User manual

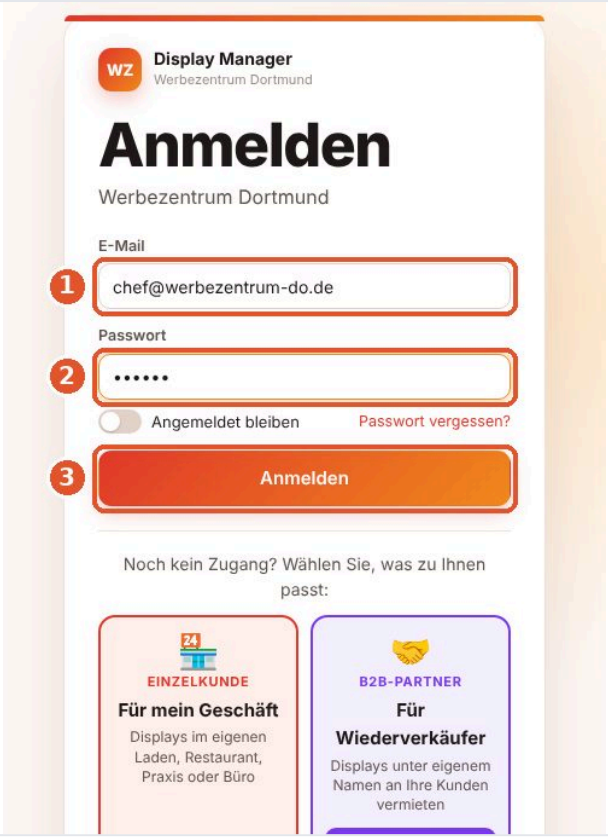
Display Manager · Werbezentrum Dortmund · Version 1.64.1 · As of 12.11.2026

🆕 New

- **Version 1.64.1:** 🪧 Objekte auf Menüboards noch einfacher: angeklicktes Objekt bekommt einen Rahmen, Pfeiltasten verschieben es (mit Umschalt in großen Schritten), Entf entfernt es – mit „Rückgängig“. ⚠ Warnung, wenn ein Objekt Preise oder Angebots-Karten verdeckt. 🍹 Objekte nur zur Happy Hour (oder nur außerhalb) zeigen – z. B. ein „−30 %“-Störer, der nur von 17 bis 19 Uhr erscheint.
- **Version 1.64.0:** ✨ Animationspaket für Menüboards: 39 bewegte Objekte – Pizza, Burger, Pommes, Döner, Sushi, Kaffee mit Dampf, Cocktail, Bier, Eis, Torte und mehr –, Angebots-Störer („−20 %“), pendelnde Preisschilder, Banderolen, Stempel und Deko. ↻ 15 Bewegungsarten (Schweben, Hüpfen, Drehen, Pendeln, Pulsieren, Wackeln, Hereinfliegen, Regen …) und 18 fertige Angebots-Szenen (Pizza-Aktion, Burger-Deal, Happy Hour, Kaffee & Kuchen, Mittagstisch, Weihnachten …). 🪧 Im Menüboard-Editor: neue Leiste „Objekte & Angebote“ – Objekte einfügen und in der Vorschau mit der Maus verschieben. Alles ansehen können alle, Kunden buchen das Paket selbst zu.
- **Version 1.63.0:** 🔌 Viel mehr Bildschirme fernsteuern: normale Fernseher von Samsung, LG, Philips, Panasonic und Roku über das Netzwerk (einmal am Fernseher „Zulassen“), Android TV / Google TV / Fire TV über ADB, Fully Kiosk, NEC-Displays und Beamer, eigene Steuerbefehle für jedes Gerät (iiyama, BenQ, ViewSonic, Sharp …), RS232 über USB-Adapter. 🏠 Smart Home: Home Assistant (vor Ort oder über das Internet), MQTT (ioBroker, Node-RED, Zigbee2MQTT), ESPHome, Infrarot-Sender mit Tasmota (fertige Codes für Samsung, LG, Sony), FRITZ!DECT- und TP-Link-Kasa-Steckdosen. 🔄 Die Brücke aktualisiert sich ab jetzt selbst; die Windows-Brücke kann alles, was der Raspberry Pi kann. Netzwerksuche findet auch Fernseher. BrightSign-Player als Display. 🎨 Menüboard-Designpaket: 12 moderne Designs für 20 Branchen (240 fertige Boards, quer und hoch) mit eigenen Schriften. Alle können alles ansehen; Kunden buchen das Paket selbst zu. Ein Design wechselt nur die Gestaltung – Gerichte und Preise bleiben.
- **Version 1.62.0:** Google & KI-Suche ausgebaut: Bestätigungs-Codes für Google Search Console und Bing Webmaster Tools, neue öffentliche Seite „Unterstützte Bildschirme & Geräte“ (/geraete), ausführliche llms-full.txt für KI-Assistenten, Anleitung in allen Sprachen in der Sitemap, Logo in den Firmendaten für Google.

1 🔑 Sign in

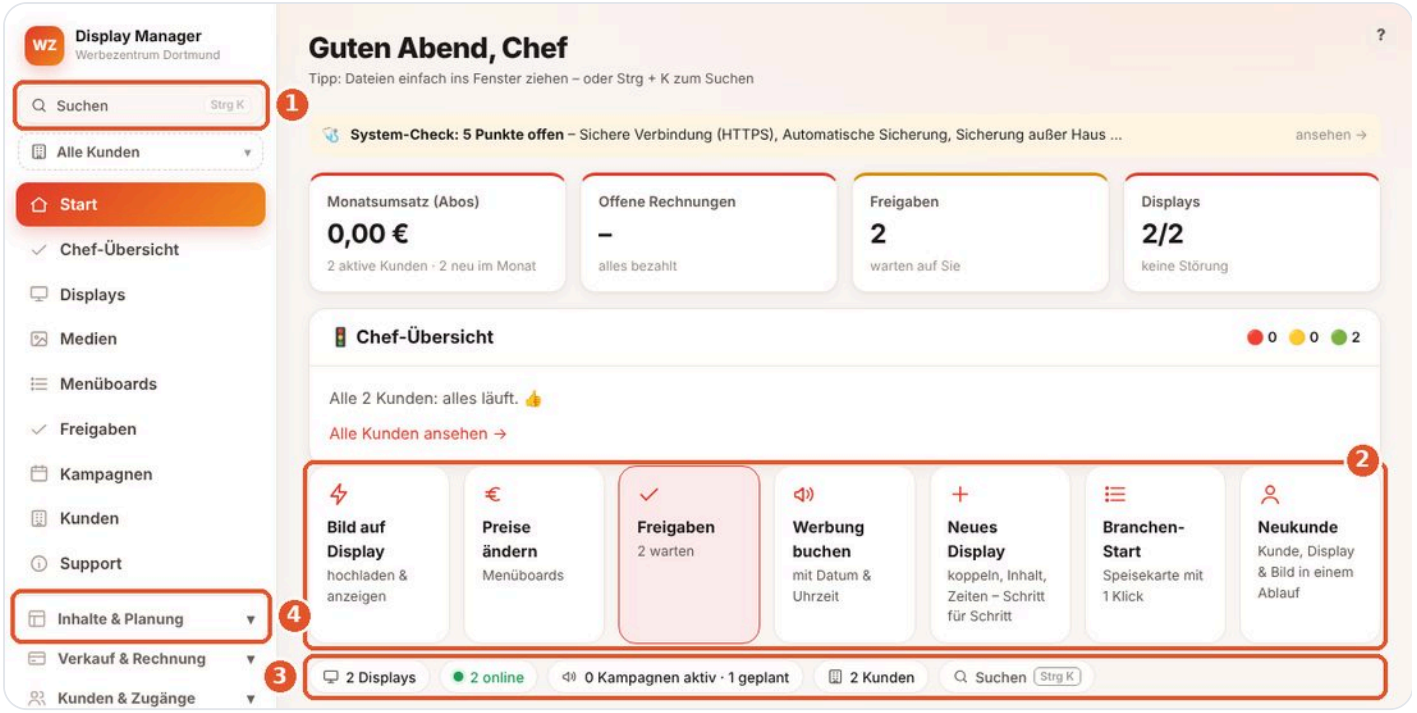
Open this address in the browser: **display.werbezentrum-do.de**



1. Enter your email
2. Enter your password
3. Click **Sign in**

2 🏠 The home page

Here you see everything at a glance and can get anywhere with one click.



1. **Search** – or press Ctrl + K: type a name, Enter
2. **Quick buttons** for the most common tasks
3. Status: how many displays are running (green = on, red = off)
4. Below that, the **topic groups** (Content & planning, Sales & invoicing ...) – tap to expand them



3 🧭 Where do I find what?

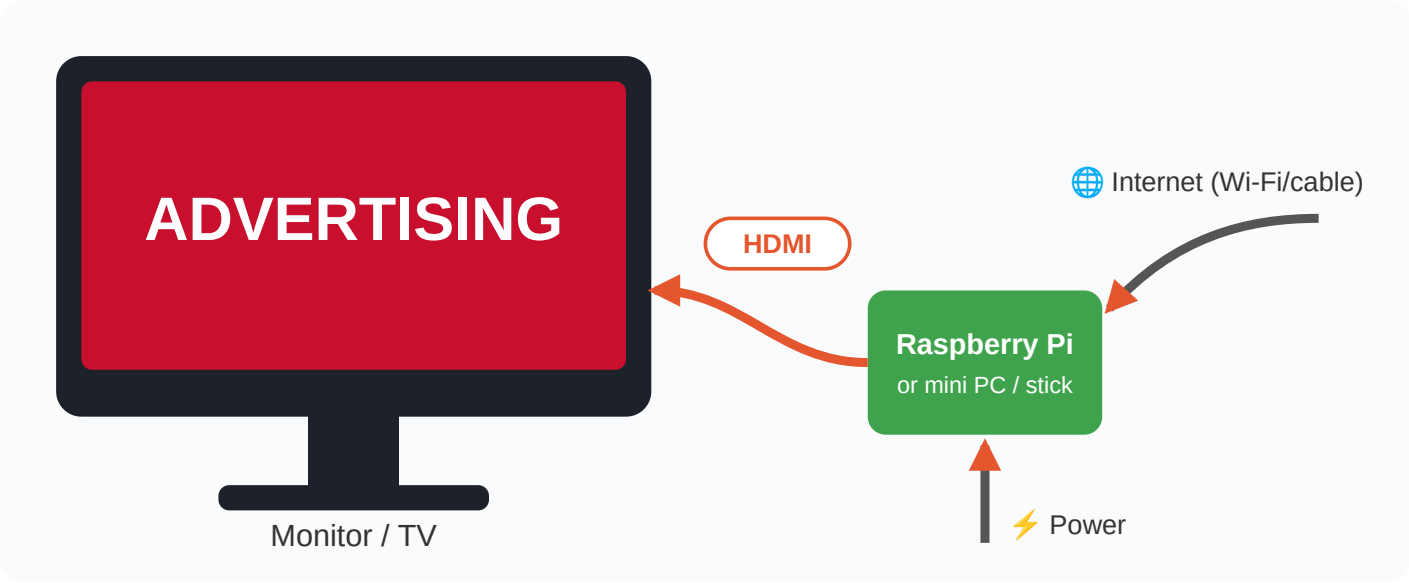
Top left the everyday items, below them six expandable topic groups (only one open at a time). At the top of every page, a tab bar quickly switches to related pages.

Problem	Solution
Daily (always visible)	Home · Displays · Media · Menu boards · Approvals · Campaigns · Customers
Content & planning	Playlists · Schedules ("What's playing on …?") · Templates & AI assistant · Seasonal packages · Animate menu · QR codes · Book ads
Sales & invoicing	Invoices (with test invoices, reminders, bank statement, online payment) · Subscriptions & plans · Sell ad slots · Rental · QR packages & prices · Demo links · Advertising network
Customers & access	Check assignment · New customer in 5 minutes · B2B partners · Users
Reports	Proof of play · Passer-by counting · Log
Displays & technology	Live view · Control center · Set up display · Plug & Play · Device control · Monitor control · Integrations
Settings	Settings (system check at the top, plus search field and jump bar) · Legal texts & trial access

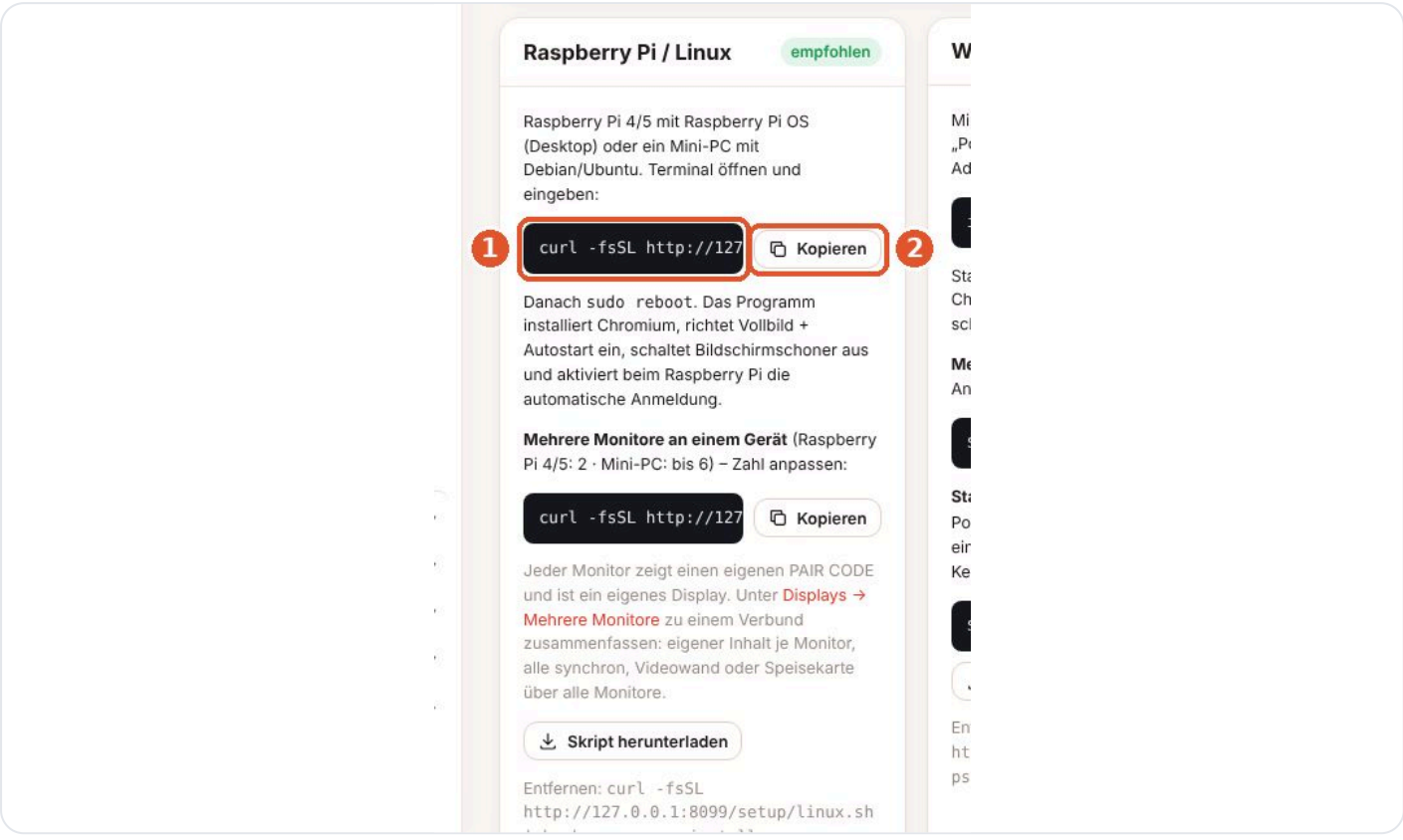
💡 Fastest: Ctrl + K (or "Search" at the top) – type pages, displays, customers, menu boards and actions and open them with Enter. On the phone: **More** at the bottom.

4 🔌 Connect a new screen

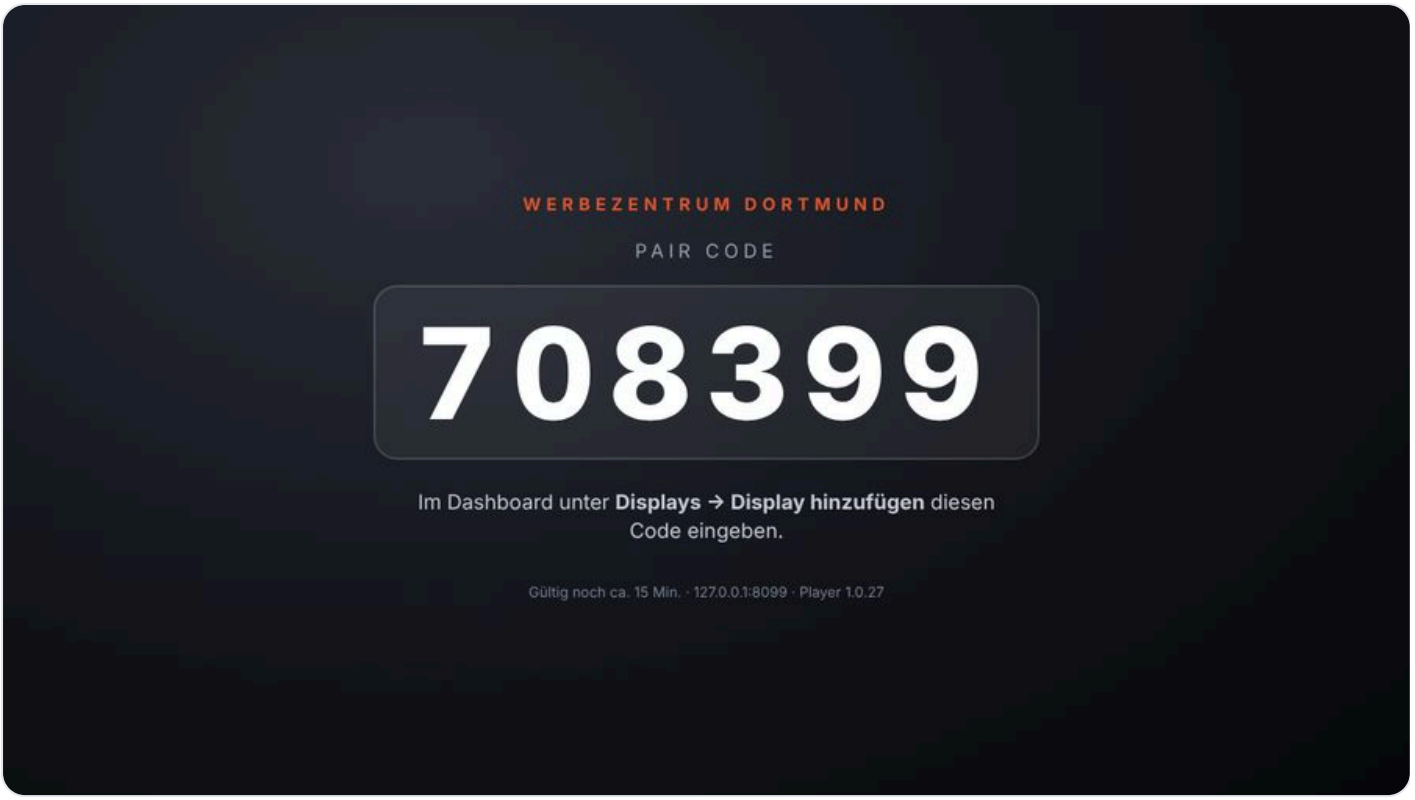
Once per screen. After that everything runs by itself – even after a power cut.



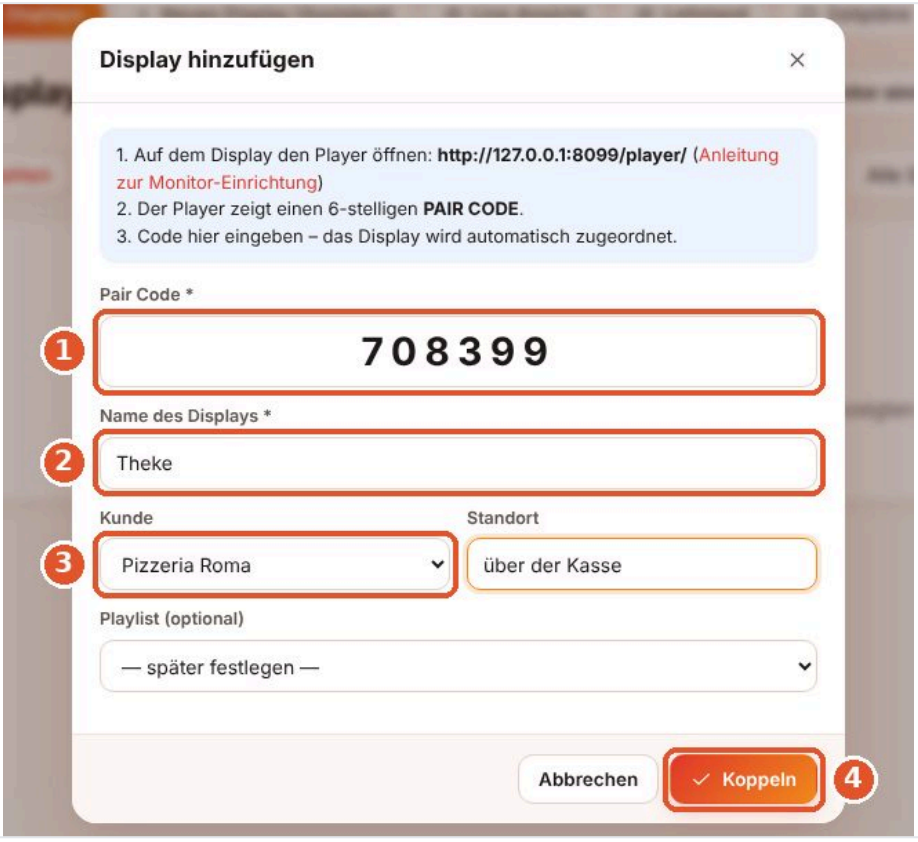
1. Connect a small computer (e.g. Raspberry Pi – detailed in the next chapter) to the monitor via **HDMI**, and connect power and internet
2. In the dashboard: **Displays & technology → Set up display**. **Copy** the command and paste it on the computer (one time only)



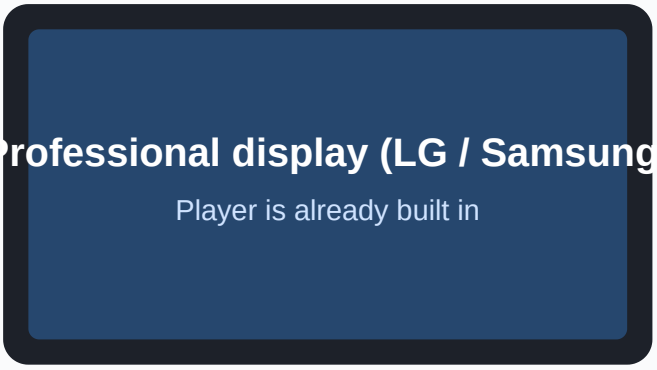
3. The monitor shows a **6-digit number**

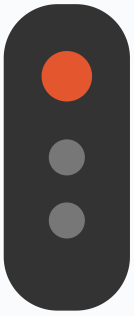


4. Home page → **Pair display**: enter the number
5. Give it a name (e.g. "Counter")
6. Select the customer
7. **Pair** – done!



💡 **Professional display with built-in player (LG / Samsung)?** No computer needed: in the display menu under "URL Launcher" or "SI-Server", enter this address: **display.werbezentrum-do.de/player/**





1. Remote control: Menu
2. "URL Launcher" / "SI-Serve
3. Enter the address (see belc

5 🍓 Set up a Raspberry Pi (step by step)

The small computer behind the screen. Set it up once – after that it starts by itself with your ads every time it is switched on.

What you need	
Computer	**Raspberry Pi 4 (4 GB or more) or Raspberry Pi 5** – a Pi 3 is too slow for videos
Memory card	microSD, 32 GB, brand-name (e.g. SanDisk, Samsung)
Power supply	**Original power supply** (Pi 5: 27 watts) – cheap power supplies cause crashes
Cable	Micro-HDMI to HDMI – into the socket **right next to the power connector**
Other	Case with cooling (continuous operation), ideally a network cable instead of Wi-Fi

A) Prepare the memory card – on the PC

1. Download the program **Raspberry Pi Imager**: **raspberrypi.com/software**
2. Choose the Pi model → operating system **"Raspberry Pi OS (64-bit)"** – **with desktop**, NOT "Lite"
3. **Edit settings**: name (e.g. **wdms-theke**), user + password (write them down!), Wi-Fi, time zone **Europe/Berlin**, keyboard **de**, **enable SSH**
4. Write to the card, put the card into the Pi, switch it on – the first start takes a few minutes

B) Set up WDMS – on the Pi (connect keyboard + mouse once)

1. Open the **Terminal** in the bar at the top (black icon)
2. Type this command and press Enter (also found in the dashboard under **Displays & technology → Set up display**):

```
curl -fsSL https://display.werbezentrum-do.de/setup/linux.sh | bash
```

3. Enter the Pi's password when asked

4. Wait until **[OK]** appears everywhere, then restart:

```
sudo reboot
```

C) Pair

1. The monitor shows a **6-digit number**
2. Dashboard → **Pair display** → enter the number, give it a name, select the customer – done!
3. Unplug the keyboard and mouse

💡 **Two monitors** with different ads on one Pi 4/5? In step B use this command instead – both appear as separate displays in the dashboard:

```
curl -fsSL https://display.werbezentrum-do.de/setup/linux.sh | bash -s -- --screens 2
```

💡 **TV settings:** turn off "Auto standby", "Eco mode" and "Turn off when no signal" – otherwise it switches itself off after a few hours. If the picture is cut off: set the picture format on the TV to **"Screen fit" / "Just Scan" / "1:1 pixel"**.

💡 **Monitor on/off in the live view:** the command also sets up a small monitor helper. If your Pi was set up before version 1.15, simply run the command from step B again and restart – the pairing is kept.

💡 After a power cut, the Pi automatically restarts with the ads. Player updates come automatically from the server. If a Pi is broken: set up a new one the same way, remove the old display in the dashboard, pair the new one.

6 ■ Stop or turn off the player on the Raspberry Pi

When you need the Pi's normal desktop. Simply closing the window is not enough – the player restarts itself after 5 seconds.

Stop temporarily (until the next restart)

1. Connect a keyboard to the Pi
2. Press Ctrl + Alt + T – a terminal opens (possibly behind the player)
3. Type blindly and press Enter:

```
pkill -f wdms-kiosk
```

4. Now you see the normal desktop
5. Start the player again: restart the Pi – or type in the terminal:

```
wdms-kiosk &
```

💡 **Without a keyboard, from the PC** (if SSH is enabled): open the command prompt / terminal on the PC, enter **ssh BENUTZER@wdms-theke.local** (your user and Pi name), password, then the command above.

Turn off permanently (use the Pi completely normally again)

1. Stop the player as described above
2. Enter in the terminal:

```
curl -fsSL https://display.werbezentrum-do.de/setup/linux.sh | bash -s
-- --uninstall
```

```
sudo reboot
```

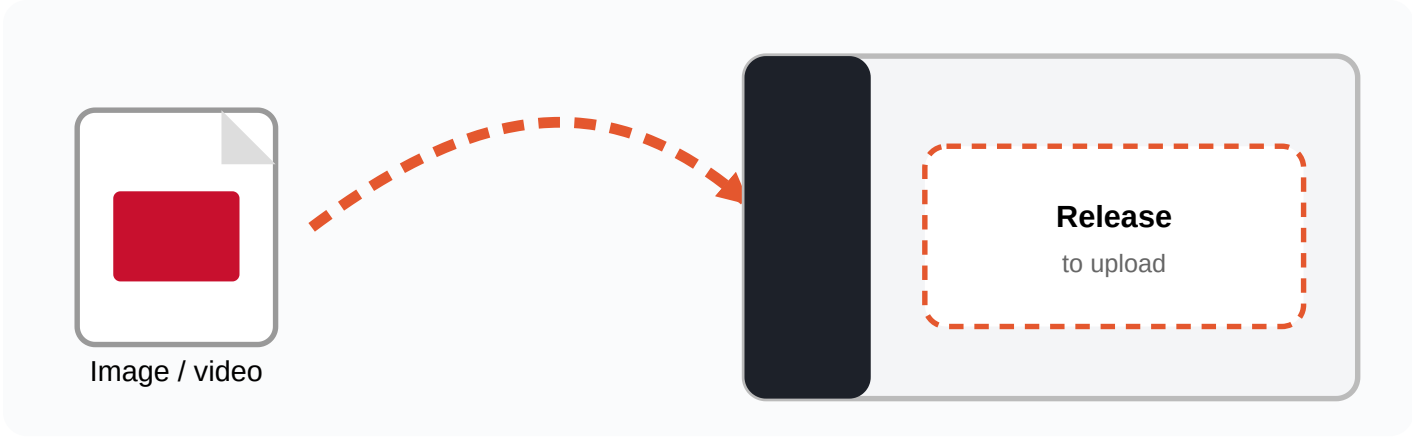
3. The Pi now starts normally into the desktop – only the player autostart was removed
4. In the dashboard: **Displays** → open the display → **Remove** (otherwise it is listed as "offline")

💡 **Re-enable later:** run the normal setup command from the chapter "Set up Raspberry Pi" (step B) again and pair again.

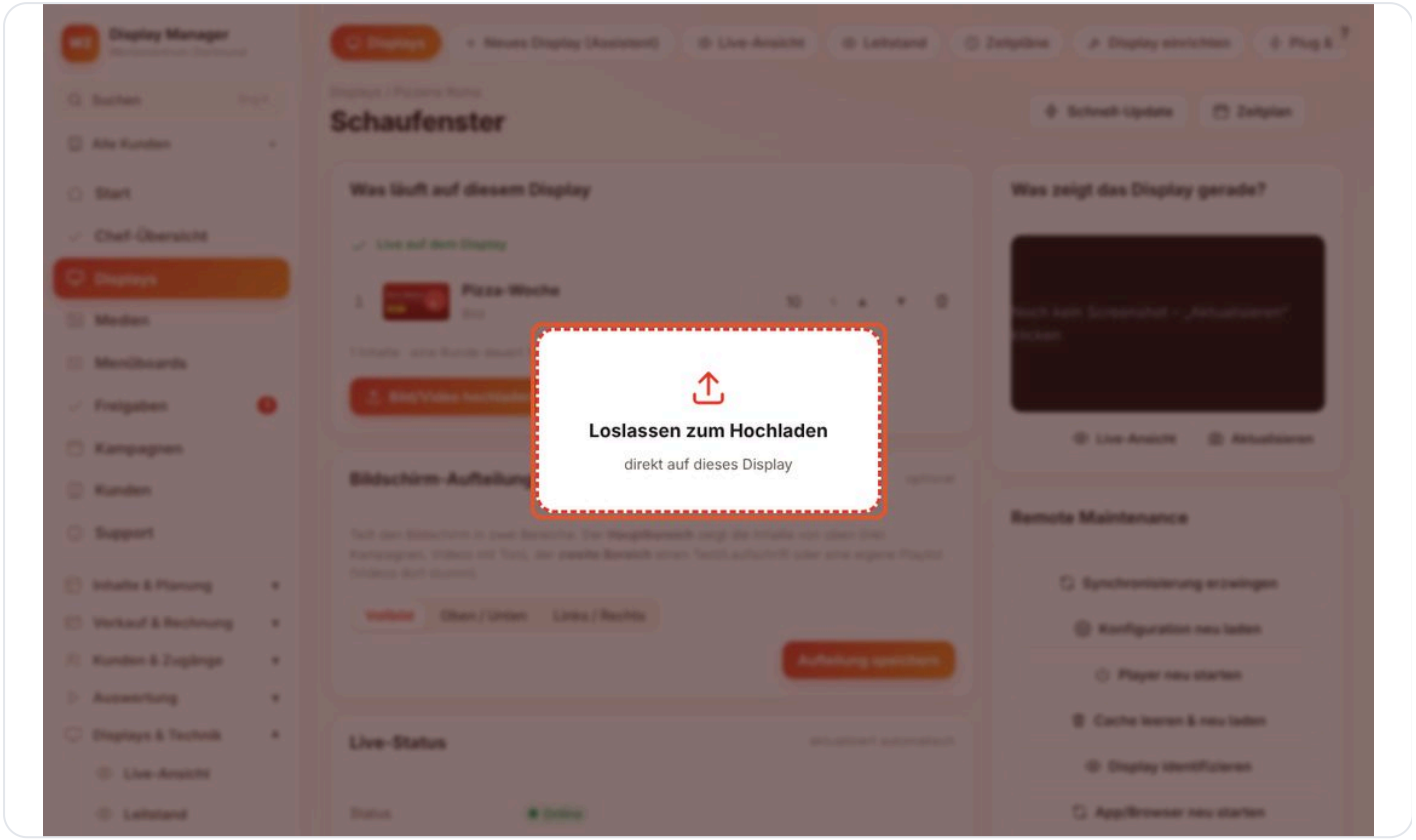
💡 **Change resolution:** quit the player → on the Pi **Menu → Preferences → Screen Configuration**.

