

DTG DTF FOOD UV PRINTERS AND EQUIPMENT



FLATBED CONFECTIONARY PRINTER



USER MANUAL

Thank you for your choice!

With any questions please contact us https://mprint-dtg.com

Cautions

It is prohibited to use the device in dusty, humid, explosive or fire hazardous areas, or with faulty electrical wiring.

It is prohibited to connect the device to a power supply network with parameters different from the specifications.

The device must be connected to a network with grounding and stable parameters specified in the specification. Use a stabilizer and normalizer for networks with poor performance.

Do not disassemble, hit or overturn the device. Repairs should only be carried out by qualified personnel.

It is prohibited to insert or pour various objects and liquids not specified in this manual.

Do not move the table manually or touch it while moving or when the device is turned on.

The device is equipped with a laser emitter in the visible spectrum (red). Do not look at the source or place any objects that could reflect the beam. Keep children away from the device during operation.

Not for children under 12 years of age.

Specification

- Print area dimensions: 21x30 cm
- Maximum product height for printing: 160 mm
- Number of colors: 4 colors (CMYK)
- Ink pumping: manual, automatic
- Device maintenance: not required
- Dimensions of the workplace (WxD): 45x60 cm
- Power: 230V 50/60Hz 50W

Contents of delivery

- Power cord with grounding, 1 pc.
- USB cable, 1 pc.
- Print heads, 2 pcs.
- Operating instructions, 1 piece

Description

MPrint FoodBox is an automatic digital flatbed printing device that prints directly on the product by applying liquid edible ink to the top surface.

The device is ready for printing with edible ink on various confectionery products: cookies, gingerbread, cakes, pancakes, chocolate, edible paper, etc.

The main requirement for the product is a flat top surface. In this case, a difference in height (unevenness) of up to 5-7mm is allowed.

The printer is equipped with a laser level and can automatically adjust the table height to obtain the highest quality printed image. Also, using a laser level, protection against damage to the printer is implemented.

The device consists of the following main parts:

- 1. Power switch
- 2. Control panel
- 3. Movable table
- 4. Laser level
- 5. Food ink filler necks
- 6. Waste ink container



In niche 6 there is a container for waste ink, as well as a chip counter for the amount of waste ink. This chip is pulled out towards itself.

Do not touch the laser level. This may disrupt its settings and the device will not be able to work correctly.

To carry the device, do not grasp the movable table or platform! Handle only the bottom of the device, or the front and back corners of the portal.



The printer control panel has 6 buttons:

- 1. Power
- 2. OK
- 3. Cancel
- 4. Clean
- 5. Load
- Start/Stop

And also 3 light indicators:

- Power (green)
- 2. OK (red)
- 3. Status (orange or red)

First start

After unpacking the device, make sure that the case and components are intact. There should be no visible damage.

The device must be installed on a flat, horizontal surface. In this case, the device must be stable and must not wobble or sag.

Gently, slowly and without force, move the movable table back and forth. Make sure that the table can move freely and that there is no damage during transportation.

Make sure the waste ink bottle is in place and the tube is facing into it.

Set the power switch to "0" - Off. Connect the power cord to the back of the device. Turn the power switch to position "1" - On.

After turning on the power, the device will begin to initialize the moving table, and the table will begin to move towards the rear end point and then forward. In this case, the "Status" indicator light will begin to flash approximately 10 times per second.

During the initialization of the moving table, there may be objects on it, so when the table moves backward, if the laser level is crossed by something, the table will automatically begin to lower so that the object on the table is guaranteed to fit in the portal of the device. Moreover, if an object on the table is higher than the maximum height allowed for the device, then the table will lower to the lowest point and initialization will be interrupted, since there is a tall object on the table. If there are no objects on the table when you turn it on, but the device lowers the table, then you should refer to the troubleshooting section of the guide.

Upon completion of initialization of the mobile device, a sound signal will sound and the "Status" indicator will go out.

After this, you need to press the Power button. This will turn on the printing part of the device. The initialization of the carriage and other things will begin. Since the print heads are supplied separately, they are not installed in the carriage. Therefore, the carriage will move to the middle and the OK indicator will flash 5 times. This is a message that the printheads are missing or not recognized.

The device comes with 2 heads - for color and black. They must be unpacked and the protective film removed from the bottom. Open the cover on the carriage and install the heads into the carriage, close the cover, press the 2 blue latches. After that, click the "OK" button on the device panel. The heads will be recognized and the green "Power" indicator will stop blinking and remain on.

