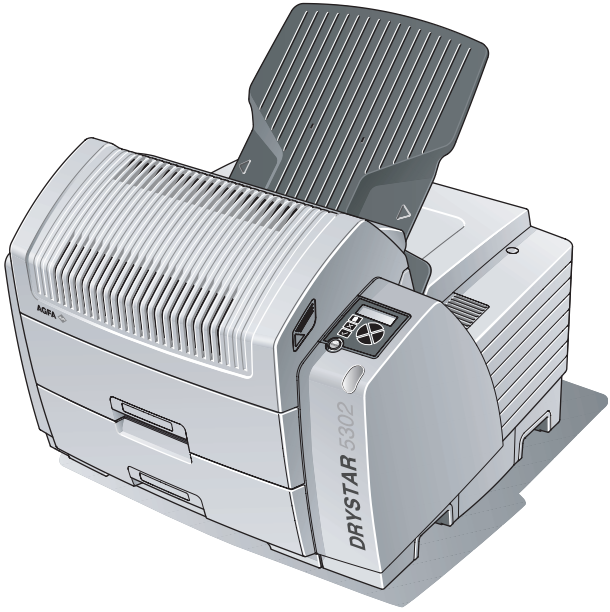
Drystar 5302

User manual



Point of > Knowledge

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This product is registered in China under the registration number:

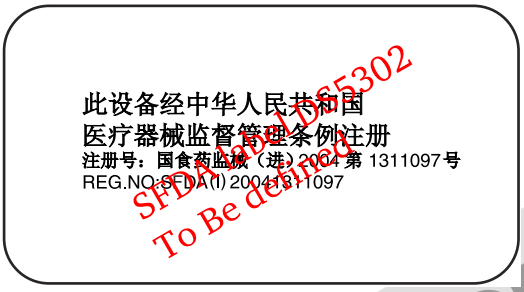

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Table of contents

Chapter 1

Introducing the Drystar 5302

This chapter introduces the Drystar 5302 to the user and draws attention to important safety precautions.

Drystar 5302 features

The Drystar 5302 is a **dry digital tabletop printer** for producing medical diagnostic images. It can print multiple formats (8x10" up to 14x17") of blue-based and clear-based film and offers crisp, dense grayscale images.

The Drystar 5302 is a Dicom-only network printer.

The Drystar 5302 offers the following features:

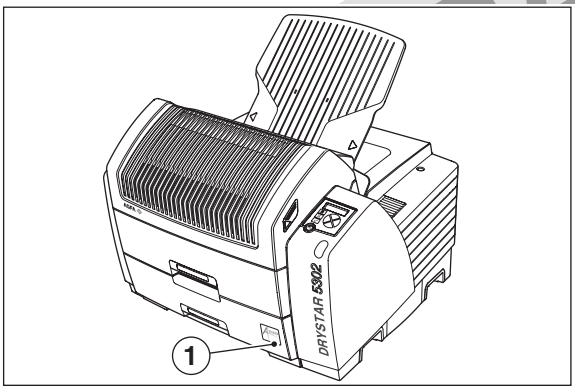
- Dry technology for printing diagnostic quality hardcopies in full daylight offers important advantages: no chemistry, no wet processing, simple cleaning procedures, no time-consuming adjustments, no darkroom and no chemical disposal costs. The consumables can be loaded in full daylight.
- With its compact design, the Drystar 5302 needs little work space and allows easy customer access. Maintenance and service activities are reduced to a minimum.
- The direct thermal printing system provides grayscale images with high quality: 320 pixels per inch resolution, each pixel with 12 bit contrast resolution and an optical density ranging from 0.2 up to 3.1 (measured with an X-Rite 310 densitometer).
- Multiple film formats (8x10", 10x12", 11x14", 14x14" and 14x17") can be used. Any combination of two film formats can be used "online". Both input trays can be adjusted for all film formats.
- The input trays of the Drystar 5302 are equipped with an RF-tag reader, which automatically traces the films used in the printer and protects the printer when detecting non-identified media.
- Number of input trays.
  The Drystar 5302 is equipped with 2 input trays. Both input trays can use multiple formats (8x10" up to 14x17").

- Number of output trays.

  The Drystar 5302 is equipped with 1 output tray, which is suitable for the multiple formats without any adjustment.

- Integrated A#sharp technology

  A#sharp is a technology that enhances image sharpness for the Drystar 5302. An A#sharp label on the lower tray shows that the imager has been upgraded with this technology.



1	A#Sharp label

Network features

- The modular design offers optimal application functionality for your specific networking requirements.

  In a network configuration, the Drystar 5302 is fully compatible with Agfa's diagnostic imaging systems, including the ADC Compact and ADC Quality System software, the Paxport and the entire line of Impax Review Systems, Storage Stations and Transmitting Stations. For more information, contact your Agfa representative.

- The functionality of the Drystar 5302 is completely controlled via the network.

- You can control the working of the Drystar 5302 via the local keypad or via a remote PC with a functioning web browser.

Customizable features

- Consumables.

