QMATIC

Installation Manual

Intro 8 G2

235.01J

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1. Introduction

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1.1 Presentation

Intro 8 Generation 2 (Intro 8 G2) is a Qmatic kiosk where customers can select a service and then receive a ticket with information.

The Intro 8 G2 has a touch screen and a colour LCD. The kiosk is designed to be connected to Orchestra. The kiosk is connected to the server system with a network cable.

Intro 8 G2 is built on the powerful and flexible Hub platform, which means that in excess of the standard kiosk functionality, you get more or less the same functionality as in Hub.

For information about the hardware parts and article numbers, see “7.1 The kiosk, accessories and stands” on page 60.

For technical specifications, see “7.2 Technical specification” on page 64.

1.2 Preparations – checklist

Before starting the installation at the site, we recommend to go through and consider the steps in this checklist. Consider each step, mark them as checked or not applicable, and move on.

Table 1: Preparations hardware installation

Preparation step	Check	N/A
Check which **network plug** the cable from the printer should be connected to and how long the cable will be.		
Check which **power plug** the cable from the power supply should be connected to and if there is a need for an extension.		

Table 2: Preparations software setup

Preparation step	Check	N/A
Obtain a static **IP address** from the network administrator on the installation site. Likewise, sub net and gateway need to be determined with the administrator. (!) You need to use a static IP address in production. However, the possibility to use DHCP with fixed number remains in the settings for convenience.		
Check that the ports numbered **3477** (UDP), **3478** (TCP and UDP) and **3479** (TCP) can be used. They are the default ports used for communication between the ticket printer in Intro 8 G2 and GW 1745 / Device Controller / Q-Win.		

Table 2: Preparations software setup

Preparation step	Check	N/A
Make sure you have access to the following information: • Orchestra version • Orchestra central host / IP address and port • Queue agent host / IP address and port (for the device controller and the kiosk to connect to, if other than localhost) • If SSL should be used and if any certificates needs to be uploaded • Branch prefix for the branch that the kiosk is used in. • Unit ID of the kiosk in Orchestra • Unit ID of the device controller in Orchestra		
Make sure you have a license key available, if needed.		

1.3 Recommended setup order

After having considered all preparation steps, we recommend that you set up Intro 8 G2 according to the following setup order:

1. Mount the hardware and accessories, if any, see “2.2 Mount the Intro 8 G2 on a stand” on page 13.
2. Connect the cables of Intro 8 G2, see “2.3 Connect the cables” on page 16.
3. Insert a ticket roll, see “2.4 Insert ticket roll” on page 17
4. Log in to the configuration pages and do the required software configuration, for example configure the network settings and the server settings. See “3. Set Up Software and Get Started” on page 19 and “4. Additional Software Configuration” on page 37.

1.4 Security at Intro 8 G2

Our software is locked down and only the required ports to communicate with Orchestra and other Qmatic products are open. There is no other function to communicate with these units than the above. For example, no SSH or FTP access.

Intro 8 G2 is equipped with a physical lock that secures all cables to the unit. A key is required in order to gain physical access.

Updates and new software is only provided from Qmatic and all software is delivered in a compressed and signed format.

2. Hardware Installation

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2.1 The main parts

Before you start mounting the Intro 8 G2, please make sure that you know the parts of the kiosk so that you can follow the instructions later in this guide.

Table 1: Exterior

Blue LED	When the blue LED at the front of the kiosk glows steadily, it indicates that the printer is working properly. When the LED is blinking, it has lost contact with the system server.
Touch screen and colour LCD	The kiosk has a 8”, capacitive, touch screen and a colour LCD.

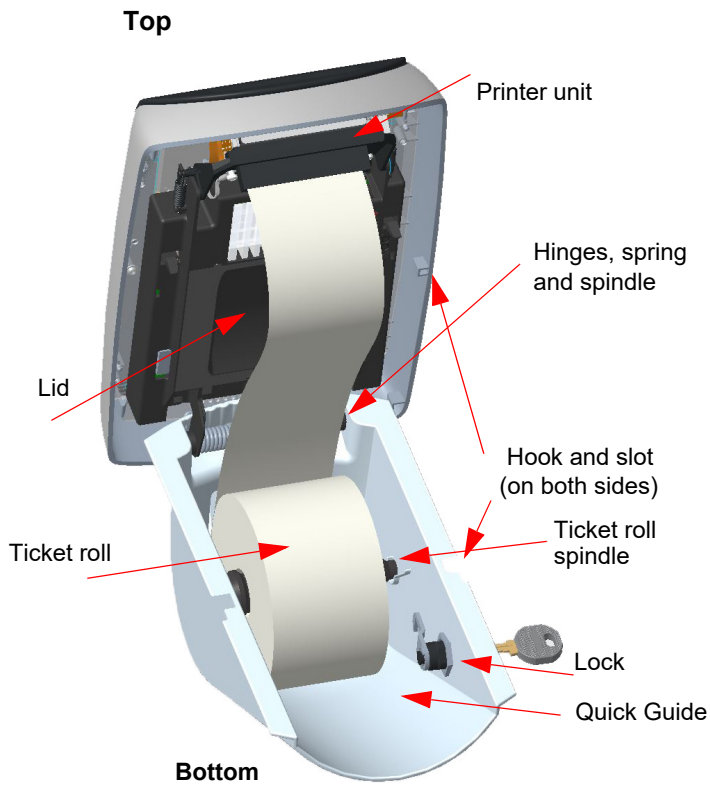


Table 2: Internal parts

Top	The top of the kiosk contains all of the electric and mechanical parts of the unit except for the ticket roll. The main parts of the top of the kiosk are the touch screen and LCD, the circuit board (with the computer) and the print unit
Bottom	The bottom of the kiosk is the compartment that holds the ticket roll on its spindle.
Hinges, spring and spindle	The hinge of the unit consists of one spindle, two screws, one spring and two hinge arms.
Hook and slot	On each side of the kiosk, there is a hook on the top and slot at the bottom that keep the unit closed.

Table 2: Internal parts

Lid	The lid covers the circuit board and cables and can be opened to access the cables.
Lock	In the bottom, there is a key lock that locks the top to the bottom.
Print unit	The print unit has a thermal print head. It prints without using ink or toner. It is integrated with the paper feed mechanism. At the opening of the printer there are three small light sensitive sensors. They are part of the ticket positioning and paper jam prevention systems of the printer.
Stickers with serial number and MAC address	There is a sticker on the circuit board with the MAC address of the circuit board and a sticker on the lid with the serial number.
Ticket roll	The ticket roll is placed in the bottom of the kiosk. The roll can be replaced by opening up the kiosk, using the key. The paper has a special perforation (patent pending) that makes the tickets easy to tear off.
Ticket roll spindle	The spindle that holds the ticket roll in place while allowing it to spin. The spindle rests in two small holders on each side of the compartment.

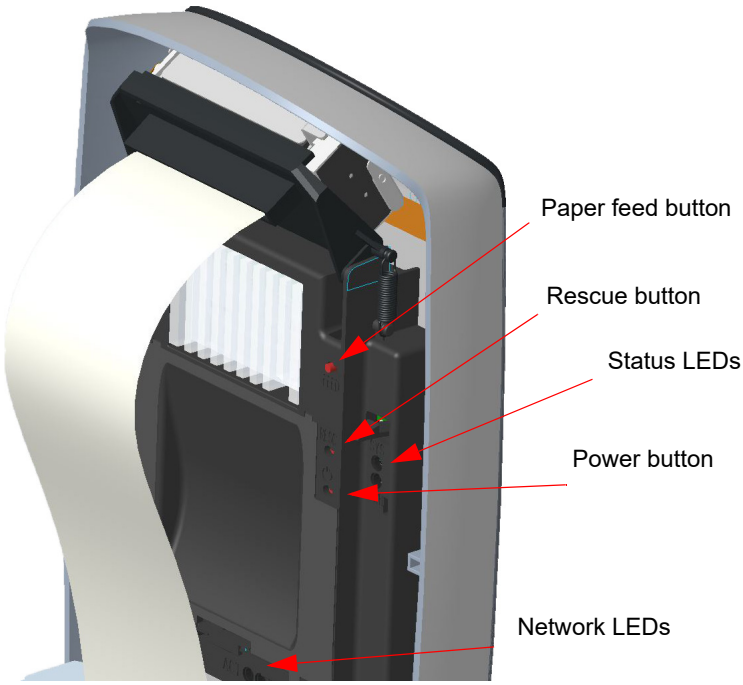


Table 3: Buttons

Paper feed button (FEED)	A short press on the paper feed button feeds paper from the printer. A longer press on the paper feed button prints a ticket with information about the kiosk settings.
Power button ⏻	Pressing this button restarts the printer.

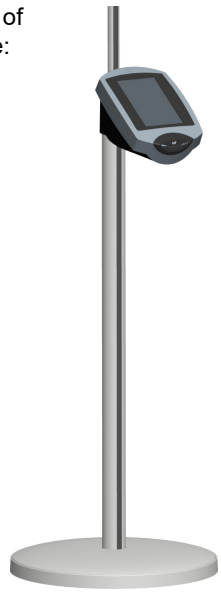
Table 3: Buttons

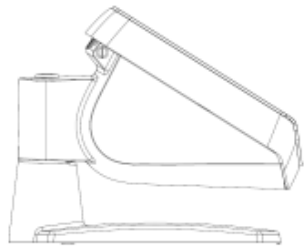
Rescue button (RESC)	Pressing this button and holding it down during power on will start Intro 8 G2 in rescue mode. Rescue mode can be used for example if firmware upgrade failed, due to power outage. After you have rebooted Intro 8 G2 in rescue mode, you can initiate a new upload of firmware. See “4.8 Upgrade firmware” on page 45. Pressing this button shortly during normal operation takes you back to the setup page on the touch screen. See “5. Configuration in Touch Screen” on page 49. Pressing and holding this button for 20 seconds during normal operation will reset the configuration. See “3.5 Reset configuration” on page 24.
Status LEDs	LEDs indicating the status of the printer (sys and pwr).
Network LEDs	LEDs indicating the network status of the printer (act and link).