Now you need to refill the ink tanks with edible ink. To do this, you need to open the filler necks and fill in ink according to the color of the cap. There are windows on the front of the device for monitoring the ink levels in the containers. These boxes have minimum and maximum level labels.

Fill ink to the maximum mark. During operation, make sure that the ink is always in the containers, that is, the level should be between the minimum and maximum marks. If the ink runs out and does not flow to the print head, it will fail and will need to be replaced.

After pouring ink into the containers, they must be closed with lids, and only then open the valve.

Now the device is ready to fill the continuous ink supply system (CISS). To do this, make sure that only the green "Power" indicator is constantly on and the carriage is in the extreme right position, motionless.

On the control panel, press and hold the "Clean" button. This will sound a beep and turn on the pump, which sucks ink from the printheads. When you hold down the "Clean" button, you will be able to watch how the ink moves through the tubes from the containers into the carriage.

We recommend holding the "Clean" button for 20-30 seconds, then releasing it and repeating after 10-20 seconds. In this mode, while the pump is not running, there is no risk of damaging the print heads.

Pumping must be continued until a constant flow of ink flows into the waste ink container. This indicates that the ink from the reservoirs has filled the tubes, filled the internal reservoir in the print head and passed through it.

This completes the preparation for the first printing. You must install the required software on your computer (Setting up your computer section).

Turning on and off

To turn on the device, you must connect the power cord and turn the power switch to position "1".

After initialization, if the "Power" indicator does not light or blink, then press the "Power" button.

When initialized, the movable table always starts moving backwards, if this does not happen or you hear strange sounds, then turn off the power and refer to the troubleshooting section of the manual.

When moving backwards, always use a laser level

After finishing working with the device, press the "Power" button, wait until the "Power" indicator goes out and then turn off the power switch to position "0".

If, after turning on the "Power" button, the "OK" indicator blinks, then refer to the troubleshooting section of the guide.

Operating

To operate, the device must be filled with ink, the power cord and USB cable must be connected, and the software must be installed on the computer.

After turning on the device, the movable table is in the middle position - parking. Press the "Load" button to move the table to the loading position or again to move it back to the parking position.

When the table is in loading position, place a sheet of cling paper on the table and lay out the items to be printed. Please note that the sheet of paper should not slide freely on the table to avoid shifting during printing and subsequent defects.

After placing the products on the movable table, press the "Start/Stop" button. A beep will sound, the "Status" indicator will blink, and the table will begin to move first up and then back, scanning the level of the top point of the product, lowering it as necessary. If you need to interrupt the operation at this point, press the Start/Stop button. The table will stop. To move to the loading position, press the "Load" button.

When the table is fully retracted back to the starting position, an audible signal will sound and the "Status" indicator is constantly on. To cancel, press "Start/Stop".

The printer is ready to print. Send the image from your computer for printing. Printing will begin, a beep will sound and the Status indicator will flash slowly. When printing, the table will move synchronously with the printed image. When printing is complete, the table will fully extend to the

loading position, a beep will sound and the "Status" indicator will go out. Printing is complete.

If you need to cancel it during printing, click the "Cancel" button.

A situation may arise where an image was sent for printing from a computer, but the device was not ready for printing. For example, when printing multiple copies of an image. In this case, the "OK" indicator will flash 2 times. In this case, if the device is already ready for printing, that is, the products are on the table, the "Start/Stop" button has been pressed, the table is in the starting position, and the "Status" indicator is on, then press the "OK" button. This will start the printing process.

To ensure that the image appears evenly on the product, two options are recommended. The first option is to use a grid laid out on a moving table and use templates in programs with the same grid. This option is fast, but may not be accurate enough. The second option is to put a blank sheet of paper and print on it. You can print the entire picture or just the outline of the image. Then put the items to be printed on this sheet. This method is the simplest and most accurate.

Computer settings

In order to use the device for printing, you must have a computer and the device driver installed on it. The device uses Canon printheads, so the appropriate drivers must be installed.

The procedure for installing and configuring the driver for Windows users is described below. Apple computer users use the standard print driver included in the operating system.