  The Drystar 5302 can handle Drystar DT 2B and Drystar DT 2C consumables, both in multiple formats (8x10" up to 14x17").

Software license information

- The Drystar 5302 uses software developed by the Apache Software Foundation (http://www.apache.org/licenses/LICENSE).

Safety precautions

The Drystar 5302 must only be operated according to its specifications and its intended use. Any operation not corresponding to the specifications or intended use may result in hazards, which in turn may lead to serious injuries or fatal accidents (for example electric shocks). AGFA will not assume any liability whatsoever in these cases.

All images created using any image technology can show artifacts which could be mixed up with diagnostic relevant information. If there is any doubt that the diagnostic information could not be absolutely true, additional investigations must be performed to get a clear diagnostic.

When operating or maintaining the Drystar 5302, always observe the following safety guidelines:

- Have electrical or mechanical defects repaired by qualified personnel only!
- Do not override or disconnect the integrated safety features.
- Ventilation openings should not be covered.
- Always switch off the Drystar 5302 and disconnect the power cord from the outlet before carrying out any maintenance work.

Film jam removal or cleaning the printer thermal head can be done without switching the power off. Nevertheless, care should be taken and the following instructions should be respected:

Always take into account the markings provided on the inside and outside of the printer. A brief overview of these markings and their meaning is given below.

	Safety warning, indicating that the Drystar 5302 manuals should be consulted before making any connections to other equipment. The use of accessory equipment not complying with the equivalent safety requirements of this printer may lead to a reduced level of safety of the resulting system. Consideration relating to the choice of accessory equipment shall include: • Use of the accessory equipment in the patient vicinity, • Evidence that the safety certification of the accessory equipment has been performed in accordance with the appropriate IEC 601-1 and IEC 601-1-2 harmonized national standard. In addition all configurations must comply with the medical electrical systems standard IEC 601-1-2. The party that makes the connections acts as system configurator and is responsible for complying with the systems standard. If required contact your local service organization.

	Caution hot: Keep hands clear from the thermal print head.
	In order to reduce the risk of electric shock, do not remove any covers.
	Type B equipment: Indicates that the Drystar 5302 complies with the limits for type B equipment.
	Supplementary protective earth connector: Provides a connection between the Drystar 5302 and the potential equalization busbar of the electrical system as found in medical environments. This plug should never be unplugged before the power is turned off and the power plug has been removed.
	Intergrounding connector: Provides a connection between the printer and other equipment which might exhibit minor ground potential differences. These differences may degrade the quality of communication between different equipment. Never remove connections to this terminal.
	Protective earth (ground): Provides a connection between the printer and the protective earth of the mains. Do not remove this connection, because this will have a negative influence on the leakage current.
	Power button: Note that the power cord has to be disconnected from the wall outlet in order to disconnect the unit entirely from the mains.
	Precautions for use in USA only: Make sure that the circuit is single-phase center-tapped, if the printer is connected to a 240 V/60 Hz source instead of a 120 V/60 Hz source.

Transport after installation

Before moving the printer, always switch off the machine. The Drystar 5302 should be transported by 3 persons or if not possible with 2. Refer to *'Remove Drystar 5302 from pallet'* on page *5* of the Installation manual. When doing this, the stability and the structure of the table top have to be taken into account. The printer should not be placed on a soft surface, since this might prevent appropriate ventilation and cause overheating. The printer must only be transported with all covers closed. The appliance may not be transported

continuously from one location to the other. Do not lift the printer by the output tray.

Waste disposal and environmental regulations

In most countries Drystar film is considered industrial waste and consequently it is not allowed to be disposed as household waste. Please consult your local waste disposal regulations. Agfa recommends having waste Drystar film collected by a licensed company.

After its life span, do not dispose of the Drystar 5302 without consideration of local waste disposal regulations. Please consult your local service organization.

Security precautions

U.S. Law restricts this device to sale to or on the order of a licensed physician.

Printed images should be treated as patient records and should only be viewed by authorized personnel.

If the power to the printer is unexpectedly interrupted, ensure that unprinted images are not deleted from the modality prior to printing. To avoid loss of images in such conditions, a UPS (Uninterruptable Power Supply) needs to be supplied to the printer.

Safety compliance

EMC issues

- USA: This equipment has been tested and found to comply with the limits for a class A digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the **Drystar 5302 Reference manual**, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at its own expense.
  If required, contact your local service organization.
- Canada: This class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.
- EC: This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Compliances

The Drystar 5302 has been tested and found to comply with the following international standards and regulations:

- the Medical Devices Directive 93/42/EEC
- CFR Part 21

Safety standards

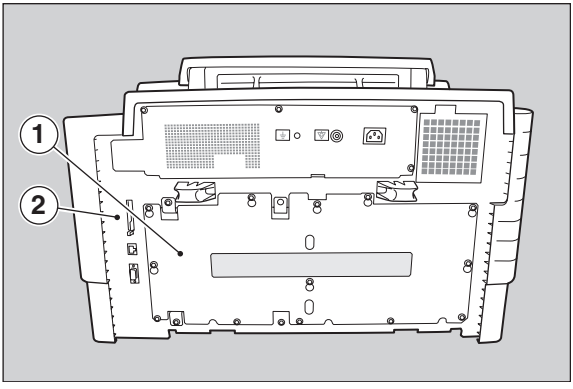
- IEC 60601-1 + A1 + A2
- EN 60601-1 + A1 + A2
- UL 60601-1
- CSA 22.2 No. 601.1-M90
- GB4943-2001 (for CCC-Mark)

Radio-interference regulations (interference suppression)

- FCC Rules 47 CFR part 15 subpart B
- IEC 60601-1-2
- CISPR 11, class A
- CISPR 22, class A
- IEC 61000-4-3
- IEC 61000-4-4
- IEC 61000-4-5
- IEC 61000-4-6
- IEC 61000-3-2
- IEC 61000-3-3
- IEC 61000-4-11
- ETSI 300330
- GB9254-1998(Class A) (for CCC-Mark)
- GB17625.1-2003 (for CCC-Mark)

Labels

The Drystar 5302 carries the CE, TÜV, cULus and CCC labels.



1	CCC label
2	CE, TÜV and cULus label

Privacy and security

Within the healthcare industry, several standardization efforts are ongoing as a response to Privacy and Security legislation and regulations. The purpose of this standardization for hospitals and vendors is to enable information sharing, interoperability and to support the workflow of hospitals in a multiple vendor environment.

In order to allow hospitals to comply with HIPAA regulations (Health Insurance Portability and Accountability Act) and to meet the IHE standards (Integrated Healthcare Enterprise) some security features are included in the user interface of the Drystar 5302 (available via the web pages only: under 'Security tools'. Refer to *Chapter 4, 'Controlling the Drystar 5302 via a remote PC (with browser)'* of the Drystar 5302 Reference manual):

- User authentication. The administrator can configure different user accounts. Each account consists of a user name and a password.
- Audit logging. This implies logging to a central log server of specific Drystar 5302 'actions', e.g. startup/shutdown, user authentication (failures), received print job ID information, etc.
- Node authentication, using certificates. Working with SSL (Secure Sockets Layer) allows secure communications over an insecure network. SSL is the security layer on top of TCP/IP.

The first two functions are available when access to the Administrator is granted (i.e. when the Administrator password has been correctly entered). To activate the SSL, please contact your Agfa representative.

Node authentication, certificates and Certification Authority

Each device - connected to a network - will receive a unique identifier: the X.509 certificate, a digital passport. Any device on the network is only allowed to communicate with another node of which it is holding the certificate in a 'communication allowed' table.

A Certification Authority (CA) is responsible for creating a certificate. The CA can be the hospital, Agfa or a third party.

This CA distributes the certificate to the hospital security responsible or service technician, who for his part:

- Imports the device certificate, created by the CA.
- Imports the certificates of all peer devices with which communication is authorized, i.e. creates the list of 'communication allowed' device certificates.

Operating modes

The Drystar 5302 can be operated in five modes: Operator mode, Key-operator mode, Service mode, Specialist mode and Administrator mode.

Operator mode

The Operator mode groups all basic functions that are intended for radiographers without special technical skills:

- Producing diagnostic usable hardcopies;
- Loading consumables;
- Ensuring normal operation of the printer.

All functions of the Operator mode are described in both User and Reference manuals. Refer to *Chapter 2, 'Basic operation (Operator mode)'*.

Key-operator mode

The Key-operator mode groups advanced functions that are intended for technically skilled operators such as X-ray operators, network managers and service and hospital technicians.

The Key-operator mode is menu-driven. The Key-operator functions are described in the **Drystar 5302 Reference manual** only. Refer to *Chapter 3, 'Advanced operation (Key-operator mode)'*.

Service mode

The Service mode functions are reserved for trained Service personnel. The Service mode is password protected and is only accessible by browser via a remote PC.

Specialist mode

The specialist mode functions are reserved for trained service personnel of the Agfa Customer Support Center. The specialist mode is password protected and is only accessible by browser via a remote PC.

Administrator mode (also known as Security)

The Administrator mode functions are reserved for the System Administrator. The Administrator mode is password protected and is only accessible by browser via a remote PC.

Control modes (local and remote)

You can control the working of the Drystar 5302 via the local keypad or via a network remote PC.

The table below gives an overview of the operating modes you can access locally and/or via the remote PC.