7 ⚡ Put an image or video on a display

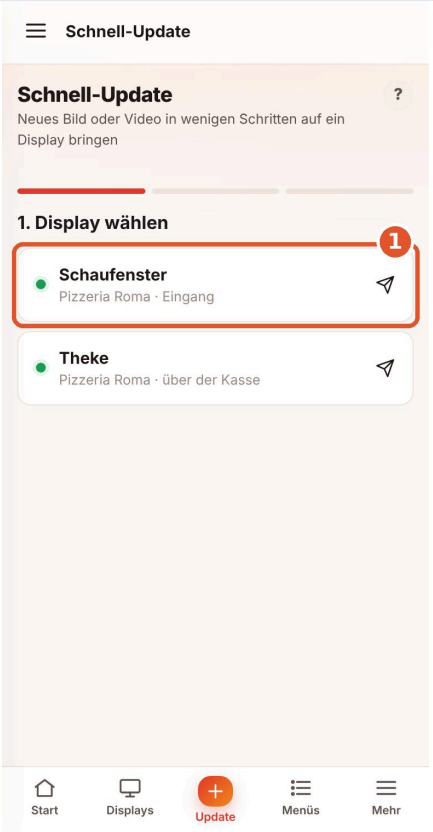
The fastest way – on your phone too.



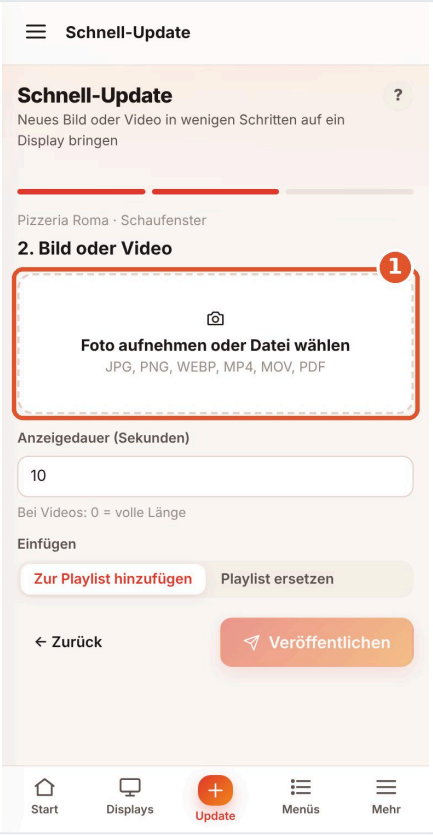
1. **On the PC:** open the display and simply **drag the image into the window** – done



2. **On the phone:** tap **+ Update** at the bottom, tap the display



3 Take a photo or choose a file → **Publish**

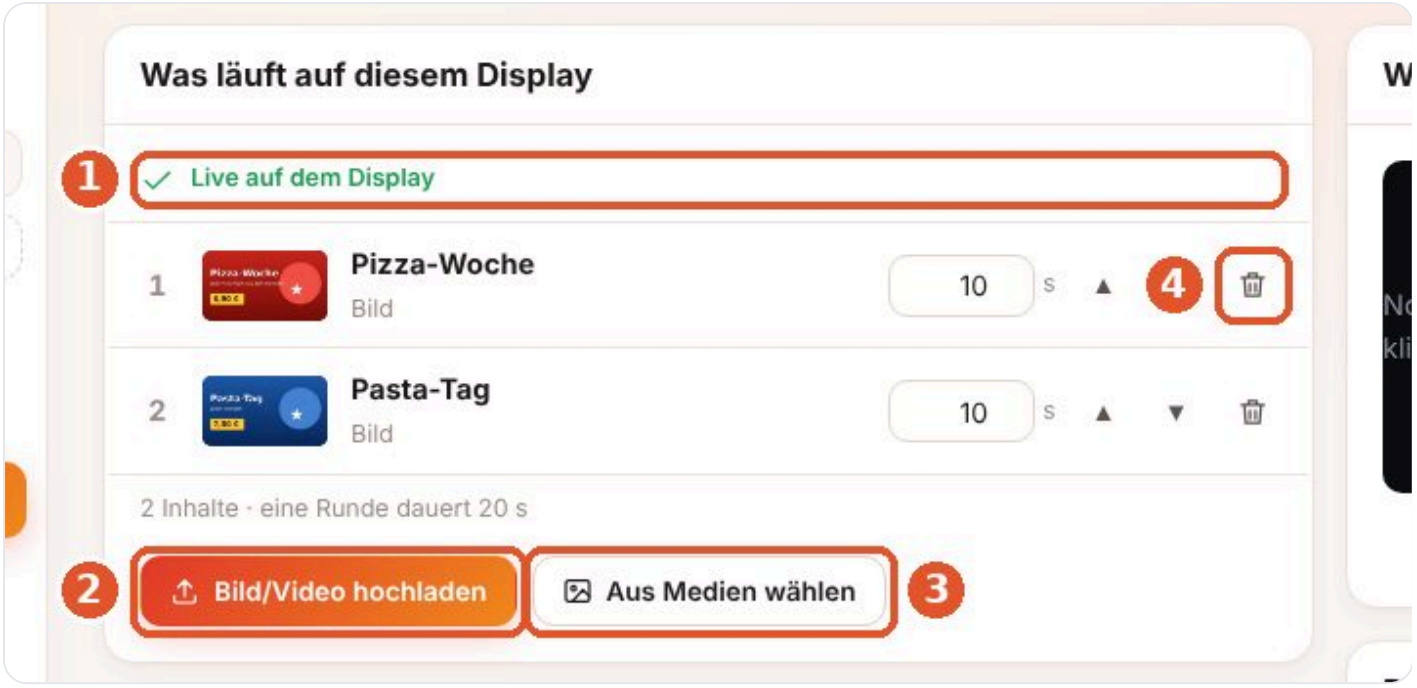


💡 After about 30 seconds it appears on the screen.

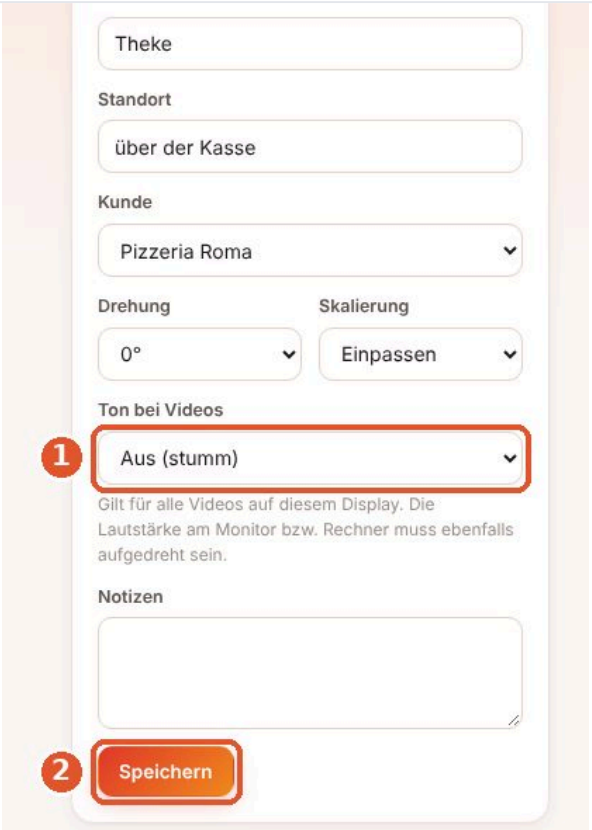

Pizza-Woche
Jede Pizza frisch aus dem Steinofen
6,90 €

8 📺 What is playing on a display?

Displays → tap the display.



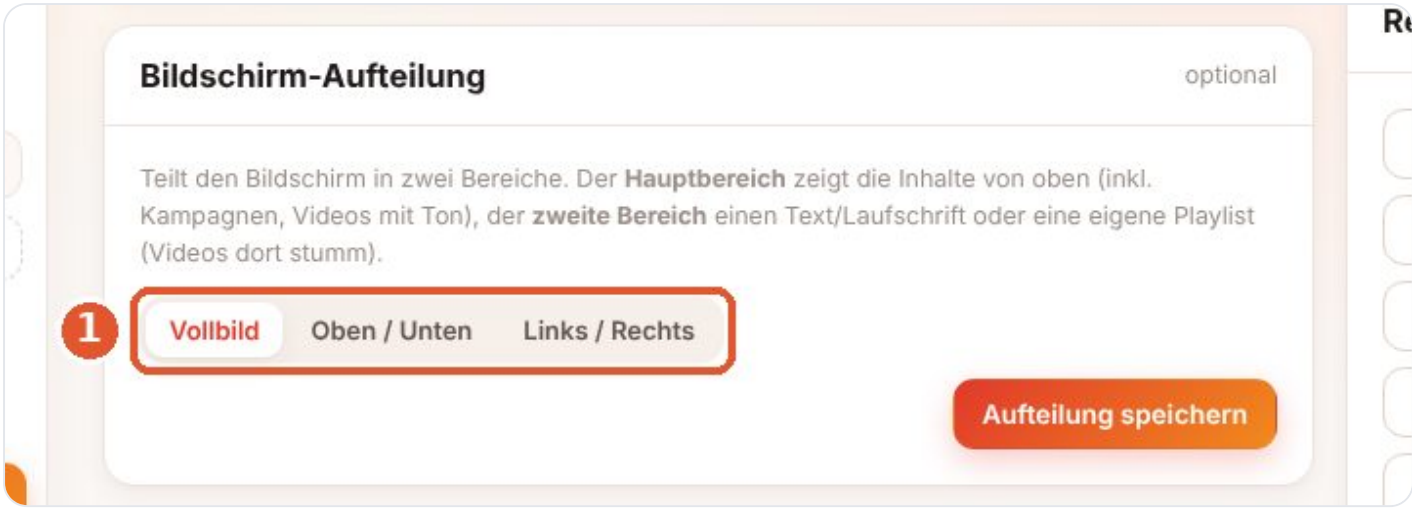
1. Green = **playing** on the display
2. **Upload**: add a new image/video
3. **Choose from media**: add an existing file
4. 🗑 removes an item (number = seconds)



1. Choose **sound for videos**
2. **Save**

9 🔲 Split the screen (e.g. video on top, text below)

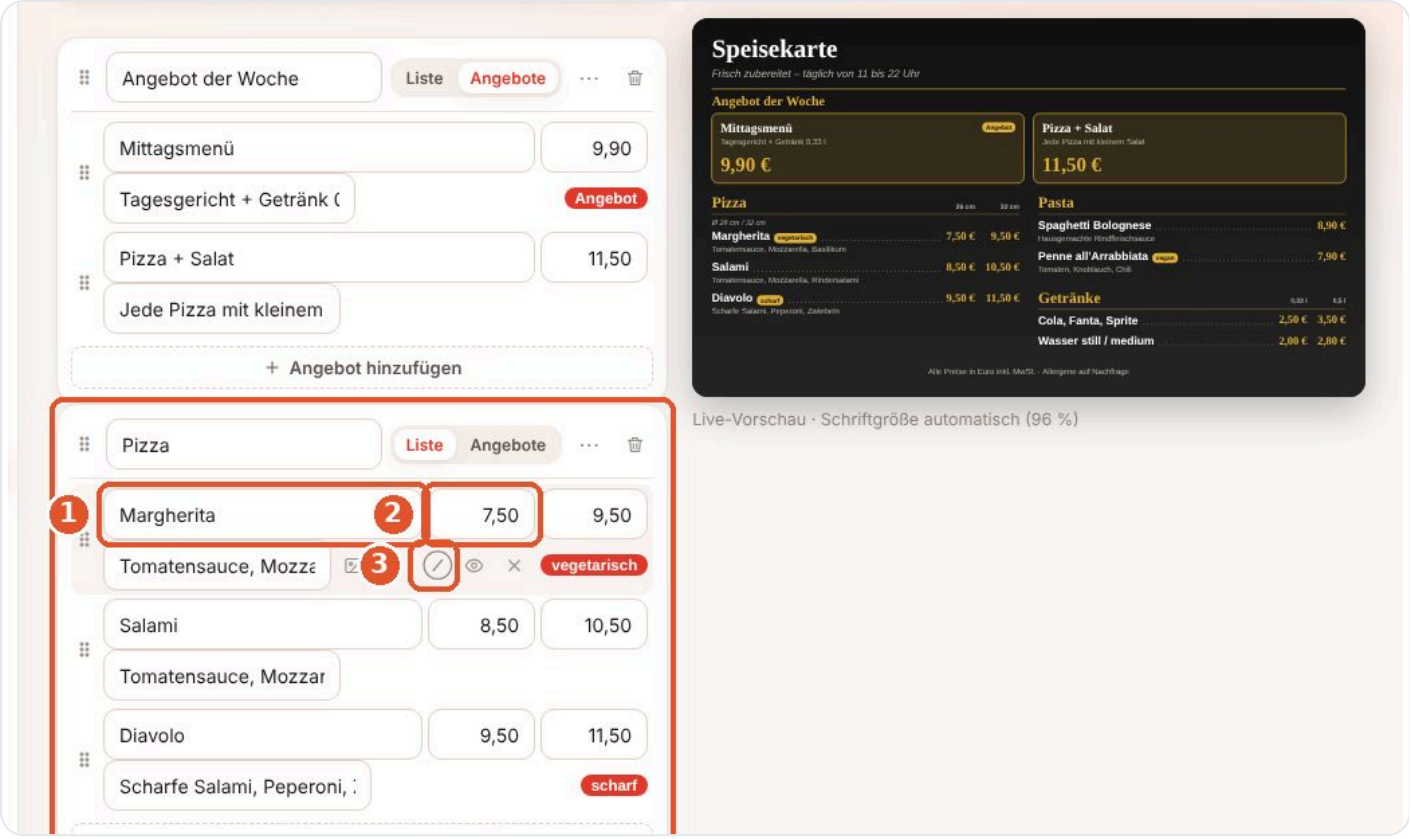
On the display page: the "Screen layout" card.



1. Choose **Top / Bottom** or **Left / Right**, enter text or a playlist for the second part, **save**

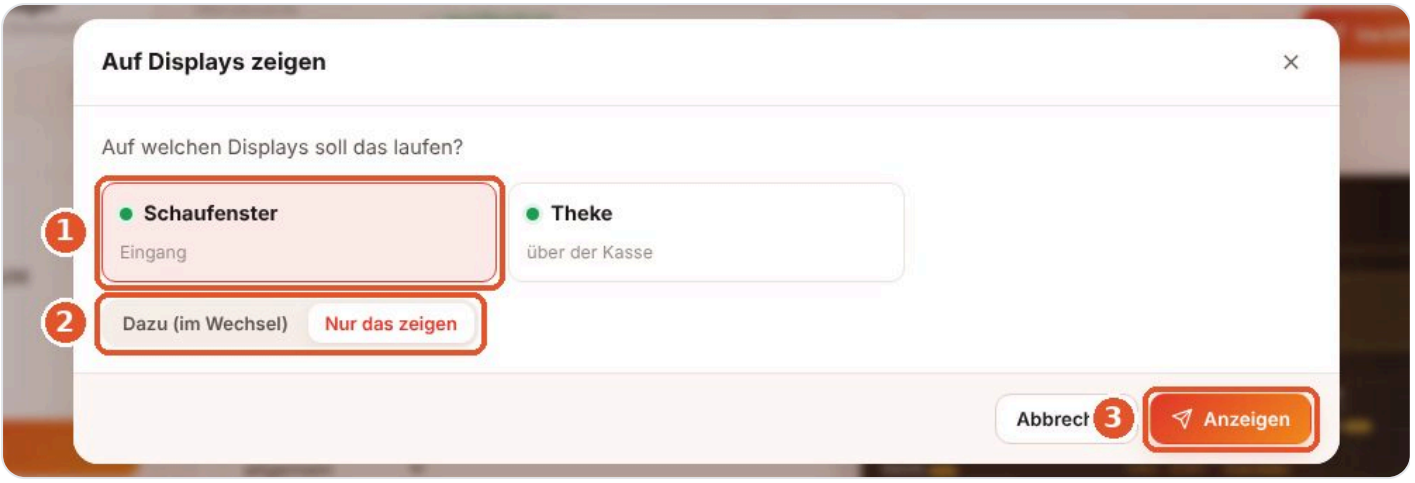
10 🍕 Menu & prices (menu board)

Change prices once – all displays are up to date immediately.



1. Type the dish (Enter = new line)
2. Type the price
3. ⊘ = sold out
4. Image icon next to the price = **photo for the dish**
5. Color/style with one click
6. **Publish**

💡 Images: section → ⋯ → **Image above the section**, or **Image** at the bottom for a pure image section. Under **More design**: custom colors for prices, titles and cards, background style (dots, stripes, waves …), background image or video, round photos.



1. The first time: tap the display(s)
2. Alternating with other ads or only the menu
3. **Show**

💡 It is saved automatically. Deleted by mistake? Tap **Undo** at the bottom.

Order numbers on the menu board (pickup display)

1. In the menu board, tick 🛎 **Show order numbers**
2. ＋ **New pickup display** (or choose an existing one) – position: bar on the right or at the bottom, width narrow/medium/wide
3. **Publish** – the board automatically leaves space for the bar
4. 🛎 **Open service view** → **Create service link** and open the link on the tablet in the kitchen/at the counter (no sign-in needed)
5. Type the number → **In preparation** or **Ready** ✓. Tapping moves it on: in preparation → ready → picked up
6. Custom headings: enter them in the menu board under the pickup display at **Texts** (e.g. "Ready for pickup") – for other languages, first tap the language code at the top

💡 New ready numbers light up and a gong sounds. Ready numbers disappear by themselves after 10 minutes (adjustable in the widget). Your POS system can also report ready orders itself – the address is in the service view under "For your POS system". The pickup display is also available as a screen of its own (Media → Widget → Pickup display).

Receipt printer: print the order with its number

1. 🛎 **Open service view** → at the bottom **Set up receipt printer …** → tick **Use receipt printer**, enter paper width (80 or 58 mm) and your name, **Print test receipt**, **Save**
2. For every order: 🧾 **New order + receipt** → tap items (twice = 2×), type a note if needed ("no onions")
3. 🖨 **Draw number & print receipt** – the next number appears as "In preparation" on the display, the receipt comes out of the printer
4. When the food is ready: tap the number → it switches to "Ready for pickup" (with gong)

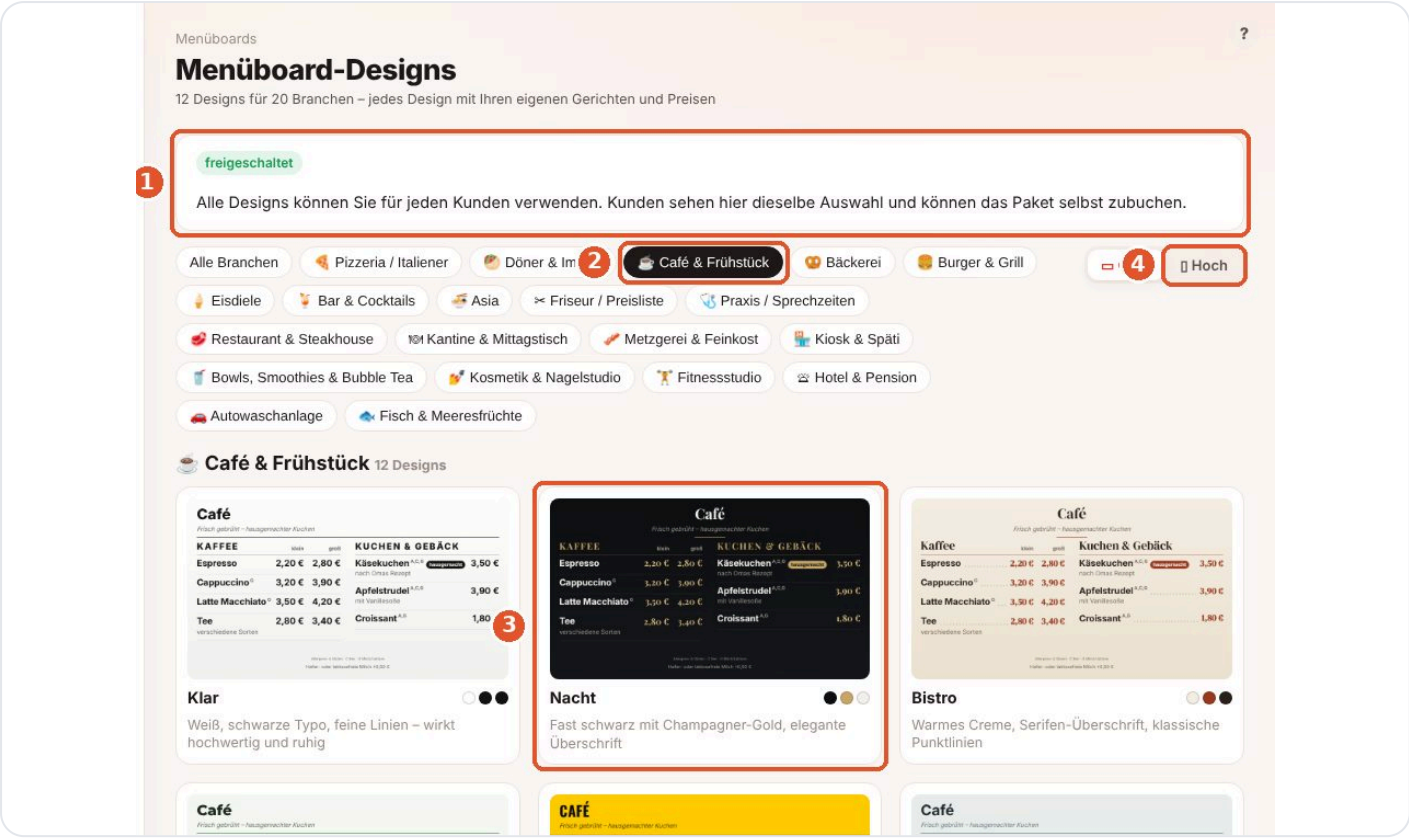
💡 The receipt printer is set up on the PC or tablet as a normal printer (USB, network or Bluetooth). So that the receipt comes out immediately without a print dialog: start Chrome with the option `--kiosk-printing`. The items come automatically from the menu shown by this pickup display (not the sold-out ones). If you wish, it also prints a kitchen ticket. **Important:** this is a pickup receipt, not a sales receipt – your till continues to print the fiscal receipt with TSE.

QR code, calories, labels

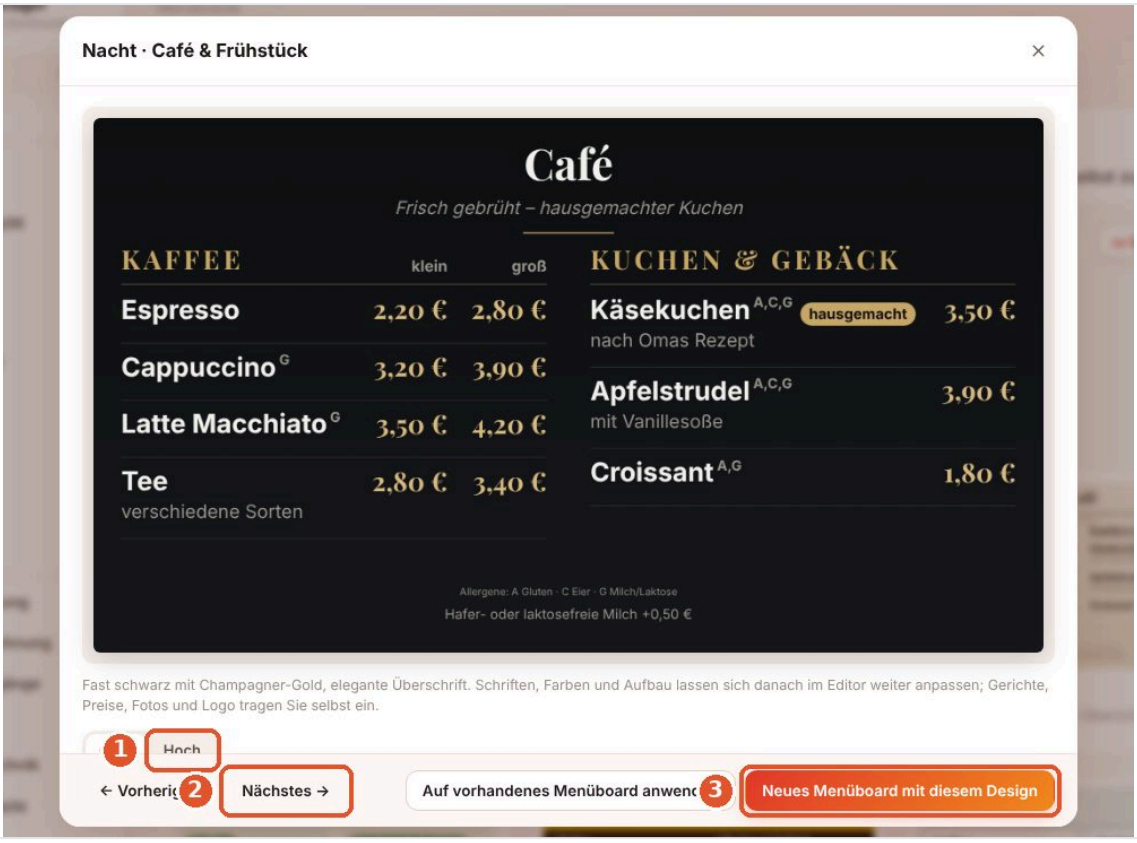
Problem	Solution
▦ **QR code**	Tick ▦ **QR code**, choose one of your QR codes and a short text below it (e.g. "Order online") – it appears in the bottom corner in the matching design.
Calories	On the dish, tap **A** (allergens) – enter the kcal at the bottom. They appear in the description. Also possible via the price table ("kcal" column).
Labels	New: bestseller, seasonal, gluten-free, lactose-free, halal, regional – translated automatically.

11 🎨 Menüboard-Designpaket: 240 fertige Designs

Menüboards → 🎨 Designs. 12 moderne Designs für 20 Branchen, quer und hoch – jedes mit echten Beispiel-Gerichten, gezeichnet genau so, wie es später auf dem Display erscheint.



1. Oben steht, ob das Designpaket für Sie freigeschaltet ist – sonst Preis und **Paket zubuchen**
2. **Branche** wählen: Pizzeria, Döner & Imbiss, Café, Bäckerei, Burger, Eisdiele, Bar, Asia, Friseur, Praxis, Restaurant & Steakhouse, Kantine, Metzgerei, Kiosk, Bowls & Bubble Tea, Kosmetik, Fitnessstudio, Hotel, Waschanlage, Fischbistro – oder „Alle Branchen“
3. Ein Design antippen = große Vorschau
4. **Quer** oder **Hoch** umschalten (Hochformat für hochkant montierte Displays)



1. In der großen Vorschau zwischen Quer und Hoch wechseln
2. Mit **Vorheriges / Nächstes** alle Designs der Branche durchblättern
3. **Neues Menüboard mit diesem Design** – öffnet den Editor mit den Beispiel-Gerichten; Namen und Preise überschreiben, veröffentlichen
4. Oder **Auf vorhandenes Menüboard anwenden** – nur die Gestaltung ändert sich, Ihre Gerichte, Preise, Fotos, Zeiten und Ihr Logo bleiben

💡 Im Editor eines Menüboards führt der Knopf 🎨 **Design** direkt in die Galerie – das gewählte Design wird für dieses Board übernommen. Farben, Schriften und Aufbau lassen sich danach unter „Mehr Gestaltung“ weiter anpassen.