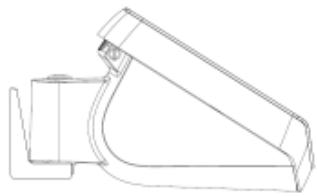
2.2 Mount the Intro 8 G2 on a stand

There are three types of kiosk stands available:

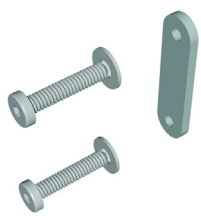
- a floor pedestal
- a table stand
- a wall bracket





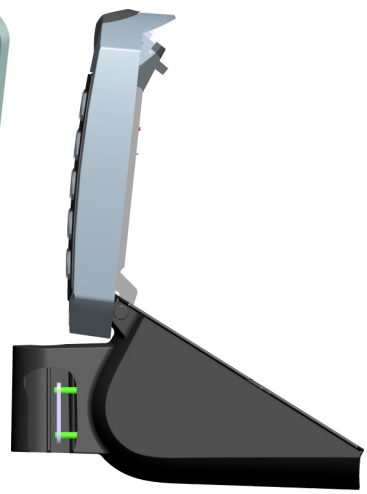


The mounting principle is the same for each method: the fastening device is a nut-plate with two screws securing the kiosk to the table stand, the wall bracket or the floor.



The nut-plate is mounted loosely with the two screws inside the kiosk, before it is lowered onto a stand.

There is a slot in each stand that will accept the screws. When the nut-plate is correctly positioned behind the slot, tighten the screws and the kiosk will be fixed to the stand.



It is recommended that the **table stand** and **wall bracket** are first mounted to the unit, and then the cables are routed through the stand/bracket and into the kiosk

With the **floor pedestal**, on the other hand, first route the cables up through the top of the tube and into the kiosk, and then, as the last step, mount the unit on the tube, being careful not to squeeze the cables.

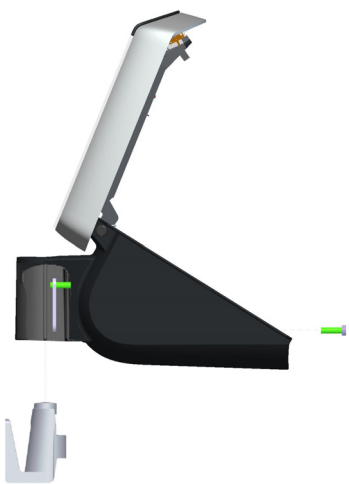
2.2.1 Mounting the kiosk on a table

To mount the kiosk on a table stand, follow these steps:

1. Fasten the nut-plate with the two screws in the kiosk loosely, as in the picture above.
2. Lower the unit onto the stand, placing the nut-plate behind the slot and tighten the screws.
3. Route the cables through the stand and into the kiosk. The next section describes how to route and connect the cables.

If appropriate, use the steel bracket to fix the stand to the table with screws. This bracket is also fixed to the unit with the nut-plate.

2.2.2 Mounting the kiosk on a wall



To mount the kiosk on a wall bracket, follow these steps:

1. Fasten the nut-plate with the two screws in the kiosk loosely.
2. Lower it onto the bracket, placing the nut-plate behind the slot and tighten the screws.
3. Route the cables through the bracket and into the kiosk. The next section describes how to route and connect the cables.

Remember to mount the kiosk at a suitable height; mounting should follow local standards.

2.2.3 Placing the kiosk on the floor

To place a kiosk on the floor, first assemble the floor pedestal and then put the unit on the top end.

Qmatic has mounting hardware for routing cables from a ceiling down to the pedestal. For more information, see “Table 1: Intro 8 Kiosk and accessories” on page 60.

Fix the stand to the floor with screws.

To assemble the floor pedestal, follow these steps:

1. Place the tube and the power supply in the lower half of the foot and route the power cable and the network cable up into the tube.
2. Slide the upper half of the foot down on the tube.
3. Slide the nut-plate with the two screws down to the bottom in the slot of the tube and tighten the screws.

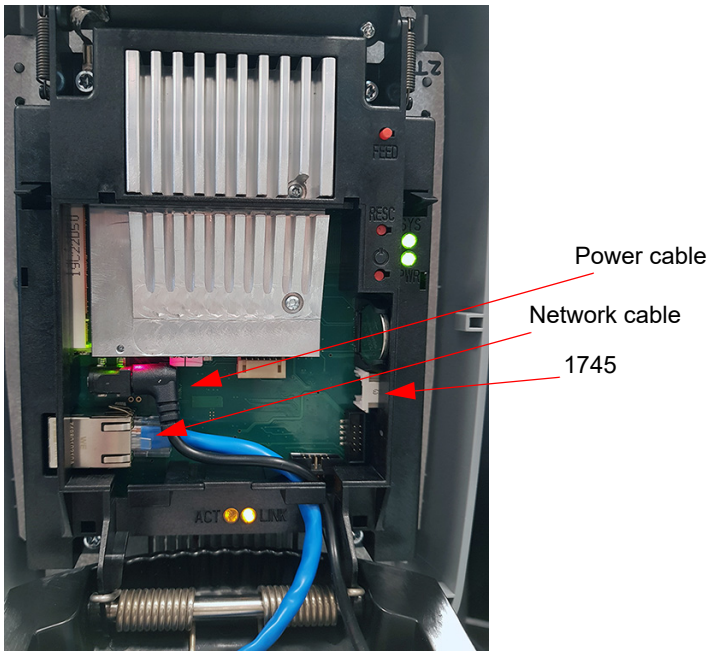
4. Put the long plastic cover in the slot of the tube.

To mount the kiosk on the floor pedestal, follow these steps:

1. Fasten the nut-plate with the two screws in the kiosk loosely.
2. Route the cables through the tube and into the kiosk. The next section describes how to route and connect the cables.
3. Lower the unit onto the tube, placing the nut-plate behind the slot and tighten the screws, being careful not to squeeze the cables.

2.3 Connect the cables

There are two cables that connect to Intro 8 G2: the power cable and the network cable. It is also possible to connect a 1745 cable and a swipe card reader.



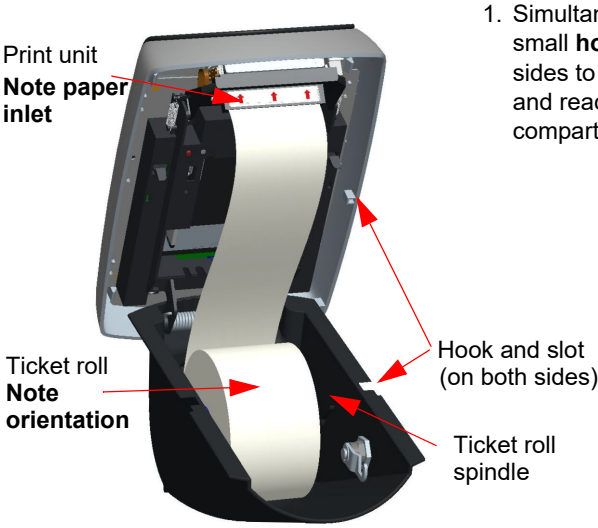
To connect the cables, follow these steps:

1. **Open the top** of the kiosk by simultaneously pressing the two hooks beneath the top casing and to the sides of the unit. Push the hooks away from you to release them.
2. Remove the **lid** covering the circuit board and cable compartment. Remove the lid by pressing the latch at the bottom of the lid.
3. **Route all cables** through the stand and into the bottom compartment behind the spring arm, but in front of the hinge spindle. The spring arm may have to be lifted slightly to get the cables behind it. Route the cables **through the slots** in the circuit board compartment up to the connectors at the top end.
4. Put the lid back.

   ⓘ Be careful to pull the cables down behind the spring arm; do not leave any excess bulge on the cables that can come in contact with the tickets on the roll.
5. Close the kiosk again.

2.4 Insert ticket roll

To insert a ticket roll, follow these steps:



1. Simultaneously press on the two small **hooks** located on the sides to **open the kiosk** casing and reach the ticket roll compartment.
2. Lift the **spindle** from the bottom compartment.
3. Make sure that the tip of the first ticket on the new roll is **clean and straight.** If necessary, tear off the damaged tickets.
4. Put the spindle through the **new roll**. Place the spindle and the ticket roll back in the spindle holder in the **correct orientation.** The tickets should feed from the back of the roll when placed properly in the compartment.
5. Insert the ticket into the **paper inlet** in the print unit following the arrows in the figure above. When enough of the ticket has been inserted, the mechanism will immediately grasp the ticket and start feeding it through.
6. **Close the unit** to finish the roll replacement.

Press a ticket button to **print a test ticket** and tear it off as a check that the printer is working as it should.

3. Set Up Software and Get Started

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3.1 Software setup overview

When the hardware is in place, you need to set up the software of Intro 8 G2. This chapter contains the most basic things that need to be done to get the kiosk up and running.

ⓘ Make sure you have checked all the steps in “Table 2: Preparations software setup” on page 3 before you begin.