Local	Password protected	Remote	Password protected
Operator mode	No	—	—
Key-operator mode	No	Key-operator mode	Yes
—	—	Service mode	Yes
—	—	Specialist mode	Yes
—	—	Administrator	Yes

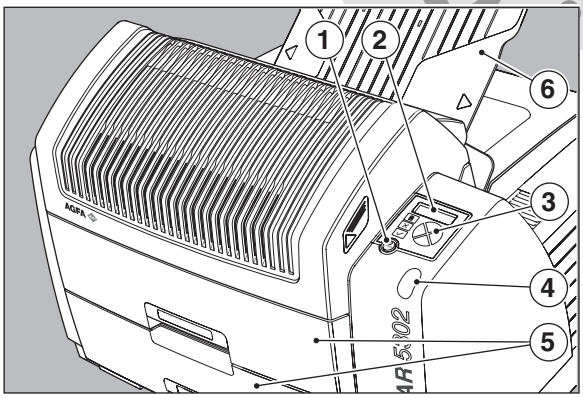
The manual describes the controlling of the Drystar 5302 via the local keypad. The menus for controlling the Drystar 5302 via a remote PC are structured in the same way and sometimes they offer even more possibilities. Refer to *Chapter 4, 'Controlling the Drystar 5302 via a remote PC (with browser)'* of the Drystar 5302 Reference manual.

The user interface

The Drystar 5302 interfaces with the user via the following controls:

- Power/Reset button;
- a keypad and a display;
- a status indicator LED;
- audio signals.

Overview of user interface controls



1	Power/Reset button
2	Display
3	Keypad
4	Status indicator LED
5	Film input trays
6	Film output tray

Never try to open the printer when the Drystar 5302 is printing a film. Always follow the instructions on the display!

The status indicator LED

On the right side of the display, an LED indicates the status of the Drystar 5302.

Color / Light		Status	Action
Green	Constant	Ready (stand-by)	Proceed
	Blinking	Busy or in key-operator mode	Wait
Red	Blinking	Warning status	Check the display for messages. Refer to *'Checking the status indicator LED'* on page *157* of the Drystar 5302 Reference manual.
	Constant	Error status	

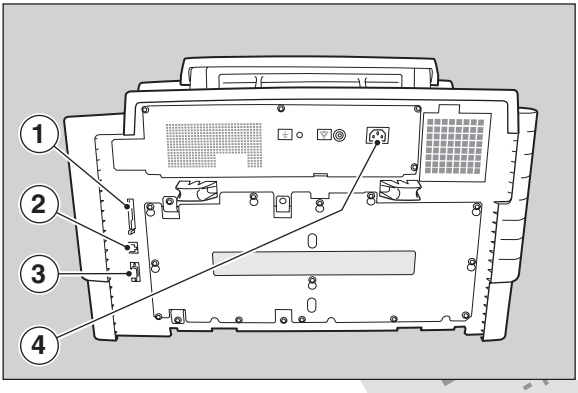
The control buttons

One control button has been provided:

	**Power/Reset** button	• To power on or off the printer. • To reset the printer.

Do NOT press the Power/Reset button without first following the procedure to stop printing when the Drystar 5302 is printing a film. Refer to *'Switching off the Drystar 5302'* on page *32*.

Rear panel



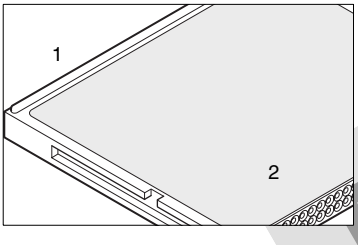
At the rear side of the printer, one slot and three connectors are available:

1	**CF-card** slot	• To insert an external CF-card for software installation, backup, etc.
2	**Network** connector	• To connect to the hospital network.
3	**Input/output** connector	• To connect a terminal PC (used by the Service engineer).
4	**Power** connector	• To connect the printer power cord.

Working with Compact flash cards (CF-card)

The Drystar 5302 is equipped with an external CF-card slot.

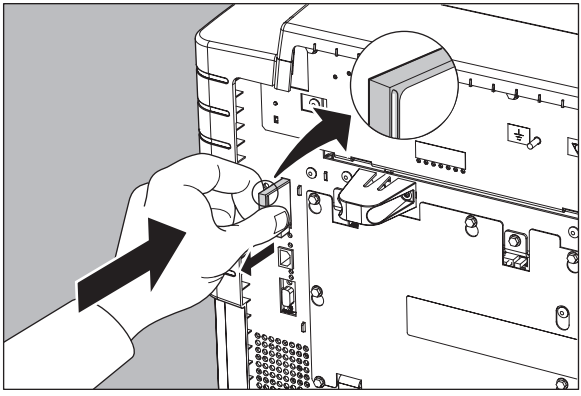
A CF-card has the following physical characteristics:



- a flat surface on one side (there is also often a label present),
- a small rim on the other side,
- connector holes on the opposite side of the rim side.

Inserting a CF-card

To insert a CF-card in the Drystar 5302 (the slot is located at the rear side):



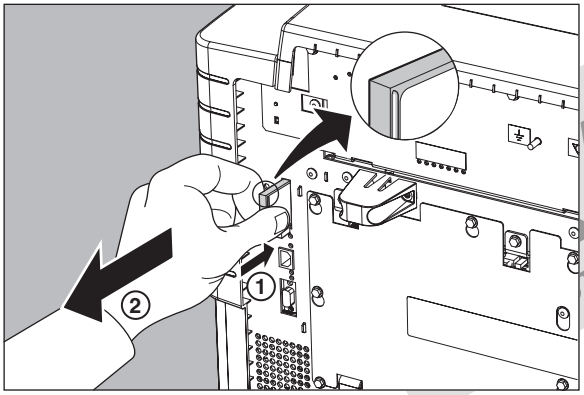
1 Hold the CF-card vertically with the connector holes in front of the slot and with the flat surface pointing to the left.