Die 12 Designs

Problem	Solution
Klar	Weiß, schwarze Typografie, feine Linien – hochwertig und ruhig
Nacht	Fast schwarz mit Champagner-Gold, elegante Serifen-Überschrift
Bistro	Warmes Creme, klassische Punktlinien

Markt	Frisch und grün, Abschnitte auf ruhigen Flächen
Street	Schwarz-Gelb, schmale Großbuchstaben, Preis-Etiketten
Nordisch	Helles Grau-Grün, weiße Karten, viel Luft
Espresso	Dunkles Kaffeebraun, zentriert
Signal	Weiß mit rotem Kopfband – stark für Imbiss und Aktionen
Ozean	Tiefblau mit hellem Akzent
Terracotta	Sandton und Terrakotta, mediterran
Editorial	Wie eine gedruckte Karte, schwarz-weiß
Lounge	Aubergine und Gold – Bar und Abendkarte

Zubuchen (Kunden)

1. Alle Designs lassen sich ohne Paket ansehen (Kennzeichnung „Vorschau“)
2. **Paket zubuchen** → Preis prüfen → Häkchen „kostenpflichtig zubuchen“ → **Jetzt kostenpflichtig zubuchen**
3. Sofort freigeschaltet – das Paket erscheint als eigene Zeile auf der nächsten Monatsrechnung

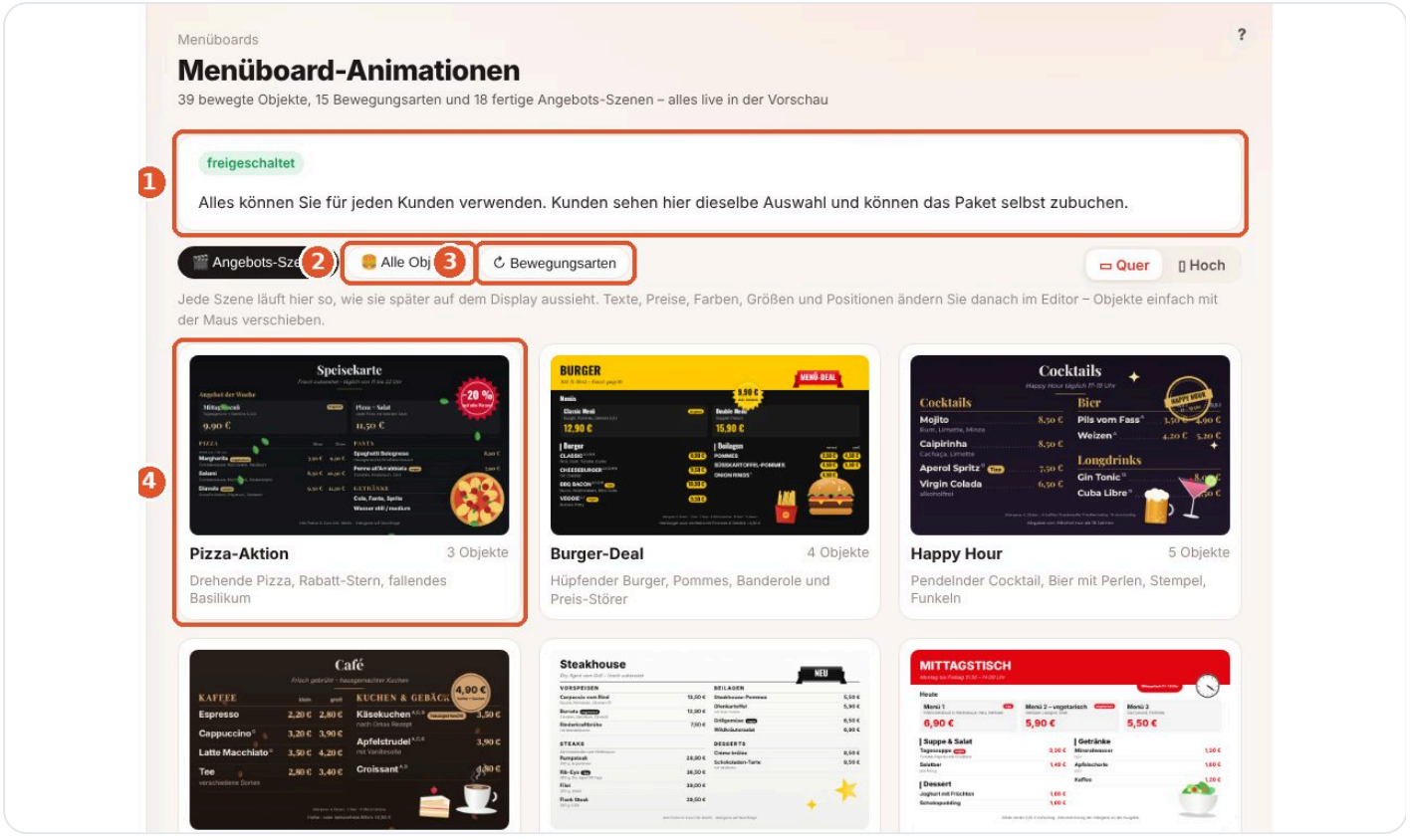
Für die Verwaltung

Problem	Solution
Preis & Text	**Verkauf & Rechnung → Zusatzpakete** → „Menüboard-Designpaket“ (angelegt mit 9,90 € im Monat). Das Merkmal „Menüboard-Designpaket“ schaltet die Designs frei – Sie können es auch in ein eigenes Paket aufnehmen.
Wer darf was?	Verwaltung, Mitarbeiter und B2B-Partner nutzen alle Designs für jeden Kunden. Kunden nur mit gebuchtem

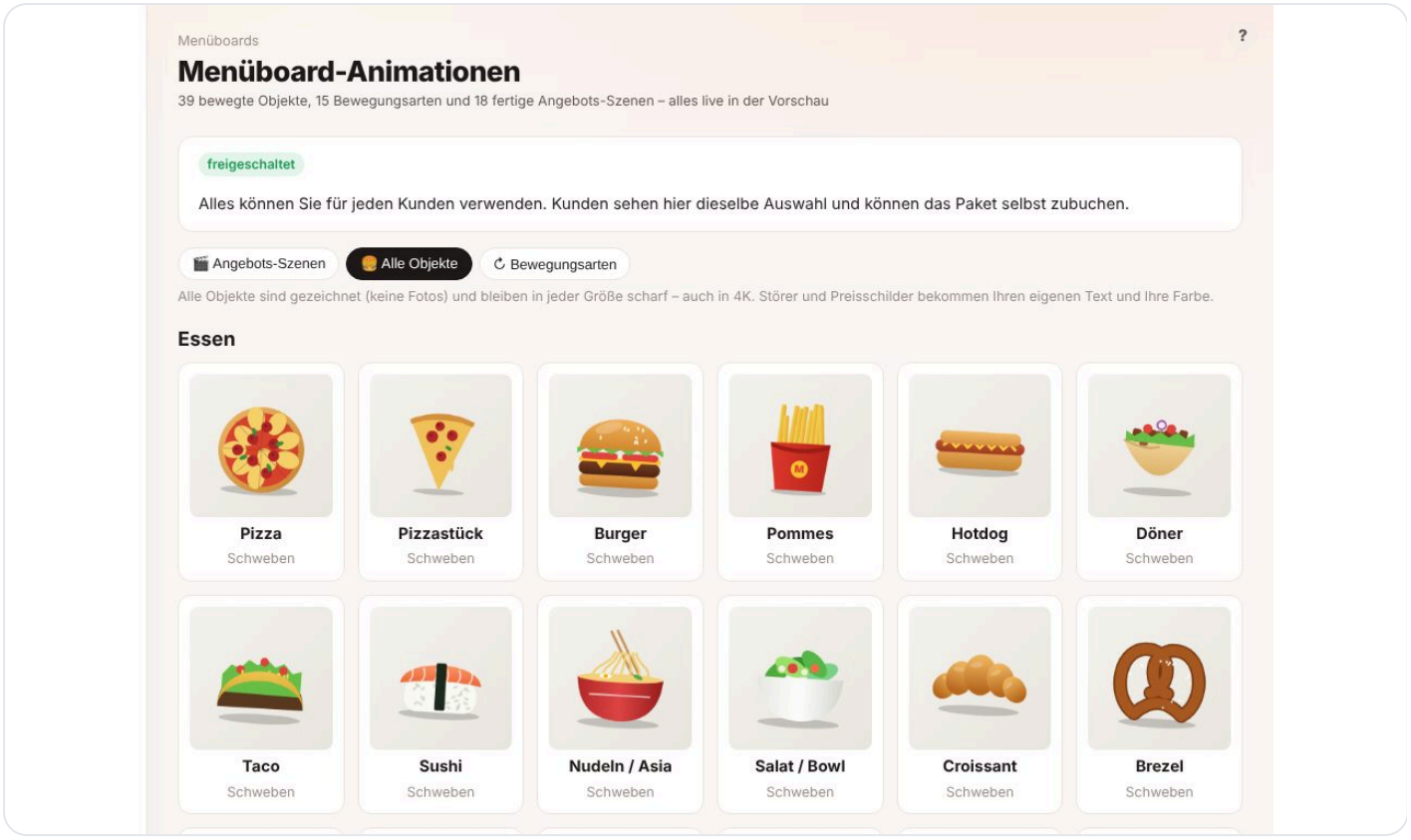
	Paket. Kunden eines B2B-Partners buchen über ihren Partner.
Benachrichtigung	Bucht ein Kunde selbst, bekommen Sie eine Nachricht; im Protokoll steht „vom Kunden selbst gebucht“.
Gekündigt?	Bereits verwendete Designs bleiben auf den Boards und weiter bearbeitbar; neue Designs lassen sich erst nach erneuter Buchung übernehmen.

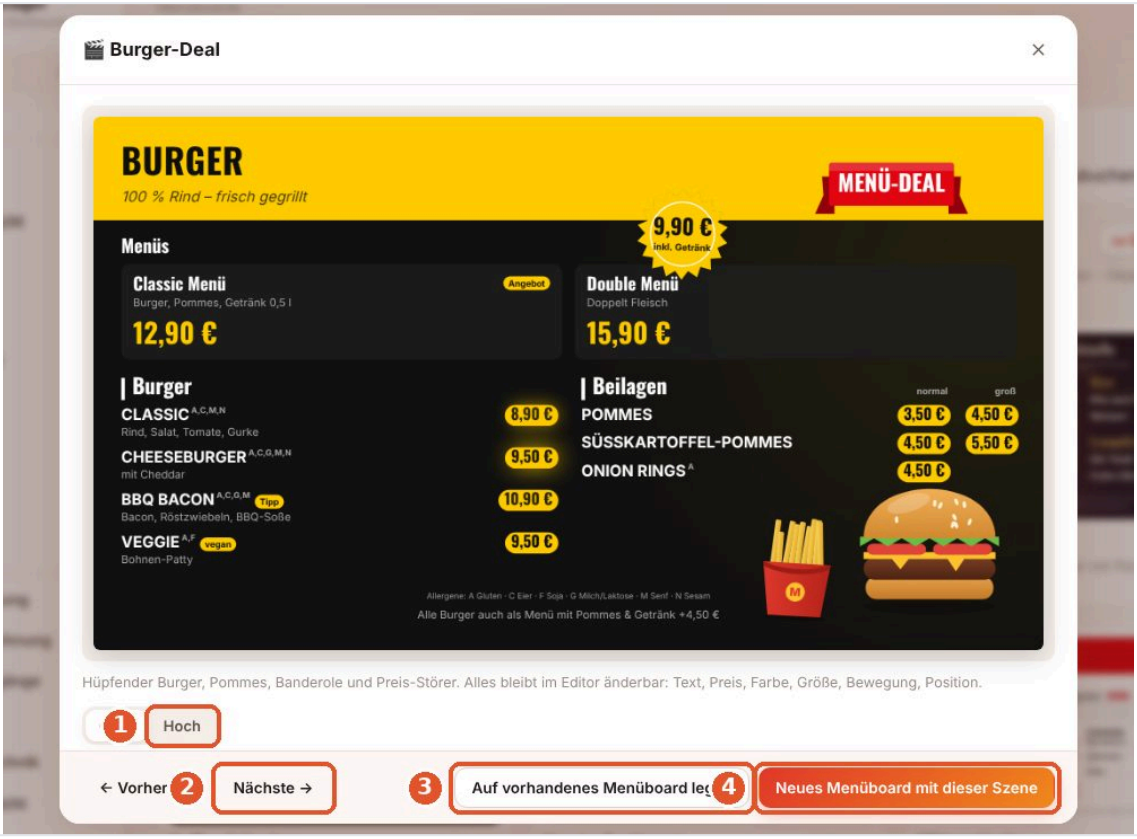
12 🎬 Animationspaket: bewegte Objekte, Angebots-Störer & Szenen

Menüboards → ✨ Animationen. Pizza dreht sich, der Burger hüpft, der Kaffee dampft, ein „−20 %"-Stern pulsiert, ein Preisschild pendelt – Bewegung zieht Blicke auf Ihre Angebote.



1. Oben steht, ob das Animationspaket für Sie freigeschaltet ist – sonst Preis und **Paket zubuchen**
2. 🍔 **Alle Objekte**: 39 Motive – Essen, Getränke, Angebote & Störer, Deko – laufen live
3. ↻ **Bewegungsarten**: alle 15 Bewegungen zum Ansehen
4. 🎬 **Angebots-Szenen**: 18 fertige Kombinationen auf echten Menüboards – antippen = große Vorschau

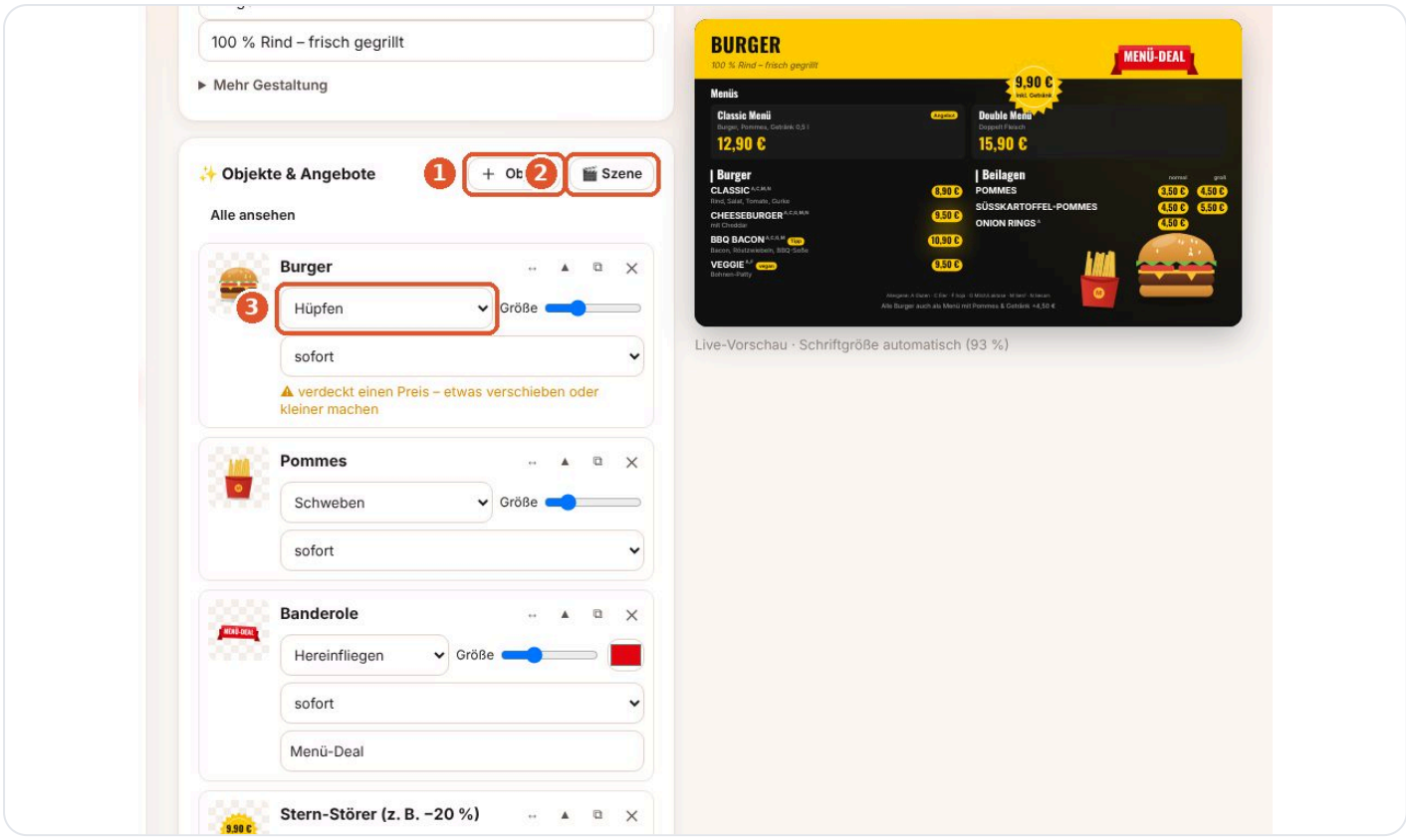




1. Zwischen Quer und Hoch wechseln
2. Mit **Vorherige / Nächste** alle Szenen durchblättern
3. **Auf vorhandenes Menüboard legen** – Gestaltung, Gerichte und Preise bleiben, die Objekte kommen darüber

4. **Neues Menüboard mit dieser Szene** – öffnet den Editor (schon als Entwurf gespeichert); Texte und Preise anpassen, veröffentlichen

Im Menüboard-Editor: Objekte & Angebote



1. **+ Objekt**: Motiv aus der Liste wählen – es erscheint rechts unten (Störer oben rechts)
2. 🎬 **Szene**: eine fertige Szene einfügen – wahlweise vorhandene Objekte behalten
3. Je Objekt: **Bewegung**, **Größe**, Farbe (bei Störern, Getränken, Deko), Startversatz („+2 s“ = startet später), bei mehreren Monitoren der Monitor, ↔ spiegeln
4. Bei Störern, Preisschild, Stempel, Banderole, Etikett: **Text** eintragen, z. B. „−20 %“ oder „4,99 €“, darunter optional eine 2. Zeile
5. **Verschieben**: das Objekt in der Vorschau rechts mit der Maus (oder dem Finger) an die gewünschte Stelle ziehen
6. ↔ = spiegeln, ▲ = nach vorne, ⧉ = verdoppeln, ✕ = entfernen (mit „Rückgängig“)

Problem	Solution

Genau platzieren	Objekt in der Vorschau oder in der Liste anklicken – es bekommt einen gestrichelten Rahmen. Dann mit den **Pfeiltasten** verschieben (mit **Umschalt** in großen Schritten), **Entf** entfernt es, **Esc** hebt die Auswahl auf.
⚠ verdeckt einen Preis	Liegt ein Objekt über Preisen oder Angebots-Karten, erscheint ein Hinweis in seiner Zeile. Einfach an den Rand ziehen oder kleiner machen.
Nur zur Happy Hour	Ist beim Board die Happy Hour eingeschaltet, gibt es je Objekt die Auswahl **immer / nur Happy Hour / außer Happy Hour**. So erscheint z. B. der „−30 %“-Störer nur in dieser Zeit – auch auf dem Display. Zum Ansehen im Editor die Vorschau auf die Happy-Hour-Zeit stellen.

💡 Ein bewegtes Objekt schaltet das Board automatisch auf ✨ **Sanft** – es wird dann als 12-Sekunden-Video in Dauerschleife veröffentlicht (am PC mit Chrome oder Edge). Mit „Still“ erscheinen die Objekte unbewegt im Bild. Wenige Objekte wirken am besten: 2–4 je Board, an den Rand gesetzt, damit Gerichte und Preise lesbar bleiben.

Die Bewegungsarten

Problem	Solution
Schweben	sanftes Auf und Ab – passt zu fast allem
Hüpfen	springt im Takt – Burger, Pommes, Pfeil
Drehen	eine ganze Drehung pro Schleife – Pizza, Donut, Stern
Pendeln	schwingt wie an einem Faden – Preisschild, Cocktail
Pulsieren	wird rhythmisch größer und kleiner – Störer
Wackeln / Rütteln	kurzer Aufmerksamkeits-Ruck alle paar Sekunden
Aufploppen	springt alle 4 Sekunden neu ins Bild
Hereinfliegen / Herunterfallen	kommt zu Beginn der Schleife ins Bild
Kreisen	kleine Kreisbahn

Quer durchs Bild	fliegt von links nach rechts über das Board
Regen	viele kleine Kopien fallen – Blätter, Schnee, Kaffeebohnen
Heranzoomen	wächst aus dem Nichts heraus
Still	keine Bewegung

Zubuchen (Kunden)

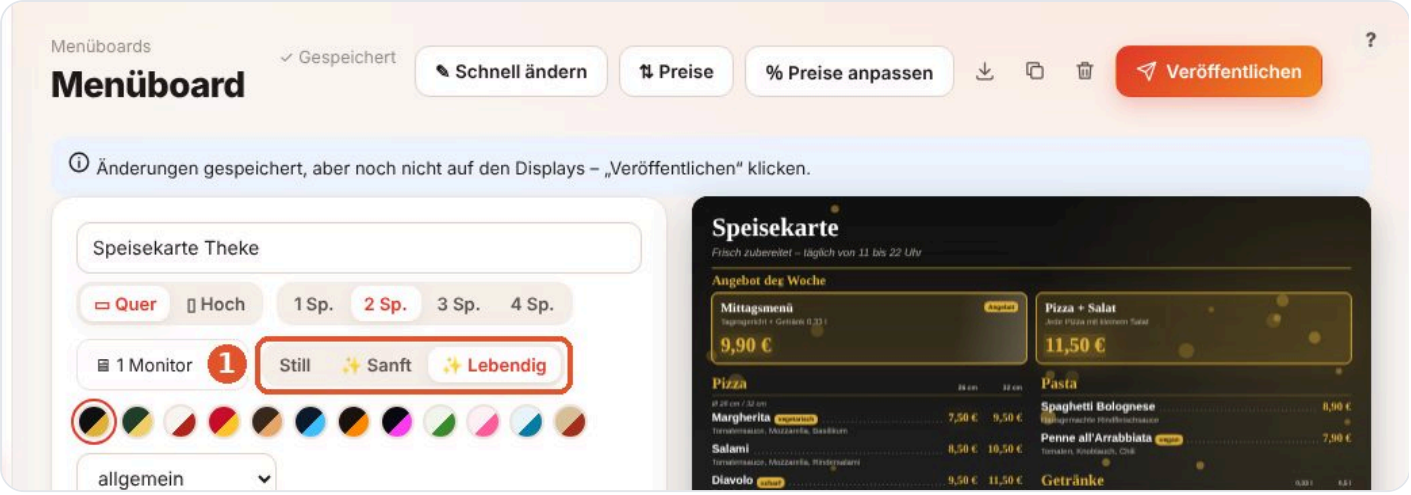
1. Alles lässt sich ohne Paket ansehen (Kennzeichnung „Vorschau“)
2. **Paket zubuchen** (Galerie) oder im Editor **+ Objekt** → Preis prüfen → Häkchen → **Jetzt kostenpflichtig zubuchen**
3. Sofort freigeschaltet – das Paket erscheint als eigene Zeile auf der nächsten Monatsrechnung

Für die Verwaltung

Problem	Solution
Preis & Text	**Verkauf & Rechnung → Zusatzpakete** → „Animationspaket“ (angelegt mit 9,90 € im Monat). Das Merkmal „Animationspaket“ schaltet die Objekte frei – auch in eigenen Paketen kombinierbar.
Wer darf was?	Verwaltung, Mitarbeiter und B2B-Partner nutzen alles für jeden Kunden. Kunden nur mit gebuchtem Paket. Kunden eines B2B-Partners buchen über ihren Partner.
Grenzen	Höchstens 40 Objekte je Menüboard.
Gekündigt?	Vorhandene Objekte bleiben und lassen sich verschieben oder entfernen; neue Objekte, andere Texte oder Bewegungen erst nach erneuter Buchung.

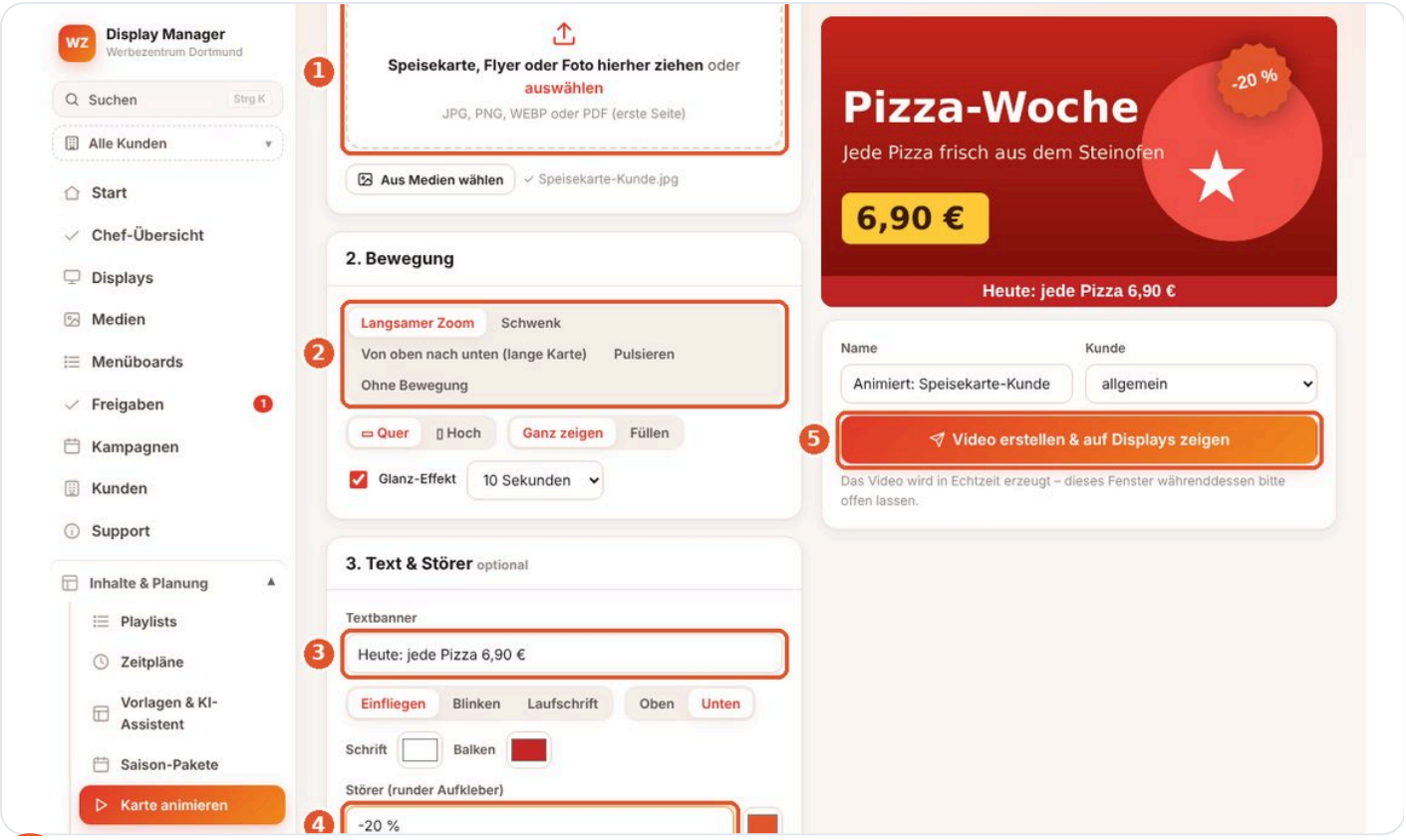
13 ✨ Bewegte Menüboards & eigene Karte animieren

Motion attracts attention – the display then shows a short video in a loop.



1. In the menu board, choose ✨ **Gentle** or ✨ **Lively** at the top – the preview moves immediately
2. Optional below: extra effect (❄ snow, 🎉 confetti, 🫧 bubbles, ❤ hearts, ✨ sparkle, 🔥 embers, 🍂 leaves, ♨ steam), 🌈 color change, 🔦 spotlight, ticker at the bottom (= footer), animate photos
3. **Publish** (takes about 12 seconds, keep the window open)

💡 The customer's menu already exists as an image or PDF? Then do this:

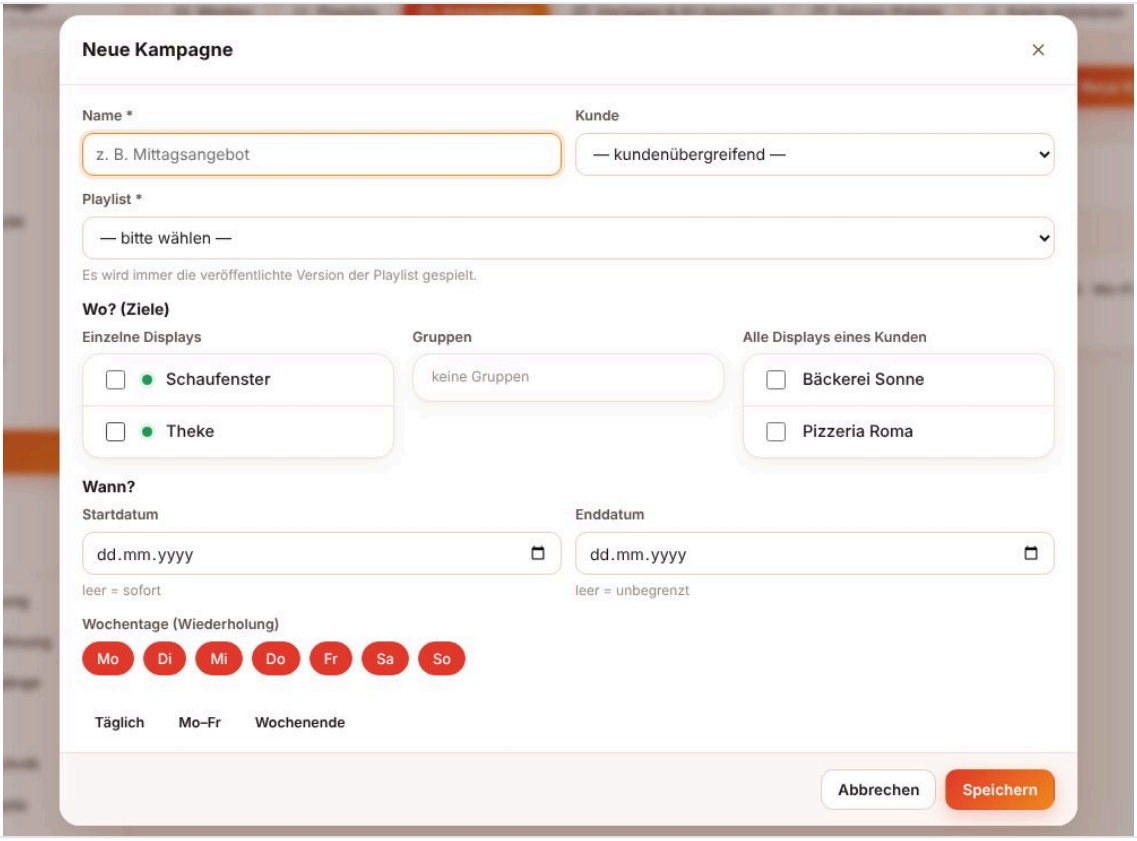


1. Menu boards → **Animate your own menu**: drag in the image or PDF
2. Choose the motion (long menus scroll automatically from top to bottom)
3. Optional: text banner, e.g. "Pizza day today"
4. Optional: eye-catcher badge, e.g. "-20 %" – click the desired spot in the preview
5. **Create video** → tap displays → **Show**

💡 Also in the media: hover over an image and click ✨.

14 Werbung zu bestimmten Zeiten (Kampagne)

e.g. "Lunch offer Mon–Fri 11–14". Campaigns → New campaign.



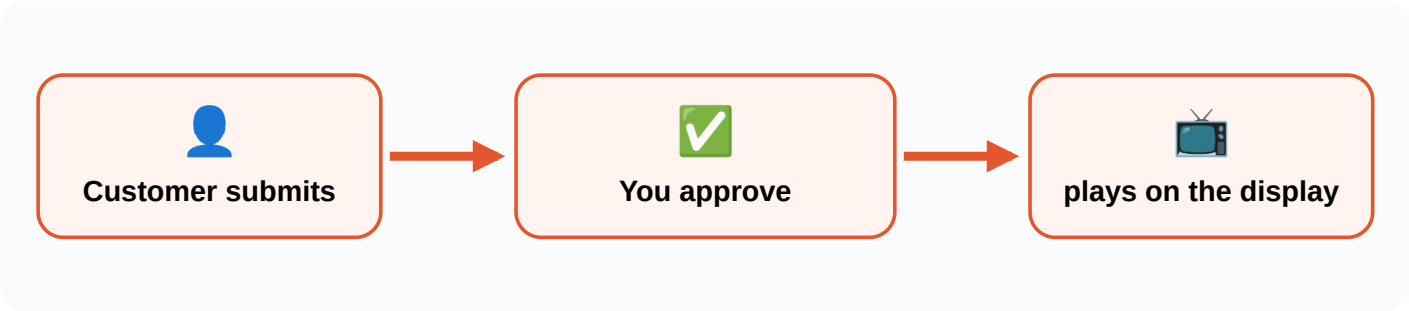
1. Choose name and playlist
2. Tick the displays
3. Date, weekdays, time
4. **Save** – starts and ends automatically

🔮 What is playing on …?

1. **Content & planning → Schedules**, choose the display
2. Enter the day and time at the top (e.g. Saturday 18:00), for weather sections choose the weather
3. **Show** – you see the campaign/playlist and exactly the images that will play then (happy hour, dish of the day, languages, seasonal motifs)

15 ✅ Freigaben (Kunde hat etwas eingereicht)

Customer ads only appear after your OK. The number on the menu item shows how many are waiting.





1. Check image, date and message
2. **Approve** – plays at the requested date
3. **Reject** – with a short reason for the customer

16 🔌 Bildschirme anbinden & fernsteuern (alle Möglichkeiten)

Ein/Aus, Lautstärke, Eingang und Zustand direkt im Dashboard – von Hand, nach den Betriebszeiten und mit Auto-Neustart. Für Profi-Displays, ganz normale Fernseher, Beamer, Android-Geräte, Smart Home und Steckdosen.

