Kodak

Magnus 400 Controller

Software
Version 1.05.394

Release Notes and Software Installation Guide
English

731-01201A-EN Rev A

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Introduction

These release notes describe the changes in the Kodak® Magnus™ 400 Controller 1.05.394 software that were made after the Magnus 400 Controller software version 1.02.392 was published. Where applicable, the release notes refer you to additional documents for more information.

Prerequisites:

- Kodak Xpo™ 3.2.37 software
- CD Image version 1.17 (includes Service Shell 3.5)—for Magnus 400 II family platesetters *only*

  Note: To verify the operating system version on your platesetter, select **Start > Run** and type `cd_ver`. The following information should appear:
  `image cd Version: VER 1.17 DATA 11/12/07`
- LDA48_2 board (part number 503-00485A) to enable diode cross connection.

  Note: The LDA48_2 board can be installed on Magnus 400 platesetters, however, not all options and functions will be available.

What Is in These Release Notes

The release notes include the following sections:

- *Enhancements* describes improvements that were made to existing features.
- *Problems Fixed* lists problems in the previous release of the Magnus 400 Controller software that are now resolved.
- *Known Problems and Limitations* lists problems that are not yet resolved, as well as problems that cannot be fixed due to software constraints.
- *Installing the Magnus 400 Controller Software* describes how to install the Magnus 400 Controller 1.05.394 software on Magnus 400 and Magnus 400 II LDA configurations and Magnus400 and Magnus 400 II Quantum configurations. It also provides tips on how to deal with typical situations or problems that you may encounter.

Enhancements

This section lists features (software and hardware) that were improved in this release of the Magnus 400 Controller software. Features that were modified as a result of a problem in the software are described in *Problems Fixed* on page 15.

Software

Magnus 400 II Supported Functionalities

- Bypass

  Note: The bypass hardware functionality is supported on Magnus 400 II configurations only.
- MCU II centering system assembly with microswitches
- Maximum plate-size (762 by 685 mm) support
- Paper disposal mechanism
- Punch conveyor
- Sixty-plate cassette capacity
- Smart edge detection on static drum

Magnus 400 and Magnus 400 II Supported Functionalities

- Diode cross connection (with LDA48_2 board, part number 503-00485A)
- Loading sequence

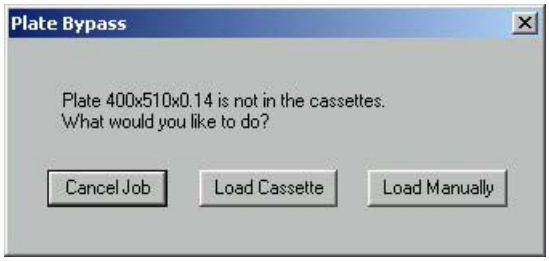
Bypass

The plate bypass option enables you to manually load a plate, either directly onto the loading area or by loading the required plate size into the MCU II cassettes.

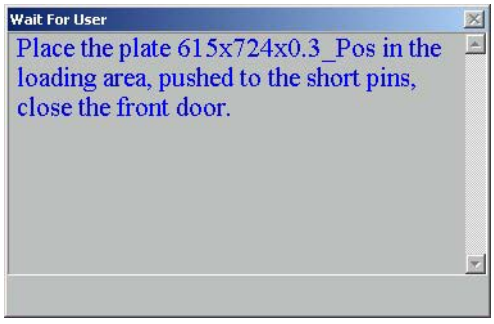
You can expose a single plate or a group of plates in the shortest possible time frame without disrupting the Magnus 400 II ongoing workflow.

To manually bypass jobs in the queue:

1. When the following message appears, select either **Cancel Job**, **Load Cassette**, or **Load Manually**.

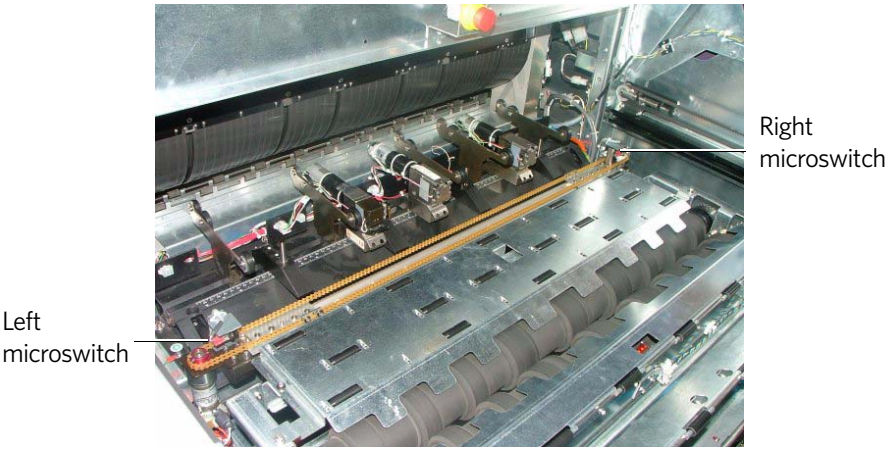


2. If you select **Load Manually**, the front door opens automatically and the following message appears:

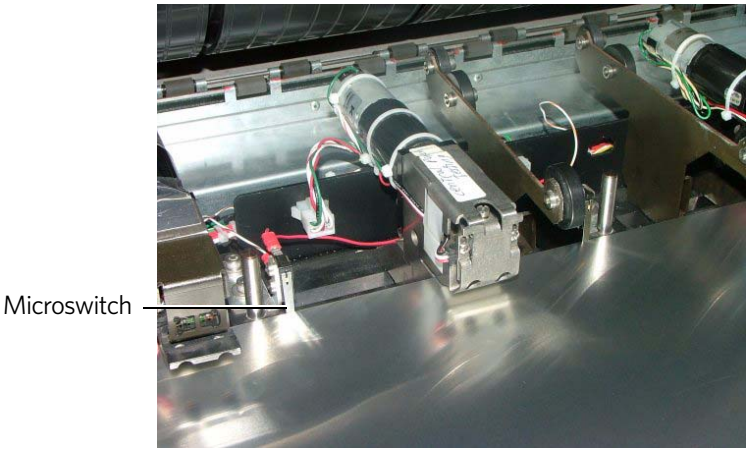


Note: The plate name, for example—615×724×0.3_POS, is the name of the plate that you want to load.

   a. Place the plate, emulsion-side up, between the two (left and right) centering microswitches.



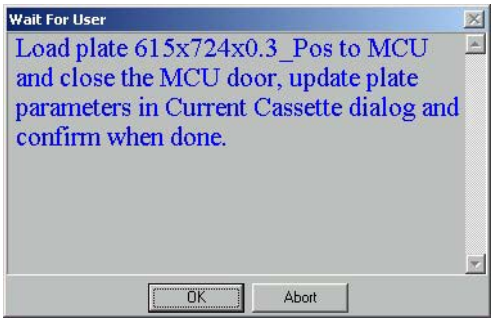
b. Push the plate forward until it touches the microswitches on the short pins.



c. Release the plate

d. Manually close the front door.

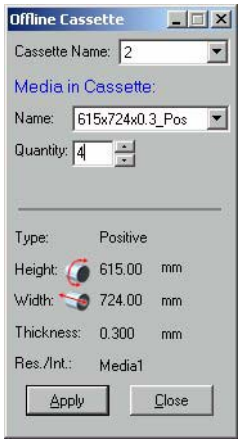
3. If you select **Load Cassette**, the following message appears:



Note: The plate name, for example—615×724×0.3_POS, is the name of the plate that you want to load.

a. Load the plate on the cassette tray, and close the MCU II loader door.

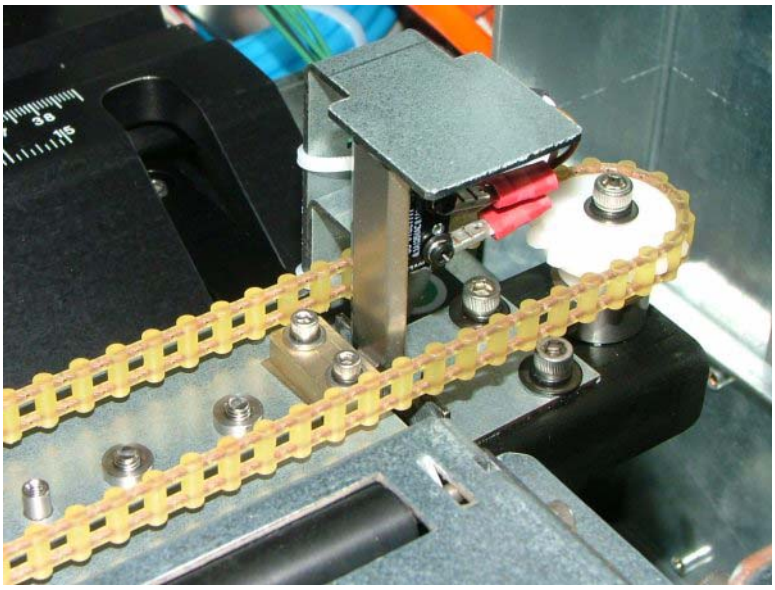
b. Update the plate parameters in the Offline Cassette dialog box, and click **Apply**.



c. In the Wait For User dialog box, click **OK**.

MCU II Centering System Assembly With Microswitches

On platesetters with MCU II or SCU II configurations, microswitches have replaced the centering pins. The microswitches, which are not affected by dirt or dust, detect the plate using mechanical means instead of electrical circuiting.