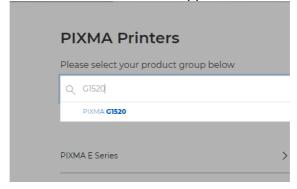
Before starting this section, the device must be turned on and only the "Power" indicator is lit. After that, download the driver from the official Canon website: canon-europe.com. On the website you need to select Support in the main menu, select PIXMA:



Select your pr

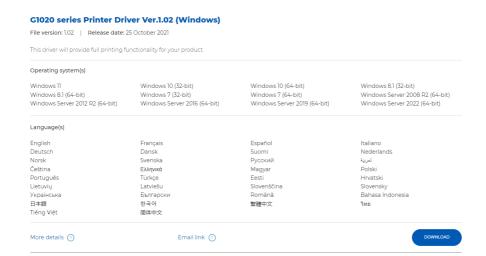


In the window that opens, enter the model "G1520" and select the model from the list that appears:

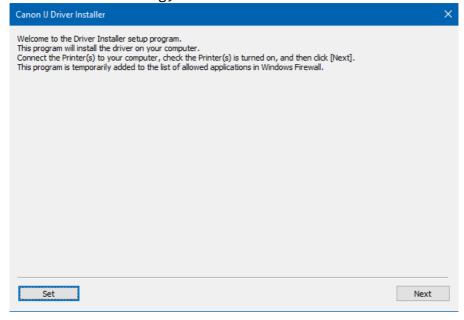


A page with the selected model will open. Go to the *Drivers* tab, specify the operating system and preferred driver language.

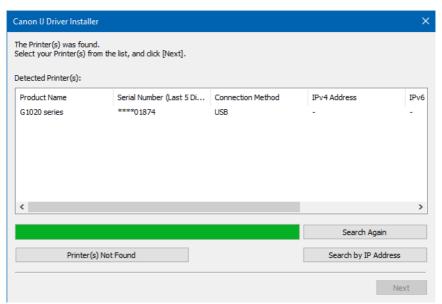
Below on the page click the Download button:



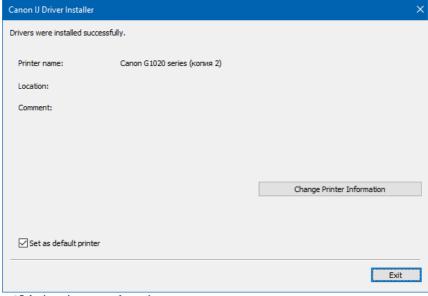
After downloading, start the installation:



Click the "Next" button and select the region. We read the license agreement and accept it. After this, the search for connected printers will begin:



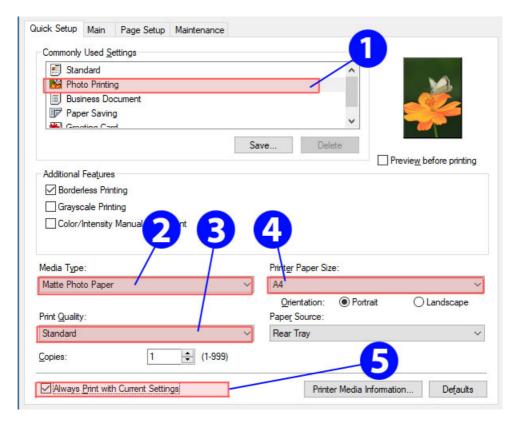
Select the printer from the list and click the "Next" button. The driver is being installed. When the installation is complete, a window will appear:



Click the «Exit» button.

Once the installation is complete, the driver and printer will be ready, but additional settings will be required for high-quality printing. To do this, go to the driver settings:

- 1. Press Win+R
- 2. Enter "control printers"
- 3. In the window that opens, find "Canon G1020 Series" and right-click
- 4. Select "Print Settings"



The settings window will appear. In this window you need to set the following:

- Select "Commonly used options" "Photo printing"
- 2. Set "Media Type" to "Photo Paper" "Matte Photo Paper".

- 3. Select "Print Quality" "High" or "Standard". "High" quality takes longer to print and is not always required when working. The choice depends on the surface to be printed and the required image detail. In general, the "Standard" quality is quite sufficient for work.
- 4. Select "Paper size" A4.
- 5. Set "Always print with current settings".

Click OK. Driver setup is complete and you can start printing.

Maintenance

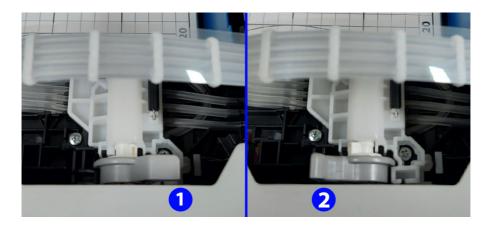
Keep the device clean and dry. After use, wipe the movable table with a soft, damp cloth. If not used for a long time, unplug the power cord.

There should be no extraneous sounds or noises when the device is operating. If they appear, contact support.