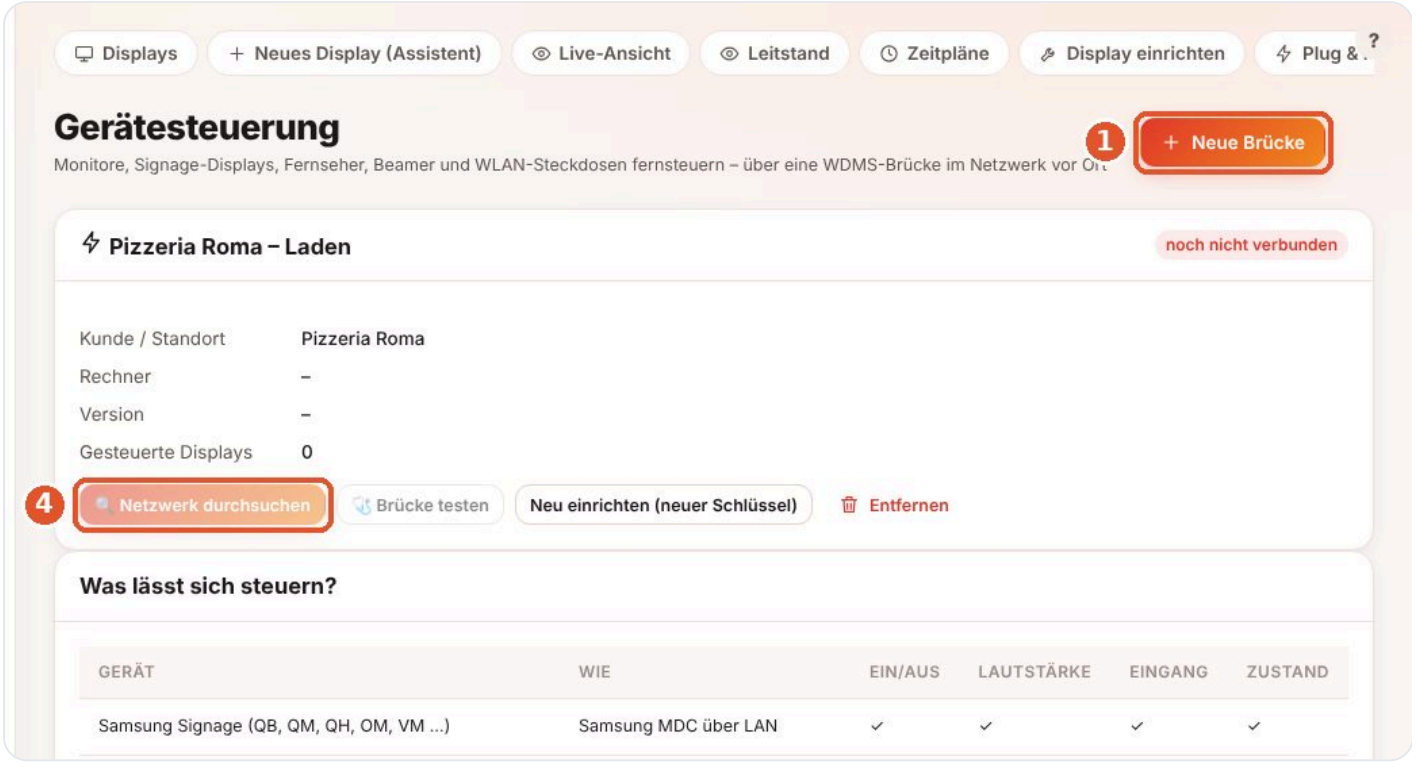
Überblick: Was passt zu welchem Gerät?

Problem	Solution
Profi-Displays Samsung, LG, Philips, Sony	**Samsung MDC**, **LG LAN**, **Philips SICP**, **Sony Bravia** – alles: Ein/Aus, Lautstärke, Ton, Eingang, Zustand. Auch über RS232 (USB-Seriell-Adapter).
NEC / Sharp-NEC Displays & Beamer	**NEC** (LAN Port 7142 oder RS232) – alles.
iiyama, BenQ, ViewSonic, Sharp, Epson, Panasonic Pro …	**Eigene Steuerbefehle**: die Befehle aus der RS232/LAN-Anleitung des Herstellers eintragen – über Netzwerk (TCP/UDP) oder RS232.
Beamer aller großen Hersteller	**PJLink** – Ein/Aus, Bild/Ton aus, Eingang, Zustand.
Normaler Samsung-Fernseher (ab 2016)	**Samsung Smart-TV** über das Netzwerk – einmal koppeln, dann alles.
Normaler LG-Fernseher (webOS, ab 2014)	**LG Smart-TV** über das Netzwerk – einmal koppeln, dann alles.
Philips-Fernseher (Android TV / Google TV)	**Philips Smart-TV** – Kopplung mit PIN, dann Ein/Aus, Lautstärke, Ton, Zustand.
Sony-Fernseher	**Sony Bravia** – am Fernseher „IP-Steuerung“ mit Pre-Shared Key einschalten.
Panasonic Viera, Roku-TVs (TCL, Hisense …)	**Panasonic Viera** bzw. **Roku** über das Netzwerk.
Android TV, Google TV, Fire TV, Android-Boxen	**Android TV (ADB)** – Ein/Aus (der Fernseher folgt über HDMI-CEC), Lautstärke, Zustand.

Tablets und Boxen mit Fully Kiosk Browser	**Fully Kiosk** – Bildschirm an/aus, Lautstärke, Zustand.
Jeder Fernseher am Raspberry-Pi-Player	**HDMI-CEC** – Ein/Aus ohne Brücke.
Jeder Fernseher mit Fernbedienung (auch ganz alte)	**Infrarot-Sender** mit Tasmota oder ESPHome – Ein/Aus, Lautstärke (ungefähr), Stumm, Quelle.
Alles, was Ihr Smart Home kennt	**Home Assistant** (vor Ort oder über das Internet), **MQTT** (ioBroker, Node-RED, Zigbee2MQTT), eigene Schalt-Adressen.
Strom an/aus für jedes Gerät	WLAN-Steckdosen: **Shelly**, **Tasmota**, **Shelly Cloud**, **FRITZ!DECT**, **TP-Link Kasa**, Zigbee über MQTT/Home Assistant.
Displays/PCs im Tiefschlaf	**Wake-on-LAN** – nur Einschalten.

💡 Unsere Empfehlung je Display: **Bildschirm** über das Netzwerk steuern (Lautstärke, Eingang, Zustand) **und** eine WLAN-Steckdose davor (hartes Aus/Ein, Auto-Neustart, wenn etwas hängt). Beides lässt sich gleichzeitig einrichten.

Schritt 1 – einmal je Standort: WDMS-Brücke

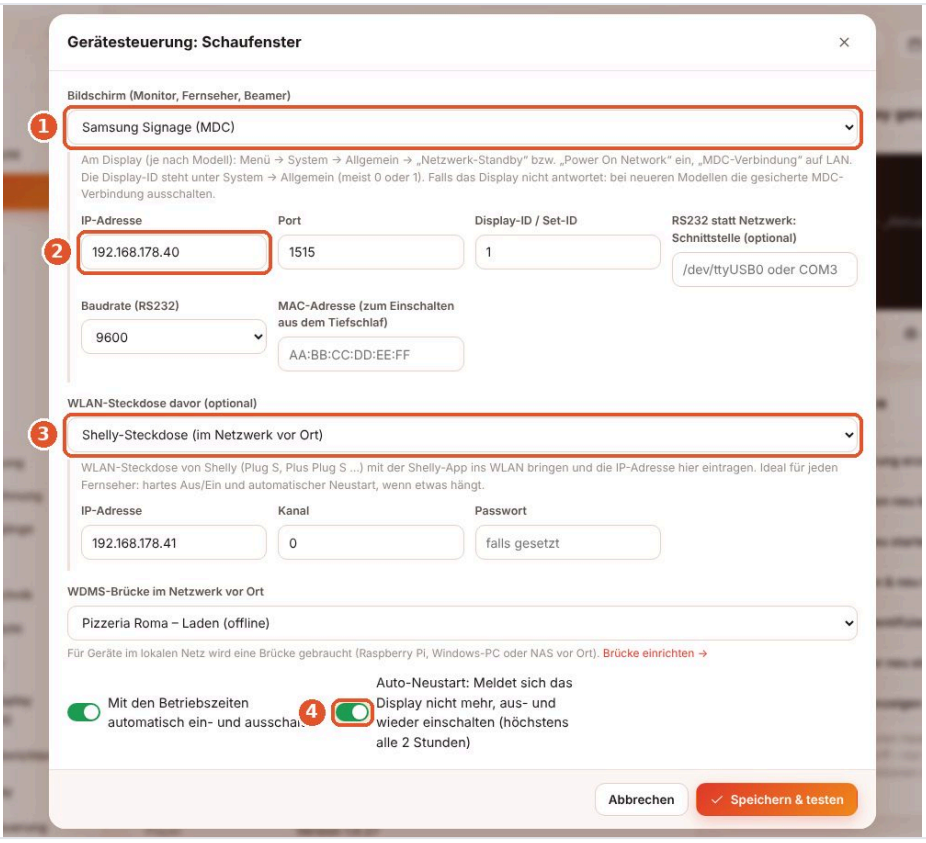


1. **Displays & hardware → Device control → New bridge**: enter a name (e.g. “Pizzeria Roma – shop”)
2. Den angezeigten Befehl auf einem Rechner im Laden ausführen: **Raspberry Pi** (auch der Player selbst), **Windows-PC** (PowerShell als Administrator), **Linux-PC** oder **NAS**
3. After a few seconds the bridge shows **online**
4. 🔍 **Netzwerk durchsuchen**: gefundene Displays, Fernseher, Beamer und Steckdosen mit **Übernehmen** einem Display zuordnen

Problem	Solution
Raspberry-Pi-Player	Hat die Brücke schon eingebaut – sie erscheint als „im Player eingebaut“, nichts einzurichten.
Android-Player-App	Hat die Brücke ebenfalls eingebaut (alle Netzwerk-Anbindungen). Nicht möglich in der App: Android TV über ADB und RS232 – dafür eine Brücke auf Raspberry Pi oder Windows.
Windows-PC	Ab 1.63 läuft dort dasselbe Programm wie auf dem Raspberry Pi (Python wird automatisch mit in den Ordner der Brücke gelegt, ADB ebenso). Ältere Windows-Brücken: Einrichtungsbefehl einmal erneut ausführen.
Updates	Die Brücke holt neue Fassungen ab 1.63 selbst vom eigenen Server. Brücken, die vor 1.63 eingerichtet wurden, einmal mit demselben Befehl neu einrichten (Pi-Player: Einrichtung des Players erneut ausführen).

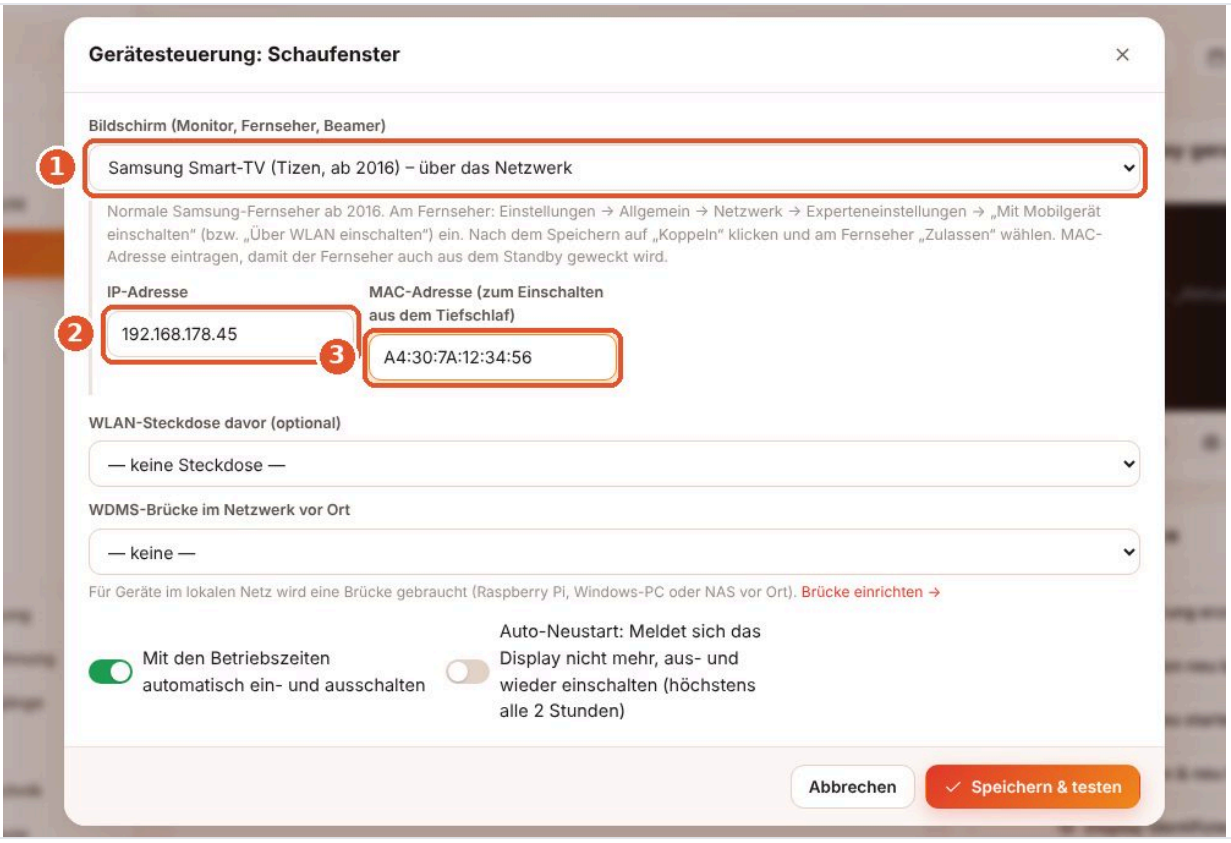
💡 Die Brücke verbindet sich nur nach außen (HTTPS). Im Router muss nichts freigegeben werden. Der Rechner sollte immer eingeschaltet sein – ein Raspberry Pi, der ohnehin als Player läuft, reicht.

Schritt 2 – je Display: Gerätesteuerung einrichten



1. Display öffnen → **Gerätesteuerung → Einrichten**
2. **Bildschirm**: Art aus der Liste wählen (nach Gruppen sortiert: Profi-Displays, Fernseher, Android, Infrarot, Smart Home, Steckdosen) – darunter steht genau, was am Gerät einzuschalten ist
3. **IP-Adresse** des Geräts eintragen (steht im Netzwerk-Menü des Geräts oder in der FRITZ!Box unter „Heimnetz") – am besten in der FRITZ!Box „Diesem Gerät immer die gleiche IP-Adresse zuweisen" anhaken
4. **MAC-Adresse** eintragen, wenn das Gerät auch aus dem Tiefschlaf eingeschaltet werden soll
5. Optional die **Steckdose** davor wählen, die **Brücke** wählen, **Betriebszeiten** und **Auto-Neustart** ankreuzen
6. **Speichern & testen**

Normale Fernseher über das Netzwerk (Samsung, LG, Philips): einmal koppeln



1. Fernseher einschalten und mit demselben Netzwerk verbinden wie die Brücke
2. Am Fernseher das Einschalten über das Netzwerk erlauben: **Samsung** Einstellungen → Allgemein → Netzwerk → Experteneinstellungen → „Mit Mobilgerät einschalten"; **LG** Einstellungen → Allgemein → Geräte → TV-Einschalteinstellungen → „Über Wi-Fi einschalten" und „LG Connect Apps"; **Philips** Einstellungen → Netzwerk → „Mit WLAN einschalten"
3. Im Dashboard die Art **Samsung Smart-TV**, **LG Smart-TV** bzw. **Philips Smart-TV** wählen, IP- und MAC-Adresse eintragen, speichern
4. Auf der Display-Seite 🔗 **Koppeln** klicken
5. Samsung/LG: Am Fernseher erscheint eine Meldung → mit der Fernbedienung **Zulassen** wählen (ca. 30 Sekunden Zeit). Philips: Der Fernseher zeigt eine **PIN** → im Dashboard eingeben
6. Fertig – ab jetzt gehen Ein/Aus, Lautstärke, Ton, Eingang (HDMI 1–4) und Zustand. Die Kopplung bleibt gespeichert, auch beim Ändern der Einstellungen (nicht bei einer neuen IP-Adresse)

💡 Kommt keine Meldung am Fernseher? Samsung: Einstellungen → Allgemein → Externe Geräte → Geräteverbindungs-Manager → „Zugriffsbenachrichtigung" einschalten und die Brücke dort ggf. aus der Liste „Abgelehnt" entfernen. LG: „LG Connect Apps" einschalten.

Ausgeschaltete Fernseher sind oft nicht im Netzwerk – Einschalten geht dann nur über die MAC-Adresse (Weckruf) oder eine Steckdose.

Problem	Solution
Sony Bravia	Einstellungen → Netzwerk → Heimnetzwerk → IP-Steuerung → Authentifizierung „Normal und Pre-Shared Key“, Schlüssel festlegen (z. B. 1234) und im Dashboard eintragen; „Remote-Start“ ein. Profi-Modell und normaler Fernseher funktionieren gleich.
Panasonic Viera	Netzwerk → „TV Remote App Einstellungen“ → „TV Remote“ ein und „Einschalten per App“ ein. Neuere Modelle (ab ca. 2019) verlangen eine verschlüsselte Kopplung – dann über Home Assistant oder Infrarot.
Roku-TV (TCL, Hisense, Sharp ...)	Einstellungen → System → Erweiterte Systemeinstellungen → „Steuerung durch mobile Apps“ → „Netzwerkzugriff: Zulässig“. Die Lautstärke wird schrittweise gestellt (ungefähr).
Hisense (VIDAA), TCL, Xiaomi, Grundig, Telefunken ...	Über **Home Assistant** oder einen **Infrarot-Sender**. Android-/Google-TV-Modelle auch über **Android TV (ADB)**.

Android TV, Google TV, Fire TV und Android-Boxen (ADB)

1. Am Gerät die Entwickleroptionen freischalten: Einstellungen → Geräteeinstellungen → Info → 7× auf **Build** tippen (Fire TV: Einstellungen → Mein Fire TV → Info → 7× auf den Gerätenamen)
2. Entwickleroptionen → **USB-Debugging** und **Netzwerk-Debugging** bzw. **ADB-Debugging** einschalten
3. Im Dashboard die Art **Android TV / Google TV / Fire TV** wählen, IP-Adresse eintragen (Port bleibt 5555), speichern
4. 🔗 **Koppeln** klicken und am Gerät **„Immer von diesem Computer zulassen“** ankreuzen und bestätigen

💡 Ausschalten schickt das Android-Gerät in den Ruhezustand – über HDMI-CEC geht der Fernseher meist mit aus (am Fernseher CEC einschalten: Samsung „Anynet+“, LG

„SimpLink“, Sony „Bravia Sync“, Philips „EasyLink“). ADB braucht eine Brücke auf Raspberry Pi, Linux oder Windows (das Programm „adb“ installiert die Einrichtung mit).

Problem	Solution
Fully Kiosk Browser	In Fully: Einstellungen → Remote Administration → „Enable Remote Administration“ ein, Passwort festlegen und im Dashboard eintragen. Bildschirm an/aus, Lautstärke, Zustand.

Profi-Displays über RS232 (serielles Kabel)

1. USB-Seriell-Adapter (z. B. mit FTDI- oder CH340-Chip) an die Brücke (Raspberry Pi) stecken und mit dem RS232-Anschluss des Displays verbinden
2. Art wählen (Samsung MDC, LG, Philips, NEC oder Eigene Steuerbefehle), die **IP-Adresse leer lassen** und bei **RS232** die Schnittstelle eintragen: `/dev/ttyUSB0` (Raspberry Pi/Linux) bzw. `COM3` (Windows)
3. Baudrate wie im Menü des Displays (meist 9600), speichern und 🩺 **Gerät testen**

💡 Unter Windows braucht RS232 das Zusatzpaket pyserial – einfacher ist ein Raspberry Pi als Brücke. Mehrere Displays an einer RS232-Kette (Daisy Chain): bei jedem Display die eigene Display-ID eintragen.

Eigene Steuerbefehle – für jedes Gerät mit Steuerprotokoll

1. In der Anleitung des Geräts den Abschnitt „RS232/LAN-Steuerung“ suchen (meist im Download-Bereich des Herstellers)
2. Art **Eigene Steuerbefehle** wählen, Verbindung (TCP, UDP oder RS232), IP-Adresse und Port eintragen
3. Je Aktion den Befehl eintragen – als Text (Enter als `\r`, neue Zeile `\n`, einzelnes Byte `\x0D`) oder als Hex mit `hex:` davor
4. Lautstärke mit Platzhalter: `{v}` (z. B. 20), `{v2}`/`{v3}` (mit führenden Nullen), `{vh}`/`{vH}` (hexadezimal)
5. Für den Zustand den Abfrage-Befehl und bei **„Antwort bedeutet AN“** den Text, der in der Antwort steht, wenn das Gerät an ist

Problem	Solution
BenQ (LAN 8000/4660 oder RS232)	Ein `\r*pow=on#\r` · Aus `\r*pow=off#\r` · Lautstärke `\r*vol={v}#\r` · Zustand `\r*pow=?#\r`, Antwort bedeutet AN: `POW=ON`
Beispiel als Hex	Ein `hex:AA 11 01 01 01 14` – Bytes genau wie in der Hersteller-Tabelle
Mediensteuerungen (Crestron, Extron, AMX)	Dort einen TCP-Befehl anlegen und hier denselben Text eintragen – so schaltet das Dashboard auch Leinwand, Licht oder Verstärker.

Infrarot: jeder Fernseher mit Fernbedienung

1. Einen Infrarot-Sender mit **Tasmota** (Software „tasmota-ir“, fertig z. B. als „IR-Blaster“ für ca. 10–20 €) ins WLAN bringen und vor den Fernseher legen bzw. kleben
2. Art **Infrarot-Sender mit Tasmota** wählen, IP-Adresse eintragen
3. **Marke** wählen: Für Samsung, LG und Sony sind die Codes eingebaut (mit getrenntem „Ein“ und „Aus“, damit nichts versehentlich umschaltet)
4. Andere Marke: **Eigene Codes** wählen. Im Tasmota-Webinterface die Konsole öffnen, mit der Original-Fernbedienung auf den Sender zielen und die Taste drücken – es erscheint z. B. `{"IrReceived":{"Protocol":"NEC","Bits":32,"Data":"0x20DF10EF"}}`. Im Dashboard `NEC:32:0x20DF10EF` (oder das ganze JSON) eintragen

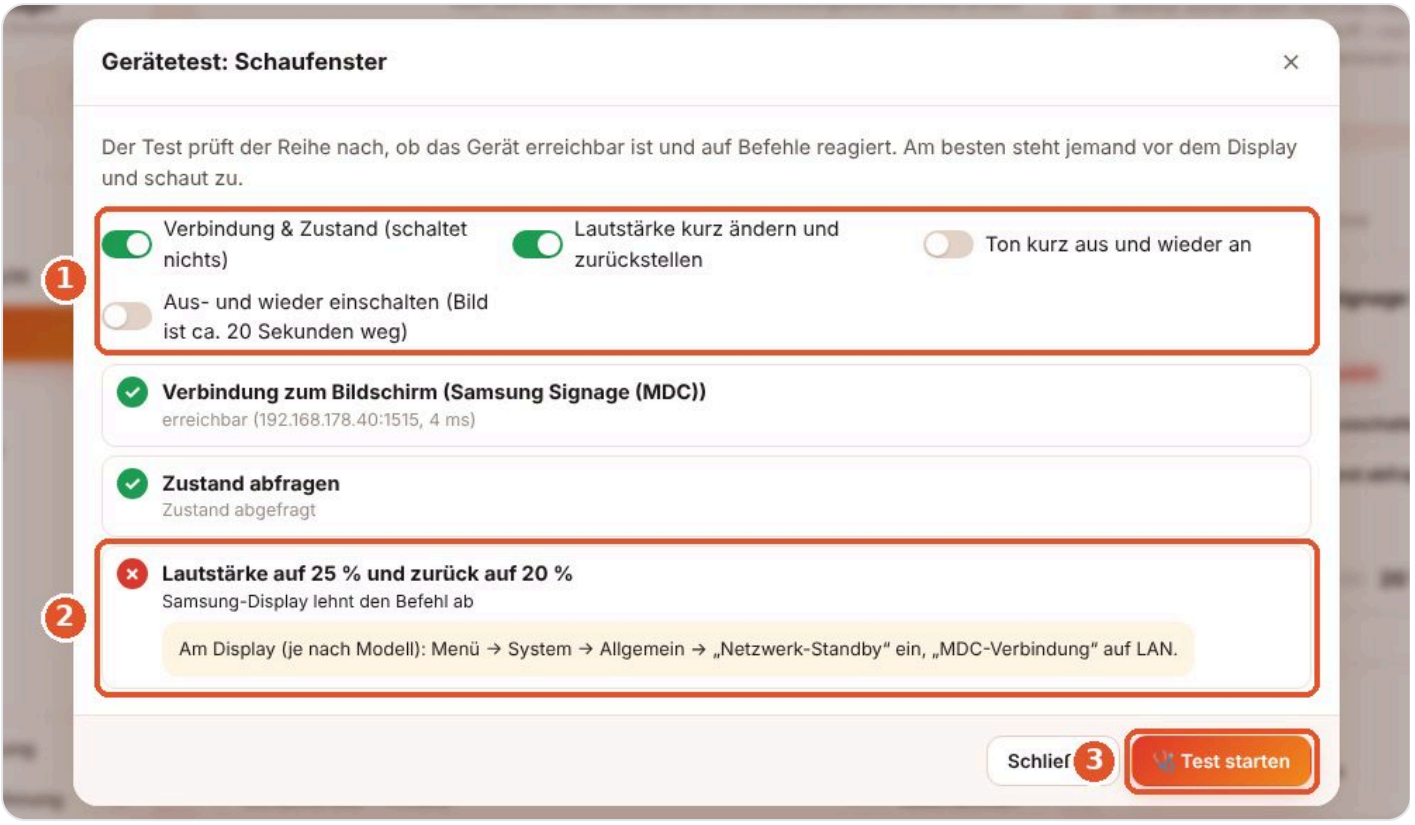
💡 Infrarot kann nicht melden, ob der Fernseher an ist. Die Lautstärke wird ungefähr gestellt (erst ganz leise, dann hochzählen). Mit **ESPHome**-Geräten geht es genauso: Art „ESPHome“, dort den Taster eintragen, z. B. `button/tv_aus`. Broadlink-Sender bitte über Home Assistant anbinden.

Smart Home: Home Assistant, MQTT, FRITZ!DECT

Problem	Solution
Home Assistant vor Ort	Art „Home Assistant im Netzwerk vor Ort“: Adresse (z. B. `http://192.168.1.20:8123`), in Home Assistant unter Profil → Sicherheit ein **langlebiges Zugriffstoken**

	erstellen und einfügen, Entität eintragen (z. B. `media_player.laden_tv` oder `switch.tv_steckdose` – steht unter Entwicklerwerkzeuge → Zustände). Damit lässt sich jeder Fernseher steuern, den Home Assistant kennt: Ein/Aus, Lautstärke, Ton, Eingang (HDMI 1–4), Zustand.
Home Assistant über das Internet	Art „Home Assistant über das Internet“ – mit Ihrer Nabu-Casa-Adresse (`https://….ui.nabu.casa`) oder eigenen https-Adresse. Keine Brücke nötig, der Server steuert direkt.
MQTT (ioBroker, Node-RED, Zigbee2MQTT)	Server-Adresse, Benutzer und Passwort, Thema zum Schalten und die Nachrichten für Ein/Aus. Beispiel Zigbee2MQTT: Thema `zigbee2mqtt/tv_steckdose/set`, Ein `{"state":"ON"}`, Aus `{"state":"OFF"}`, Zustand `zigbee2mqtt/tv_steckdose`. Tasmota: `cmnd/steckdose/POWER` mit ON/OFF, Zustand `stat/steckdose/POWER`. Port 8883 = verschlüsselt.
FRITZ!DECT 200/210	In der FRITZ!Box unter System → FRITZ!Box-Benutzer einen Benutzer mit dem Recht „Smart Home“ anlegen; Benutzer, Passwort und die **AIN** (steht auf der Steckdose) eintragen.
TP-Link Kasa	HS100/HS103/HS110/KP105 mit älterer Firmware direkt; neuere Kasa- und Tapo-Steckdosen über Home Assistant.
Shelly, Tasmota, Shelly Cloud	Wie bisher: IP-Adresse (bzw. Cloud-Server, Schlüssel und Geräte-ID).

Test device



1. Open display → Device control → 🩺 **Test device**
2. Tick what should be tested as well (volume, sound, off/on)
3. **Start test** – each step shows ✓ or × with a hint on the cause; the result is saved in the display log

💡 Check the bridge: Device control → 🩺 **Test bridge** (all devices of the bridge). On site: run the same setup command with **--test** instead of the key.

Wenn es nicht klappt

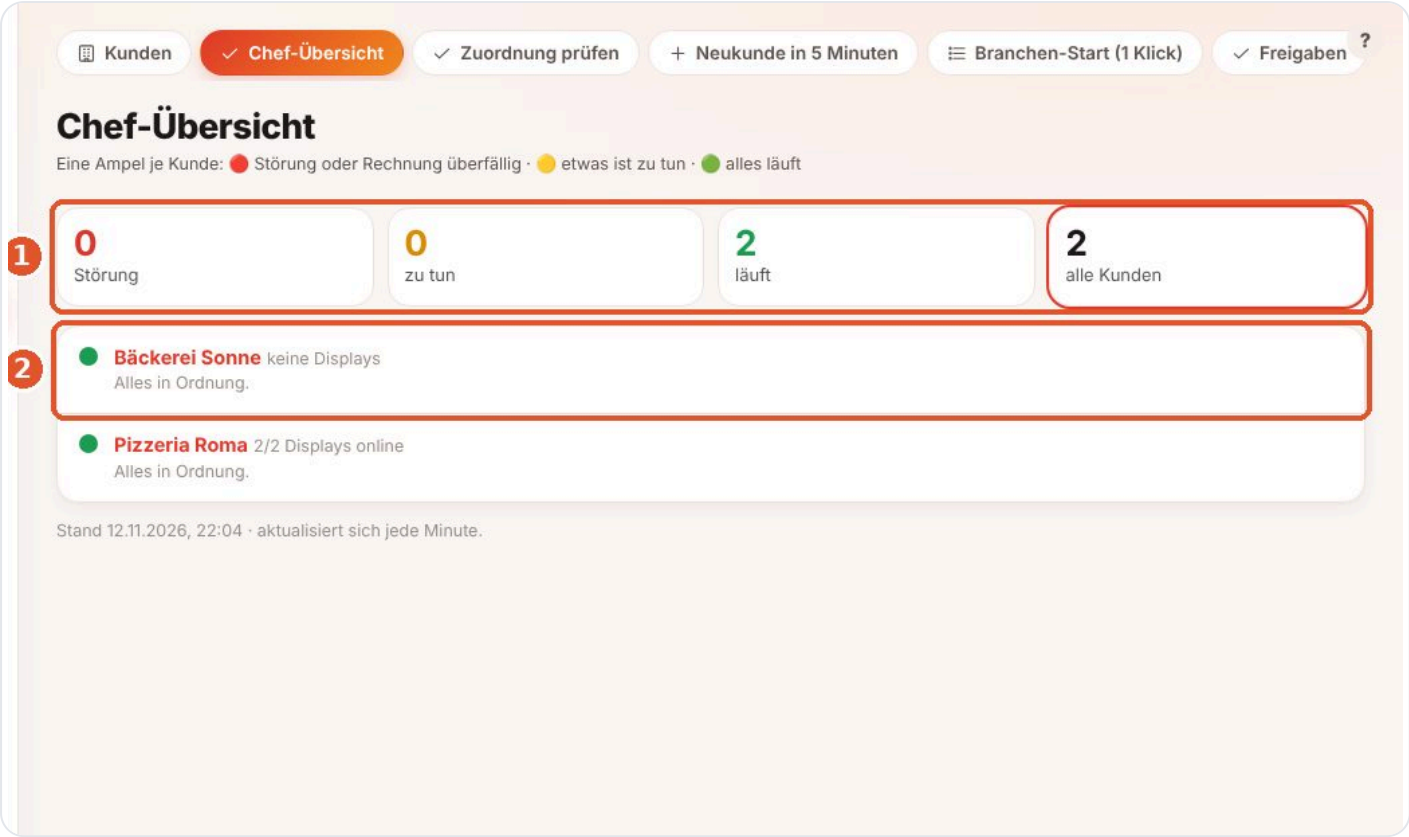
Problem	Solution
„nicht erreichbar"	IP-Adresse prüfen (hat sich nach einem Router-Neustart geändert?), Gerät eingeschaltet, Brücke im selben Netzwerk (nicht im Gäste-WLAN).
„lehnt Port … ab"	Das Gerät ist da, aber die Netzwerksteuerung ist im Menü aus – Hinweis bei der jeweiligen Art beachten.
„Noch nicht gekoppelt"	Auf der Display-Seite 🔗 **Koppeln** klicken und am Fernseher bestätigen.

