e.g. on the desk.

4.2 Cabinet mounting

Note

The CUBE can be integrated into the edge rack, for example.
Drawings for the installation of the CUBE can be downloaded free of charge. For information on how to do this, see the enclosed installation instructions.

➢ Separating the parts of the CUBE

The part made of wood can be used as a drilling template for the cabinet door (or you may have already processed this with the CNC program).

➢ Now screw the two halves of the CUBE to the cabinet door and connect them to each other using the integrated plug connector.

➢ Install the housing with the connections facing down.

Note

The part made of wood is superfluous.
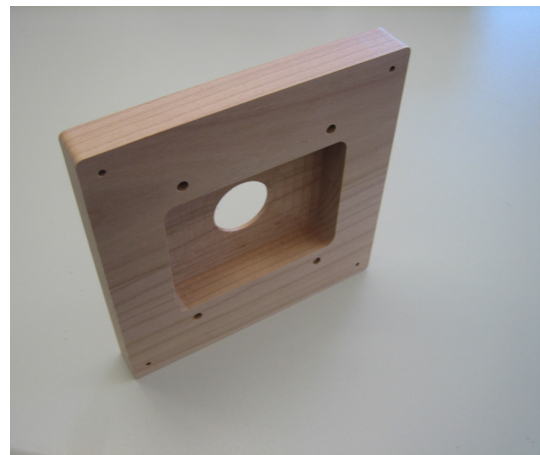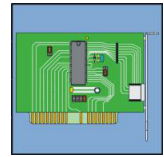
4.3 Wall mounting

The CUBE can be secured with screws (see drawing for the bore holes and dimensions for mounting the CUBE on the wall).

In addition, the CUBE can be attached to magnetic surfaces by means of the magnets integrated into the housing.
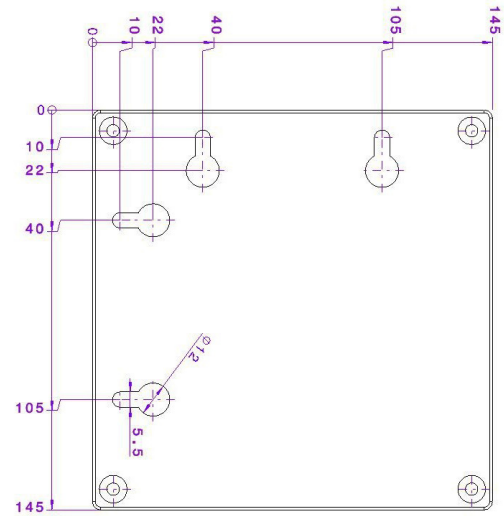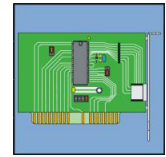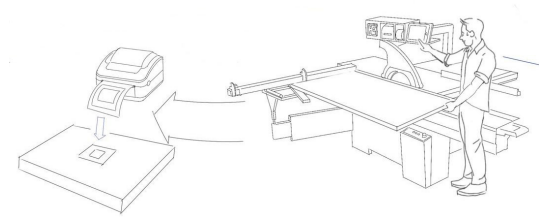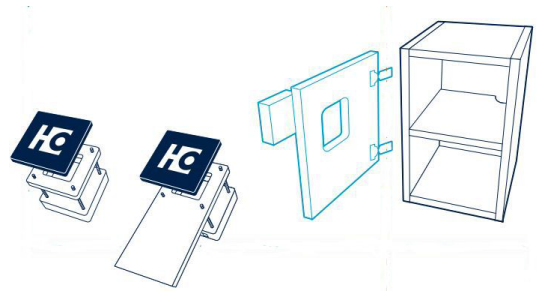
4.4 Integration into a saw

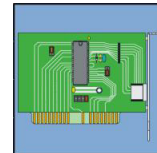With this application too, you can install the CUBE in a self-built rack for a saw.

Drawings for the installation of the CUBE can be downloaded free of charge.

The CUBE is installed in the door in the same way as for cabinet mounting.

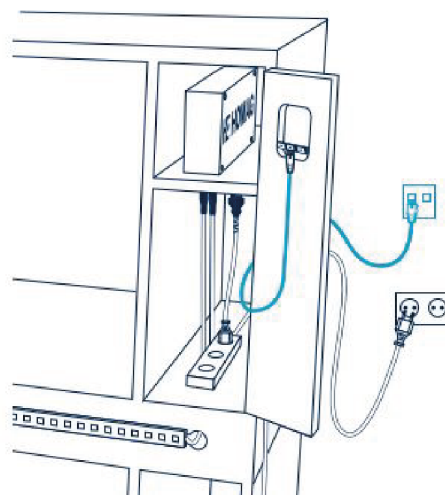➜ The individual installation steps are described in the chapter on cabinet mounting.
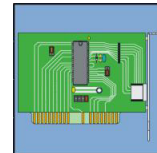
4.5 Connecting the CUBE

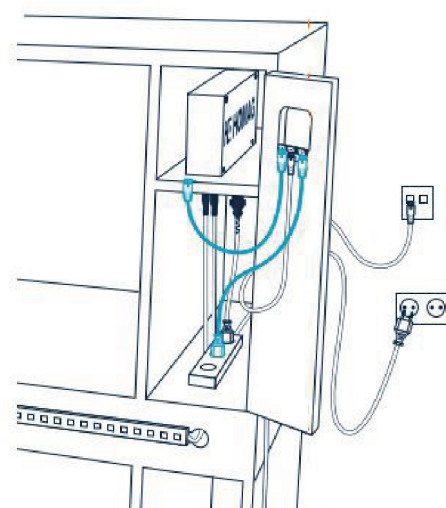**Note**

The LAN socket must allow access to the Internet.