2 Insert the CF-card gently into the slot and push it until the unlocking lever underneath the slot comes out.

If you cannot push the CF-card completely into its position, this means that you have to turn it 180 degrees (while keeping the connector holes faced to the slot).

Removing a CF-card

To remove a CF-card from the Drystar 5302 slot:



1 Push the unlocking lever underneath the CF-card slot.
The CF-card is pushed slightly outward.

2 Remove the CF-card gently from the slot.

Audio signals

The Drystar 5302 gives status information via beeps. The length of the beep indicates the response of the system to a key command.

- A **short** beep means that Drystar 5302 has accepted the key command and is starting the operation.
- A **long** beep means that you have pressed a non-active key or that the Drystar 5302 has rejected the key command.

Certain conditions can cause an interval beep. An interval beep accompanies an error or warning message. Refer to 'Troubleshooting checklist' on page 65.

The keypad

The keypad is located below the display panel.

The Drystar 5302 keypad features the following keys:

	**Key-operator** key	To access the advanced functions of the key-operator mode. Refer to *Chapter 3, 'Advanced operation (Key-operator mode)'*.
	**Escape key**	To quit the current function or exit a menu without saving modifications.
	**Confirm** key	(In key-operator mode) • To select a menu. • To accept an entry in a menu.
	**Up** key	• To move the cursor to the previous entry field. • To scroll upwards. • To increment the number in a(n) (alpha)numerical entry field.
	**Down** key	• To move the cursor to the next entry field. • To scroll downwards. • To decrement the number in a(n) (alpha)numerical entry field.
	**Left** key	• To scroll backwards through multiple choices within a field. • To move the entry position in a(n) (alpha)numerical entry field from right to left. • To toggle between values in a field.
	**Right** key	• To scroll forwards through multiple choices within a field. • To move the entry position in a(n) (alpha)numerical entry field from left to right. • To toggle between values in a field.

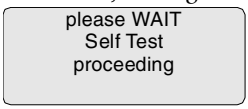
All keys (except the key-operator key) have an LED that is on when the key is valid in a certain situation.

You can press and hold down an arrow key to scroll quickly through a list or a menu.

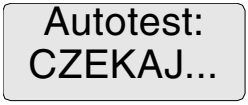
The display

The Drystar 5302 control panel has a backlit LCD display. We distinguish two panel types depending on the selected language:

- a backlit LCD display with 4 lines for Western languages (e.g. Dutch, French, Portuguese, Swedish, ...).



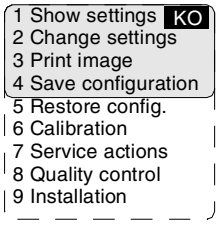
- a backlit LCD display with 2 lines for Eastern language (e.g. Greek, Chinese, Korean, Polish, ...).



Whether a display is translated or not depends on the operating mode.

General display features

The figure below shows how the display is illustrated in this manual:



The visible display lines are indicated in the grey zone. The other possible lines are shown in the white area and can be reached by scrolling using the Up/Down arrow keys on the Keypad.

In the upper right corner, the current printer status is displayed:

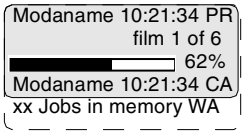
- In Operator mode, two characters display the print queue status. Refer to *'Managing the print queue'* on page *35*.
- In Key-operator mode, two characters are displayed in reverse video to indicate the current menu- or submenu level (e.g. 'KO' for Key-operator main level).
- A warning, an error or a maintenance request is displayed respectively with the character W, E and M.

Operator mode

In **operator mode**, appropriate information is displayed in accordance with the status of the printer.

The operator basic screen looks as follows, indicating that the Drystar 5302 is ready for operation and that no job is currently being executed.

When the printer is busy with at least one print job, the print queue screen is displayed:



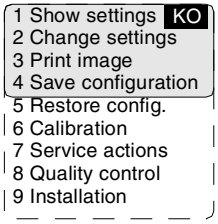
The **progress indicator** keeps the user informed of the progress of a process (e.g., calculation of a bitmap, printing of a film). The line is gradually filled from left to right, from 0% to 100% as the process proceeds.

On the print queue screen the modality name defined during installation will be used to refer to the corresponding modality. In case a nickname (daily used name) has been defined during installation, this nickname will be used.

Refer to *'Managing the print queue'* on page *35*.

Key-operator mode

In **key-operator mode**, operation is menu driven. The menu displays the key-operator functions.



The display shows only four lines. In the above figure, they are indicated in the grey zone. The other possible lines are shown in the white area and can be reached by scrolling using the Up/Down arrow keys on the Keypad.