Einschalten geht nicht, Ausschalten schon	Viele Fernseher schalten im Standby das Netzwerk ab. MAC-Adresse eintragen und am Fernseher „Einschalten über Netzwerk/WLAN“ erlauben – oder eine Steckdose davor nutzen.
„Diese Steuerungsart kennt die Brücke nicht“	Die Brücke ist älter als 1.63 – einmal mit dem Einrichtungsbefehl neu einrichten bzw. die Android-App aktualisieren.

💡 Technische Einzelheiten für Techniker: `docs/GERAETESTEUERUNG.md` im Paket.

17 🚦 Chef-Übersicht: Ampel je Kunde

See at a glance where things are stuck – **Owner overview** in the menu or the tile on the home page.

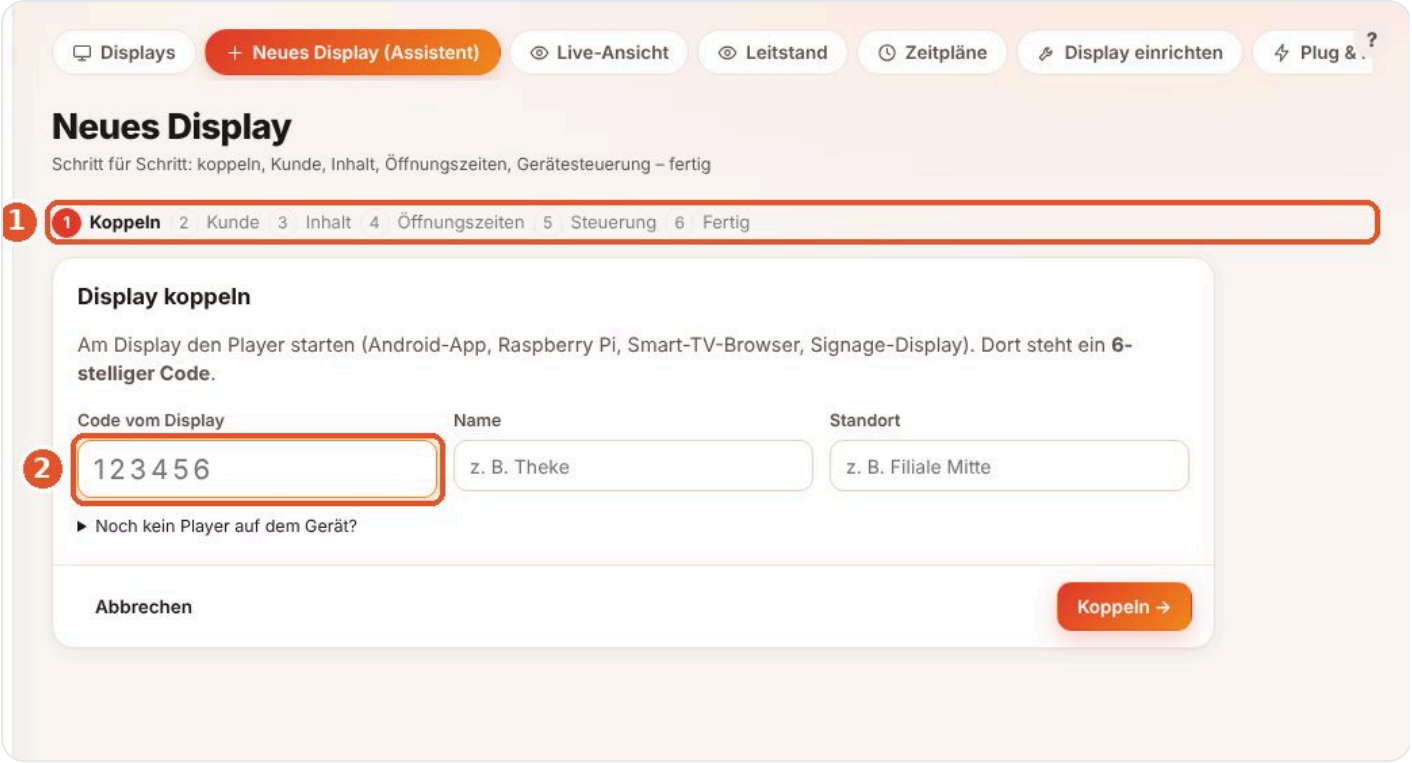


1. **Red**: a display is offline during opening hours, the monitor is off or an invoice is overdue
2. **Yellow**: something needs doing – empty or unpublished playlist, display awaiting approval, contract ending soon, device test with errors, open invoice
3. **Green**: everything is running
4. Every reason is a link straight to the right place

💡 Tapping the numbers at the top filters the list. B2B partners only see their own customers.

18 🧭 Neues Display Schritt für Schritt

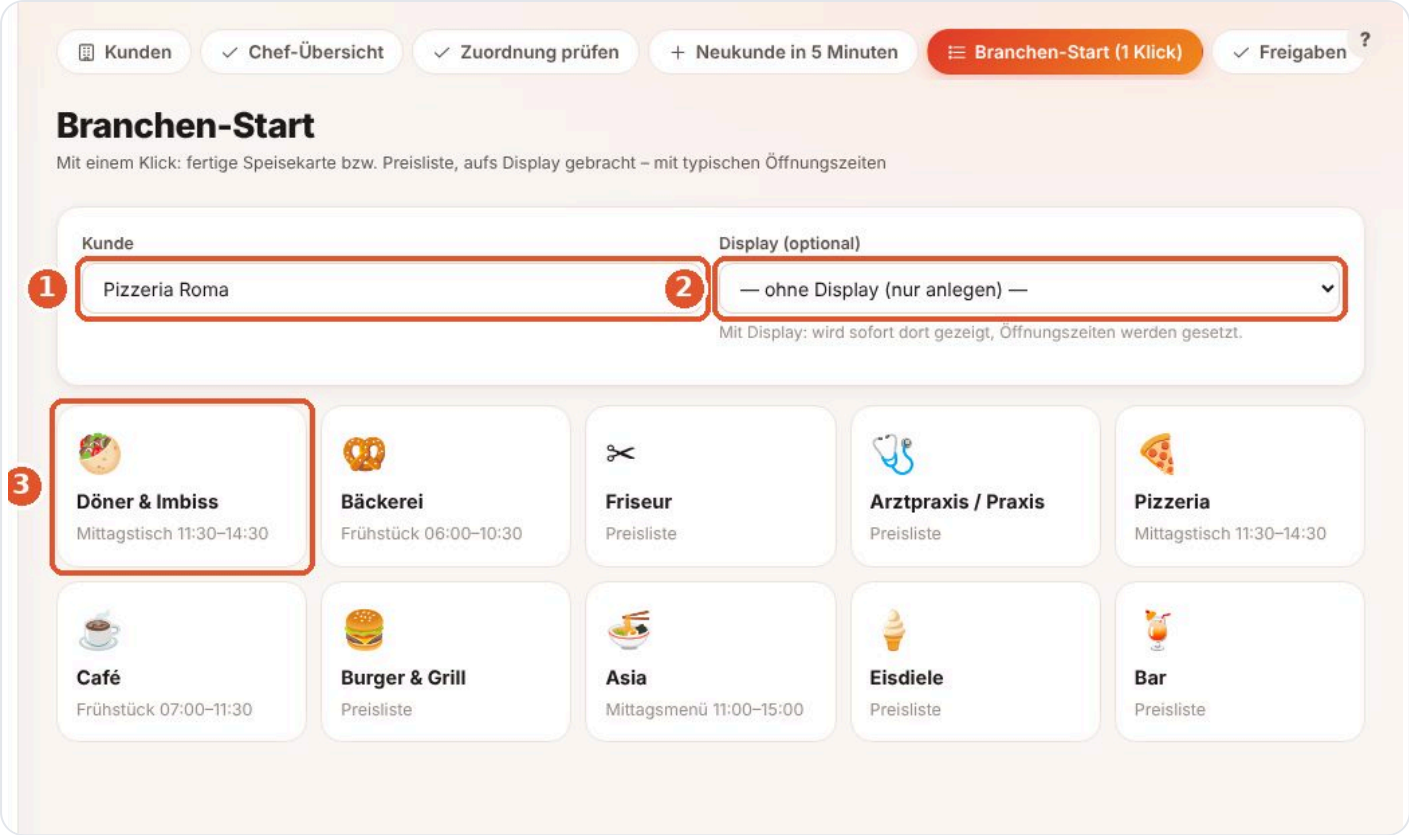
Displays & hardware → New display (wizard) or the tile on the home page.



1. **Pair**: enter the code from the display, name and location
2. Choose the **customer**
3. **Content**: ready-made menu (industry), existing playlist or an image/video
4. **Opening hours**: outside them the display shows black or turns the monitor off
5. **Device control** (optional) and finally **Test device now**

19 🍽 Branchen-Start mit einem Klick

A ready-made menu or price list on the display for new customers in seconds.



1. Choose the customer and (optionally) the display
2. Tap the industry: kebab shop, bakery, hairdresser, practice, pizzeria, café …
3. The menu is created, published and runs on the display – with typical opening hours
4. **Adjust prices** opens the editor

20 🕗 Tagesablauf: Frühstück, Mittag, Abend

Open display → under "Campaigns for this display" → **Set up daily schedule**. For all displays of a customer: open customer → **Daily schedule for all displays**.

1. Tap **+ Breakfast**, **+ Lunch**, **+ Dinner menu** (or a custom time slot)
2. Adjust times and weekdays
3. Choose the playlist for each time slot and **Save**

💡 Outside the time slots, the default playlist runs. Campaigns and booked advertising still take priority. A menu board can additionally show individual sections only at certain times.

21 📲 Ausfall-Alarm per SMS, WhatsApp oder Telegram

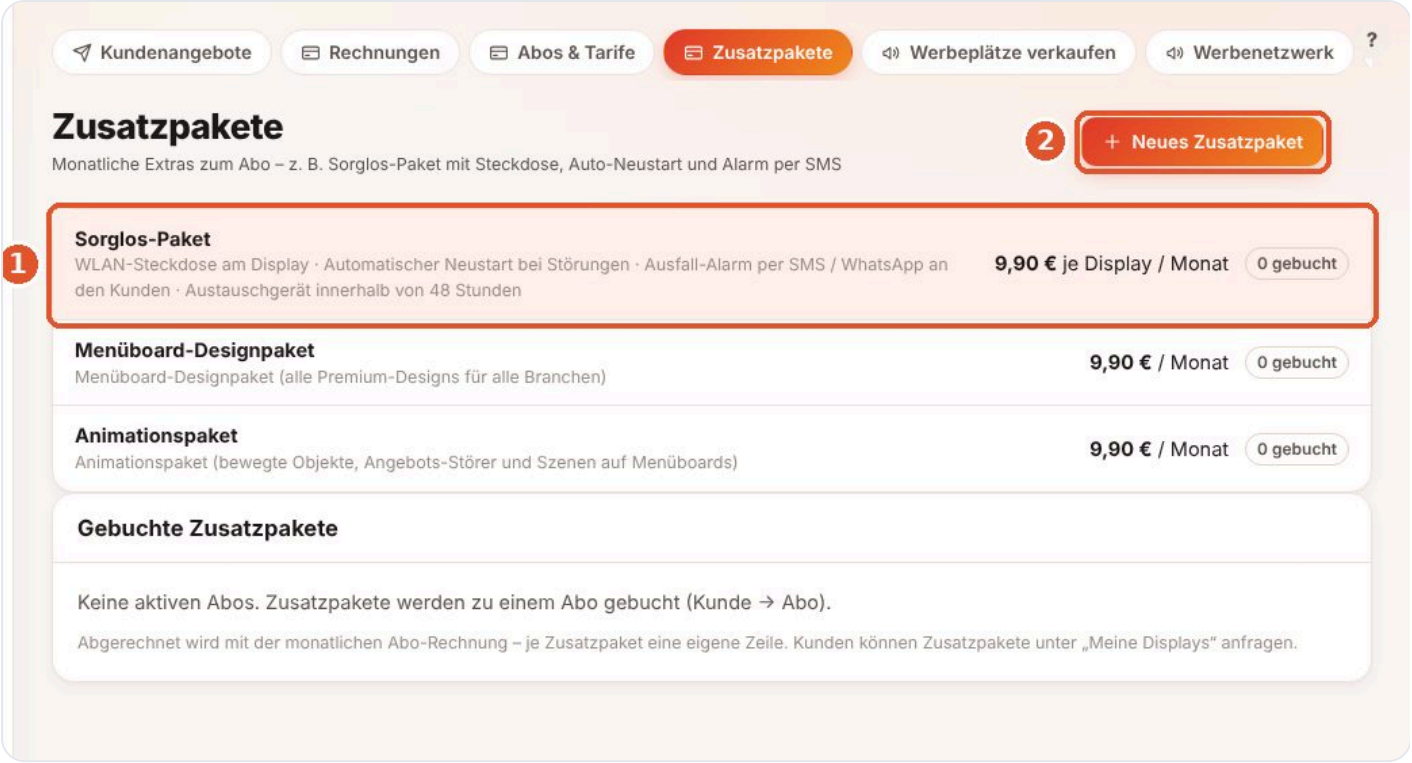
Settings → Outage alerts – at the bottom "Alert by SMS, WhatsApp or Telegram".

1. Choose the **method**: SMS (seven.io or Twilio), WhatsApp (Twilio or free to your own number via CallMeBot), Telegram bot or custom address
2. Enter the provider's access key and recipients (mobile numbers, comma-separated) – below it says where to get the key
3. **Save & send test message**

💡 Customers with the Worry-free package (or all, if you switch it on) receive the alert at their **alert number** – enter it at the customer under "Edit".

22 🛡 Zusatzpakete: Sorglos-Paket & Co.

Sales & billing → Add-on packages.



1. Create an add-on package or adjust the prepared **Worry-free package** (price, per display, contents)
2. At the bottom, **add** it to the customer – it appears as a separate line on the monthly invoice
3. The system switches on "Automatic restart" and "Outage alert by SMS" itself for these customers

💡 Customers see add-on packages under "My displays" and can request them there – you receive an email.

23 🛒 Lizenzen verkaufen

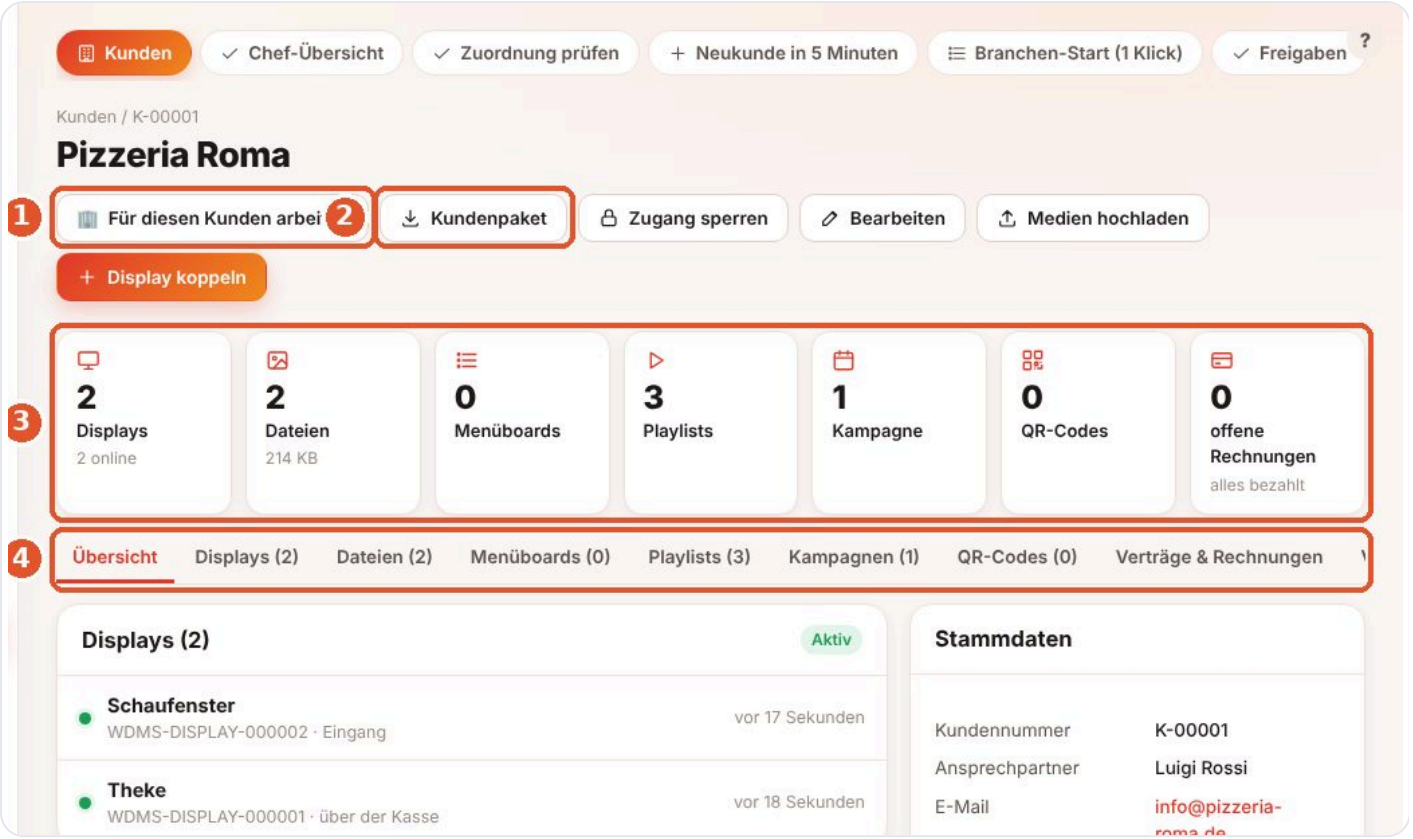
Settings → Sales → Sell licenses; orders under **License & protection**.

1. Enable the order page and define packages with prices
2. Companies order at **/lizenz-kaufen** – the invoice comes immediately, with Stripe also online payment
3. As soon as the invoice is paid (online, bank statement or manually), the license is sent out automatically by email

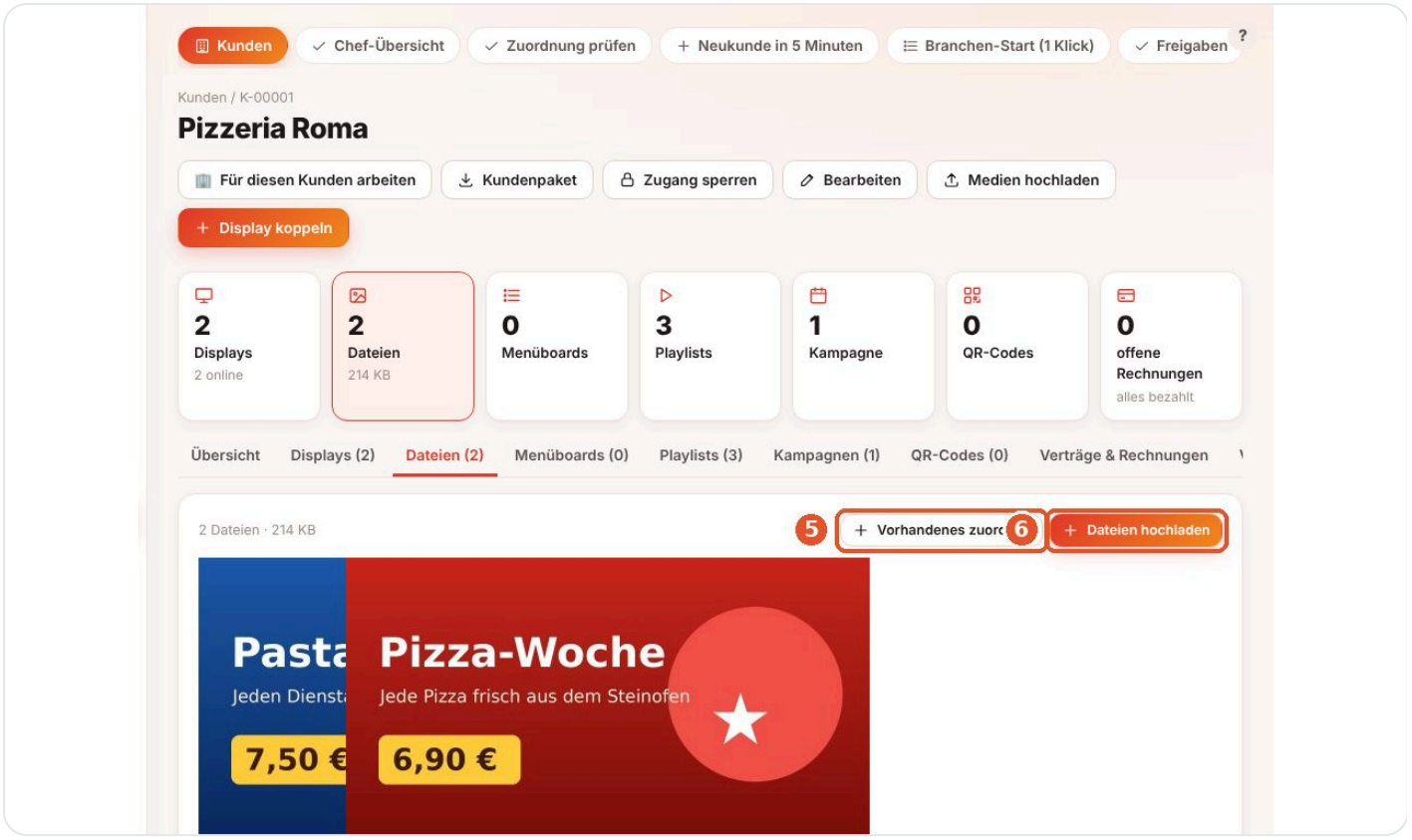
💡 Requirement: your license key is installed (License & protection).

24 🗂️ Kundenakte: alles eines Kunden an einer Stelle

Customers → tap a customer. At the top there are tiles with everything that belongs to this customer.



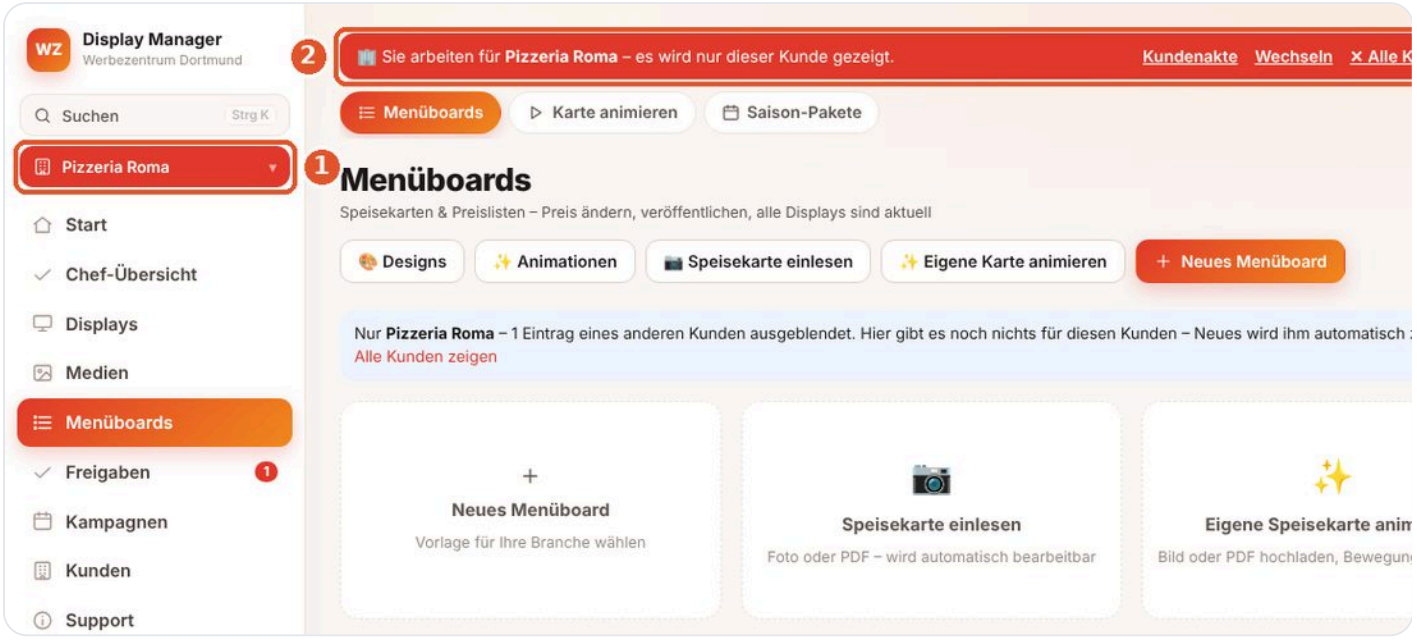
1. **Work for this customer**: all lists then only show this customer, new items automatically belong to them
2. **Customer package**: everything of the customer as a ZIP (overview, files, menu boards, QR codes, invoices)
3. **Tiles**: number per area – tapping opens the list
4. **Tabs**: overview (master data, subscription, access) and one list per area



5 **Assign existing items**: bring entries without a customer (or accidentally with another customer) here – files are also moved on the server into the customer's folder

6 **New**: create directly for this customer

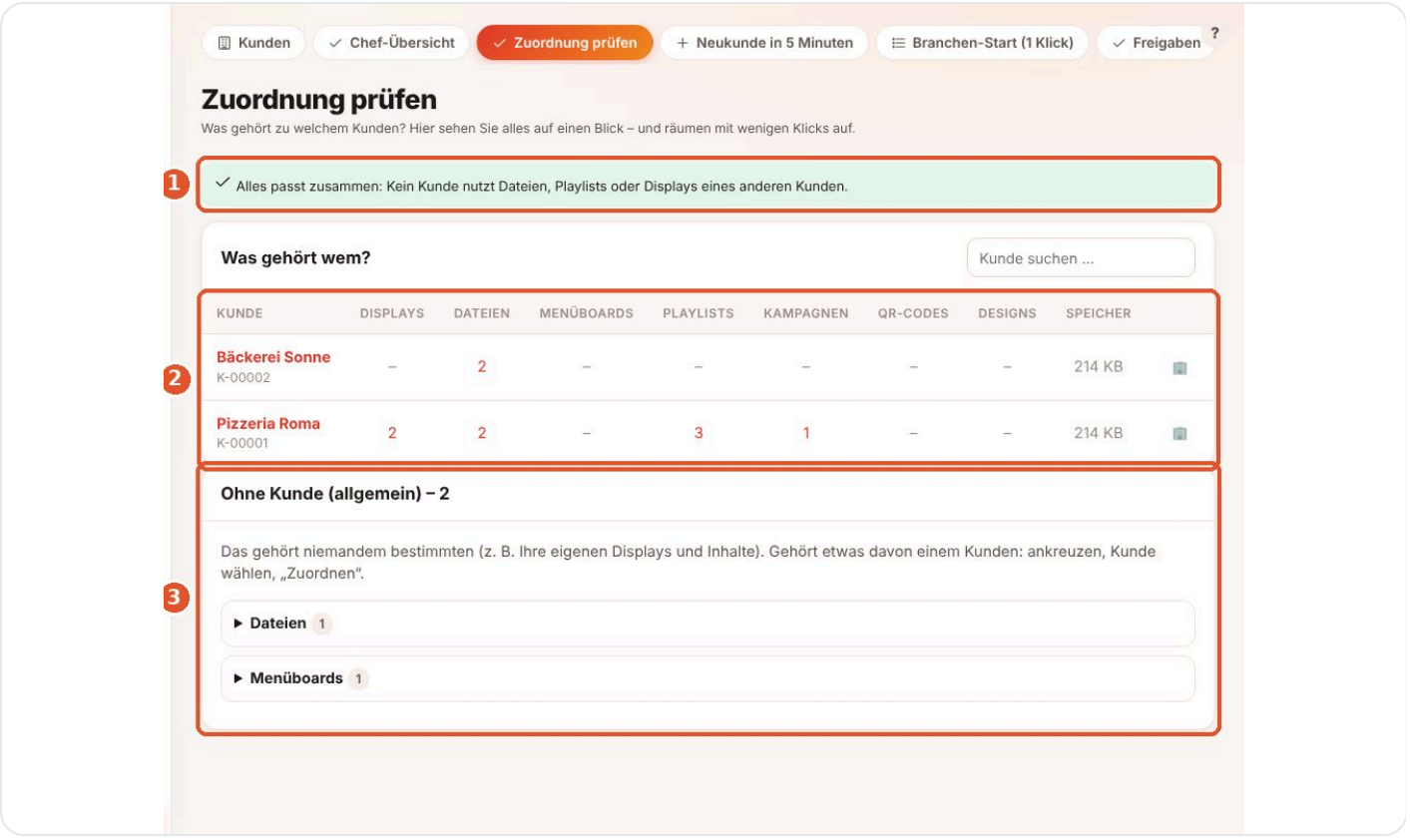
Work for a customer



1 Choose the customer on the left under **Search**

2 The coloured band shows who you are currently working for – ✕ **All customers** ends it

Check assignment



1 **Does not match**: e.g. a file of another customer in a playlist – usually with a button to fix it

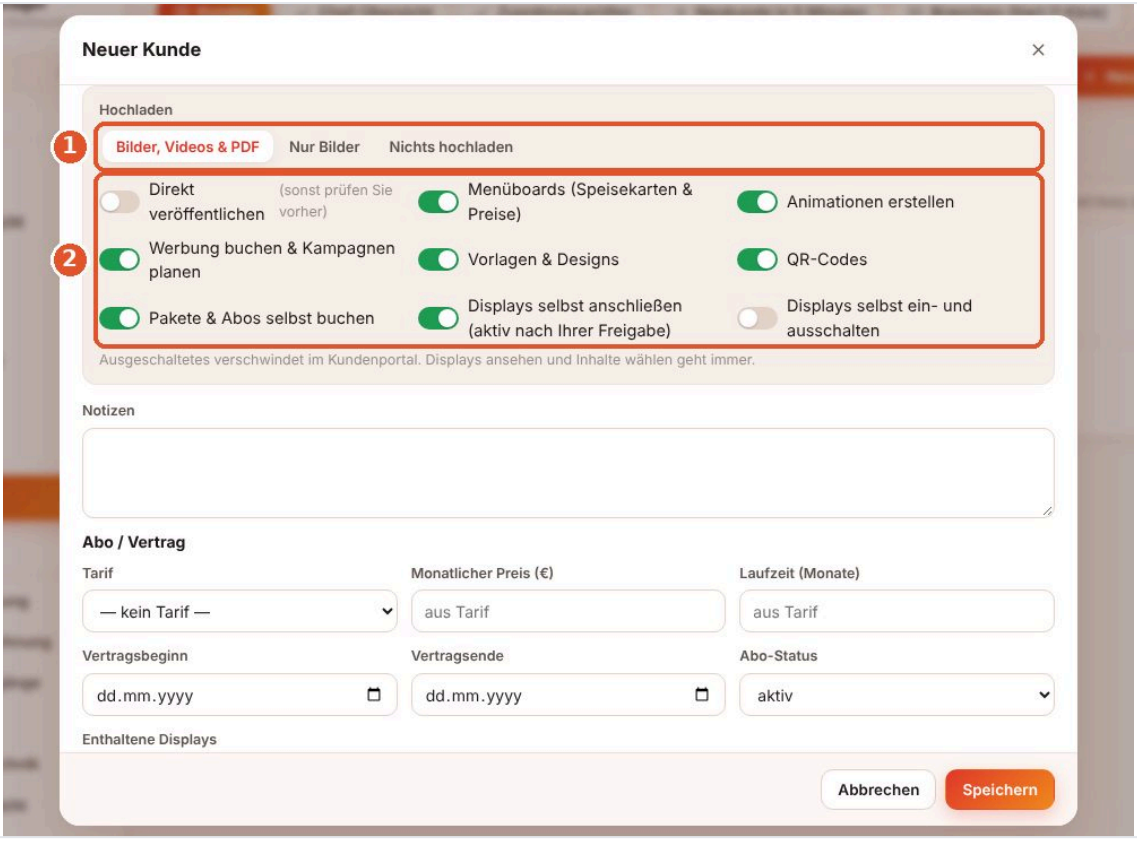
2 **What belongs to whom?** Numbers per customer – tapping opens the customer file

3 **Without customer**: tick, choose customer, **Assign**

💡 Customers see neither the customer file nor “Check assignment” – they can only access their own content. B2B partners only see their own customers.