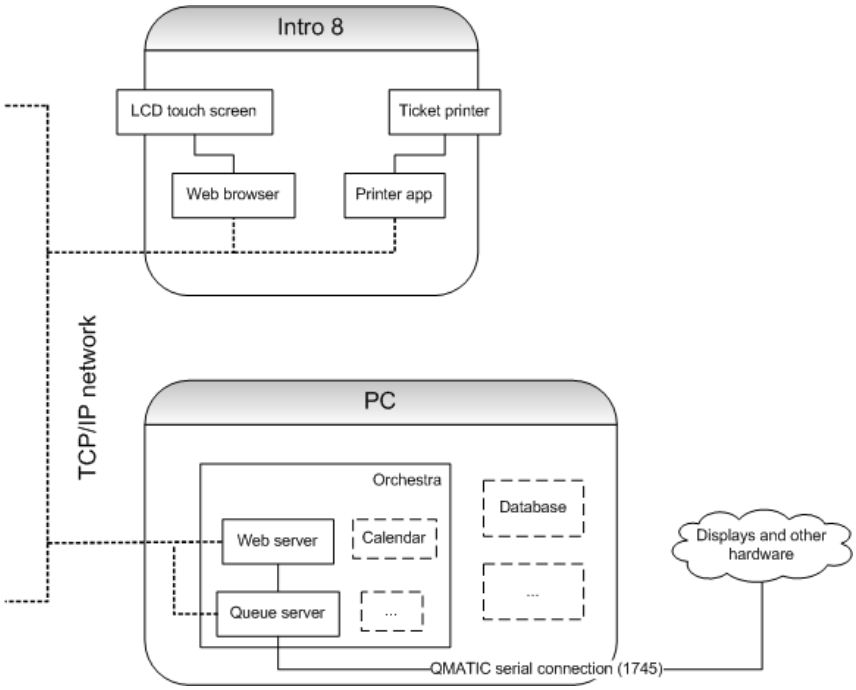
The following steps need to be completed:

1. If needed, activate license key and upload certificates. See “3.6 Handle licenses and MyQmatic” on page 25 and “3.8 Secure communication” on page 28.
2. Set the network parameters of the kiosk. See “3.7 Configure network settings” on page 27
3. Enable and configure the queue agent and the device controller, if they are to be used. See “3.9 Manage the queue agent” on page 30 and “3.10 Manage the device controller” on page 31.
4. Configure the server settings and set the start page for the touch screen. See “3.11 Configure the server settings” on page 32.

For other configuration, see the next chapter: “4. Additional Software Configuration” on page 37.

3.2 Intro 8 G2 system overview

Intro 8 G2 has a processor with touch screen and LCD, and a ticket printer. The processor runs a web browser that communicates with the web server on the system server (Orchestra). The ticket printer communicates with the queue server on the system server.



On the web server are all the HTML or QSP pages needed for Intro 8 G2. Intro 8 G2 only stores the address of the start page.

In the normal case, a press on a button on the touch screen is a command to the web server to send a new page for display on the LCD, or it is converted to a button press for the queue server to process, or a combination of this.

The queue server on the system server handles the button press, and in the normal case sends a ticket to the ticket printer with a queue number and other information about the selected service.

The web pages, HTML or QSP, are always customised pages not included with the system server. Example pages are available on Qmatic World, they are also included with the installation.

3.2.1 Intro 8 G2 modes

Intro 8 G2 can be run in the following modes:

- **Queue Agent plus Device Controller (GW1745)**: The most common way of using the kiosk in a distributed environment with the device controller
- **Queue Agent only, without Device Controller**: If there are no Qmatic hardware devices in the branch that require the Device Controller, the kiosk can be run with Device Controller unlicensed or disabled.
- **Device Controller only, without queue agent**: If you want to use the central queue agent instead of the distributed mode, the kiosk can be run with queue agent unlicensed or disabled.

To enable and disable the queue agent or the device controller, see “3.9 Manage the queue agent” on page 30 and “3.10 Manage the device controller” on page 31.

3.3 Orchestra prerequisites

The following things need to be set up in Orchestra to use Intro 8 G2:

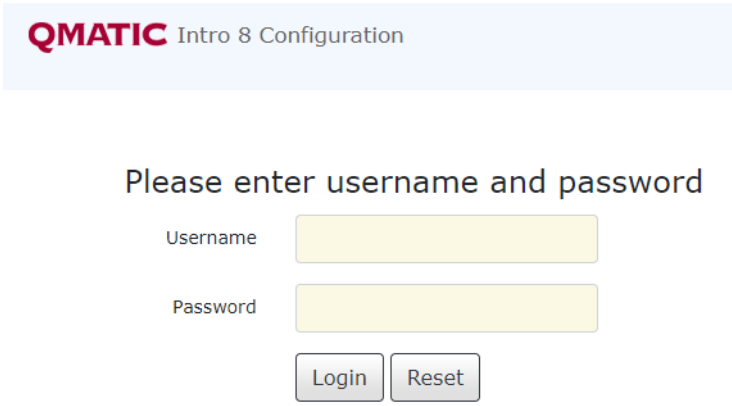
- A layout/surface for the kiosk touch screen and the ticket need to be prepared.
- The kiosk unit type needs to be added to the equipment profile that the branch uses. Configuration can be done in both equipment profile level (e.g Unit ID and touch application) and in branch level (e.g. kiosk IP address).
- The device controller unit type needs to be added to the equipment profile that the branch uses.

3.4 Access configuration pages

Intro 8 G2 is configured from the external configuration pages. It is also possible to do some basic configuration from the internal configuration pages on the touch screen.

To access external configuration pages:

1. In a browser, go to http://<*ipaddress*>/admin, where <*ipaddress*> should be replaced by the IP address of the kiosk. The factory installed IP address is **192.168.0.17**.
2. If you get a security warning, click Advanced and then Proceed (depending on browser).
3. The following login page is opened:



4. Log in with the following credentials:

   Username: **InstallAdmin**

   Default password: **ulan**

Internal configuration pages:

To access the internal configuration pages, see “5.2 Log in to internal configuration pages” on page 50

To read about the configuration that can be done on the touch screen, in the internal configuration pages, see chapter “5. Configuration in Touch Screen” on page 49.

In the following pages, the setup is described as it is done from the external configuration pages.

3.5 Reset configuration

It's possible to reset the configuration of Intro 8 G2 to the default settings as for a new unit (or same after USB upgrade). This can be used for example

- if you want to re-configure the unit and want to start from scratch
- if the unit does not work properly and you suspect a misconfiguration
- if the password is lost.

To reset the configuration:

1. Press and hold the rescue button for 20 seconds until the unit beeps 3 times.
2. Once the configuration is reset, the unit restarts automatically.

The following applies when you reset the configuration:

- Any installed queue agent is removed, including database, media and log files.
- Any license is not affected.
- Web cache is cleared.
- The network configuration is reset and the WAN IP address will be 192.168.0.17
- Log files are not removed (except for the queue agent log files).
- Any installed patches are not removed.

3.6 Handle licenses and MyQmatic

Intro 8 G2 functionality requires that you have both a MyQmatic SD card and a license. For more information about the available licenses, please refer to the data sheet for Intro 8 G2, found on Qmatic World.

The MyQmatic SD card, installed from factory in your Intro 8 G2, serves the following two purposes:

- Storage for queue agent's media folder.
- Functioning as a license holder card.

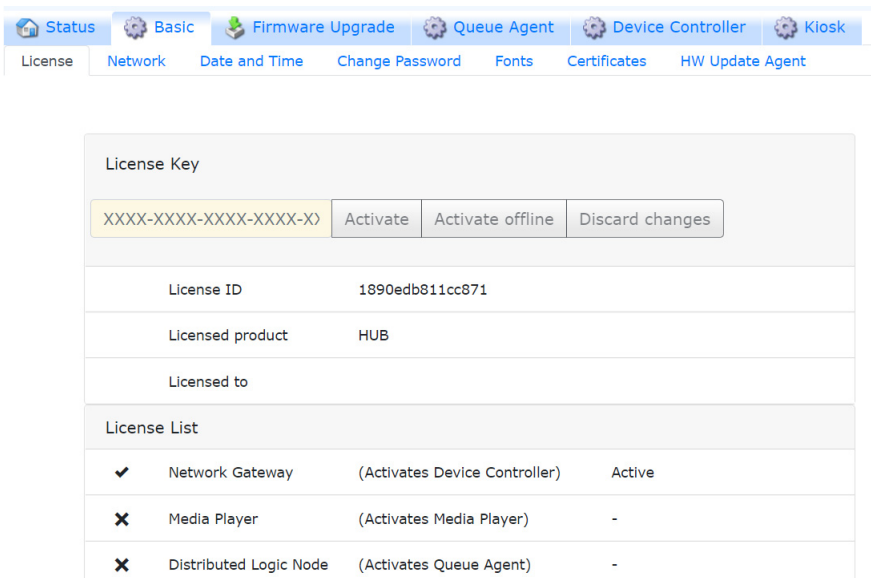
This makes it possible to move a MyQmatic SD card from one Intro 8 G2 to another. In this way, all data, including license, and storage in the queue agent media folder will be transferred with the card. More information about MyQmatic can be found on Qmatic World.

The MyQmatic SD card is factory installed and formatted and must never be removed or inserted while Intro 8 G2 is powered on. At power on, the system will ensure that the MyQmatic SD card contains the needed files and folders. If the card is faulty in some way, you will be notified about it.

3.6.1 Activate licenses

To activate a license, go to Basics > License.

Before a license is activated, the page looks like this:



ⓘ The Network Gateway license is always enabled, even before you enter your license key. However, you can enable/disable the device controller in the Device Controller tab.

It is possible to activate licenses online, or offline.

To activate your license online:

1. Make sure that Intro 8 G2 has access to the internet and that a **Primary DNS** is configured, before you start the procedure. This is needed for Intro 8 G2 to have access to the Qmatic license server.

   You can use Google's DNS, which is used by entering 8.8.8.8 or 8.8.4.4 in the DNS field. For more information, see "Network" on page 31.

2. Enter your license key in the yellow field and click **Activate**.

ⓘ When proxy is used, online license activation is not possible. Use offline activation instead.

To activate your license offline:

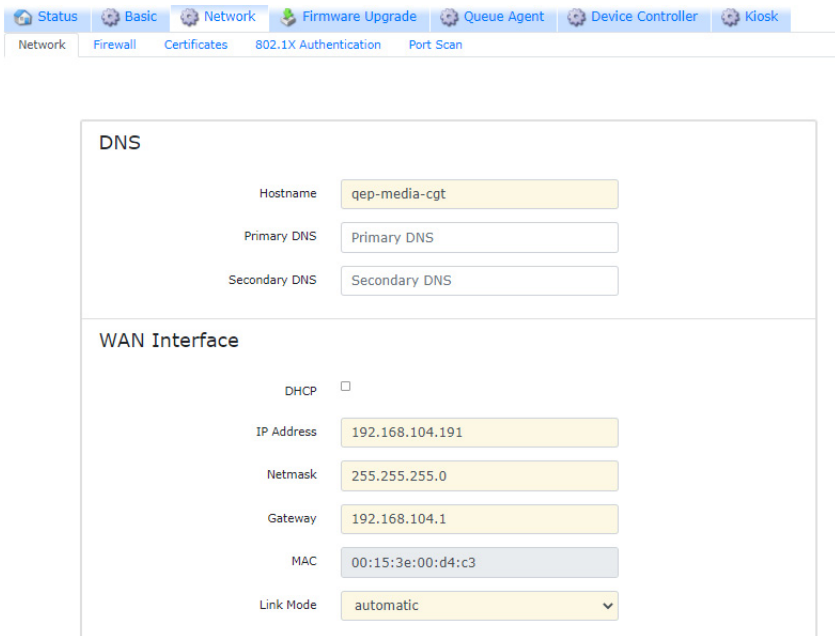
1. Enter your License Key.
2. Click **Activate offline**.
3. A file will be downloaded.
4. Go to Qmatic World and upload the file in the licensing tab.
5. When you get a license file (*.*sli*) in return, place that file in a suitable directory.
6. In the kiosk configuration pages, click **Select file** and upload the license file.