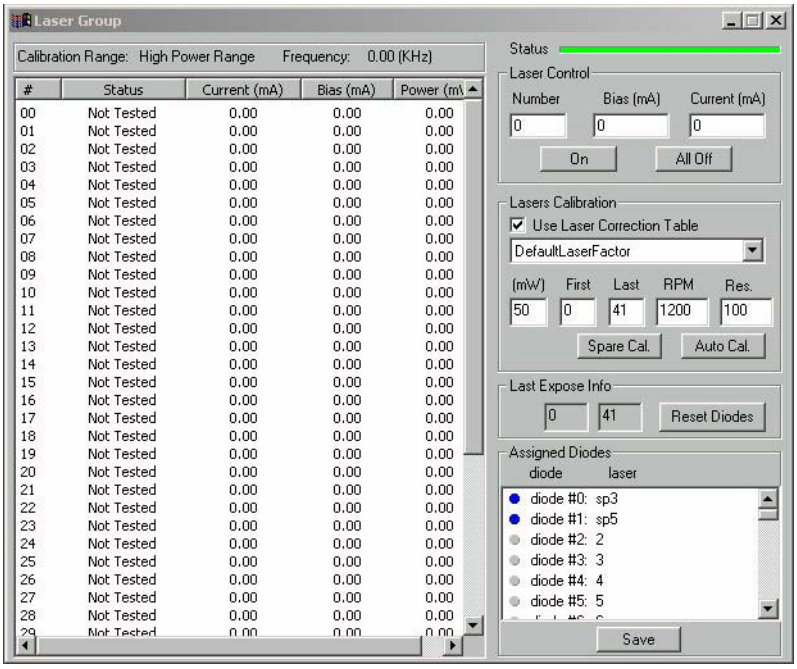
Diode Cross Connection

In version 1.05.394, you can replace a faulty diode with any available diode in the laser diode array using an improved cross-connection diode splicing method.

Version 1.05.394 supports up to 330 mW at 1300 rpm on Magnus 400 II (LDA) platesetters and 23 W at 500 rpm on Magnus 400 II Quantum platesetters with a thermal 2.5 imaging head .

Note: To use any of the diodes for cross connection (and not just the spares), the LDA48_2 board must be installed on the platesetter.

The Laser Group dialog box for the service engineer has changed:

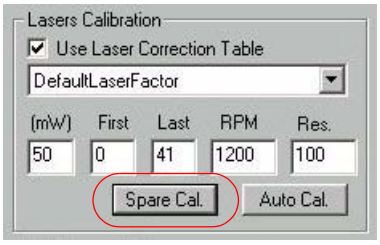


Laser Group dialog box for service

In the Laser Group dialog box for service, the following changes have been implemented:

- The **Connect Spare Diodes** area has been renamed to **Assigned Diodes**. In the **Assigned Diodes** area, two lists appear: one for the diodes and one for the lasers. Any laser number can be assigned to any and every diode in the list.

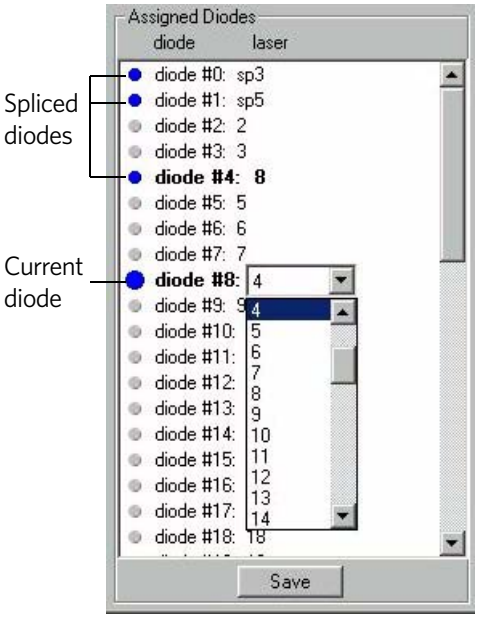
- In the **Lasers Calibration** area, the **Spare Cal** button was added to calibrate spare lasers *only*.