25 🏢 Kunden anlegen & Rechte festlegen

Customers → New customer (or open customer → Edit).

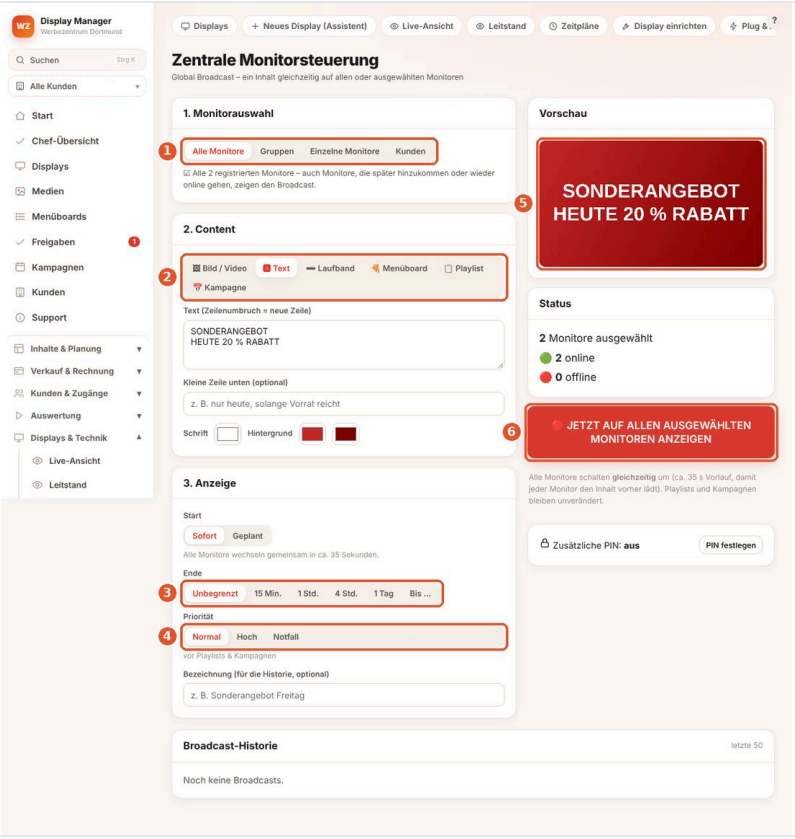


1. **Upload:** images, videos & PDF – **images only** – or **nothing**
2. Tick = enabled: publish directly (otherwise you check first), menu boards, animations, book ads, templates, QR codes

💡 Access for the customer: open customer → **Create user** (email + password) – or do everything at once with 🚀 **New customer in 5 minutes**.

26 📢 Alle Monitore gleichzeitig (Monitorsteuerung)

A text, image or video immediately on **all** monitors – e.g. a special offer or an emergency. Menu **Displays & technology → Monitor control** (only with permission).



1. **Choose monitors:** all, groups, individual ones or per customer
2. **Choose content:** type text, image/video, ticker, menu board, playlist or campaign
3. **End:** unlimited, 15 min. ... or until a time. Start immediately or scheduled
4. **Priority:** Normal – High – **Emergency** (plays even in maintenance mode)
5. Check the **preview**
6. Press the red button and confirm – all switch **at the same time** (after a short lead time so that every monitor is ready)

💡 At the top you see for each monitor: 🟢 received · 🟡 updating · 🔴 offline · ⚠️ error. **END ACTIVE BROADCAST** – all monitors show their normal program again. Playlists and campaigns are never changed.

💡 Protection: admins need the "Global Broadcast" permission (Customers & access → Users). In addition, a **PIN** can be set.

27 👁 Live-Ansicht: Was läuft gerade? Ist der Monitor an?

Menu **Live view**: all displays at a glance – with current image, playing content, player and monitor status.

1. Open **Live view** – the images arrive after a few seconds and refresh continuously (red badge ● **LIVE**)
2. Below each image: **player online/offline**, **monitor on/off** and what is **playing** right now
3. Red border = problem (player offline or monitor off). **Problems only** hides everything else
4. Click an image = large view with all details

Monitor status	
🟢 **Monitor on**	The TV reports: switched on
🔴 **Monitor off / No monitor**	TV in standby – or no monitor on the HDMI cable
🔵 **Monitor connected**	On/off cannot be queried – enable **HDMI-CEC** on the TV (Samsung "Anynet+", LG "SimpLink", Sony "Bravia Sync", Philips "EasyLink")
⚪ **unknown**	No monitor helper: run the setup command on the Raspberry Pi once more (chapter "Set up Raspberry Pi")

💡 The displays only send images while the live view is open – afterwards they return to normal, economical operation. Monitor status (on/off) is available for Raspberry Pi; for smart TVs with a built-in player you see the image and player status.

28 📱 App aufs Handy

The dashboard is available as an app for **iPhone, Android, tablet and PC** – without an app store, always up to date. For you, your admins, B2B partners and customers.

1. In the menu tap **App on your phone** (on the sign-in page: **Install as an app on your phone**)
2. On the PC: scan the **QR code** with your phone camera – the page opens on your phone

iPhone / iPad

1. Open the page in **Safari**
2. Tap the **share icon** (square with an arrow pointing up)
3. Choose **Add to Home Screen**
4. **Add** – done

Android

1. Open the page in **Chrome**
2. In the app dialog tap **Install now** – or menu ⋮ → **Install app**
3. Confirm **Install** – done

Android app as a file (APK)

1. On the phone open the address **display.werbezentrum-do.de/app/handy** (or in the app dialog under "Android" tap **Download app file**)
2. Open the downloaded file **WDMS-App.apk**
3. The first time, allow **"Allow installation from this source"**
4. **Install** – the app "WDMS" appears on the home screen

💡 The Android app can take photos directly with the camera and upload them, and saves downloads in the "Downloads" folder. Links with a partner ID (.../?p=kennung) open directly in the app with the partner logo.

Android – as an app file (APK)

1. On the phone open the address **display.werbezentrum-do.de/app/handy** (or in the app dialog tap **Download WDMS app**)
2. Open the file **WDMS-App.apk**. The first time, Android asks: **allow** "Install unknown apps" for the browser
3. **Install** – the app "WDMS" appears on the home screen
4. In the app, photos can be taken directly with the camera and uploaded; downloads end up in the "Downloads" folder

💡 Sign in once, and you stay signed in. In the app everyone sees exactly what they also see on the PC. Customers of a B2B partner automatically get the app with the partner's name and logo.

29 🤝 B2B-Partner (Wiederverkäufer)

Under **Customers & access → B2B partners**: companies that pass the system on to their own customers under their own name and logo. You remain the main admin, see everything and can lock or terminate at any time.

Partner registers themselves

1. Interested companies click **Register as B2B partner** on the sign-in page – or you link directly to **display.werbezentrum-do.de/#/partner-werden** (e.g. on your website)
2. They enter company, contact person, address, phone, email and password – you receive an email
3. Open **Approvals → Approve & set terms**: price per customer and per monitor, quotas, features – or **Reject**
4. The partner receives an email with their own sign-in address. You then set the logo and colour on the partner page

💡 To turn off: **Settings → Media & customer portal** → untick "Companies may register themselves as B2B partners".

Create a partner yourself

1. Click **New partner**: company name, ID (e.g. **mueller-media**), colour, email
2. **Billing:** enter the price per customer and price per monitor (per month)
3. If needed, set a maximum number of customers and monitors (0 = unlimited)
4. Choose the features the partner may offer to their customers – anything switched off is locked for them and their customers
5. **Save**, then on the partner page **Upload logo** (PNG, JPG, WEBP or SVG)
6. **Create account** – name, email, initial password. Give the partner the **sign-in address** (.../?p=kennung) and the login details

What the partner can do themselves

Problem	Solution
Customers	create, edit, activate, lock – only their own

Displays	pair, control, live view – only those of their customers
Content	Media, playlists, campaigns, templates, menu boards (if enabled), approvals
Users	Accounts for their customers and their team
My partner account	Number of customers, monitors, monthly billing with you, sign-in address for their customers

💡 Their customers sign in via the partner's sign-in address and only see the partner's logo and name there – also in the mobile app and on empty displays. New registrations and display requests from their customers are sent to the partner by email.

Billing

1. **Customers & accounts → B2B partners** shows for each partner: customers × price per customer + monitors × price per monitor = amount per month
2. The total across all partners is shown at the top
3. Once under **Settings → Company details for invoices**: address, tax number/VAT ID, bank details, logo. **View sample invoice** shows the result
4. At the start of each month, the statement for the previous month is created automatically (PDF, sequential number). On the partner page under **Monthly statements**: view, **send by email**, recalculate
5. The partner finds their invoices under **My partner account**

💡 With a tax number or VAT ID the document is called "Invoice", without one "Statement". Automatic sending by email can be switched on in the settings – otherwise check first, then send manually. Please check the invoice details with your tax advisor.

Lock and terminate

1. Open the partner → **Lock**: the partner and all their customers are signed out immediately and can no longer get in. The monitors keep running
2. **Unlock** restores everything
3. **Terminate**: like locking, optionally also **lock all monitors of their customers**. The data is kept – **Reactivate** is possible at any time

Take over customers from a partner

1. Open the partner → **Take over customers**
2. Choose the target: **Direct (no partner – you look after the customers yourself)** or another B2B partner
3. Select **All customers** or individual ones; if needed, **unlock locked monitors again**
4. **Take over** – the customers move completely with their accounts, displays and all content. Afterwards they sign in with their existing login details (under your logo)

💡 You can also see all customers of all partners under **Customers** – with a "Partner" column and filter. When creating a customer, you can choose a partner under **Belongs to**.

30 👤 Kundenkonten: Registrierung, Freigabe, Sperren

New customers can create an account themselves. It only becomes active once you approve it – and the customer can only use what you enable.

Approve a new registration

1. The customer clicks **"Register now"** on the sign-in page and fills in the form (optionally with a preferred package)
2. You see them under **Approvals → New customer accounts** (number on the menu item, optionally also by email)
3. **Approve & set permissions**: upload (everything / images only / nothing), publish directly, menu boards, animations, book advertising, templates, QR codes, book packages
4. The customer receives an email and can sign in – or you click **Reject** (with a note)

Lock access

1. Open the customer → at the top **"Lock access"**
2. The customer is signed out immediately and can no longer sign in – their displays keep running normally
3. To allow access again: **"Unlock access"**

💡 Change permissions later: open the customer → **Edit** → "What may the customer do in the portal?". Turn off registration completely: **Settings** → tick box "New customers may register themselves".

Confirm subscription requests

1. If a customer books a package, it appears under **Approvals → Subscription requests**
2. **Confirm subscription** (choose start date) – any previous package ends automatically the day before
3. Or **Reject** with a note – the customer sees it in the portal and by email

Displays connected by customers

1. Customers with the permission "Connect displays themselves" can set up and connect their display on their own
2. It appears under **Approvals → New displays from customers** (with a note on whether the package still has room)
3. **Approve display** – it immediately shows the customer's content. **Reject** deletes the connection and the screen shows a code again

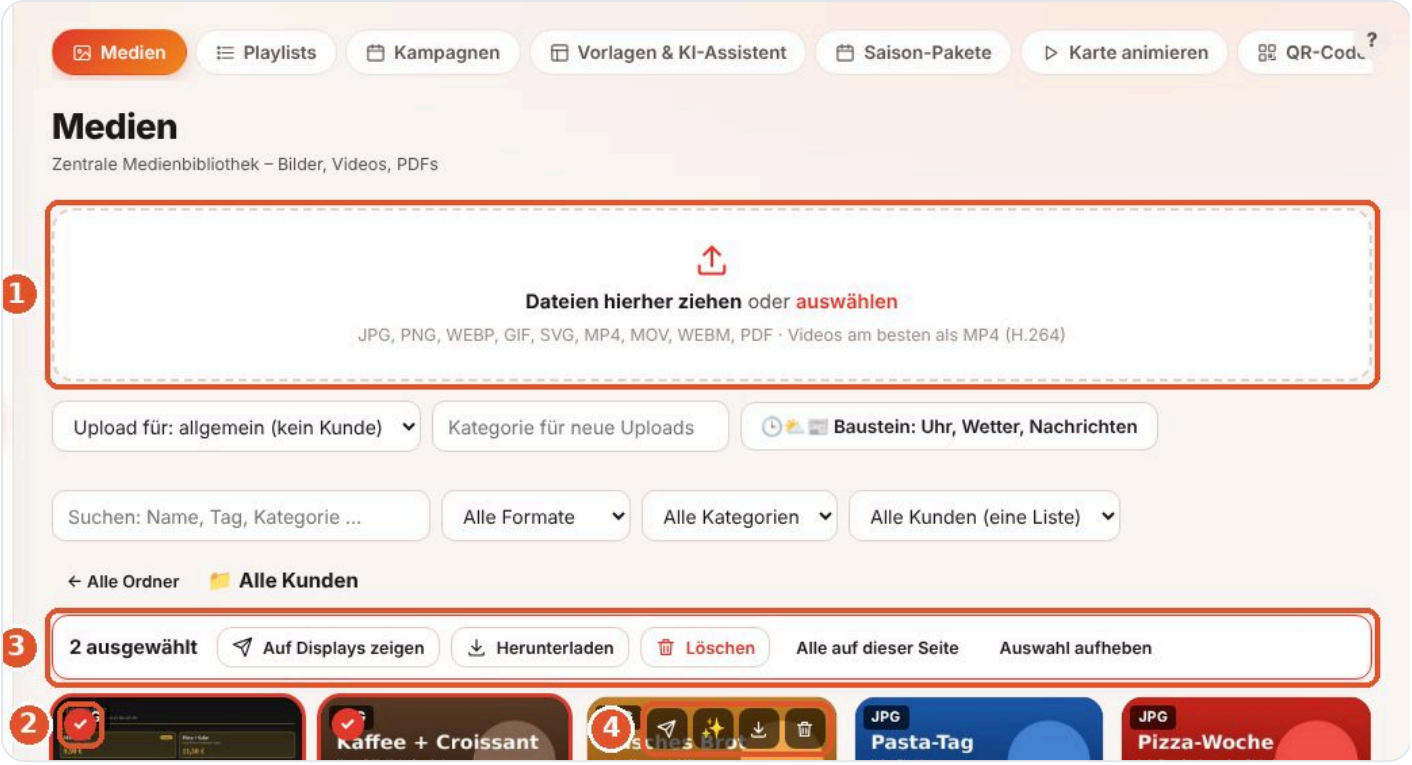
More admins

1. You are the **only Super admin**. **Customers & accounts → Users → Add admin**
2. **Lock** in the list signs an admin out immediately – **Unlock** reverses it
3. Click the row → **Delete** removes the account completely. Admins cannot change you or your settings

💡 You manage packages and prices under **Sales & invoicing → Subscriptions & plans** (the customer only sees packages ticked "bookable"). On confirmation, the first invoice is created automatically and sent to the customer by email (see chapter Invoices).

31 🖼 Medien (alle Bilder & Videos)

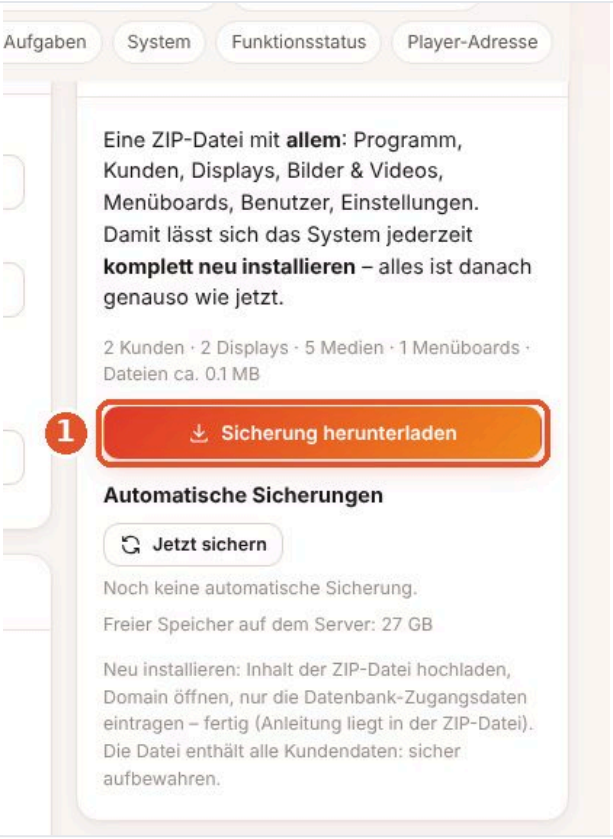
Upload, sort, download.



1. Drag files here
2. Tick = select (multiple possible)
3. **Show on displays**, **Download** (several as ZIP) or **Delete**
4. On hover: ➤ show on displays, ⭳ download, 🗑 **delete**

32 💾 Komplett-Sicherung & Neuinstallation

One file with **everything**: program, customers, displays, images, videos, menu boards, users, settings.



1. **Settings → Download backup**
2. Keep the ZIP file safe (e.g. download a new one once a month)

💡 **Reinstall / move:** create an empty MySQL database → upload the complete contents of the backup ZIP → open the domain → enter only the database login details → **Install**. Afterwards everything is as before; sign in with your existing password.

💡 The backup contains all customer data – do not share it. For normal updates, keep using the update package.

Automatic backup (every night)

1. **Settings → Automatic backup**: leave it switched on, set the time and number (default: 3 am, the last 7)
2. On the right under "Full backup" all saved backups are listed – **download** or **delete**. **Back up now** creates one immediately

3. If storage space is low: choose the scope "Data only" (without images/videos – please keep those separately yourself)

💡 The backups are stored securely on your server. For emergencies (server gone), also back up off-site – see below.

🌍 Additional off-site backup

1. Get a second storage, e.g. **Hetzner Storage Box** (inexpensive, SFTP/WebDAV), Nextcloud or your NAS – create a folder there, e.g. **wdms**
2. **Settings → Automatic backup → Additional off-site backup**: enter target address, user, password. Examples: sftp://u123456.your-storagebox.de/home/wdms · https://cloud.example.de/remote.php/dav/files/NAME/wdms · ftps://nas.example.de/wdms
3. 🔌 **Test connection** – uploads a small test file and deletes it again
4. From now on, every nightly backup is also copied there; **Keep** determines how many remain there

💡 If copying fails at night, you receive an email. You can enter the status address …/api/v1/health in a monitoring service (e.g. UptimeRobot, free) – then you notice immediately if the server itself goes down.

33 🔐 Anmeldung: Passwort vergessen, Angemeldet bleiben, Zwei-Faktor

Sign in securely and conveniently – on the PC and in the mobile app.

Problem	Solution
Forgot your password?	Link on the sign-in page: enter your email, click the link (valid for 60 minutes), set a new password. All other devices are signed out in the process.
Stay signed in	Tick box when signing in (already ticked on mobile): 30 days without signing in again. **My account → Sign out everywhere** ends this on all devices.

Turn on two-factor sign-in (strongly recommended for admins)

1. Authenticator app on your phone (e.g. **Google Authenticator** or **Microsoft Authenticator**)
2. Bottom left on **My account** (person icon) → **Two-factor sign-in → Set up**
3. In the app **+** → scan the QR code, enter the 6-digit code → **Turn on**
4. Print or save the **recovery codes** – they let you in even without your phone

💡 From now on, sign-in asks for your password AND the current code from the app. If you have lost your phone: use a recovery code, or an admin resets 2FA under **Customers & accounts → Users**.

34 🔔 Störungsmeldungen per E-Mail und aufs Handy

You receive an email when a display is offline or the monitor is off – and an all-clear as soon as everything is running again.

1. **Settings → Fault alerts**: switch on, enter recipient address
2. **Alert after**: e.g. 15 minutes – short dropouts are not reported
3. **Alert from/to**: no emails at night; anything still faulty in the morning is then reported
4. If desired, B2B partners or customers also receive the alert for their own displays

📱 Push notification to your phone

1. Open the app on your phone (iPhone: first install via "Share → Add to Home Screen")
2. Top right **My account** → 🔔 **Enable push on this device** → allow notifications
3. **Send test notification** – arrives within a few seconds. From now on, your phone notifies you of every fault and all-clear

💡 If many displays fail at the same time (e.g. internet outage), you receive a single summary email. "Monitor off" is available for the Raspberry Pi with HDMI-CEC – nothing is reported during scheduled off times.

Reliable at night too: set up a Cronjob (once)

1. **Settings → Background tasks**: copy the address
2. All-Inkl: **KAS → Tools → Cronjobs → Neuen Cronjob anlegen**
3. Paste the address, schedule **every 5 minutes** – save

💡 Without a Cronjob, alerts, backup and monthly billing still run – whenever displays report to the server.

35 ⏻ Betriebszeiten & Monitor ein/aus

Fixed opening hours per display: outside them the status is "closed" (grey, no warning), the TV switches off automatically and back on in the morning.

1. Open the display → **Opening hours** card
2. Tick **Set opening hours** – choose a **template** (e.g. Mon–Sat 9–20, Restaurant 11–23) or enter each weekday yourself (unticked = closed all day)
3. **Save** – or **For all displays of the customer** or **Also for other displays …**

Problem	Solution
Closed (grey)	The display is off outside opening hours – no warning, no fault email. For 20 minutes after opening there is no warning yet (the device is starting up).
“Display is intentionally switched off”	For a seasonal break or renovation: no warnings until the checkbox is cleared again.
Availability	Below the card: the percentage of opening hours the display was running (30 days). In the control center for 7 days.
Raspberry Pi + TV with HDMI-CEC	The TV is actually switched on and off (standby).
Other devices / without CEC	Outside these hours the display shows a black screen.
“Turn monitor on / off” buttons	Switch immediately (Pi with CEC), e.g. for an appointment outside the hours.

💡 Raspberry Pis set up before version 1.17: run the setup command (chapter “Set up Raspberry Pi”) once more – the pairing is kept. Enable HDMI-CEC on the TV (Anynet+, SimpLink, Bravia Sync …).

36 🩺 System-Check: Ist alles eingerichtet?

A traffic-light list shows what is still missing – one click takes you to the right setting.

1. Open **Settings** – the **System check** is at the very top
2. Red and yellow items first: **Fix** jumps straight to the right place
3. A notice appears on the home page as long as something important is still open

Problem	Solution
Red	Important – e.g. no backup, background tasks not running, no HTTPS.
Yellow	Recommended – e.g. off-site backup, company details for invoices.
Blue	Note – e.g. company logo, older player versions.

37 📊 Abspiel-Nachweis

How often and how long each ad ran on each display – as a PDF proof for advertising customers or as a CSV for Excel.

1. Open **Reports → Proof of play**
2. Choose a period (e.g. **Last month**), and if needed a customer, display or ad
3. **Proof as PDF** – ready to forward to the advertising customer. **CSV** for your own analysis

💡 The displays report every playback with time and duration (even after an internet outage the data is sent later). Customers and B2B partners only see their own figures.

📊 Monthly statistics automatically by email

1. **Settings → Invoices**: turn on 📊 **Monthly statistics**
2. Tick **Monthly statistics by email** for the customer – with 📊 **Send test to me** you can see beforehand what they will receive
3. At the start of each month, each of these customers receives a short summary with the previous month's proof of play as a PDF

💡 Customers whose content did not run that month do not receive an empty email.

38 ⛅ Bausteine: Uhr, Wetter, Nachrichten

Ready-made content for the displays – simply add it to the playlist like an image.

1. **Media → Widget: clock, weather, news**
2. Choose the type: **Clock & date**, **Weather**, **Clock + weather** or **News**
3. For weather, type in the location (city or postcode) – the preview shows the result immediately
4. Choose colours, **Create** – then show it on displays or add it to a playlist

💡 Weather: data from the German Weather Service (DWD, free to use, source is shown). News: enter an RSS address – please only use feeds whose content you are allowed to show publicly. As a **ticker**, the news widget fits perfectly into the second area at the bottom (screen layout).

39 🧾 Menüboard: Vorlagen, Allergene, Sprachen, Tageszeiten, Happy Hour

Everything a modern menu needs – without doing the work twice.

1. **New menu board** → choose a template for your industry (pizzeria, kebab, café, bakery, ice cream parlour, burger, hairdresser …) – simply overwrite the sample dishes
2. **Allergens**: tap the letters/numbers on the dish – the legend at the bottom of the board is created automatically
3. **Languages**: choose ＋ **Language** (English, Turkish …) – all texts are **translated automatically** right away. Tap the language code at the top to check or change translations; 🌐 **Translate automatically** fills in dishes added later. The display switches between the languages automatically
4. **Only at certain times**: in the section ⋯ → ⏱ **Show only at certain times**, e.g. breakfast until 11:30 or lunch menu Mon–Fri 11–15
5. 🍹 **Happy hour**: tick the box, choose the time and enter the happy hour price for the drinks – at that time the display automatically shows the special prices

💡 When publishing, all variants (times × languages) are created at once. The displays pick the right one themselves – even without internet.

40 📅 Menüboard: Tagesgericht, Kombi, Countdown, Wetter, Ausverkauft

Small extras that sell more – set them up once and everything runs by itself.

Problem	Solution
📅 **Dish of the day**	Section ⋯ → **Dish of the day per weekday**. Choose the day for each dish (Mon … Sun) – the display automatically shows only today's dish.
Combo offer	On the dish, tap **A** → under **Combo offer** enter the individual price (e.g. 12,40). The board shows the old price crossed out and “You save 2,50 €”.
⏱ **Countdown**	Under 🍹 **Happy hour**, tick **Countdown on the display**: “Happy hour starts in 45 min” or “… ends in 23 min” counts down live.
🌦 **Weather**	Section ⋯ → **Only in certain weather** (heat, cold, rain, snow) and enter the location or postcode at the top. At 25 °C, for example, the display automatically shows the ice cream menu.
⊘ **Sold out from your phone**	In the menu board list, below the board, tap **Sold out today …** (or in the editor ⊘ **Sold out**): tap the dishes on your phone, then **Publish** at the bottom – on the display they are crossed out.

💡 Everything is prepared when publishing – the display decides by itself based on time, weekday and weather, even if the internet is briefly down.

41 ✅ Menüboard: Preise prüfen, anpassen, vor dem Veröffentlichen kontrollieren

Fewer typos on screen – and price increases in one minute.

Problem	Solution
Price check	When you leave the price field it is corrected: “9,9000” → “9,90”, “7.5” → “7,50”. Unclear prices (e.g. “8,955” or over 1.000 €) are marked **red**. Texts such as “from 7,50” stay as they are.
Before publishing	If something stands out – missing translations, deleted logo/photo/background, missing pickup display or QR code, an unusual price – a short list appears. **Back to editing**, **Publish anyway** or 🌐 **Translate & publish**.
% Adjust prices	At the top, **% Adjust prices**: all dishes or one section, e.g. “+0,50 €” or “+5 %” (use minus to lower), round to 0,10 €, 0,50 € or ,90. The preview shows old → new. **Apply** – and if needed **Undo** at the bottom.
Deletion protection	An image used in a menu board (logo, background, photo) can only be deleted under Media once it has been replaced there – the message names the board.

42 🎄 Saison-Pakete (Weihnachten, Ostern, Sommer …)

Ready-made designs for every occasion – they only run during the chosen period, alternating with the normal content.

1. **Content & scheduling → Seasonal packages** – tap an occasion (the matching period is already filled in)
2. Adjust the heading, text and price – the preview updates immediately
3. Choose the customer and displays, check the period and display duration
4. **Send to displays** – done. After the period the design disappears by itself

💡 Want to design more (photo, logo, colours)? **Continue designing in the editor** opens the design for editing. In the playlist the design shows 📅 with the period. Ramadan: the start date is approximate (moon sighting) – adjust the date if needed. A nice extra offer for your customers.

43 🚀 Neukunde in 5 Minuten

On site at the customer's: everything in one flow instead of on four pages.

1. **Customers → 🚀 New customer in 5 minutes**
2. **1 Customer**: company, contact person, email – **Create customer**
3. **2 Display**: type in the code from the screen – **Pair** (or “Later”)
4. **3 Menu**: tap an industry template (pizzeria, kebab, café …) – it is created for the customer
5. **4 Access**: **Create access & send email** – the customer sets their own password via the link (valid for 7 days)
6. Finally, **Edit menu**: enter prices, publish, show on the display

44 ⇅ Preise aus Excel, Google-Tabelle oder Kasse

Change prices once in your spreadsheet or POS system – the menu board takes them over.

1. Open the menu board → at the top **⇅ Prices**
2. **Excel or CSV**: download the template, enter prices, upload the file – changed prices are shown, then **Apply**
3. **Google Sheets**: in Google Sheets choose **File → Share → Publish to web (CSV)**, enter the address – the prices are synced regularly
4. **POS system**: give the key and address to the POS technician – the POS system sends prices directly

💡 New prices from the spreadsheet or POS system appear the next time the menu board is opened, or automatically if “publish automatically” is turned on.

45 ⭐ Bausteine: Instagram, Google-Bewertungen, Wartenummer, Touch-Terminal

Lively content that updates itself.

Problem	Solution
📷 **Instagram wall**	Latest posts from an Instagram account. To do this, enter an access key (token) for the account once – instructions are in the dialog.
⭐ **Google reviews**	Stars, number of reviews and the best comments. Enter a Google API key once under **Settings → External services**, then search for the business in the widget.
🛎 **Pickup display**	Order numbers “Being prepared” and “Ready for pickup” – as a separate screen or as a bar in the menu board (see chapter Menu board). Operated via tablet, phone or POS system.
🔢 **Ticket number**	Large call display. After creating it, the **control panel** opens (later in the widget: 🔢 **Open control panel**) – one tap = next number. Save the control panel link as a bookmark on your phone; it works without signing in.
👆 **Touch terminal**	Tiles to tap (menu, offers, site map, text, image, video). After a while without being touched it returns to the start page.

1. **Media** → **Widget** → choose the type
2. Fill in the settings, check the preview, **Create**
3. Show it on displays or add it to a playlist, just like any image

46 ✨ Werbe-Assistent & QR-Statistik

From a sentence to a finished ad slide – and measure how often the QR code was scanned.

1. **Templates** → at the top ✨ **AI assistant**: type e.g. “Schnitzel with fries 9,90 € every Friday”
2. Tap one of the suggestions – the slide opens in the editor, adjust image and colours, save
3. QR codes: **Content & scheduling → QR codes** – content can be changed at any time, scans per day and weekday in the statistics (separate chapter “QR codes”)

💡 With an AI key (Settings → External services) the assistant writes the texts freely. Without a key it works with templates and recognises price, day and product by itself.

47 ⬛ QR-Codes: Inhalt jederzeit ändern

The printed QR code always stays the same – you change what appears when it is scanned here.