ⓘ This process must be completed within 14 days for the license to be activated correctly.

3.7 Configure network settings

ⓘ To see the current settings, you can print a test ticket by doing a long press on the paper feed button.

To configure the network settings for the kiosk, go to Network > Network



The following settings are available:

- DNS:
  - **Hostname**: if the Intro 8 G2 is used in dynamic host configuration (DHCP) mode, the hostname is reported to the DHCP server.
  - **Primary DNS**: Name server IP address (default: 8.8.4.4)
  - **Secondary DNS**: Name server IP address (default: none)

- WAN Interface:
  - **DHCP**: It is possible to obtain an IP address automatically (DHCP) by selecting this check box. It is however recommended to deselect this check box and use a static IP address instead.

    ⓘ The following settings are only applicable if you have unchecked the DHCP check box.
  - **IP Address**: the static IP address that the kiosk should use
  - **Netmask**: the netmask
  - **Gateway**: the IP address of the Gateway
  - **MAC**: interface MAC address (can not be changed)
  - **Link Mode** - Select a network speed
- Proxy:
  - Enable - Check the check box to enable the proxy
  - HTTP/HTTPS proxy - Host address for the HTTP/HTTPS proxy server
  - Port - Port for the HTTP/HTTPS proxy server

When done, click **Apply.**

3.8 Secure communication

It is highly recommended to configure Intro 8 G2 to use HTTPS / SSL / WSS for all communication. This is done by using digital certificates.

The first time you access the configuration pages, the browser will most likely say “Not secure” and show a security warning. This is because a default self-signed certificate is used. You can however proceed by selecting Advanced and then Continue.

3.8.1 Trusted certificates and server certificates

There are two types of certificates, trusted certificates and server certificates.

- **Trusted certificates** are for when Intro 8 G2 functions as a client, i.e. when Intro 8 G2 makes requests to for example the orch server. Trusted certificates are in most cases certificates from a trusted certificate authority (CA).

  If Orchestra is connected to the Internet and uses a certificate from a public CA, Intro 8 G2 will check and use this certificate. In this case there is no need to upload public certificates manually. If a private CA is used, you need to upload the same certificate that Orchestra uses or the certificate of the private CA.

- **Server certificates** are for when Intro 8 G2 functions as a server, i.e. when Intro 8 G2 receives requests from for example web browsers accessing the configuration pages. The uploaded file should be in pem format and should contain the private and public keys, and the certificate chain.

  ⓘ The certificate uploaded here is not used by the queue agent in the unit. Certificates for the queue agent are managed from Orchestra.

3.8.2 Upload certificates

To upload certificates:

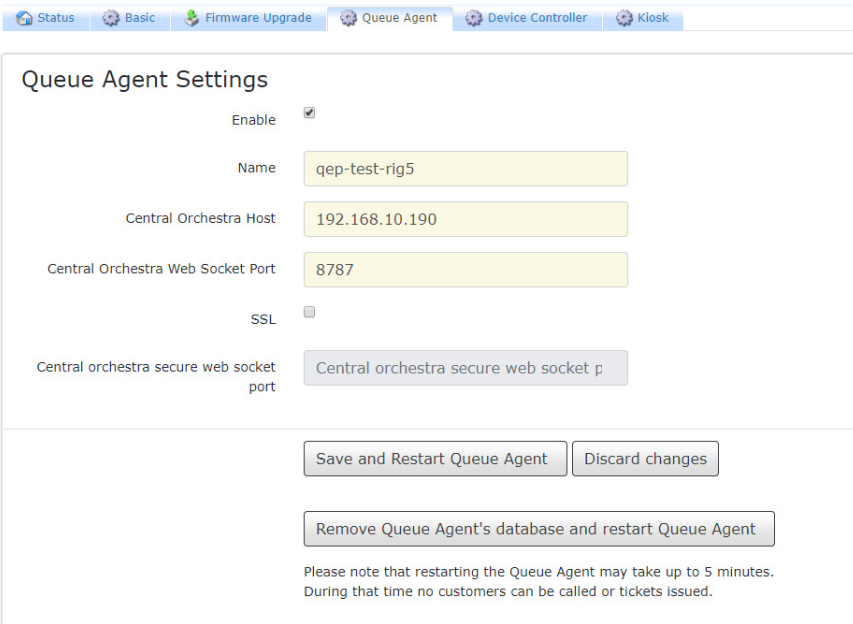
1. Go to Network > Certificates.
2. Click **Upload certificate.**

   ⓘ The certificate file format needs to be **.pem*.

3. After you have uploaded a certificate, you have to save and restart Intro 8 G2.

3.9 Manage the queue agent

To enable the queue agent, go to Queue Agent > **Enable.**



The following settings are available for the Queue Agent:

- **Name**: The name of the Queue Agent, must be unique. The name is set here and will appear in Orchestra in the list of queue agents.
- **Central Orchestra Host**: The IP address of the central Orchestra host.
- **Central Orchestra Web Socket Port**: The web socket port number used for communication with central Orchestra server.

When done, press **Save and restart Queue Agent**.

After enabling the queue agent and entering all settings, it should be verified that the queue agent is connected to Orchestra. Check that it is displayed in the list of queue agents in System Administration. Also, this queue agent has to be selected for the branch that should use it. This in done in Business Configuration > Branches.

3.9.1 Remove queue agent database

To remove the queue agent database, click **Remove Queue Agent's database and restart Queue Agent**.

ⓘ Please note that a restart of the queue agent may take up to 4-5 minutes, during which time no customers can be called.

3.10 Manage the device controller

To enable the device controller, go to Device Controller > **Enable.**

The following settings are available for the device controller:

- **Branch Prefix**: The branch prefix set on the branch in Orchestra.
- **Id**: The unique unit Id of the device controller, set in Orchestra.
- **Server**: The IP address of the queue agent this device controller should communicate with. Should be set to 127.0.0.1 (i.e. localhost) when the device controller should connect to the queue agent in the same kiosk.
- **Port**: The port number to use for communication with the queue agent.
- **Debug:** Check this box to enable debug logging to file.
- **SSL**: Check this check box to connect to the queue agent using a secure connection.

  ⓘ For this to work properly, the queue agent must be configured so that a port has been opened for web socket secure communication.

When you have entered all your settings, please click **Save and Restart Device Controller**.

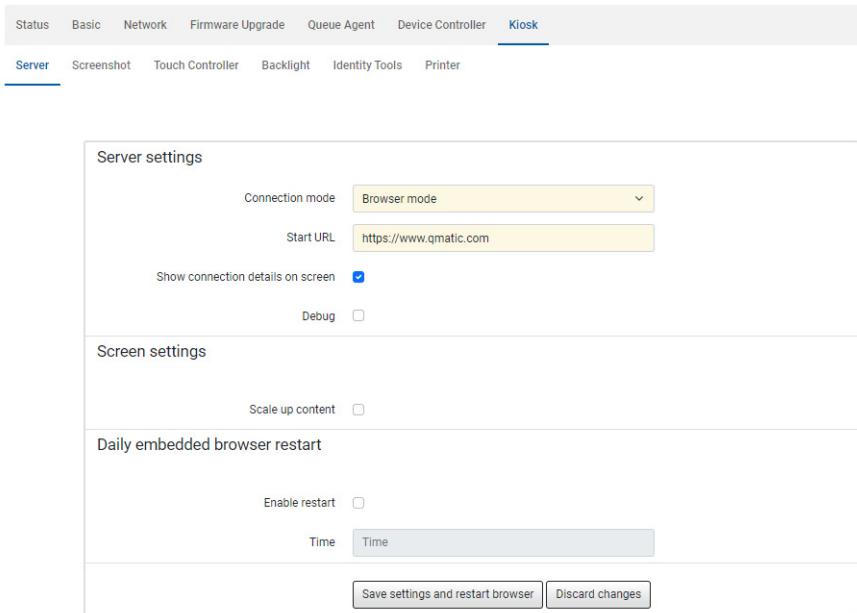
3.11 Configure the server settings

For the system to know which start page to show on the touch screen, you have to configure the server settings.

ⓘ If you use surfaces that were created for an older Intro kiosk, you need to check the **Scale up content** check box. This is because the resolution is higher in Intro 8 G2.