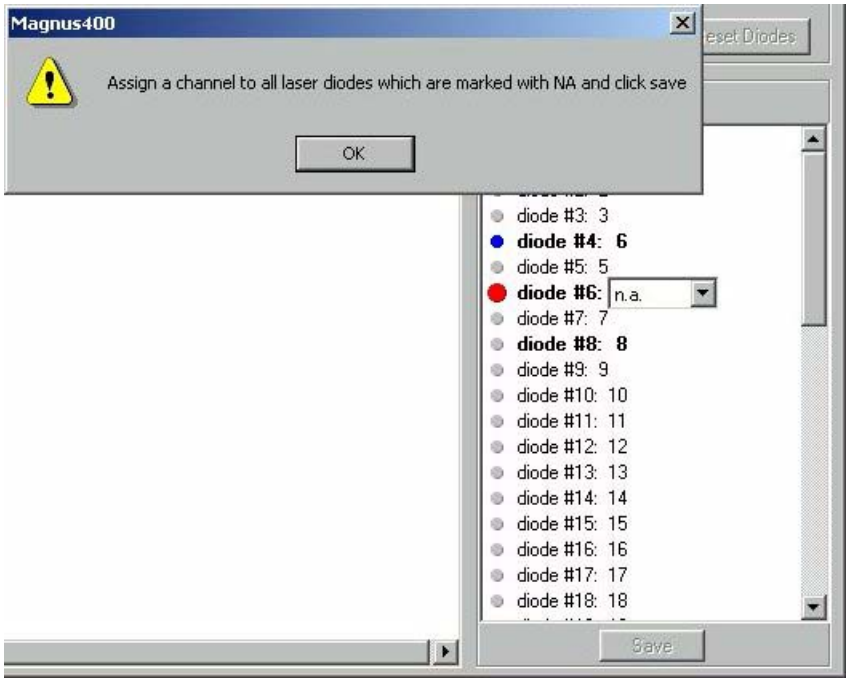
- In the **Assigned Diodes** area, a list box appears next to the selected diode, enabling you to select a diode (spare or regular) on which to perform the cross connection.

  Identifying Spliced Diodes

  - A small blue dot appears next to a diode that has already been spliced.
  - A large blue dot appears next to the currently selected diode.

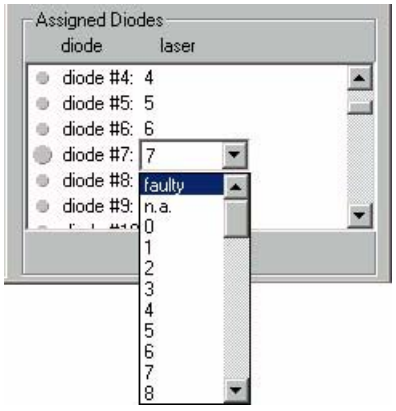


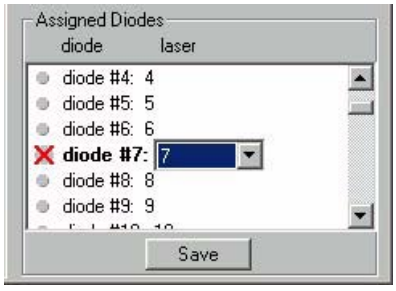
- To complete a cross-diode connection, each diode must be assigned a laser number. If you do not assign a laser number to each diode, the following message appears:



- For service information purposes, you can assign a faulty tag to a diode that is known to be faulty. After you select **faulty** from the laser number list box, a red **X** appears to the left of the corresponding diode and the associated laser number appears in the laser list box. This enables other service engineers to quickly identify and repair diodes.

  Note: Only a diode can be marked faulty.





- To ensure that the laser assignment has been saved, you must save your changes. If you did not click **Save**, when you close the Laser Group dialog box, the following message appears. Click **Yes** to save and close the Laser Group dialog box.



- To prevent an error message from appearing when less than the maximum number of lasers is going to be used, in the Laser Group Properties dialog box, change the value of the **Min Lasers For Reduce Performance Message** parameter from 42 (F type laser heads) or 32 (S and E type laser heads) to the actual number of lasers that will be used.

Loading Sequence

Loading parameters were improved to increase performance and enable higher throughput.

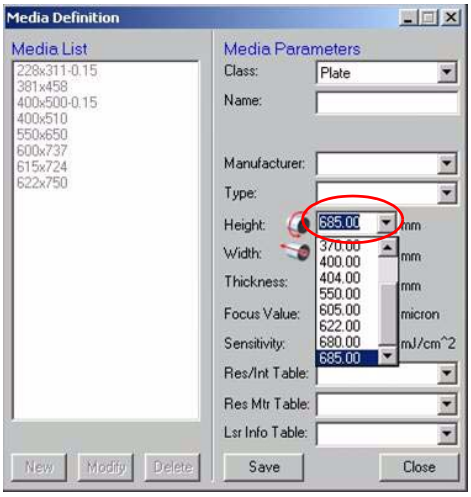
For more information, see the Multi-Cassette Unit II for Magnus 400 II and Magnus 400 II Quantum Plate-Loading Sequence and Parameters Guide.

Maximum/Minimum Plate Size Support

The Magnus 400 II platesetter can handle a larger range of plate sizes compared to the earlier Magnus 400 platesetter:

- Maximum plate size: 762 by 685 mm (30 by 27 in.)
- Minimum plate size: 228 by 300 mm (8.98 by 11.81 in.)

To select the maximum plate size, in the Magnus 400 Controller software, go to **Settings > Media Definition** and in the Media Definitions dialog box, select the required media or click **New** and define a new media according to the maximum/minimum plate size.



Paper Disposal Mechanism

The design of the MCU II and the location of the paper disposal bin were changed. The bottom of the MCU II was opened and a collection basket (formerly the paper disposal bin) was added.

The improved paper disposal system evacuates the slip sheets to the mobile collection basket located under the MCU II.