The active keys are indicated by their respective LEDs.

Data entry

When entering numerical or alphanumerical data, always adhere to the following principles:

- Only (alpha)numerical data can be entered.
- During data entry, the field is displayed in reverse mode.
- Increment the number in a(n) (alpha)numerical entry field by pressing the Up key. Transition from 9 to 0 of one figure will also increment the next figure to the left, respecting the valid limits of the range.
- Decrement the number in a(n) (alpha)numerical entry field by pressing the Down key. Transition from 0 to 9 of one figure will also decrement the next figure to the left, respecting the valid limits of the range.
- Move the entry position in a(n) (alpha)numerical entry field from right to left by pressing the Left key.
- Move the entry position in a(n) (alpha)numerical entry field from left to right by pressing the Right key.
- Press and hold down a key to repeat arrow key actions.
- To accept an entry in a menu, press the Confirm key.
- A short beep acknowledges and terminates the entry.
- The Drystar 5302 will sound a long beep if you press a key that is not to be used at that moment.

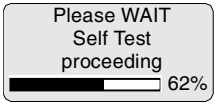
Switching on the Drystar 5302

Before switching on the Drystar 5302, read the safety instructions. Refer to 'Safety precautions' on page 9.

Follow the procedure below to ensure proper startup of the Drystar 5302 and to check that everything is working correctly.

1 Check that the power cord is plugged in and then switch on the printer by pressing the **Power/Reset** button.

On the display, the following message is displayed. After a short while, a progress indicator will show the proceeding of the self-test.



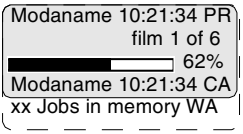
- If anything goes wrong during the self-test, refer to *'Startup errors' on page 172 of the Drystar 5302 Reference manual.*

2 The printer is ready for operation:

- If, on the front panel display, the READY message is shown, *the status indicator LED is constantly green.*

It takes 13 minutes (starting up of the Drystar 5302 and heating up of the thermal print head) before you can start printing. The display will inform you that the printer is warming up:

- If, on the front panel display, the print queue screen is shown, *the status indicator LED is green and blinking.*



3 Make sure that the printer is loaded with appropriate consumables.

Refer to page 38 for detailed information on loading films.

If the job status displays a warning or error indication, refer to 'Troubleshooting checklist' on page 65.

Switching off the Drystar 5302

When you want to switch off the printer, it is recommended to follow the procedure as described below, to make sure that any pending print jobs have finished printing.

1 Make sure that pending jobs are correctly finished. If necessary, follow the procedure to stop printing.

2 Press the **Power/Reset** button to switch off the Drystar 5302.

- *If the printer is ready, it shuts down immediately:*

Power off initiated

Please wait

- *If the printer is busy printing images, it will first print all images in the memory before shutting down:*

Power off after finishing images in memory
Please wait

- *If there is an error/warning/incident during power off and there are still unprinted images in the memory, the following message is displayed:*

Are you sure to power off the printer? (images in queue will be lost)

Press the Confirm button (YES) to proceed with the power-off, or the Escape button (NO) to quit.

Powering off the printer with unprinted images in memory may result in image loss!

Chapter 2

Basic operation (Operator mode)

This chapter will inform on how to manage the print queue, how to print films with priority and how to load new films.

Overview of operator functions

This section focuses on the basic operating principles of the Drystar 5302. After reading this chapter, the operator should be able to produce diagnostic usable hardcopies. No special technical skills are required.

All basic operator functions can be activated directly by pressing a single key on the keypad.

Function / Task	Description	Page
'Managing the print queue'	Jobs that have been received are put in a print queue, waiting to be printed.	*35*
'Loading films'	Instructions for loading new films on the printer.	*38*

Managing the print queue

You can always check the status of the print jobs.

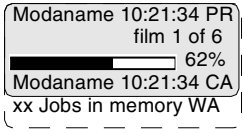
Keep in mind that one print job can hold several films to be printed. In accordance with the acquisition modality used and with the actual settings, films can be grouped in a folder to be submitted as one print job for the Drystar 5302. Refer to the User manual of the acquisition modality for more information.

Checking the print queue

If jobs have been transmitted from the network to the Drystar 5302, they are put in the print queue on a first in, first out schedule. New jobs that are added to the queue get the 'waiting' status.

As soon as the last film of a job is ejected in the output tray, the next job that has been calculated will be put in printing status.

Example of the print queue screen:



- The first line shows information on the job that is currently being printed: the modality name, the time of receipt of the job and the job status (refer to the table below).
- The second line shows how many films are to be printed for the current job and also which film from that total is currently being printed.
- The **progress indicator** keeps the user informed of the progress of a process (e.g., calculation of a bitmap, printing of a film). The line is gradually filled from left to right, from 0% to 100% as the process proceeds.
- The last line (reachable by using the down arrow key) displays the number (xx) of print jobs that are in the Waiting (WA) status. These jobs have been loaded into the print queue and they are waiting to be printed.