To configure server settings:

1. Go to Kiosk > Server
2. Select a **Connection mode**.

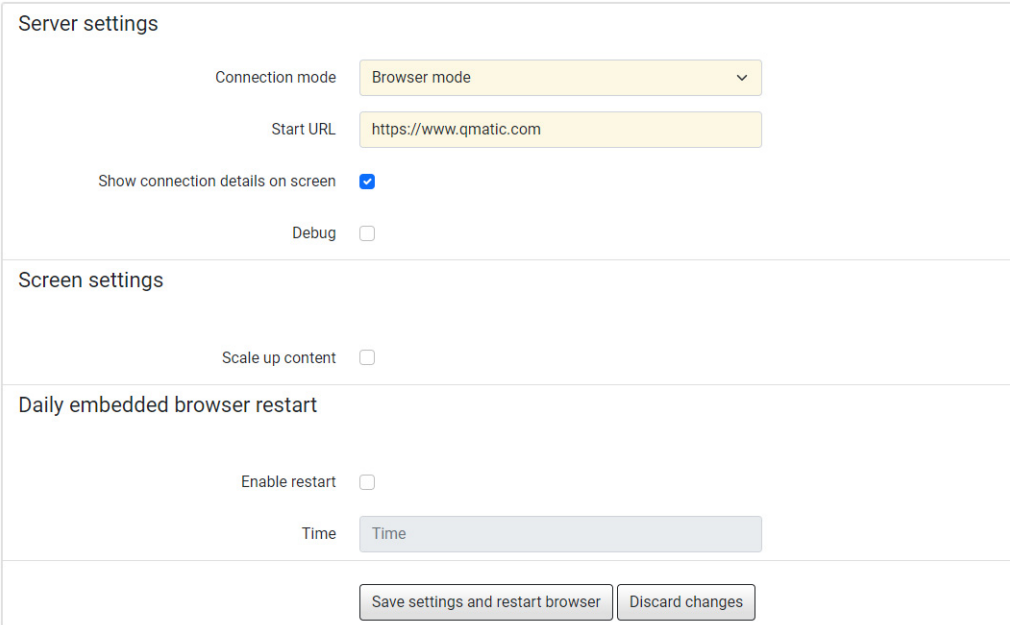


   The following connection modes are available:

   - Browser mode
   - Orchestra R5 or later
   - Orchestra R4
   - Solo/Q-Win

3. Enter the settings for that mode. The settings for each connection mode are described in more detail below.

3.11.1 Browser mode



For browser mode, the following settings are available:

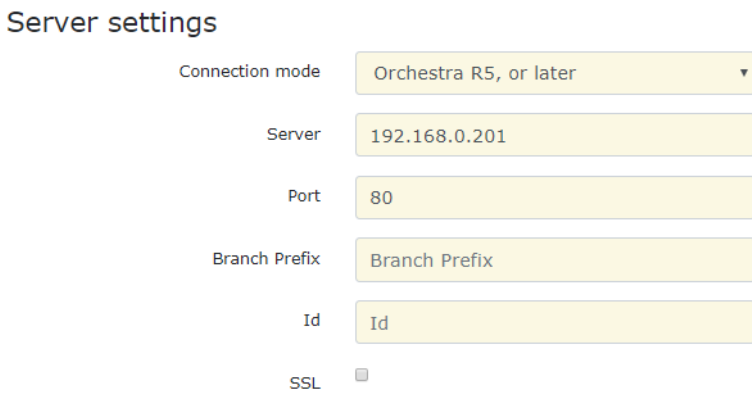
Server settings:

- **Start URL**: The complete URL of the start page to use.

  http://<ipaddress>:<port>/touchScreen?unitId=branchId:unitId
  Example: http://192.168.2.230:8080/touchScreen?unitId=CEN:Intro8

- **Show connection details on screen:** Check this box to show network information such as the current IP address and target URL on the startup screen.
- **Debug:** Check this box to enable logging from the JavaScript console and connection information.

3.11.2 Orchestra R5, and later



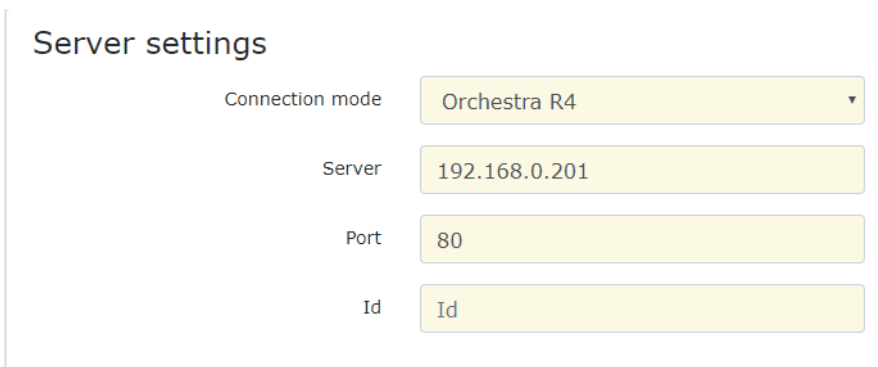
For Orchestra R5 and later, the following server settings are available:

- **Server**: IP address of the Queue Agent server.
- **Port**: The websocket port number to use for communication with the queue agent server.
- **Branch Prefix**: The branch prefix (configured in Orchestra), for example GBG.
- **Id**: Unit id of kiosk (configured in Orchestra in Business Configuration)

  ⓘ Note that the start URL used by the browser in Intro 8 G2 is fetched from the Orchestra server.

When done, click **Save settings and restart browser**.

3.11.3 Orchestra R4



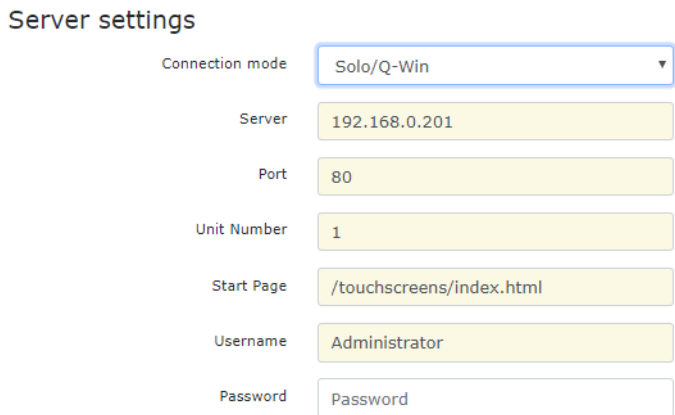
The following settings are available:

Server settings:

- **Server**: Server host name or IP address, default is localhost.
- **Port**: Server port number.
- **Id**: Unit id of device (configured in Orchestra).

When done, click **Save settings and restart browser**.

3.11.4 Solo/Q-Win



The following settings are available:

- **Server**: Server host name or IP address, default is localhost.
- **Port**: the port number to use for communication with the system server.
- **Unit Number**: The number used of the device in question, for example 1 as in “Printer 1”
- **Start Page.** The page on the server that Intro 8 G2 should load. Default is index.html.
- **Username**: Username to use for log in to Solo/Q-Win.
- **Password**: Password used to log in to Solo/Q-Win (optional).

4. Additional Software Configuration

Topics in this chapter

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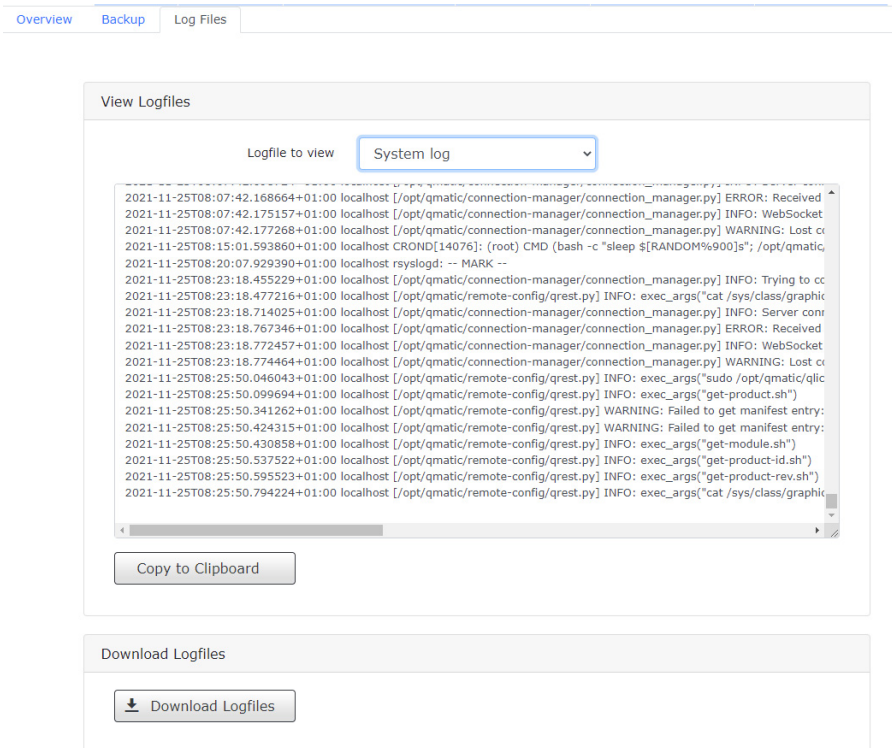
Configure backlight level.....47
Identity tools.....47
Configure LED flash and feed distance 48
Hide IP address from startup screen 48

4.1 View and download log file

To view or download log files, go to Status > Log Files



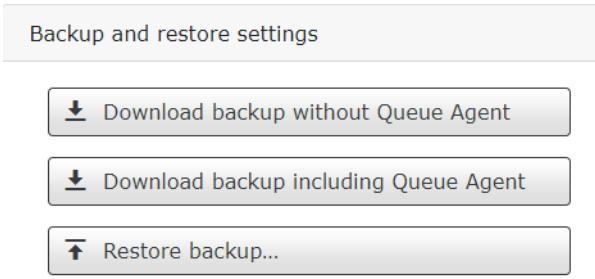
- To view a log file, select a log file in the dropdown. The following log files can be viewed:
  - System log
  - System log from last bootup
  - Device Controller
  - Browser
  - Agent Daemon
  - Queue Agent

  The last 1000 lines of the log files are displayed. If there are new log lines, they are fetched and appended every 10 seconds (does not apply to Last bootup log).
- If you want to copy the log, click **Copy to Clipboard**. It can then be pasted into any text editor.

- To download all log files, click **Download logfiles**. It may take a while before the download starts. The downloaded package also contains the configuration files and some system status output (active processes and emmc wear status).

4.2 Backup and restore settings

Go to Status > Backup and restore settings.



In this section, you can download a configuration to use as backup. This may be useful if you either are a support technician, or if you want to reuse the same configuration in many units.

To handle several units, follow these steps:

1. Add the wanted patch to one unit.
2. **Download the backup file** from the first unit, selecting one of the following download options:
   - Download backup **without Queue Agent** - contains all settings except for Queue Agent and Java binaries.
   - Download backup **including Queue Agent** - contains all settings including Queue Agent and Java binaries.