The collection basket accommodates up to 150 slip sheets.

This means that paper counts are no longer performed and that the Max error and warning numbers are no longer relevant.



A new detector was added to the paper disposal system—the High Level Detector. The detector default status is closed (open=0).

High Level Detector: When the level of the paper in the paper bin almost reaches the maximum paper capacity, the following alert appears:

```
The Paper disposal bin is almost full, please empty the paper
bin.
```

Punch Conveyor

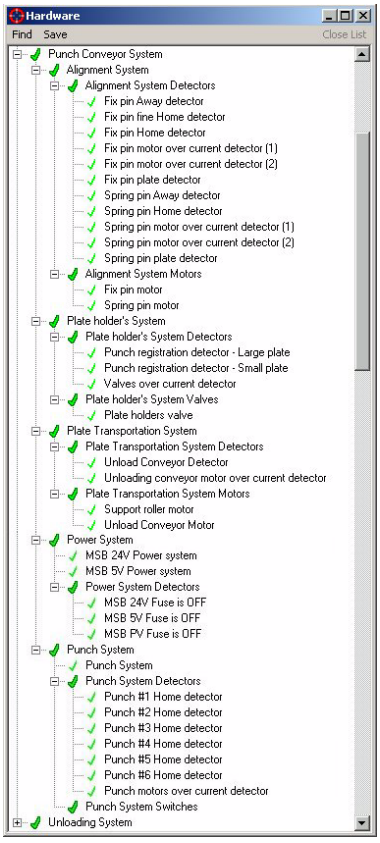
A new punch conveyor option was added to the Magnus 400 II configuration. The standalone punch conveyor connects to Magnus 400 II ContinuousLoad (CL) platesetters, and enables you to configure up to six punches.

Punching occurs after the plate is exposed and unloaded.

Note: Measurement (for the nuts and screws) on the punch conveyor are in metric units rather than US units.

For more information, see Magnus 400 II Options on TechPlanet.





Sixty-Plate Cassette Capacity

Each cassette can now store up to 60 (0.3 mm) plates.

Smart Edge Detection on Static Drum

Note: Static edge detection is available for Magnus 400 II family platesetters only.

To improve imaging throughput, edge detection is now performed on a static drum.

In version 1.05.394, smart edge detection is performed on a stationary drum on the following configurations:

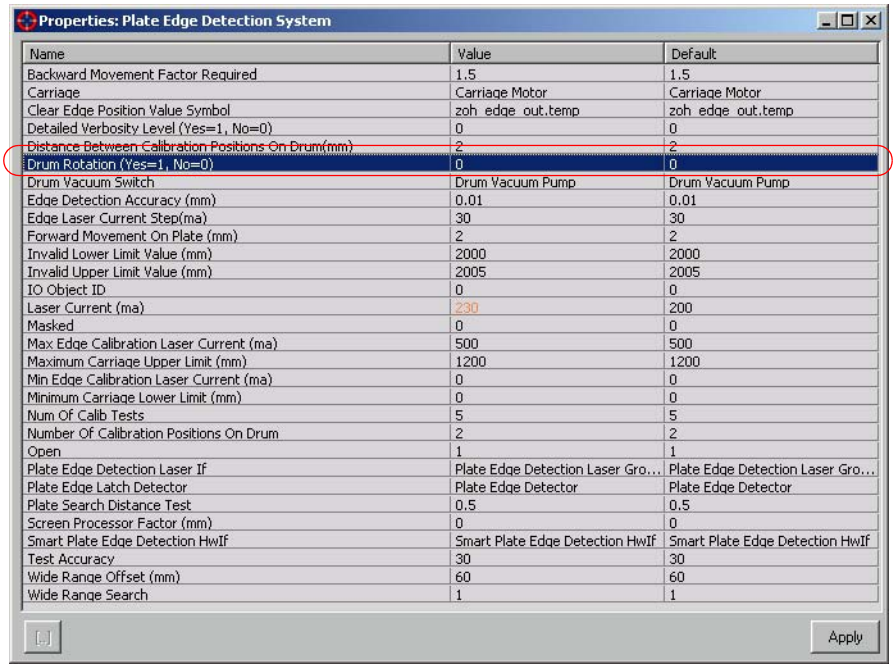
- Magnus 400 II with MCU II option
- Magnus 400 II ContinuousLoad (CL)

However, when the Magnus 400 II platesetter is configured with a punch conveyor, smart edge detection is performed on a *rotating* drum.

In version 1.05.394, a new parameter—**Drum Rotation (Yes=1, No=0)** was added. The default value of this parameter depends on the platesetter configuration.

Note: During the Magnus 400 II Controller software installation, the default value of the **Drum Rotation (Yes=1, No=0)** parameter changes automatically according to the platesetter's configuration.

To locate the **Drum Rotation (Yes=1, No=0)** parameter, go to **Hardware > Expose System > Plate Edge Detection**. Rright-click **Plate Edge Detection System**, and select **Properties**.