A description of the possible status of the jobs is listed in the table below:

Status		Description
PR	Printing	Printing of this job is in progress.
CA	Calculating	The necessary calculations are already being made before printing of the job can be started.
WA	Waiting	Jobs are queued in the printer memory.

On the print queue screen the modality name defined during installation will be used to refer to the corresponding modality. If there is also a nickname (daily used name) defined during installation, the nickname is used.

About Drystar 5302 consumables

The Drystar 5302 can handle blue-transparent and clear-transparent films. Available film formats are 8x10”, 10x12”, 11x14”, 14x14” and 14x17”.

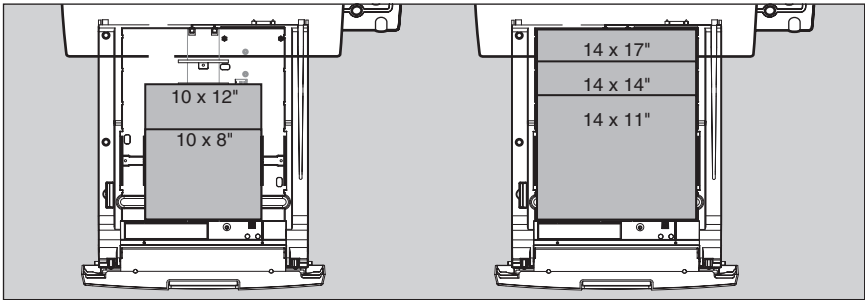
When a new film pack is loaded, the Film Identification tag is read and the printer settings are automatically adjusted.

The key-operator can overrule the film settings for the input tray. Refer to *‘Changing the configuration settings’* on page *56 of the Drystar 5302 Reference manual.*

The following film types can be used:

Drystar DT2 B	8x10” up to 14x17”
Drystar DT2 C	8x10” up to 14x17”

If you want to change the film format, the tray configuration must be modified. Refer to ‘Drystar 5302 network configuration’ on page 148 of the Drystar 5302 Reference manual for more information.



Loading films

This section describes how to load the Drystar 5302 with appropriate films.

The Drystar 5302 can be loaded with 8x10", 10x12", 11x14", 14x14" and 14x17" films.

The Drystar 5302 can be loaded with new films in full daylight. Loading films is easy and can be done very quickly. Follow the procedures as described in this section.

The Drystar 5302 will inform you in several ways when a film tray is empty:

- an audible signal,
- the status indicator LED is flashing (red color),
- the display screen shows a message informing you that the input tray is empty.

The procedure is slightly different, depending on the fact whether the Drystar 5302 is printing/calculating or in the ready state.

When the printer is in the ready state, go to Step 3.

Make sure not to load more than one film pack in an input tray. Loading more than one film pack in the input tray may damage the Drystar 5302.

When the Drystar 5302 is printing or calculating and an input tray is empty:

1 The display shows the following message:

```
Lower input tray empty

DO NOT OPEN TRAY YET
Get new film pack
```

2 Wait while the printer finishes printing any current jobs.

When the film path is cleared, proceed with step 3.

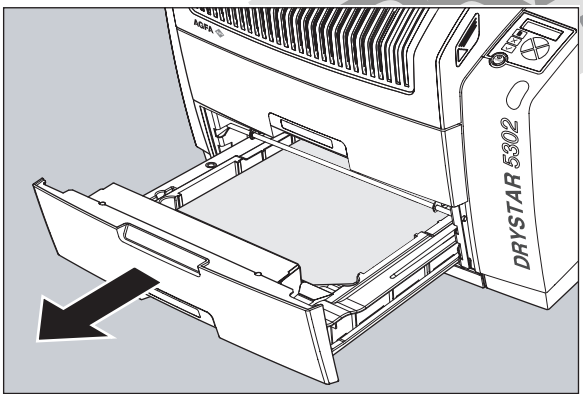
When the Drystar 5302 is in the ready state and an input tray is empty:

3 The display shows the following message:

```
Lower input tray empty

OK to Open the
INPUT TRAY
```

4 Open the empty input tray.



To avoid possible film jams, make sure to open input tray all the way.

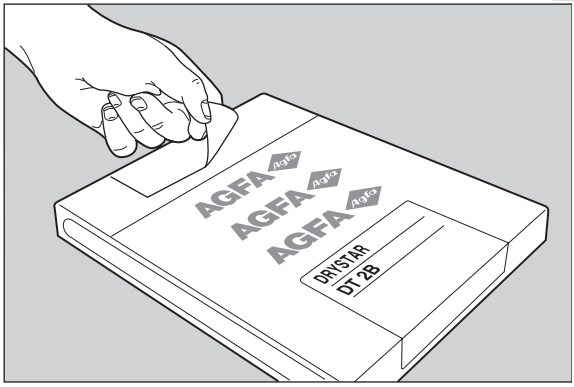
5 The printer is ready to receive a new film when the following message appears:

```
Remove cover sheet
from tray
Load new film
Close tray
```

6 Remove the white (protective) film sheet.

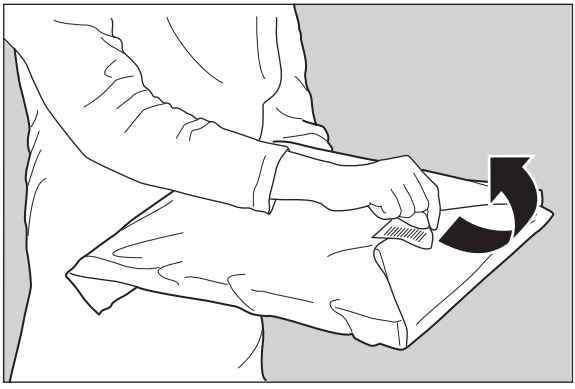
7 Take film pack, and open it.