   After a while, a file named **qep_backup<date_time>.tgz** will be downloaded.
3. Restore the other units, using the backup file that was downloaded in step 2. This way you will get a good starting point for all the units.

To modify the backup file before restoring it, follow these steps:

ⓘ We recommend that you use a tool such as 7-zip for this procedure.

ⓘ Note that this is for Windows users.

1. Start by extracting the downloaded **tgz** backup file into its own folder.

2. Open the folder. Here, you should find a single file without extension. Right click on this file, and select **Extract here** from the 7-zip menu.

   The **data** and **opt** folders, as well as a **version.json** file should now have appeared. Delete the temp file you just extracted.

3. Do the wanted modifications.
4. Right click the folder and select **Add to archive** from the 7-zip menu.

   ⓘ Do not select the **.7z** or **.zip** options, because that will create an incompatible restore file. Instead, select **tar** from the archive format selector. No other compression details should need to be changed here.

5. When a **.**tar file has been created, you will need to repeat the process, by right clicking on the .tar file and selecting **Add to archive** from the 7-zip menu. This time, choose **.gzip** as the archive format and change the suggested file extension of the output file to **.tgz.**
6. After clicking **OK,** you should now have a restore file that you will be able to apply to your Intro 8 G2, as described below.
7. If you want to upload a backed up configuration to the unit, click **Restore backup**, select the wanted file and click **Upload** settings to upload it. This procedure may take a while, but the progress can be monitored in the GUI.

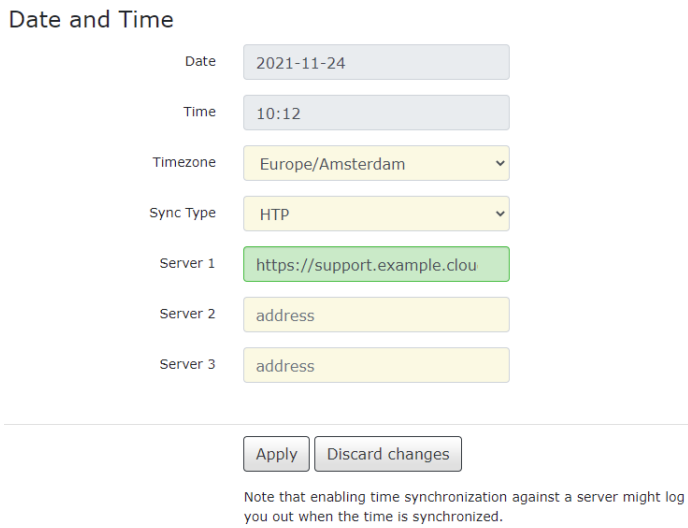
   ⓘ The file that you upload must have file extension .tgz.

8. When done, click **Apply** to save the settings.

4.3 Configure date and time

It is important to set the time and date, for the application to run correctly.

To configure the settings for date and time, go to Basic > Date and Time.



1. Start by selecting **Sync type**:
   - Manual
   - NTP (Network Time Protocol)
   - HTP (HTTP Time Protocol)

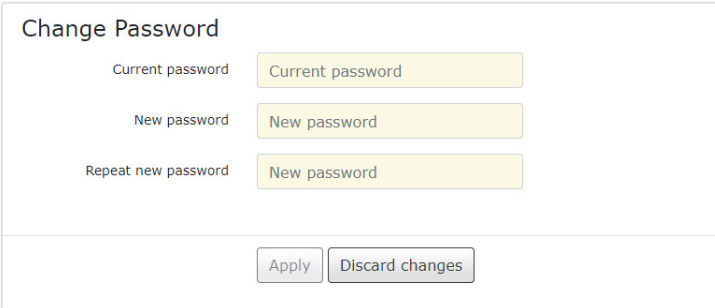
   If you select **NTP** or **HTP**, Intro 8 G2 will synchronize its clock with that of the specified servers. You can add up to 3 servers. Use server hostname or ip address. For example, use an NTP server provided by your IT department or use HTP against any available web server. We recommend that you use your Orchestra server that you connect your unit to.

   If you select **Manual**, manually enter the date and time.
2. Set a timezone.
3. When done, click **Apply** to save the settings. If you use NTP/HTP, it may take a while before the settings are applied. Time sync is updated continuously. When time is synchronized, you might be logged out.

4.4 Change password

To change password:

1. Go to Basic > Change Password



2. Enter the current password and then the new password twice.

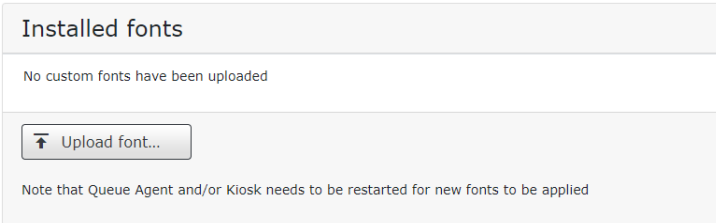
   ⓘ The password must contain 8-64 characters.

3. Click **Apply** to save.

4.5 Use specific fonts in tickets

If, for example, you want to use a specific font on your tickets, the Queue Agent requires that the font is installed in Intro 8 G2.

Only true type fonts (with file extension **.ttf**) can be uploaded.



To install a font:

1. Go to Basic > Fonts and click **Upload font**.
2. Choose a .ttf font file, click **Open** and then **Upload**.

   If you try to upload a font that already exists, or, for example, try to upload a font with a file name in upper case, when there is already one with a file name in lower case, you will be prompted about this.

3. When one or several fonts have been uploaded, you will need to manually restart the queue agent and/or kiosk. This can, for example, be done on the queue agent tab.

4.6 802.1X Authentication

802.1X is a standard for port-based network access control. You can enable network authentication for the WAN port so that the unit as a supplicant sends its credentials to an authentication server using the Extensible Authentication Protocol (EAP). Two EAP methods are supported:

- EAP-MD5 for simple authentication with username and password
- EAP-TLS for strong security using certificates

ⓘ Network authentication is not supported for the LAN port.

To configure 802.1X Authentication:

1. Go to Network > 802.1X Authentication
2. Check ‘Enable’.
3. Select EAP Type.
4. Depending on which EAP Type you select, enter the required setting and upload the required files.

   ⓘ Only .pem file type is accepted.

5. Click **Apply**. Please wait a few moments while the settings are processed and applied.

4.7 Scan ports

By scanning ports, you can check if the ports required to connect to Orchestra are open or closed.

To scan ports:

1. Go to Network > Port Scan
2. Enter the following settings:
   - Target Host: IP address or hostname of the Orchestra agent.
   - Ports: The ports you want to scan. The field is pre-filled with the standard ports, but you can remove or add ports.

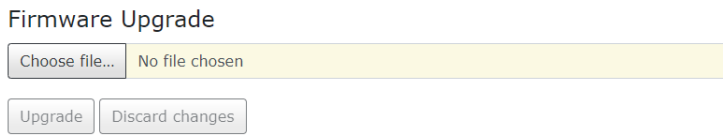
4.8 Upgrade firmware

The firmware of Intro 8 G2 can be upgraded in two different ways:

a) You can upload a file in Firmware Upgrade tab (see below).

b) You can use HW Update Agent, see “4.8.1 Enable HW Update Agent” on page 45.

To upgrade the firmware using the Firmware Upgrade tab:



1. Click **Choose file** and choose the wanted firmware file (has to be a .tar file).
2. Click **Upgrade** to start the upgrade process.
3. When all stages have reached 100%, the upgrade is complete. The upgrade process normally takes 5-10 minutes.

   The progress can be monitored in the GUI.

(!) All configuration of the unit is kept and still in use after the upgrade.

(!) A power outage during upgrade is recoverable, i.e. the next reboot should restart the upgrade. However, if possible, keep your browser open during the whole upgrade process.

4.8.1 Enable HW Update Agent

HW Update Agent is a tool for distributing firmware upgrade and other software files to hardware units in an efficient way.

(!) Note that HW Update Agent has not been released yet.

To enable HW Update Agent, follow these steps:

1. Go to Basic > HW Update Agent
2. Select the **Enable** check box.
3. Enter the following parameters:
   - Name of the hardware unit
   - Host
   - Port
4. Click **Apply**

4.9 Enable daily system reboot

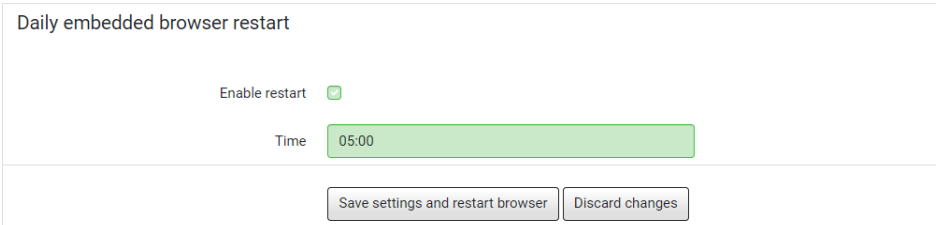
In some cases, it is recommended to regularly restart the system. To enable automatic daily reboot of the system, follow these steps:

1. Go to Basic > Reboot and select **Enable**.
2. Add a time in format HH:MM for when the daily reboot should take place.

4.10 Enable daily browser restart

In some cases, it is recommended to regularly restart the embedded browser. To enable automatic daily restart, follow these steps:

1. Go to Kiosk > Server.



2. Under Daily embedded browser restart, check the **Enable restart** check box
3. Enter a time for when you want the restart to take place (HH:MM).
4. Click **Save settings and restart browser.**

The browser will restart at the set time every day until you disable automatic restart.

4.11 View and download screenshot

To show what is displayed on the media player at the moment, go to Kiosk > Server > Screenshot.

The screenshot auto refreshes every 5 seconds.

You can also click the button to download the current screenshot.