1. **Content & scheduling → QR codes → New QR code**: enter a name and choose what appears when scanned:
2. 🔗 **Redirect** (website) · 👤 **Business card** (call, email, route, "Save contact") · 📝 **Info page** (text with button) · 📄 **File(s)** (PDF, images, videos, Word, Excel ...)
3. Save – the QR image appears on the right straight away: **SVG (print shop)**, **PNG 4000 px** or **PNG 1000 px**. Test it once with your phone before printing
4. New menu? Open the QR code → click the upload icon next to the file (replace) → **Save**. The printed code shows the new file immediately

Design

1. 🎨 **Design QR code**: tap a template or choose dots, corners, circle shape, colours, gradient and a frame with text ("Scan me!")
2. Upload a logo and set its size and position with the sliders – for a large logo, set error correction to **H** under **Advanced**
3. **Save design** – the content stays the same, only the look changes. A warning appears if the contrast is too low

Customers make changes themselves

1. Open the customer → **QR package** card → **Change**: package (Free, Basic, Premium or custom), term, custom price, pause, individual features overridden
2. In the customer portal the customer sees **QR codes**, changes content and clicks **Submit for approval** (with "without approval": live immediately)
3. You review under **Approvals** (comparison old → new, preview) and click **Approve** or **Reject** with a reason. Until then the old version stays live
4. If a package expires or is paused, the printed codes keep working – only editing is locked. Extend with **+ 1 month** / **+ 1 year**

Problem	Solution

QR packages & prices	**Content & scheduling → QR codes → QR packages**: what a package includes (number of codes, storage, videos, design, logo, print quality, statistics, without approval) and what it costs. Monthly packages appear automatically on the monthly invoice.
Show on displays	In the QR code, click **Show on displays** on the right – the designed code is added to the media as an image. In **Templates** you can insert a dynamic QR code including its design.
Previous versions	Every change is saved – restore with one click under **Previous versions**.

Moving from the previous QR manager

1. Download the complete folder of the old QR management (qr.ihre-firma.de) via FTP and pack it as a ZIP
2. **Settings → QR codes → Import from previous QR manager**: choose the ZIP – the test run shows what will be imported → **Import now**
3. Download **Redirect for old QR address** and upload its contents (index.php, .htaccess) to the subdomain's folder in place of the old files – old printed codes then lead into the new system

💡 Customers and their logins are imported too (same password). Optionally enter the address https://qr.ihre-firma.de under Settings → QR codes – new codes will then be shorter.

48 🧾 Rechnungen automatisch bei Vertragsabschluss

Every new contract gets its invoice immediately – numbered consecutively, as a PDF by email.

Problem	Solution
Subscription confirmed or created	First invoice immediately: the first month (if the subscription starts mid-month, pro rata by days) – or, if preferred, the entire term in advance. Monthly after that.
QR package assigned	Invoice for the current month or the annual or one-time fee.
Ad booking activated	Invoice for the booked period (paid with PayPal: marked "paid").
Rental confirmed	Invoice for the rental period or the first month incl. setup.

1. Once: fill in **Settings → Company details for invoices** (address, tax number or VAT ID, bank) and click **View sample invoice**
2. **Settings → Sales → Invoices**: "Automatically create an invoice for every contract concluded" and "send immediately by email" are switched on – also choose here: first month or entire term
3. For the following months, switch on "Automatically create monthly invoices at the start of the month" – months already billed are never billed twice
4. **Sales & invoicing → Invoices** shows all invoices: mark as **paid**, **send** again or **Cancel**

Numbers, archive and cancellation

Problem	Solution
Consecutive numbers	Without gaps for each year: WZ-R2026-0001, WZ-R2026-0002 … – even if two contracts are concluded at the same time, no number is ever used twice.

Unchangeable	Every invoice is archived as a PDF when it is created. If you change your company details later, old invoices stay exactly as they were sent. The archive is included in the backup.
Cancel instead of delete	Invoices are never deleted. **Cancel** creates a cancellation invoice with its own number and negative amounts. If the customer had received the invoice, they automatically receive the cancellation invoice.
Service period	Shown on every invoice (mandatory). Enter it for your own invoices – empty = invoice date.

💡 If a customer has no e-mail address, the invoice is still created; the start page points this out and you can send it later. Partner customers do not receive an invoice from you – the partner bills them. Please agree the invoice details once with your tax advisor.

49 🧪 Testrechnungen, Mahnwesen, Kontoauszug, E-Rechnung

Try everything out safely – and the system keeps an eye on unpaid invoices for you.

Test invoices (not included in the real invoices)

1. **Sales & invoicing → Invoices →** 🧪 **Test invoices** tab
2. **Test contract invoice**: choose a customer – you receive exactly the invoice they would get when concluding the contract (to your address, not to the customer)
3. Or **Write test invoice** for your own trial
4. Afterwards **Delete test invoices** – real invoices remain untouched

💡 Test invoices have their own number range (e.g. WZ-T2026-0001), the red stamp "TEST INVOICE", are sent only to you and are not counted in revenue, outstanding amounts or reminders. Under **Settings → Invoices → Test mode**, **only** test invoices are created temporarily – even for online contract signing.

Incoming payments & reminders

Problem	Solution
Payment term	In the settings (e.g. 14 days). Overdue invoices are marked red; the home page points them out.
Automatic reminders	Tick **Automatically send reminders for overdue invoices**: payment reminder → 1st reminder → 2nd reminder at the set interval, with a reminder fee if desired. For a single invoice, use **Remind** on the invoice.
Import bank statement	Export the transactions as CSV in your online banking and upload them in **Sales & invoicing → Invoices → Import bank statement**. Invoices whose number appears in the payment reference and whose amount matches are marked as paid.

E-invoice (XRechnung)

1. Fill in the company details completely (the settings show what is still missing)
2. Tick **Include e-invoice (XRechnung)** for the customer – public authorities: enter the Leitweg-ID
3. The XML file is then attached to every invoice email; download it individually via **XML** on the invoice

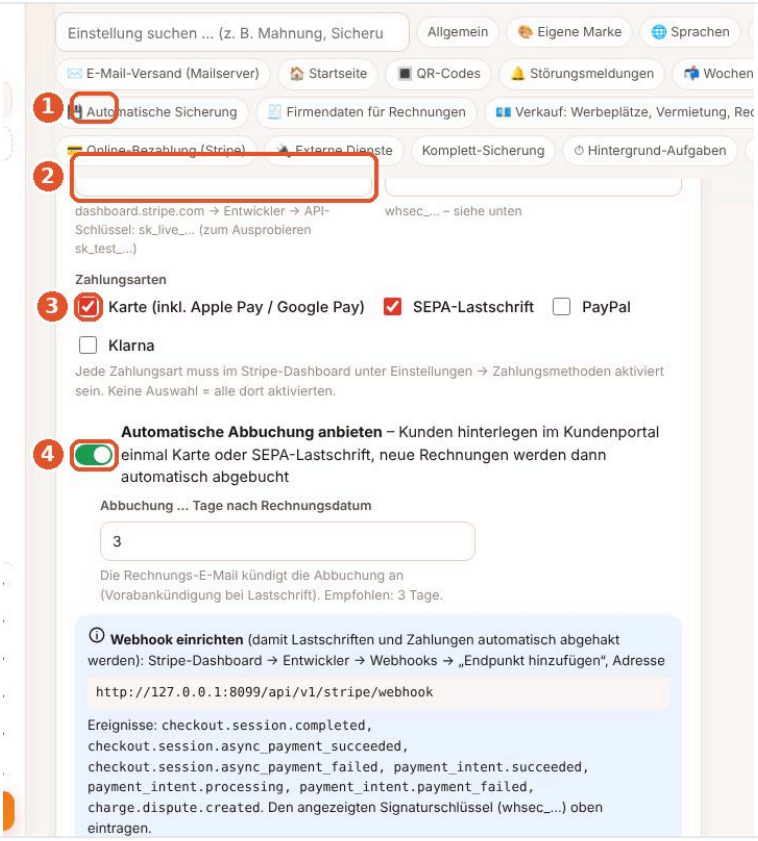
Online contract signing

1. **Settings → Sales**: switch on **Customers book packages directly in the portal** and enter your contract terms (Terms)
2. The customer chooses a package in the portal and accepts the terms – the subscription is active immediately
3. They receive the contract confirmation (PDF, with the time of consent) and the first invoice by email

💡 When switched off, everything stays as before: the booking arrives as a request under **Approvals**. Please check the terms and invoice details with your tax advisor or lawyer.

50 💳 Online-Bezahlung und automatische Abbuchung

Customers pay with one click – and invoices tick themselves off.



Setup (once, about 10 minutes)

1. Create an account with **Stripe** (stripe.com) and enter your company details and the bank account for payouts
2. In the Stripe dashboard under **Settings → Payment methods**, activate the payment methods you want (e.g. card and SEPA direct debit)
3. Under **Developers → API keys**, copy the **secret key** and enter it in WDMS under **Settings → Online payment** – to try it out, use the test key first (sk_test_...)
4. Under **Developers → Webhooks**, create an endpoint with the address from the WDMS settings, select the events listed there and enter the **signing secret** (whsec_...) in WDMS
5. **Enable online payment**, save and **test the connection**

How your customers pay

Problem	Solution

Payment link	Every new invoice contains a link “Pay conveniently online” in the e-mail and on the PDF. The customer sees the invoice number and amount and pays on Stripe's secure page – you never see card or account details.
Customer portal	Under **My invoices**, every open invoice shows **Pay online**.
Ticking off	Card payments are marked as paid immediately. For direct debit, “Payment in progress” is shown until the bank confirms (a few days) – no reminders are sent during that time.
Sharing the payment link	In the invoice list, 🔗 copies the link, e.g. for WhatsApp.

Automatic payment

1. Leave **Offer automatic payment** switched on and choose the period (recommended: 3 days after the invoice date)
2. The customer clicks **Save payment method** under **My invoices** in the portal (or ticks “Charge future invoices automatically” when paying)
3. New invoices are charged automatically after the period; the invoice e-mail announces this
4. If it fails (e.g. insufficient funds), the invoice stays open: the customer receives the payment link, you receive an e-mail. Use 💳 **charge** to try again manually

💡 Only invoices created after the payment method was saved are charged automatically – older open invoices are paid by the customer via the link or charged by you with 💳 **charge**. The customer can stop automatic payment at any time in the portal, you can do so for the customer under **Automatic payment → Remove payment method**. Stripe charges a fee per payment; bank transfer and bank statement matching continue to work.

51 💶 Werbeplätze verkaufen & Rechnungen

Sell airtime on your displays to other companies – the location gets a share.

1. **Settings → Sales**: switch on the "Book advertising" page, choose payment by invoice and/or PayPal
2. **Sales & invoicing → Sell ad slots → Create ad slot**: displays, price per week/month, how often the ad plays, location's share in %
3. Companies book via **.../werbung**, upload their ad and pay. You review under **Sell ad slots** and click **Activate** – the ad runs during the booked period
4. On **Activate**, the invoice is created automatically and emailed to the customer (see chapter Invoices)

💡 PayPal: enter the client ID and secret from developer.paypal.com under Settings → External services. To try it out, choose "Test (Sandbox)" first.

52 📦 Vermietung: Display-Pakete, Event-Miete, Vorführ-Links

Rent out displays monthly or by the day – with availability.

1. **Sales & invoicing → Rental → Create rental item**: e.g. "Starter 43 inch", "Shop window 55 inch bright", "Digital pavement sign", "Touch terminal" – monthly or daily price, quantity, photo
2. Public page **.../display-mieten** or **Rent a display** in the customer portal: choose the period, the available quantity is shown, send a request
3. Under **Rental**, **confirm** or reject the request – the customer receives an email
4. **Sales & invoicing → Demo links**: name, logo and colour of a prospect → open the link: a sample display with their logo, ideal during a sales conversation

💡 The calendar prevents double bookings: if all devices are taken for the period, no more requests can be made.

53 🖥 Mehrere Monitore in einem Laden (Monitor-Verbund)

Control up to 10 monitors at one location together – with one player per monitor or one mini PC for all.

Problem	Solution
Each monitor its own content	e.g. monitor 1 pizza, monitor 2 pasta, monitor 3 drinks – managed in one place.
All the same, in sync	All monitors show the same thing – at exactly the same time; videos also play in sync.
Video wall	One large image or video spread across all monitors (e.g. 3 side by side or 2 × 2). Bezel compensation adjustable.
Menu board across several monitors	One menu, automatically split across the monitors – each shows its part.
Running effect across all	The content moves in step from monitor to monitor: what was just showing on monitor 1 moves to monitor 2 next, and so on. Choose at least as many images as there are monitors.

Setup

1. Connect the monitors: either one player per monitor (Raspberry Pi, stick, smart TV) – or one mini PC for all: setup command with the number of monitors, e.g. `… | bash -s -- --screens 3` (Linux) or `$env:WDMS_SCREENS=3; irm …/setup/windows.ps1 | iex` (Windows)
2. **Displays → Multiple monitors → New monitor group**: choose name, customer and type, **Create group**
3. **Pair new monitor**: enter the codes in order (monitor 1 = left). Existing displays can also be selected and reordered with ↑ ↓
4. **Show numbers on monitors** – each monitor displays its number in large print. If the order is wrong: reorder and save
5. Content: for "in sync", "video wall" and "running effect", choose an image/video or playlist under **Shared content**; for "each its own content", as

usual on the respective display

Menu across several monitors

1. Open the menu board → choose the number at the top under 🖥 **Monitors** – the preview shows all monitors side by side
2. The sections are distributed automatically; in a section you can also assign a fixed monitor under ⋯. **Heading everywhere** shows the title and logo on every monitor
3. **Publish** – each monitor gets its own section
4. In the monitor group, choose the type **Menu board across several monitors** → **Choose menu board**

Video wall: what plays how?

Problem	Solution
🎭 **Wall show (building block)**	Movement across all monitors, drawn live: ball, car, person, aeroplane, your own image or animated GIF/WebP, scrolling text, light beam, wave, confetti, sparks, snow … up to 6 layers at once. Pin-sharp with any number of monitors.
🖼 **One image across the whole wall**	One large image in the wall's format (3 × 1 → 5760 × 1080 pixels) – each monitor shows its section.
🎬 **One video across the whole wall**	Works well up to about 4K (3840 pixels wide) – i.e. 2 monitors in full sharpness, or 2 × 2. Each monitor has to load the entire video.
🎬 **Wall video made of individual parts**	For 3 to 10 monitors in full sharpness: cut the video into one part per monitor (cropping helper) and put them together in the monitor group. All parts play in sync.

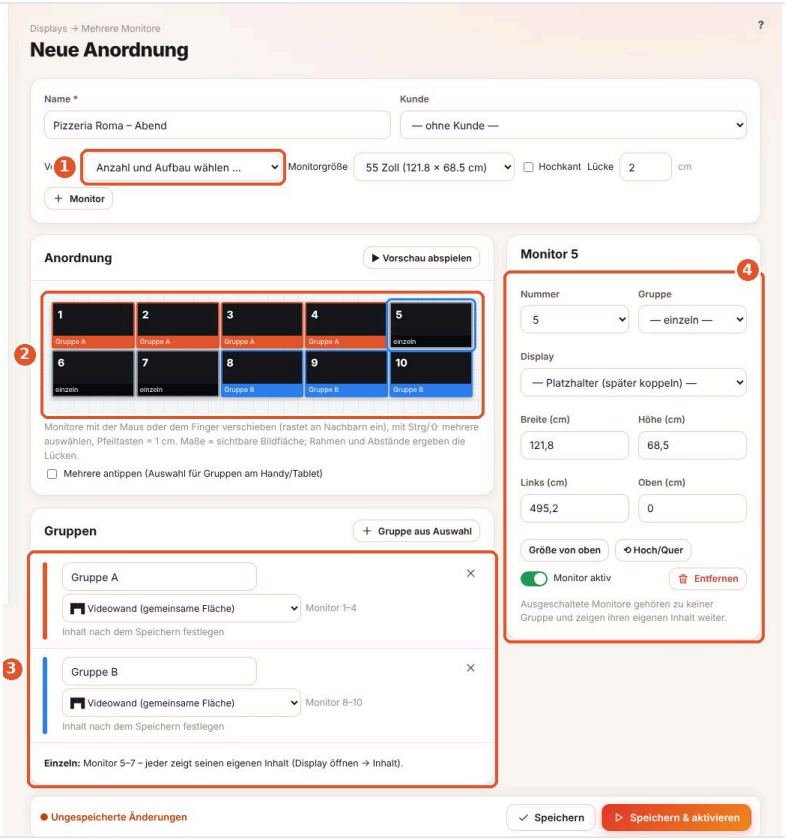
1. Set the bezels: in the monitor group, **Bezel compensation → Calculate from centimetres** (visible picture width and bezel between two screens)
2. Check: show the **Wall show** block with 📐 **Test pattern** – lines and circle must run straight across the bezels

3. Create a wall show: **Media → Block → Wall show across all monitors**, add layers via quick start, view it in the preview "as a wall with ... monitors"
4. In the monitor group, select the block under **Shared content** – done

💡 A video wall runs most smoothly when all monitors are connected to ONE mini PC (display mode "Extend", one player window per monitor). With one stick per monitor, each monitor continuously syncs its clock with the server; with very fast motion, a minimal offset may still be visible at the edges. Use identical monitors (size, model).

54 🧩 Anordnungen: Monitore frei anordnen, Gruppen & Mischbetrieb

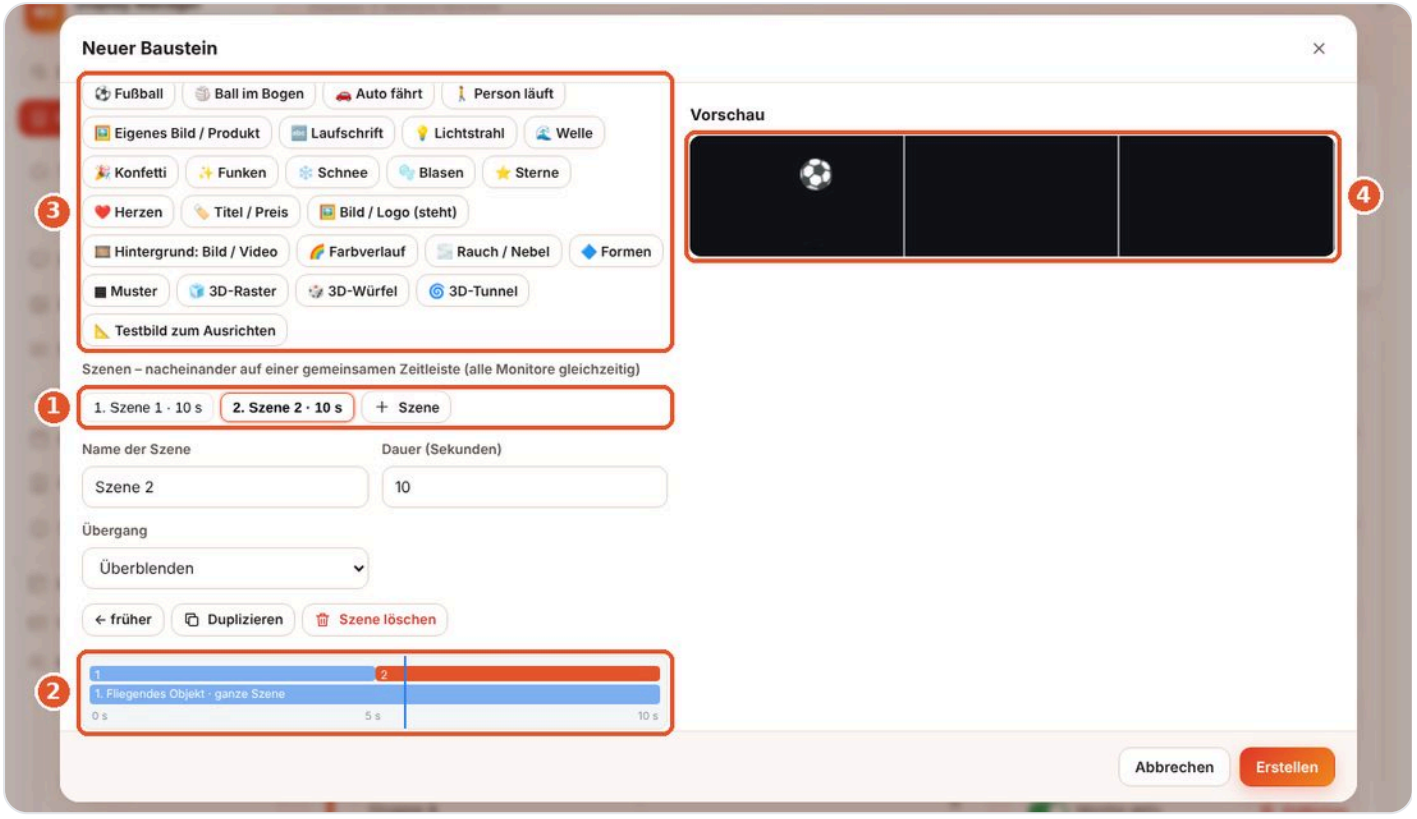
Lay out 1–10 monitors exactly as they are mounted – and freely choose which ones form a video wall together and which run individually.



1. **Displays → Multiple monitors → New arrangement**: enter name and customer
2. Under **Template**, choose the number and layout (e.g. 5 side by side or 5 × 2) and the **Monitor size** (e.g. 55 inches, also portrait)
3. Drag the monitors to the right position with the mouse – they snap to their neighbours. Click a monitor → on the right, assign a display, set size and position in cm, switch it on or off
4. Click several monitors with Ctrl or ⇧ → **Group from selection**. Choose the type for the group: **Video wall**, all the same in sync, menu board across the monitors, chase effect or each with its own content
5. **Save & activate** – the displays run this way immediately. Then set the **Content** for each group; monitors without a group show their own content
6. ▶ **Play preview** shows the whole area with running animations – so before publishing you can see what plays across which monitors

Problem	Solution
Mixed mode example	Monitors 1–4: group "Video wall" (animation across all four) · Monitors 5–7: individual, each with its own menu · Monitors 8–10: second group "Video wall"
Different sizes	Each monitor has its own size in cm – the animation still runs true to scale across all of them. Bezels and spacing are simply the gaps between the monitors.
Multiple arrangements	E.g. save "Day" and "Evening" and switch between them with **Save & activate**. **Duplicate** creates a copy with all groups and content.
Unsaved?	At the bottom, "● Unsaved changes" is shown as long as something has not been saved; when you leave the page, the system asks for confirmation.

Wall show with scenes and timeline



1. Media → **Widget** → **Wall show across all monitors**
2. **+ Scene**: several scenes play one after another (e.g. 0–5 s background, 5–10 s product …) with crossfades or slide-ins

3. Add layers: animated title, product image, background video, gradient, smoke, shapes, patterns, 3D effects, flying objects, ticker ...
4. For each layer, set the **Area** (e.g. only across monitors 1–3) and **Time window** (e.g. second 5–10) – or drag the bar in the timeline
5. In the preview, view it "as a wall with ... monitors", save it and select it as content in the group

Check synchronisation

1. In the active layout, ⏱ **Synchronisation** shows for each monitor how accurate its clock is (± ms), how much videos deviate and which frame rate it achieves – with a traffic light and hints
2. **Sync test pattern (60 s)**: all monitors show the shared clock in milliseconds, a flash at every full second and a bar across the whole wall. **Photograph all monitors at the same time** and compare the numbers
3. **Test report ...**: enter the differences you read off → PDF and CSV with measured values, hardware and result (e.g. for acceptance)

💡 How precisely the monitors stay in sync depends on the hardware: wired network instead of Wi-Fi, sufficiently fast players (e.g. Raspberry Pi 5, mini PC) – or several monitors on one mini PC that uses the same clock. The system shows a warning if a device is too inaccurate.

55 🧱 LED-Wand & Passanten-Zählung

Displays for LED walls and advertising towers, plus anonymous reach figures.

1. Open the display → card **LED wall & counting** → **LED wall / output only a section**: position and size in pixels (e.g. 0, 0, 384 × 192) – the rest stays black
2. Passer-by counting (Raspberry Pi with USB camera): tick the box, run the setup command once more
3. **Reports → Passer-by counting**: people per day and by time of day, per display

💡 Privacy: the camera only counts on the device – no images are stored or transmitted, only numbers. Please put up a notice sign at the location.

56 🔌 Schnittstellen: WZ Order & Kasse

Orders and prices arrive automatically – no need to type anything twice.

1. Open **Displays & technology → Interfaces**
2. For the pickup display, click **Generate key** and enter the address in WZ Order or the POS system
3. ▶ **Send test order** – the number appears under "Being prepared" and then switches to "Ready for pickup" (with a chime)
4. For prices: on the menu board, click **Generate POS key** – the POS sends prices and "sold out" automatically

💡 Events: **created** (new), **ready** (done), **collected** (picked up), **cancelled** (cancelled). Without a number, WDMS assigns the next one. The response contains a link for guests – print it as a QR code on the receipt. Prices are matched by item number or name.

57 📱 „Wo ist meine Bestellung?“ & Sprachansage

Guests see the status on their phone, and the display announces the number.

1. Operate pickup display → **Set up receipt printer …**
2. Tick **QR code on the receipt** – guests scan it and see "Being prepared" → "Ready for pickup" (with sound if they tap "Turn on sound")
3. Tick **Voice announcement on the display** – ready numbers are announced ("Number 118") in the board's language

💡 The guest page needs no app and no sign-in. It only shows the number and status. The voice announcement requires a display with sound (TV volume turned up).

58 🎨 Vorlagen-Bibliothek & Werbung aus Foto

60 ready-made ad slides – and a phone photo becomes an ad in seconds.

1. **Content & planning → Templates & AI assistant**
2. Choose a category (Food service, Retail, Services, General); if desired, tick **In my brand colour**
3. Tap a design → adjust texts, price and image → **Save as image in media**
4. 📷 **Ad from a photo**: choose a photo, describe it briefly ("Pizza Margherita €8.90 – every Tuesday"), **Suggestions** – tap one of the three

💡 The colours are taken from the photo. With an AI key (Settings), the texts become even more creative.

59 📣 Werbenetzwerk: Geld mit dem Display verdienen

Customers make their display available for other companies' ads and receive a share.

1. Turn on: **Settings → Legal texts & trial access** → Advertising network (default share, e.g. 30 %)
2. Customer: **Reports → Advertising network** → **Join** for the display (consent is saved)
3. You: **Sell ad slots** → create an ad slot for this display (price, customer share)
4. Booked ads play automatically; under **Advertising network** you can see the credit notes per month (also as a spreadsheet)

💡 On the public booking page, advertisers can book **the entire network** with one click. Without the customer's consent, no ad slot can be created on their display (unless you tick "Written consent available").

60 🎁 14 Tage kostenlos testen – für Kunden und B2B-Partner

New customers and partners get started right away and decide with one click after the trial whether they want a subscription.

1. **Settings → Legal texts & trial access** → card **14-day free trial**
2. **Customers**: turn on "Free trial", choose the trial period (default 14 days) – also applies to customers who register via a B2B partner's address
3. **B2B partners**: turn on "Also offer the trial to B2B partners", set the quota for the trial (e.g. 3 customers, 3 displays) → **Save**
4. Create customers with a trial yourself: **Create customer** or **New customer in 5 minutes** → tick **14-day free trial**

Problem	Solution
During the trial	Everything can be used; a notice at the top or bottom shows the remaining days and the button "Choose package" / "Become a partner".
3 days before the end / at the end	Automatic email with a link to decide.
After the trial	Everything remains saved and visible, but can no longer be changed. When signing in, the page **"Your trial"** appears: **Yes, continue** (choose a package or send a request to you or the partner) or **No, thanks** (access is closed, no costs).
No decision	A decision must be made by the deadline (default 7 days after the trial ends, adjustable under "Deadline to decide"). After that, the account is deactivated automatically: access closed, displays locked, no costs, data is kept. To reactivate: **+14 days** on the customer or partner.
Your task	If they choose "continue", you receive an email. Open the customer or partner → **End trial (activate)**; for partners, then set prices and quotas. To extend: **+14 days**.

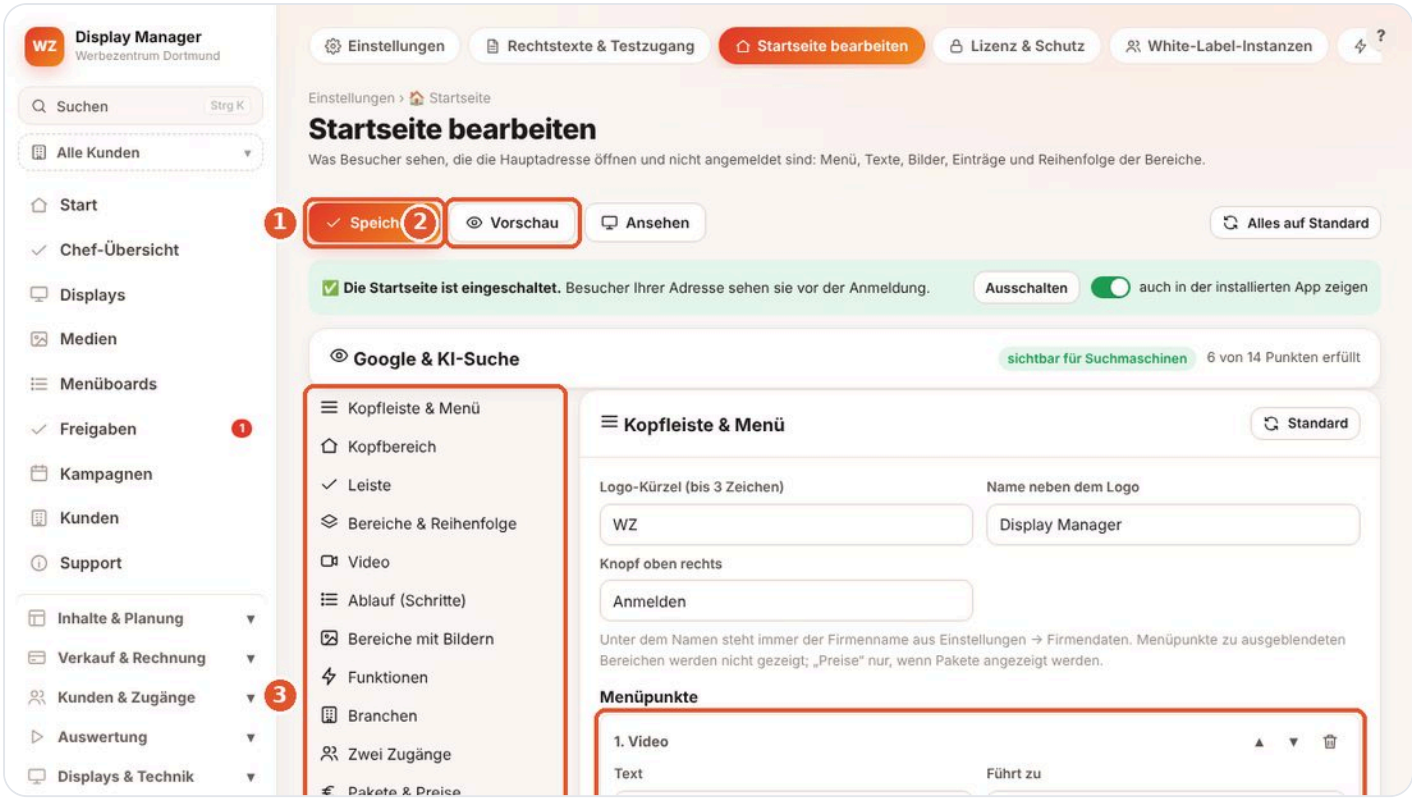
Direct links for advertising	Customers: `…/#/testen` · Partners: `…/#/partner-testen`

1. Check the terms, privacy policy and data processing agreement (DPA): **Use template and edit** – or leave empty (the template then applies)
2. Tick **Require consent** → **Save**

💡 Trial customers are activated immediately; their first display needs no approval.
Please have the template texts checked by a lawyer once.

61 🏠 Startseite bearbeiten (Vorstellungsseite)

What visitors see when they open your address and are not logged in – you change the menu, texts, images, sections and order yourself.