Verify that the film type on the film pack corresponds with the sticker on the tray! If you do use an other film type, you are advised to change the label on the tray.

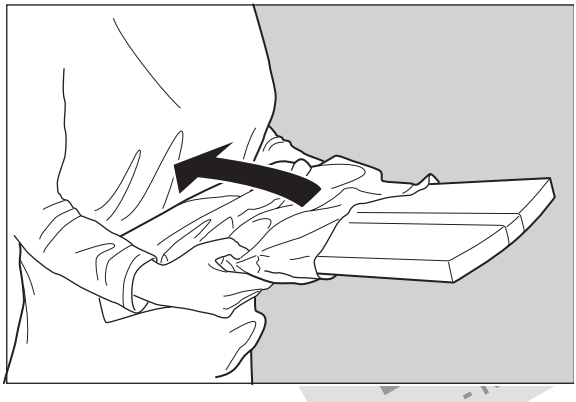


You can put the film pack onto a table to make manipulation easier. Before you do this, make sure that the table is dust-free!

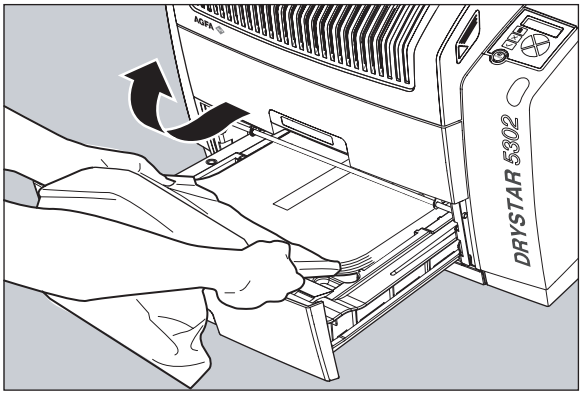
8 Remove the sticker from the film pack.



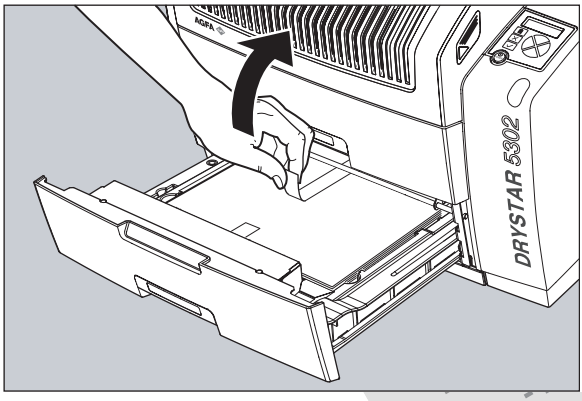
9 Remove the plastic film bag partially.



10 Slide the film pack into the input tray, and remove the plastic film bag completely.



11 Tear the plastic tape from around the film pack.



12 Close the input tray.

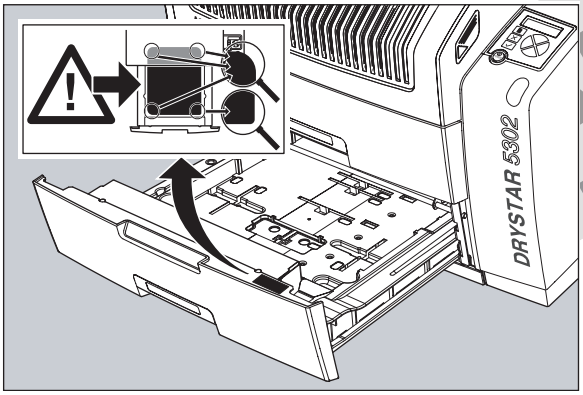
The Drystar 5302 resumes printing as soon as the tray is closed.

Loading instructions are also available on the input tray cover.

Never reuse a jammed film. Refer to 'Clearing of film jams' on page 161 of the Drystar 5302 Reference manual.

Checking the correct position of a film in the input tray

You can verify that the film is properly loaded by watching the lower right corner of the films in the input tray. The rounding of this corner should be smaller than the other three corners. This is also indicated on the sticker at the right side of the input tray cover.



When a new film is loaded, the Film Identification tag is read and the printer settings are automatically adjusted. The Film Identification tag is located on the protective sheet on the backside of the film pack. The figure below shows the film pack upside down.