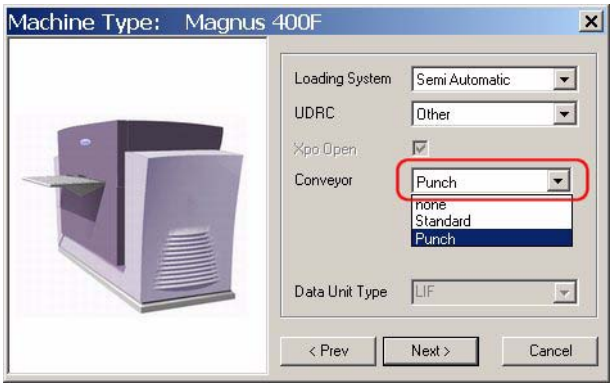


- Default value **0**: For all configurations without punch conveyor
- Default value **1**: For all configurations with punch conveyor

Upgrade Plate Conveyor Configuration to Punch Conveyor Configuration

Magnus 400 Controller 1.05.394 enables you to upgrade a Magnus 400 II or Magnus 400 II Quantum platesetter from a plate conveyor configuration (standard) to a punch conveyor configuration (punch).

To upgrade the configuration, you must reinstall the Magnus 400 Controller 1.05.394 software, and in the Machine Type dialog box, in the **Conveyor** list box, select **Punch**.



Problems Fixed

This section lists problems that are resolved in this release of the Magnus 400 Controller software.

- Remote support: Previously, when you selected **Utilities > Remote Support** for the first time, initially the NetMeeting Setup dialog box appeared (in which you need to click **Next** several times), followed by the Remote Support dialog box. After the Remote Support dialog box appeared for the first time, it appeared automatically whenever the Remote Support option was selected. This has now been **FIXED**.
- For platesetters with LIF and the Xpo 3.1.55 software only: Previously, to perform calibration using the Xpo software, you had to define a negative media in the Media Definition dialog box, and then perform a calibration test with the negative media. Positive media did not appear in the Calibration dialog box. This has now been **FIXED**.
- Previously, buttons were unavailable (gray) in the Magnus 400 Controller software dialog boxes, in the Media Setting dialog boxes, and in the Loading System dialog boxes. This has now been **FIXED**.
- On Magnus 400 Quantum platesetters only: Previously, when you defined a punch in the registry, you had to change the Punch Motor > Height Pos parameter from 100 to 375. This has been **FIXED**.
- Previously there were Smart edge and LMCE communication problems with the COM board. This has now been **FIXED**.
- Previously, there were startup problems because the MCE controller was not active. This has now been **FIXED**.
- Previously, the UDRC (type 1)/Expose got stuck at the end of the expose process in working mode. This has now been **FIXED**.
- Previously, the centering sequence prevented misregistration left/right (punch to image). This has now been **FIXED**.
- Previously, there were punch conveyor punch depth variations. This has now been **FIXED**.
- Previously, data shift line appeared due to noise on the LMCE line. This has now been **FIXED**.
- Previously, horizontal lines appeared on Magnus 400 plaestters with laser diode array (LDA) heads. This has now been **FIXED**.

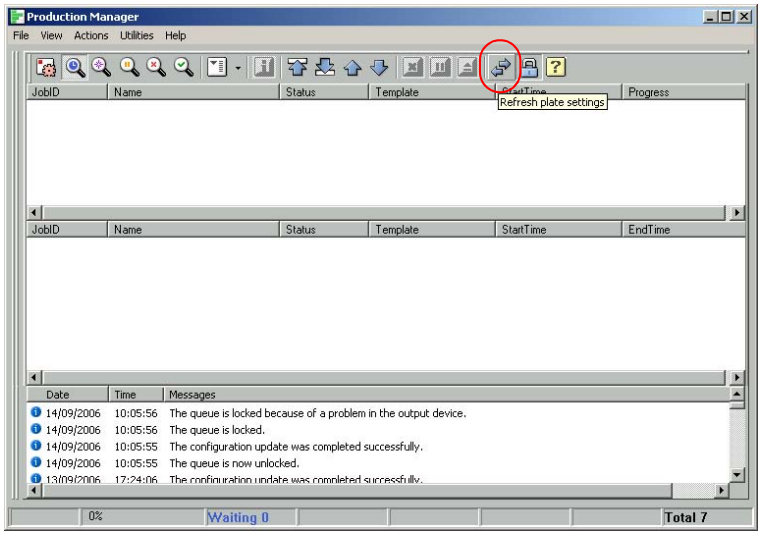
Known Problems and Limitations

This section lists known problems in the Magnus 400 Controller software. When a problem listed here is resolved, the solution is described in the *Problems Fixed* section of the release notes for the next version of the Magnus 400 Controller software.