1. **Settings → Edit homepage** (or Settings → 🏠 Start page → **Edit homepage**)
2. Select the section on the left, change the texts on the right – move entries with ▲ ▼, copy, delete or **Add entry**
3. **Preview** shows the page on PC and on mobile before you save
4. **Save** – immediately visible to all visitors

Problem	Solution
Header bar & menu	Logo initials, name, menu items (text and target: a section of the page or a custom address, e.g. your website)
Header section	Large heading, text, buttons, bullet points with check marks and the image in the screen
Sections & order	Show or hide and move each section. **Add custom section** for your own offers – with text, image and button

Images	**Choose image**: included images or upload your own (PNG, JPG, WEBP up to 5 MB)
Footer	Your own links (e.g. legal notice, privacy policy) and an additional text such as opening hours
Translations	Included texts are translated into all languages. For changed texts, enter the translation here – otherwise visitors in other languages will see the German text

💡 **Default** on each section restores the included texts, **Everything to default** does so for the whole page. Prices still come from the plans, phone and email from the company details.

62 🛰️ Leitstand: alle Displays auf einen Blick

Spot problems before the customer calls.

1. **Displays & technology → Control center**
2. Top: how many displays are online, offline, with a warning
3. Tick **Only displays with warnings** – offline, HDMI cable unplugged, old player, errors

💡 The page refreshes every 30 seconds. Clicking the name opens the display with remote maintenance (restart, clear cache, screenshot).

63 🔌 Plug & Play: Display koppelt sich selbst

Prepare the device, plug it in at the customer's – done.

1. **Displays & technology → Plug & Play** → choose name, customer and start playlist → **Create code**
2. **Android box / Fire TV:** install the WDMS player app, enter the setup code on first launch (later: long-press the menu button or OK)
3. **Raspberry Pi:** run the command shown in the terminal
4. **Smart TV / browser:** open the setup address

💡 A code is valid for the selected number of displays and days. Remote maintenance: open the display → **Restart app/browser** or (Raspberry Pi) **Restart device**.

64 🔗 Eigene Internet-Adresse (Domain)

Run your system under your own address, e.g. display.ihre-firma.de – data, displays and logins are kept. This is possible if your provider runs the system for you.

1. Open **Settings** → 🔗 **Own web address**, enter the address you want (ideally with a word in front, e.g. **display.**ihre-firma.de) → **Request address** (Adresse beantragen)
2. At your domain provider (IONOS, Strato …), create the **DNS record** shown on this page – usually a **CNAME** pointing to your provider's address
3. Your provider sets up the rest (certificate, switchover). You can see the status on the same page: **Received → Accepted → Switched over**
4. After the switchover, open the new address and **sign in again** (same email, same password), then save your bookmarks and the mobile app again

Problem	Solution
Displays show "old address"	Under **Displays**, devices that still connect via the previous address are marked **old address** (alte Adresse). Enter the new address in the player app or on the display – until then they keep running normally.
"Not reachable"	The DNS record is not active yet or is misspelled. Check the record – changes often take 15–60 minutes.
Domain without a word in front (ihre-firma.de)	Only works with an A record – your existing website would then no longer be reachable at this address. Better: display.ihre-firma.de

💡 Your emails, your website and your domain stay with your current provider – only one single DNS record is added.

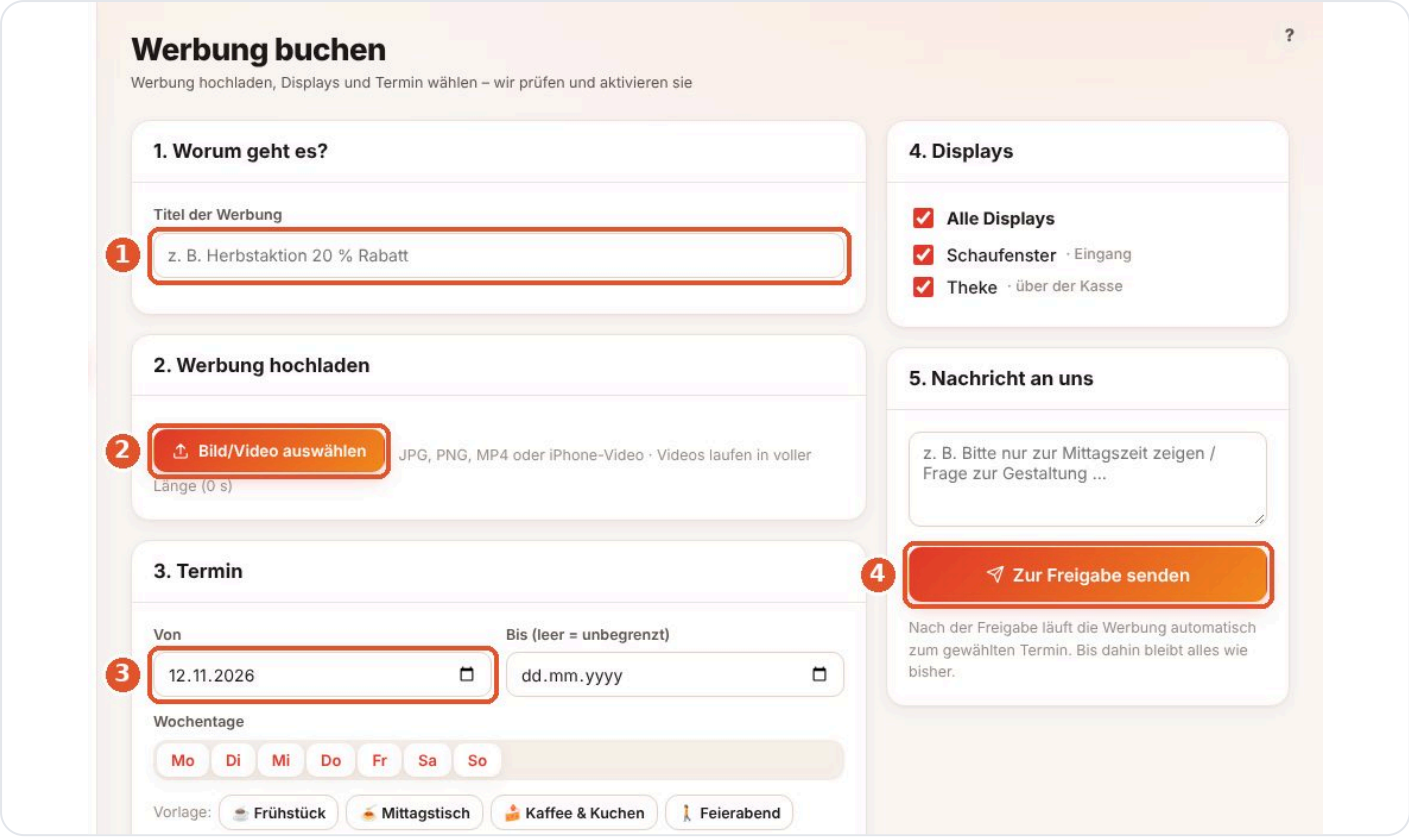
65 🛟 Wenn etwas nicht klappt

The most common cases – usually solved in 1 minute.

Problem	Solution
Display is **red (offline)**	Check power and internet at the screen. It will then come back on its own.
Monitor shows a **number**	It is new or was removed: home page → **Pair display**, enter the number.
Monitor only shows **time/logo**	Nothing has been assigned yet: open the display → drag an image in.
Video without sound	Open the display → set **Sound for videos**. Turn up the volume on the monitor.
iPhone video is rejected	iPhone: Settings → Camera → Formats → **Most Compatible**, record again.
Customer ad does not appear	Home page → **Approvals**: approve. Check the campaign dates.
Forgot password	On the sign-in page, **Forgot password?** – link by email. Or the administrator resets it under **Customers & access → Users**.
Lost phone with authenticator app	Sign in with a **recovery code** – or an Admin clicks **Reset 2FA** for the account under **Customers & access → Users**.
TV switches off after a few hours	On the TV, turn off "Auto standby" / "Eco mode" / "Switch off without signal".
Picture cut off at the edges	Set the TV's picture size to "Screen fit" / "Just Scan" / "1:1 pixel".
Getting to the desktop on the Pi	See the chapter "Closing the player on the Raspberry Pi".

66 📣 Werbung buchen (mit Datum & Uhrzeit)

In the customer account: menu item **Book advertising**.



1. Enter a title
2. Upload an image or video
3. Schedule: date, weekdays, time
4. **Send for approval** – the operator checks and approves

67 🔑 Konto erstellen (Kunde)

On the sign-in page: **"No customer account yet? Register now"**.

1. Enter company, contact person, email and password – choose a package right away if you like
2. Click **Create account**
3. As soon as the account has been approved, an e-mail arrives – then log in with e-mail and password

68 🖥 Display selbst anschließen (Kunde)

In the customer account: menu item **Connect display** (if enabled).

1. Set up the player: Raspberry Pi with the command shown – or enter the address shown on the smart TV
2. The screen shows a 6-digit number: enter the number, name and location → **Connect display**
3. The screen shows "Display connected ✓ – waiting for activation"
4. After approval by the Werbezentrum, your advertising plays automatically

69 📦 Pakete & Abo (Kunde)

In the customer account: menu item **Packages & subscription**.

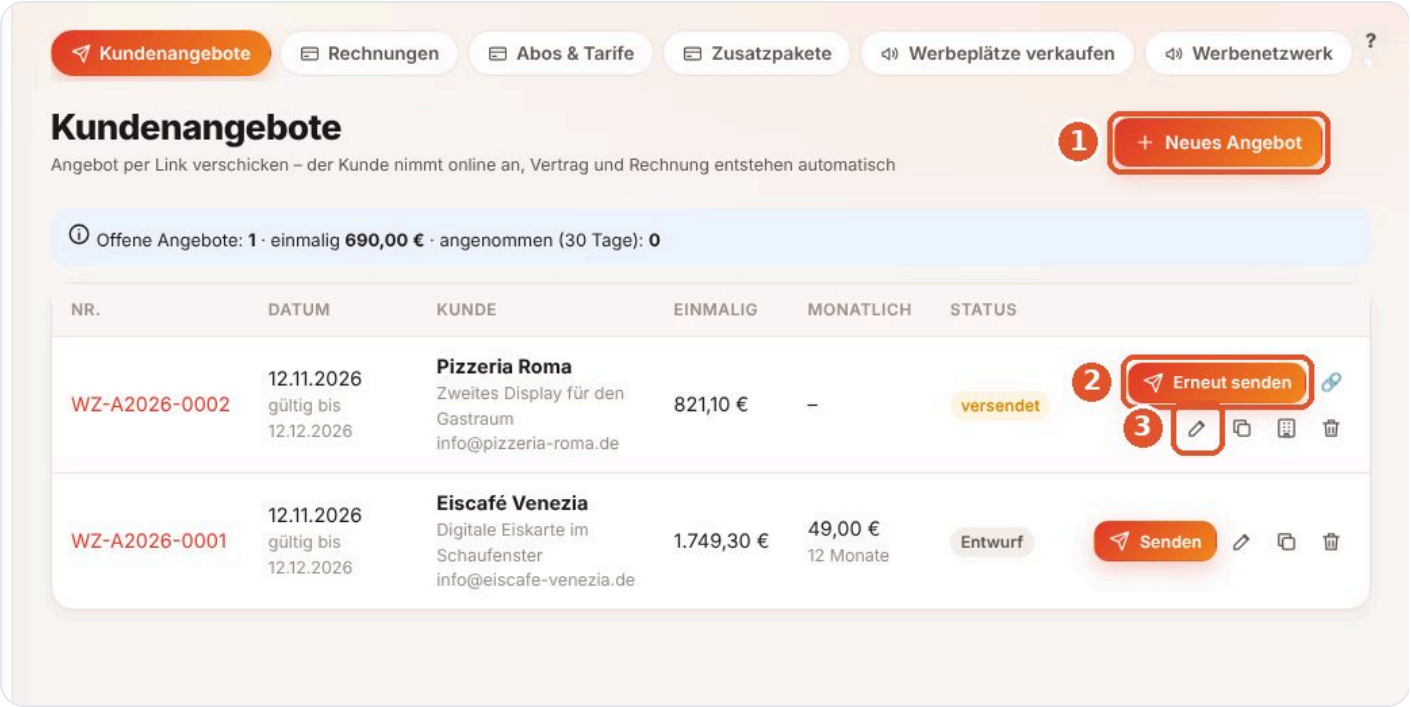
1. At the top you see your current package with its term and the displays in use
2. Below, all packages: **"Book this package"** or **"Switch to this package"**
3. Optionally write a message → **Send binding request**
4. The Werbezentrum confirms the request – you receive an email. Until then, you can withdraw the request.

70 💶 Preise ändern (Kunde)

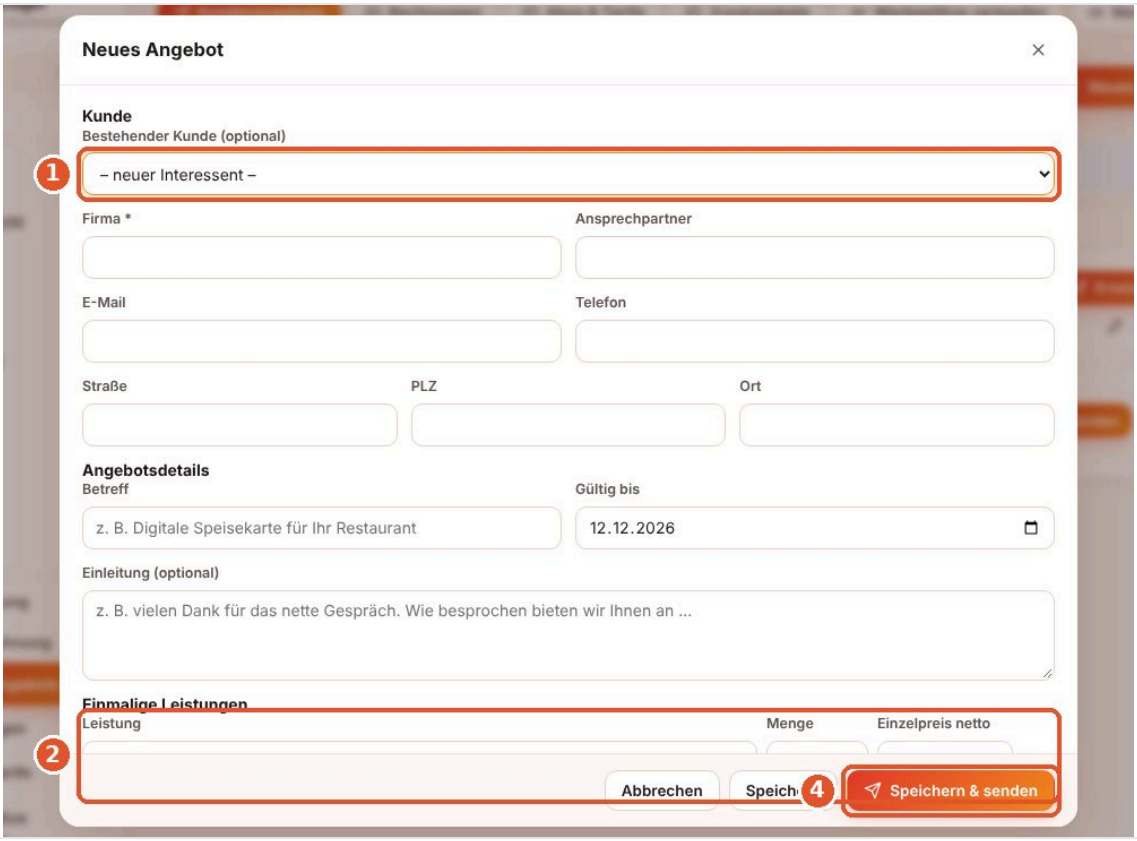
Exactly as described above under "Menu & prices" – instead of "Publish", the button is called **Send for approval**.

71 📝 Angebote mit Online-Annahme

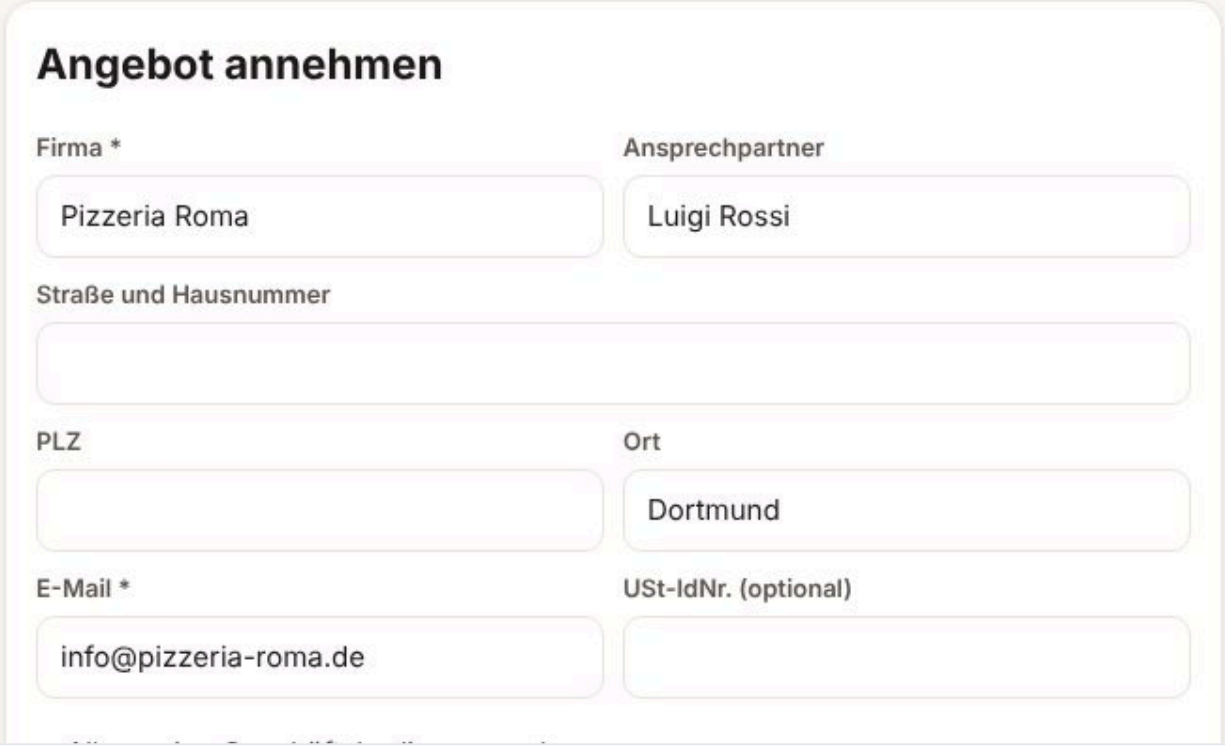
Send a quote by link – the customer accepts online, the contract and invoice are created automatically.



1. **Sales & billing → Quotes → New quote**
2. Select a customer or enter a new prospect (company, e-mail, address)
3. Enter one-off services (e.g. display, installation, setup) and – if desired – a monthly package: take it from a plan or enter it freely (price, term, displays, services)
4. **Save & send**: the customer receives the quote as a PDF with a link to accept it



How the customer accepts



Problem	Solution
Accept	The customer opens the link, checks their details, confirms the terms and conditions and enters their

	name as signature. Time, name and internet address are saved.
Then automatically	New customer with customer number and access to the customer portal (password link by e-mail), contract with contract confirmation (PDF), invoice for the one-off services and the first subscription invoice – depending on the setting “Invoice on conclusion of contract”.
Status	Draft → sent → viewed (the customer has opened the link) → accepted or declined (with reason) or expired.
Change	At any time until acceptance. Reopen expired quotes with a new “Valid until”. 📋 copies a quote as a new draft.

💡 Existing customers also see open quotes in the customer portal under **My invoices**. With Stripe the customer can pay the first invoice online right after accepting.

72 📈 Reichweiten-Bericht für Werbekunden

How many people had the opportunity to see the ad? The strongest argument when selling advertising space.

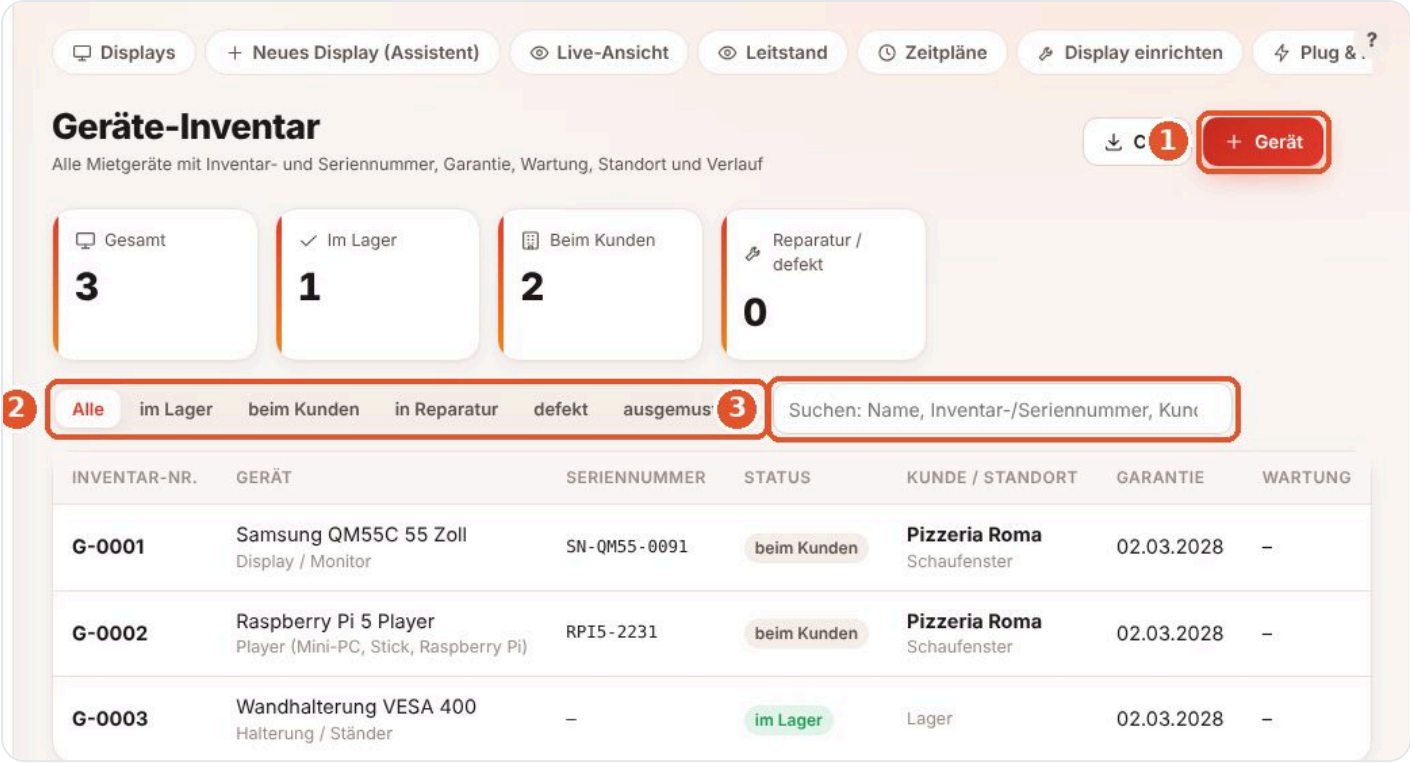
1. **Analytics → Reach**: select the period, the advertiser and – if desired – a single ad
2. Optionally enter the price the customer pays for the period – then the **Price per 1,000 contacts** appears in the report
3. **Report as PDF** – for the advertiser, with an explanation of the calculation

Problem	Solution
Contacts measured	Displays with passer-by counting (camera) deliver the real passers-by per hour.
Contacts estimated	Without a camera, enter it for the display under **LED wall & counting → Without camera: estimated passers-by per hour** (e.g. from the shop's number of customers).
Calculation	Per hour: passers-by × chance of seeing. Chance of seeing = (airtime of the ad + viewing time per play) ÷ 3,600 seconds. The viewing time (default 5 seconds) is under Settings → Sales.

💡 Customers see their own figures in the customer portal under **Reach**.

73 📦 Geräte-Inventar

What is in stock, what is at which customer, when do warranty and maintenance expire?

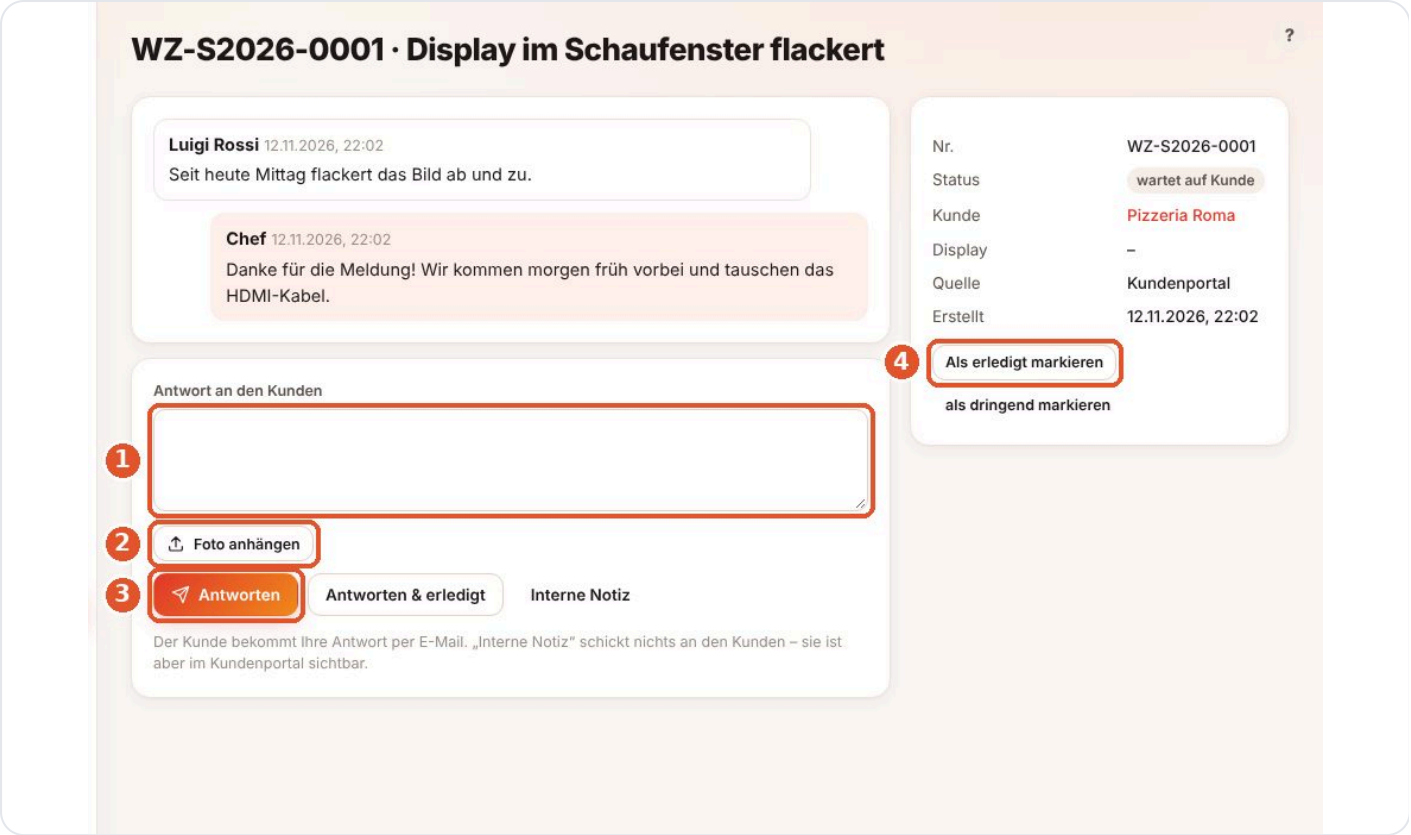


1. **Displays & hardware → Equipment inventory → Device**: name, type, serial number, purchase, warranty, next maintenance
2. Click the device → **Hand over to customer**: select customer, display and location
3. On return **Take back**: condition (OK / damaged) and note – damaged devices are then set to “defective”
4. Everything is under **Device history** – with date and who entered it

💡 Warranty expiring soon is marked yellow, maintenance due red. For a customer, the card **Devices at customer** shows all their rental devices. **CSV** exports the whole inventory for Excel.

74 Support-Tickets

All requests and faults in one place – instead of phone, e-mail and WhatsApp chaos.



Problem	Solution
From the customer	Customers write in the customer portal under **Help & support** – a photo helps. You receive an e-mail.
For faults	If a display is offline or the monitor is off, a ticket is created automatically. When the display is running again, it closes by itself (Settings → Outage alerts).
Replies	**Reply** sends the customer an e-mail; **Reply & done** closes the ticket. If the customer replies, it reopens.
Overview	Menu item **Support** with the number of tickets waiting for your reply. Create tickets by hand (e.g. after a phone call) via **Ticket**.

💡 B2B partners see and answer the tickets of their own customers.

75 🧮 Export für den Steuerberater (DATEV)

Once a month all invoices for the bookkeeping – without retyping.

1. **Settings → Tax advisor / DATEV**: enter advisor and client number, chart of accounts (SKR 03/04) and the tax advisor's e-mail address – you get these details from your tax advisor
2. **Sales & billing → Invoices → Tax advisor**: select the month
3. **Download ZIP** or **Send to tax advisor** – or switch on “Send automatically at the start of the month” in the settings

Problem	Solution
Contents	DATEV posting batch (for import into DATEV), outgoing invoice journal for Excel and all invoices of the month as PDF.
Postings	Per invoice: debtor to revenue account (gross amount, automatic account with VAT). Cancellation invoices as a reverse posting. Test invoices are never included.

💡 Please agree the first export with your tax advisor (revenue accounts, debtors as a collective account or per customer). The tax advisor books incoming payments from the bank statement.

76 💬 Hilfe & Support (Kunde)

In the customer login: menu item **Help & support**.



1. **New request**: what it is about, which display, a short description – a photo helps
2. The reply appears here and arrives by e-mail
3. Anything else? Simply reply in the same request

77 🔌 Automatisch starten – auch nach Stromausfall

So that a display shows ads again without help after a power cut or restart – set this up once per device.

Problem	Solution
Android box as kiosk (recommended)	Under Displays & hardware → Plug & Play, create a setup code – the “Android kiosk” QR code appears there. Reset the box to factory settings. On the welcome screen, tap the same spot 6 times quickly (remote control: press OK 6 times). Scan the QR code – the player installs itself, becomes the home screen and starts every time the device is switched on. Nobody can close it by accident.
Android box, Fire TV, tablet (without reset)	Install the app and allow “Display over other apps” on first start. Even better: set WDMS Player as the home screen (home app) – press the Home button and choose “WDMS Player” → “Always”. Fire TV does not allow a custom home screen – use an Android TV box for continuous operation.
Raspberry Pi	Run the setup command: automatic login, autostart, hardware watchdog and restart via remote maintenance are set up. Use the original power supply – power supplies that are too weak are the most common cause of crashes.
Windows mini PC	Run the setup command once in PowerShell as administrator with automatic login (see Windows above). In the BIOS, set “Restore on AC Power Loss” or “Power On after AC loss” to “Power On” – the PC then boots by itself after a power cut.

Samsung signage (Tizen)	Menu → System → Power Control → switch on “Auto Power On”. Set the start source (“Default Content” or “Power On Source”) to “URL Launcher”.
LG signage (webOS)	Menu → General → Power → set “Power On Status” (status after power loss) to “Power On” or “LST”. SI server: start mode “Local” (WDMS app) or “URL” (player address).
Regular TV (without signage function)	TVs cannot start an app by themselves – connect an Android box or a Raspberry Pi via HDMI. Switch on HDMI-CEC on the TV (Samsung “Anynet+”, LG “SimpLink”, Sony “Bravia Sync”, Philips “EasyLink”): the box then switches the TV on and selects the right input. Switch off automatic power-off (“Auto Power Off after 4 hours”, “Eco Mode”, “Energy Saving”) – otherwise the TV turns itself off after a few hours. If available: choose “Last source at power on”.

💡 Watchdog: Raspberry Pi and Windows also report to the server every minute. If the player hangs, it is restarted automatically; if it stays silent for an hour, the whole device restarts.