4.12 Configure the touch sound volume

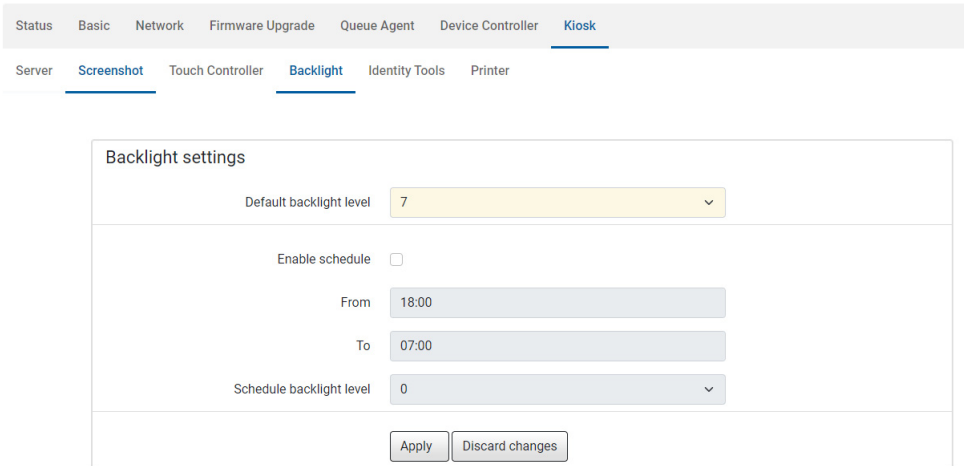
To configure the volume of the sound generated when touching the screen

1. Go to Kiosk > Touch Controller.
2. Set the volume to your liking.
3. Click **Apply**.

4.13 Configure backlight level

To configure the backlight level, go to Kiosk > Backlight. In this tab, you can set a backlight level and also schedule another backlight level, for example if you want to lower the backlight during non-business hours.

The default backlight level is 7.



The following settings are available:

- Default backlight level - Set the backlight level during normal operation mode.
- Enable schedule - Select if you want another backlight level during the scheduled time period. Use this to set the screen in sleep mode during non-business hours.

To set up a backlight schedule:

1. Check the **Enable schedule** checkbox.
2. Enter when the schedule starts and ends in the **From** and **To** fields.
3. Set a **Schedule backlight level**, i.e., what backlight level the screen should use when the schedule is active. Set to 0 if you want the screen to appear black. Note that the touch screen is still activated.

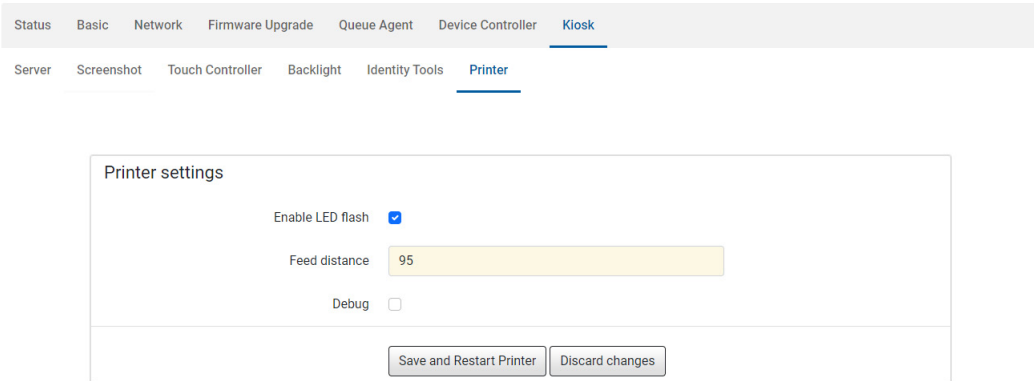
4.14 Identity tools

To set which card readers you are using, go to Kiosk > Identity Tools.

Click **Save and Restart/Stop Identity Tools** when done.

4.15 Configure LED flash and feed distance

To configure the LED flash and feed distance, go to Kiosk > Printer.



The following settings are available:

- **Enable LED flash**: Check this check box to make the blue LED flash on lost system connection.
- **Feed distance**: Enter the distance that the ticket should be fed out after it has been printed. Values between 50 and 600 are valid. A larger value makes the ticket feed out more. Standard for Intro 8 is 95.
- **Debug**: Enable logging from the printer application.

When done, click **Save and Restart Printer**.

4.16 Hide IP address from startup screen

In some cases you may want to hide information such as IP address and URLs from the startup screen:

- Go Kiosk Server and uncheck the **Show connection details on screen** check box.

When this setting is off, only time, version and connections state is shown.

5. Configuration in Touch Screen

Topics in this chapter

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Log in to internal configuration pages 50
Manage network settings 51
Configure server settings 52
Scale up screen content 54
Configure date and time 54
Change password 55

5.1 Introduction

From Intro 8 G2 touch screen, you can access the internal configuration pages where you can do some basic configuration.

The internal configuration pages are split into the following tabs, described below:

- Network
- Server
- Hardware
- Date and time
- Change Password

5.2 Log in to internal configuration pages

You can reach the internal configuration pages in two ways:

a) When the kiosk is powered on, the login page below is displayed for a short while.

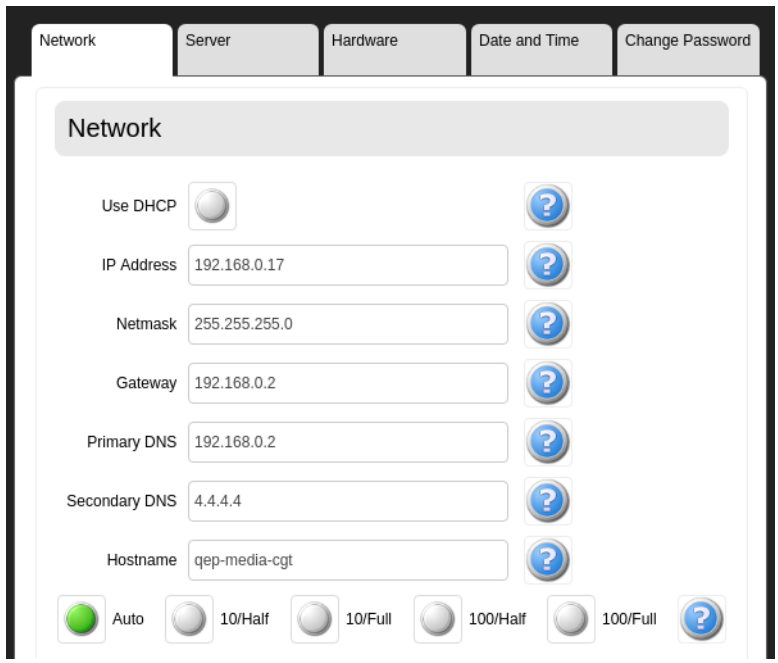
b) You can also reach this page during normal operation by pressing the rescue button.

- To log in, select **Login** and enter the password using the on-screen keyboard. Default password is *ulan*.

  ⓘ After a while, if you don't select anything, the start page will load and normal operation will start. You can also press **Connect** to start normal operation straightaway.

5.3 Manage network settings

In the Network tab, you can manage network settings.



The following settings are available:

- **Use DHCP***:* If you want to use a dynamic IP-address, enable this option. When this option is enabled, the fields *IP Address*, *Netmask*, and *Gateway* are greyed out and thus not available.
- ⓘ A DHCP server must be available in the network, to be able to use this option.
- **IP Address**: The static IP address of Intro 8 Generation 2.

  Example: If this unit is connected to a local network, this address could look something like: *192.168.1.234*.
- **Netmask**: The netmask for the unit.

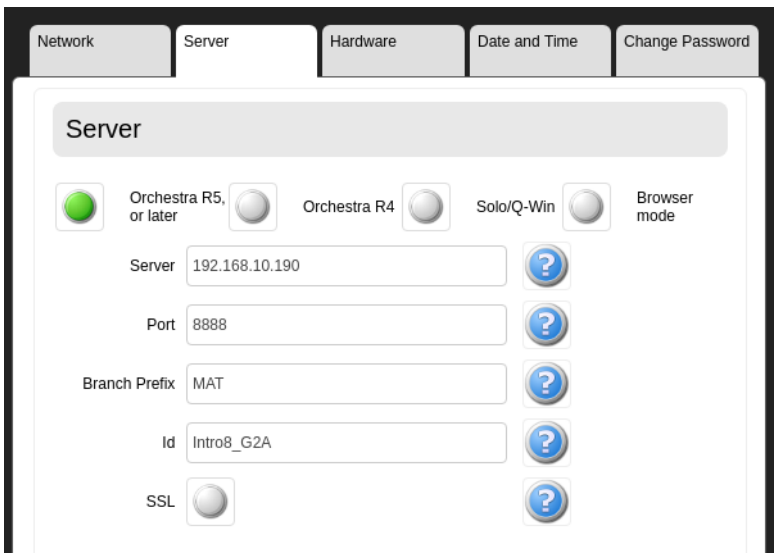
  Example: If this unit is connected to a local network, this address could look something like: *255.255.255.0*.
- **Gateway**: The gateway for the unit. Example: If this unit is connected to a local network and the IP-address is *192.168.1.234*, the gateway could look something like: *192.168.1.1*.

- **Primary DNS** - This is the name server (DNS) to use when resolving names into static IP addresses.
- **Secondary DNS** - enter a name server IP address.
- **Hostname**: This is the unit's hostname. The hostname is reported to the DHCP server, if DHCP mode is selected, above. A valid name has 1-63 characters and includes [a-z], [0-9], or '-'.
- **Auto / 10/Half / 10/Full** etc: Select a network speed.

When done, select **Save**.

5.4 Configure server settings

In the Server tab, you configure the server settings.



First, select in which mode to run the printer:

- Orchestra R5, or later
- Orchestra R4
- Solo/Q-Win
- Browser mode

The settings for the different modes are described below.

5.4.1 Orchestra R5, or later

For this mode, the following settings are available:

- **Server**: Server host name or IP address of the queue agent, default is *localhost*.

  ⓘ Note that the start URL used by the browser in Intro 8 Generation 2 is fetched from the Orchestra server.