During operation, the printer performs periodic automatic cleaning. During this process, the pump turns on and pumps ink through the print heads. The pump design allows for pumping ink separately – color and black. The pumped-out ink is waste and is discharged into a special container. Therefore, you should monitor the level of this ink and empty the container periodically.

This device uses Canon print heads, which use thermal droplet technology, so the presence of liquid inside is a prerequisite for operation. If it is missing, the printing elements will overheat and fail. Because of this, the device should always be refilled with ink if used.

To fill the device with CISS, it must be plugged in and the power switch must be in position "1". In this case, the device must be in standby mode. If the green "Power" indicator is on, press the "Power" button and wait until the indicator goes off. Now close the ink supply valve, position "2":



Now open the ink tanks and fill in the ink. After refueling, you need to close the lids and switch the valve to position "1".

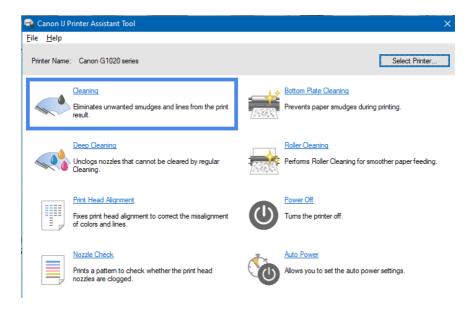
Press the "Clean" button and hold it for 20-30 seconds. You can watch how the ink fills the tubes and enters the carriage. We recommend holding the button for no more than 30 seconds. After this, you need to pause for 10-20 seconds and then press the "Clean" button again. Repeat these operations until a constant flow of ink flows into the waste ink container. System filling is complete.

During operation, the bottom of the print heads may become dirty and the ink may dry out on the outside. Because of this, print quality may deteriorate, especially noticeable on small details or on solid colors - the design will have stripes. To fix this, press the Clean button and hold it for 3-5 seconds. Please note that the carriage at this moment should be in the extreme right position.

This operation will turn on the pump and pump the ink a little, which can clean the heads.

If this procedure did not help and the drawings are still defective, then you need to start cleaning through the device driver on the "Maintenance and Settings" tab, click "Cleaning". After cleaning, the driver will offer to print a nozzle test. Lay out a clean white A4 sheet and print a sample. Follow the driver instructions.

Avoid frequent print head cleaning through the driver, as this will increase the printer's internal counters and will require replacement of the waste ink chip. The chip is a consumable item and can be easily replaced independently, but will require additional financial expenses. We recommend using the "Clean" button and printing test images, since during printing it is possible to clear clogged channels in the heads.



If you need to transport the device, turn off the ink supply valve, empty the waste ink bottle, and make sure the ink bottles are closed.

If you need to send the device by transport companies, then you must additionally drain the ink from the containers so that when the device is turned over, ink does not spill.

The movable table cannot be moved by hand when the device is turned on, but it may happen that the table is moved during operation. In this case, the device must be reinitialized, that is, turn off and turn on the power. Remember, to turn off the power with the switch to position

"0", the green "Power" indicator must not light up. Otherwise, press the "Power" button and wait.

After switching on, the movable table will calibrate its position and the device will be ready for use.

Troubleshooting

The device has several ways to show what error has occurred. Some errors can be resolved by the user, but some require a service technician.

Errors fall into two categories: table-related and printhead- and system-related.

Possible errors of the moving table and solutions.

1. When you turn on the device, the table does not move.
Once the device is turned on, the power switch should light up. If it does not light, check the fuse in the power connector.

If the "Status" indicator is flashing, but the table does not move, then turn off the power and move the table by hand. It should move without any hesitation or jerking.

If this does not solve the problem, contact support.

2. When you turn on the device, the table goes completely down

The reason for this error is a problem with the laser level.

The first thing to do is check and clean the laser emitter and receiver from dust and dirt. Attention! The laser emitter has a yellow triangle sticker. Wipe the emitter with a soft cloth and check that there is no dust on the receiver.

If this does not solve the problem, then turn off the device. Press and hold the Clean button. Power on the device. Wait for the beep to sound after approximately 2 seconds. After this, release the button. The device will enter the laser level setting mode. In this mode, the laser emitter will turn on, and the rest of the printer systems will be in standby mode.

To check the laser emitter, hold up a piece of paper. The laser will appear as a red dot in the visible spectrum.

If there is no dot, contact support.