- Local3 loading not consistent: This problem still occurs. To work around this problem, install the Infineon Memtool 3 software. For more information, see *Resetting the Local3 Board on Magnus 400*.
- In the Laser Info Tables window, the **Extension** column is available, but *not* useable.
- The Magnus 400 Controller software stops responding when the Xpo Calibration dialog box is open and you send a plate to be exposed after changing a parameter in the Media Definition dialog box.

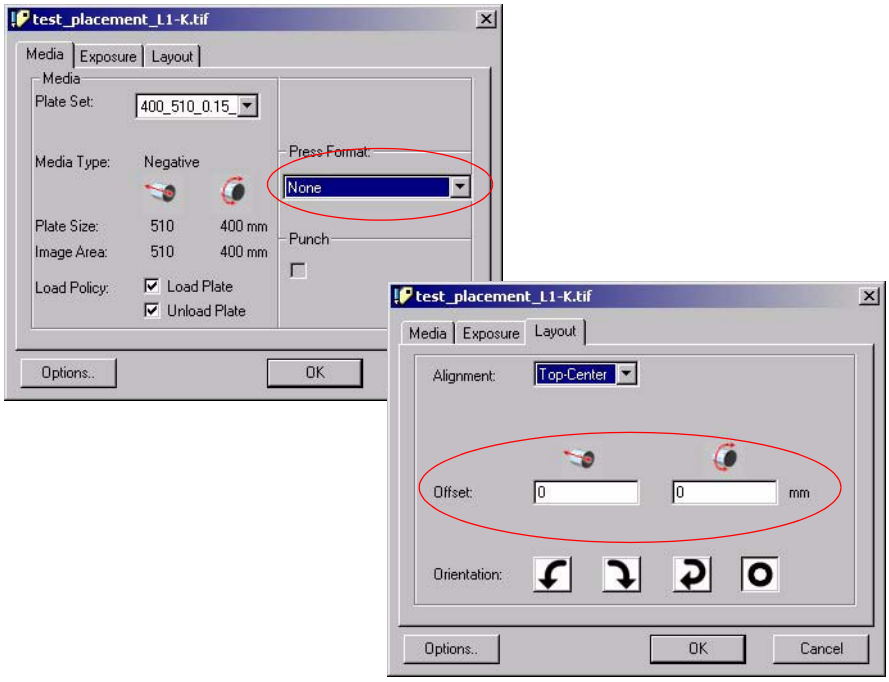
  Workaround:

  1. In the Magnus 400 Controller software, in the Media Definitions dialog box, change the required parameter and click **OK**.
  2. Close the Xpo Calibration dialog box.
  3. On the Xpo palette, select **Production Manager**.
  4. In the Production Manager window, on the toolbar, click the **Refresh plate settings** button and close the window.



  5. On the Xpo palette, select **Calibration**.
  6. In the Calibration dialog box, send a plate to expose.

- On all Magnus 400 and Magnus 400 II LDA configurations: When exposing a negative plate using a positive exposure, where the **Press Format** is **None** and no **Offset** is selected, a white line appears on the exposed area.



- The maximum drum speed allowed for exposures at 120 lines/mm is 1200 RPM.
- For Magnus 400 family platesetters *only* (*not* for Magnus 400 II family platesetters): The stepper motor fails intermittently because the ampere values in the LMCE/TMCE were not calibrated for the LIN black stepper motor (part number 184-00098).

  Workaround:

  1. On the desktop, double-click the **Service Shell Client** icon.
  2. When the Service Shell workspace appears, select **Views > Device Monitor**.
  3. At the command prompt, type the following commands, one after the other, and press ENTER after each command.

     ```
     set carriage Ihold 1.2
     set carriage Iplot 5
     set carriage Imove 5
     ```

4. To verify the settings, at the command prompt, type `set carriage`. The updated carriage values appear in the **Active** column.

```
set carriage
LMCE>> set carriage
PRM carriage parameters:
Group        Parameter       Active              Default             Units
-------------------------------------------------------------------------
carriage     Mspeed          25                  25                  mm/s
carriage     Accel           50                  50                  mm/s^2
carriage     Gearing         1.000               1.000
carriage     Pitch           2.500               2.500               mm
carriage     Steps           200                 200
carriage     Kamp            2.000               2.000               Amps/Volt
carriage     Imove           5.000               2.500               Amps
carriage     Iplot           5.000               2.500               Amps
carriage     Ihold           1.200               1.500               Amps
carriage     Mtravel         818                 1150                mm
carriage     Espeed          10                  10                  mm/s
carriage     Ispeed          25                  25                  mm/s
*** Command Complete
```

- Startup problems due to inactive MCE controller.
- Buffer errors after the expose process with invalid binary buffer index. Install the new COM board (supported by new COM board driver) to resolve errors.
- Data path control error message `too much data has been received on Q configurations` appears on Quantum configurations.

  Too little data has been received error appeared in simulation and was resolved by using a different Kodak Prinergy® workstation.