- **Port**: The Websocket port number to use for communication with the queue agent server.
- **Branch Prefix**: The Branch Prefix (configured in Orchestra), for example GBG, or AB1.
- **Id**: Unit id of device (configured in Orchestra)

5.4.2 Orchestra R4

For this mode, the following settings are available:

- **Server**: Server host name or IP address of the queue agent, default is *localhost*.
- **Port**: Server port number.
- **Id**: Unit id of device (configured in Orchestra)

5.4.3 Solo/Q-win

For this mode, the following settings are available:

- **Server***:* Server host name or IP address of the queue agent, default is *localhost*.
- **Port**: the port number to use for communication with the system server
- **Unit Number**: The number used of the device in question, for example 1 as in “Printer 1”
- **Start Page**: The page on the server that Intro 8 G2 should load. default is *index.html*.
- **Username**: Username to use for log in to Solo/Q-Win.
- **Password**: Password (optional) used to log in to Solo/Q-Win.

5.4.4 Browser mode

For this mode, the following settings are available:

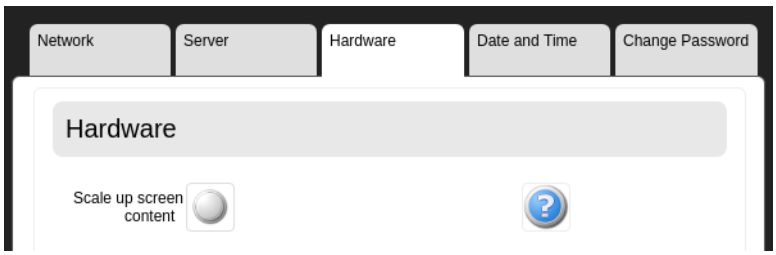
- **Start URL**: The complete URL of the start page to use

  Example: http://192.168.2.230:8080/touchScreen?unitId=CEN:Intro17

5.5 Scale up screen content

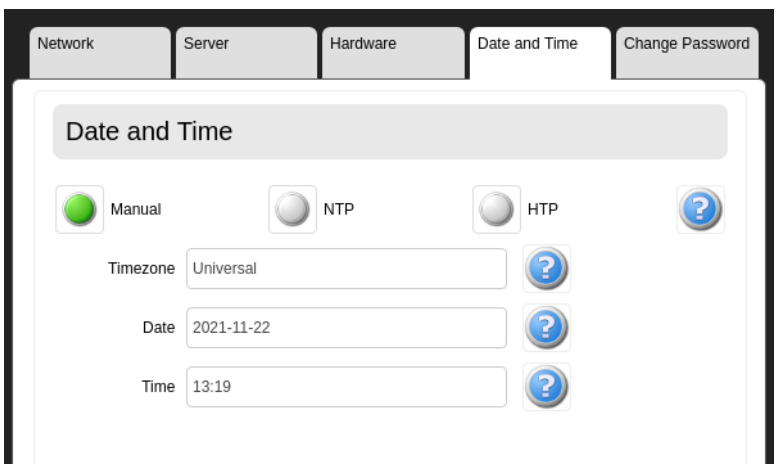
If you use a surface created for an earlier Intro 8, you need to scale up the content. This is due to the resolution being higher in Intro 8 G2.

- To scale up content, go to the hardware tab and select the Scale up screen content checkbox.



5.6 Configure date and time

To configure date and time, go to the Date and Time tab.



Select Manual, NTP (Network Time Protocol) or HTP (Http Time Protocol). If NTP or HTP is enabled, Intro 8 G2 will synchronize its clock with the specified server(s). If **Manual** is selected, it is possible to manually set the date and time.

Enter the wanted **Timezone**. When using the unit with Orchestra R5 or later, this value will automatically be set from the Server settings.

Settings when **Manual** is selected:

- **Date**: Valid format is YYYY-MM-DD.

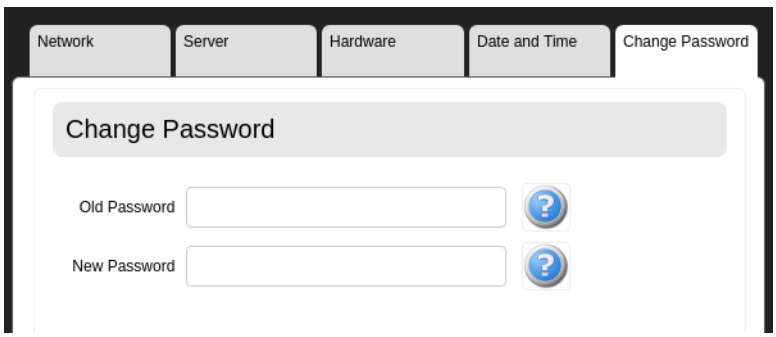
- **Time**: Valid format is HH:MM.

Settings when NTP or HTP is enabled:

- **Server 1-3**: IP address of the server that shall be used if NTP or HTP is enabled.

5.7 Change password

To change password, go to the Change Password tab.



- Enter the old password and the new password, and click **Save**.

6. Troubleshooting

Topics in this chapter

Troubleshooting 58

6.1 Troubleshooting

Table 1: Troubleshooting guide

Condition	Possible cause
No picture on the screen.	No power No connection with system server: • Network not working. • Wrong network parameters (IP address for example) in internal computer and/or in server. • System server not running.
The blue LED is not on.	No power.
The blue LED is blinking.	No connection with system server: • Network not working. • Wrong IP address in printer and/or in server. • System server not running.
No ticket when button pressed and the blue LED is on.	No tickets in print unit.
Ticket does not come out fully.	Ticket jam: see “Clear a paper jam” in the Service & Maintenance Guide. Paper dust in printer, see “Clean the print unit” in the Service & Maintenance Guide. Incorrect type of tickets
Printing over ticket edge.	Incorrect type of tickets.
All tickets are blank.	Ticket roll inserted backwards.
Low print quality.	Incorrect type of tickets. Paper dust in printer: clean the print head.

7. Hardware Parts and Technical Specification

Topics in this chapter

The kiosk, accessories and stands.....60
Technical specification.....64

7.1 The kiosk, accessories and stands

Table 1: Intro 8 Kiosk and accessories

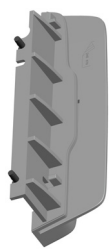
Name	Art. No.	Description	Package contains
Intro 8 US/ Eur	10213053	Kiosk Intro 8 G2. Power supply PS 24 V, 4 A: art no 10100938, Meanwell GST90A24 Ticket roll. Printed Quick Guide (inside kiosk). Keys.	1 of each.
Ticket roll, black	10900085	Ticket roll for Intro kiosks. The paper has a special perforation (patent pending) that makes the tickets easy to tear off.	
Magnetic Card Reader Swipe	11340120		1 piece w/ mounting instructions.
Column upper 1100.	10213202	Tube 1100 mm. Cover strip. For routing cables from a ceiling.	1 piece.
Extension Bracket Upper Column.	10213225	Bracket used to attach two columns to each other, to increase the length of the column.	
Extension cable.	11040316	Power extension cable, 3.5 m. To be used with Upper column 1100.	1 piece.

Table 1: Intro 8 Kiosk and accessories

Name	Art. No.	Description	Package contains
Signboard.	10930401	Signboard for upper column tubes.	1

Table 2: Printer stands

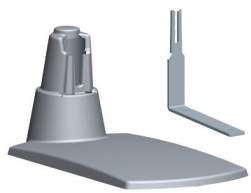
Name	Art. No.	Description	Package contains
Table stand.	10213204		Table stand X 1, fastening bracket X 1, rubber feet X 4, double adhesive tape, nut plate kit X 1.
Wall bracket.	10213205		Wall bracket X 3, nut plate kit X 3.

Table 2: Printer stands (Continued)

Name	Art. No.	Description	Package contains
Floor pedestal P3310, single pack	10213209		Foot X 1, tube X 1, cover strip X 1, end cap X 1, nut plate kit X 2
Floor pedestal P3310, 2-pack	10213206		Foot X 2, tube X 2, cover strip X 2, end cap X 2, nut plate kit X 4
Stabiliza-tion kit	14111369	Stabilization kit for ped-estal P33310	One kit of 6 pieces.
Pedestal P3311.	10213210		Profile w/ hardware X 1. Foot w/ lid and hardware X 1. Wall bracket w/ hardware X 1. Top lid w/ plugs and hardware X 1. Plastic strip X 3.

Table 2: Printer stands (Continued)

Name	Art. No.	Description	Package contains
Pedestal P3311 Extension.	10213220		Profile w/ hardware X 1. Plastic strip X 3.
Pedestal P3311 Tube Bracket.	10213230		Bracket X 1. Lid X 1. Set of screws X 1.

7.2 Technical specification

Table 3: Technical specification

Product name	Intro 8 G2
Server system	Qmatic Orchestra
Size	165 x 185 x 288 mm / 6.5 x 7.3 x 11.3 in (W x H x D).
Weight	2,02 kg / 4,45 lb (including ticket roll)
Printing method	Thermal printing. Printing speed max: 140 mm/s, 8 dots/mm (203 dpi).
Paper type	Thermal sensitive. To secure long-term, trouble-free use of the printer, the Qmatic ticket rolls are specifically manufactured for Qmatic printers.
Power requirement	24 V DC, 4 A. An external power supply, 100-240 V AC, 50-60 Hz, is included: art no 10100938, Meanwell GST90A24
Power consumption	Stand by: Approx 25 W Printing: W_{max} = 125 W, T_{max} = 1 sec.
Back-up battery	CR2032, 3V, lithium anode. (!) **CAUTION!** Risk of explosion if battery is replaced by an incorrect type. Dispose used batteries according to local regulations.
Temperature	Operating: 10-40 ºC, storage: 0-40 ºC
Relative humidity	Operating: 15-75%, storage: 10-90%.
Network transmission speed	Supported: 10/100 MBit Ethernet.
Connectors/ cables	RJ45 - CAT5 - Shielded-FTP (S/FTP) or better. The cable must be flexible and withstand bending.
Display	Touch capacitive, 104,4 X 170 mm. Resolution: 1024 x 600 pixels. Contrast ratio: 600:1, luminance: 400 cd/m2. Viewing angles: left, right, above, below: 80º.
Expected life of thermal print head	The thermal print head will print more than 1.65 million standard tickets (60 mm) with a print rate of 12.5%.

Table 3: Technical specification

Safety and other regulations	CE, RoHS2, WEEE.

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