➢ Connect the CUBE at Internet connection **2.3** to a LAN socket in your network using a LAN cable. The LAN cable is included in the sales package.
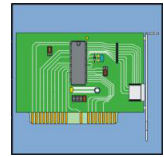
2.3

2.3	Internet connection

➢ Connect the CUBE to the LED box and/or printer.

Connect the LED box via Ethernet **2.4**.
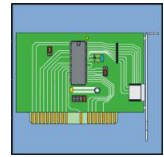
Connect the printer via USB interface **2.2**.

2.2	2x USB Interface
2.4	Ethernet connection

➢ Insert the power supply unit belonging to the set into the power supply connector on the CUBE **2.1** and plug it into a suitable socket.

➢ Check cabling.

2.1

2.1	Power supply connection

4.6 Commissioning

A mobile end device is required for commissioning. (E.g. a tablet)

Install either the "HOMAG productionAssist" app or the "HOMAG materialAssist" app on this mobile end device.
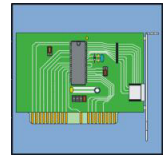
You can find these apps in the Google Play Store or the App Store.

Note

To log into the app you need a tapio account.

For more information on installation and operation, please see the corresponding app.
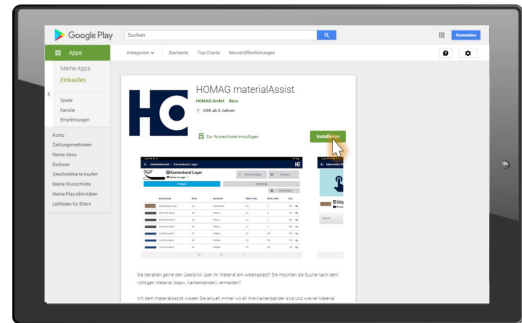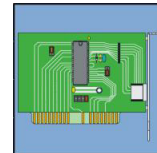
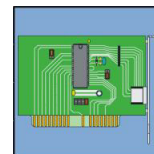## 5 Status display

General meaning of the status display

Meaning of status display status	Color	Animation	Status light	Note
Connect, device starts	White, logo white	Chaser lights		Wait
Network error	White, logo off	Chaser lights		Restart the device
LAN cable not connected properly	White, logo orange	Chaser lights		Check the wiring on the CUBE/switch/router
No link	White, logo yellow	Chaser lights		Check the wiring on the CUBE/switch/router
No IP address	White, logo purple	Chaser lights		Check DHCP server/router settings
No Internet	White, logo white	Flashing		Check firewall/DNS/gateway
Remote diagnostics active	Yellow/blue, logo white	Flashing, static		Wait, or disconnect via Web diagnostics or button
Network error/NTP not available	White, logo blue	Flashing		Check router/switch connections

Meaning of status display status	Color	Animation	Status light	Note
Error	Yellow, logo white	Flashing		Open APP/open diagnostics
Onboarding/configuration required	White/blue, logo white	Flashing		Open THE APP and configure it
SSH active	Turquoise/blue, logo white	Flashing, static		Wait or switch via Web diagnostics
User action required	Blue, logo white	Flashing		Open APP/open diagnostics
Connected/normal operation	Blue, logo white	Static		No error, function given

Meaning of the status display in the menu

Meaning of display	Color	Animation	Status light	Note
Option in the menu is selected by pressing a button	White, logo white	Static		
Menu item is being executed	White, logo white	Chaser lights		
Menu option was executed successfully	Green, logo green	Flashing		

Meaning of display	Color	Animation	Status light	Note
Error during execution of the menu option	Red, logo red	Flashing		
Main menu, first option is selected	First LED white, logo blue	Static		
Activate/deactivate remote diagnostics	Second LED white or blue, logo blue	Static		
Restore factory settings	Sixth LED white, logo blue	Static		
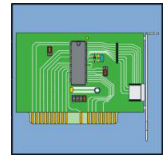
6   Routine maintenance / Care

Cleaning:

Cleaning should always be performed with a slightly damp cloth. If there is only a low level of dirt, it is usually sufficient to clean the surface with water. Soft cleaning agents such as liquid domestic cleaning agents are suitable. After cleaning, rub the surface with a dry cloth to remove any traces of water that remain. Make sure that you do not use too much water/liquid when cleaning.

Note

- Do not use any aggressive cleaning agents, abrasives or abrasive pads to clean the CUBE.
- Do not spray or pour any liquids directly onto the device.

Disposal

In accordance with Directive 2012/19/EU – Waste electrical and electronic equipment.

Note

This product must not be disposed of with unsorted municipal waste. Please dispose of the device in accordance with the valid regulations in your country or return it to:
HOMAG GmbH
Homagstrasse 3–5
72296 Schopfloch
or
HOMAG Plattenaufteiltechnik GmbH
Holzmastr. 3
75365 Calw-Holzbronn, Germany
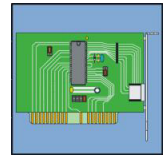
7   Troubleshooting

	error description Situation	Possible cause	Remedies
1.0	**Status display on the CUBE flashing yellow**		
		Error	➢ Open APP/open diagnostics
2.0	**Status display on the CUBE flashing white**		
		Internet connection faulty	➢ Check that the Internet connection and router are working
			➢ Check the LAN cable connection
			➢ ☎ Service
3.0	**Device not working**		
		No power supply	➢ Check the plug-in power supply unit and the plug-in connections of the power supply
		Hardware defective	➢ ☎ Service