If there is a dot, then check whether the beam hits the receiver. There is a small hole on the receiver where the laser should go. If the beam does not fall into this hole, then the receiver will need to be adjusted. To do this, you will need to unscrew the two screws securing the receiver. Attention! The maximum you can turn the screws is 1.5 turns. After releasing the screws, you need to move the receiver so that the beam enters the hole in the receiver, and also so that when the laser beam crosses the red indicator on the receiver lights up.

After aligning the receiver, tighten the screws. Press the "Start/Stop" button and the device will begin the initialization procedure when turned on.

3. The table does not move out completely and images are printed further from the edge of the table.

With prolonged use of the device or possible manual movements of the table, it may shift. You can notice that the table is not in the loading position as usual; the printing on the products is shifted further from the beginning. This is not a breakdown of the device, but requires action on the part of the user, namely, you need to set up the movable table.

To do this, turn off the device. Pull the movable table forward as far as it will go. Now grab the aluminum profile from the bottom of the table with one hand, rest your other hand on the movable platform and pull the table. It will take effort, but within reasonable limits. After this, you will notice that the extreme loading position has become larger in front.

This completes the table setup procedure. Turn on the device and use it.

4. When printing on sugar or wafer paper, dirty streaks and stains remain.

When printing on edible paper, especially wafer paper, it will warp due to moisture from the ink. Considering that the gap between the print heads and the products is small, a

very slight deformation of the sheet of paper will lead to the bottom of the heads touching and, as a result, contamination of the surface of the sheet.

To avoid this problem, after pressing the "Start/Stop" button, when the moving table has completely passed the laser level, briefly block the laser level with your finger or other object. This will allow the table to be lowered slightly and will ensure that the gap between the heads and the sheet increases.

Please note that too large a distance will greatly affect the image quality.

5. When printing on products, spots and blots may occur

The reason for this is due to the formation of a drop of ink on the bottom of the print head after cleaning, as well as small protrusions on the product that could not be detected by the laser level due to size.

If this happens, pay attention to the parking area of the carriage on the right. There are two rectangles in the carriage parking area through which ink is pumped out of the head when cleaning. Ink can accumulate in these rectangles and then form a drop. To solve the problem, press the "Clean" button for 2-3 seconds when the carriage is not in the parking zone. This will pump out the stale ink and the problem should be resolved.

If this does not help, then clean the print head through the device driver.

If the products have small protruding parts that are not detected by the laser level, then when moving the table to start printing, close the laser level for a short moment. This will lower the table a little and the print head will not touch these protrusions.

6. The table works fine, but when printing, the "OK" indicator flashes 2 times

The indicator flashes 2 times and this indicates that there is a print job, but the table is not ready. Place the products on the table and press the "Start/Stop" button. When

the table is in the print start position and after the beep, press the "OK" button. This will begin the printing process.

7. The table works fine, but the OK indicator blinks 3 times when printing

This is a hardware error and you need to reboot the printing system. If the table is waiting to print, press the "Start/Stop" button, the "Status" indicator will go off. Now press the "Power" button and wait until it turns off. Then turn it on again with the "Power" button. If the "Power" indicator is constantly on and "OK" is not blinking, the device is ready for use.

If this does not help, please contact support.

8. The table works fine, but the OK indicator blinks 4 times when printing

The print head is not installed correctly. Check the contacts and the installation of the heads in the carriage.

9. The table works fine, but the OK light flashes 5 times when printing

The ink supply valve is closed. Open it and restart the device with the "Power" button.

The printheads are not detected or are installed incorrectly. Check the installation.

10. The table is working normally, but the OK indicator blinks 8 times when printing.

The waste ink counter chip requires replacement. Purchase and install a new chip.

11. The table is operating normally, but the OK light is blinking and/or the Power light is blinking when printing.

This indicates a hardware error in the printer. When the computer is connected, the driver will display an error code. Contact support with a description of the problem and this code.

12. During printing, the heads hit the product

The device is equipped with a laser level, but this situation may occur when working with the device. In this case, you need to turn off the device, close the ink supply valve and manually move the carriage to the middle. Open the carriage and remove the print heads.

Inspect the underside of the heads without turning them over. Important! The print head contains ink and may leak if turned over.

If there are visual traces of the product, then moisten a lint-free cloth in the washing liquid and carefully remove the remains of the product. Under no circumstances should you wipe the surface of the head where the nozzles are located. This part needs to be cleaned using a soaking motion.

After this, install the heads into the carriage, close the cover and open the ink supply valve. Turn on by pressing the "Power" button. Clean it through the device driver.

If this section does not describe your problem, then contact support with a description of the situation, the actions that were taken and any other information useful for solving the problem.