Installing the Magnus 400 Controller Software

Important: If Magnus 400 Controller 1.02.392 or 1.04.393 is installed on your platesetter, you do not need to install the Image CD version 1.17 or Service Shell 3.5. For more information , see Upgrading Magnus 400 Controller Versions 1.02.392 and 1.04.393 to 1.05.394.

This procedure includes the following sections:

- *Installing the Software on a Magnus 400 LDA/Magnus 400 II LDA Platesetter* on page 20
- *Installing the Software on a Magnus 400 Quantum/Magnus 400 Quantum II Platesetter* on page 25

Before You Begin



1. On the Microsoft® Windows® desktop, double-click the **MachineBackup** icon to save the registry and database files. See *Saving the Registry and Database Files* in the Magnus 400 II and Magnus 400 II Quantum Cold Start Software Installation Guide (731-01206A).

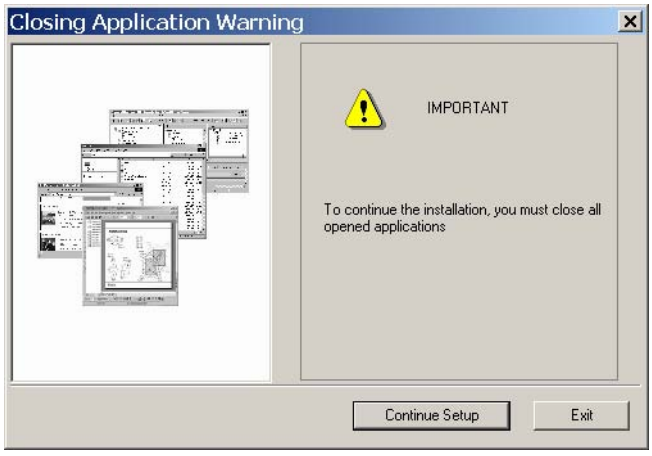
   Note: For the Magnus 400 II Quantum platesetters (with TH2 heads), in addition to saving the registry and database files, you must also save the nonvolatile storage (NVS) parameters. See Saving NVS parameters.

2. On the Operations toolbar, verify that the status indicator is **Ready**.
3. To enable access to the computer (PC), in the Magnus 400 Controller software, open the rear and right side doors of the platesetter.
4. Quit the Magnus 400 Controller software, Service Shell, and any other software that might be open on your client workstation.

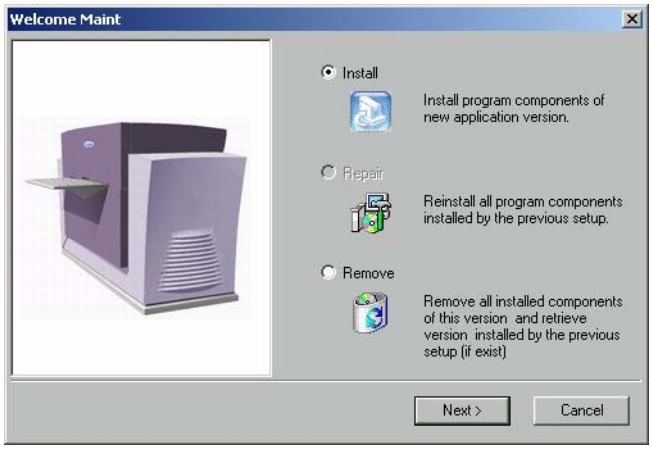
Installing the Software on a Magnus 400 LDA/Magnus 400 II LDA Platesetter

This section describes how to install the Magnus 400 Controller 1.05.394 software on Magnus 400 and Magnus 400 II configurations.

1. Insert the **Magnus 400 Controller Version 1.05.394** CD (651-00902A) into the CD-ROM drive. When the Closing Application Warning dialog box appears, verify that all software is closed, and click **Continue Setup**.

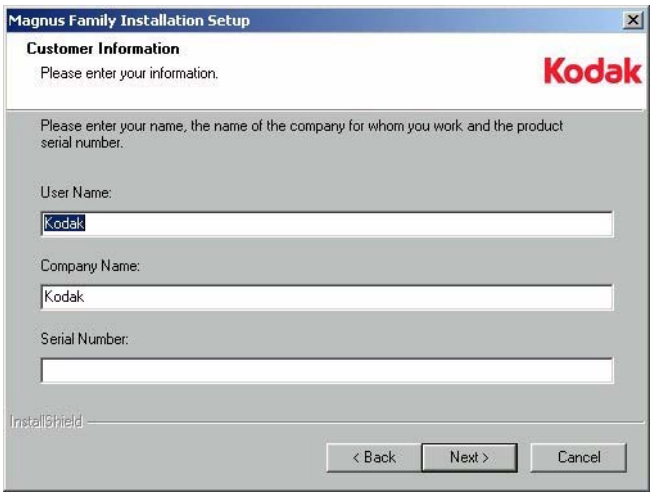


2. When the Welcome Maint dialog box appears, select **Install**, and click **Next**.



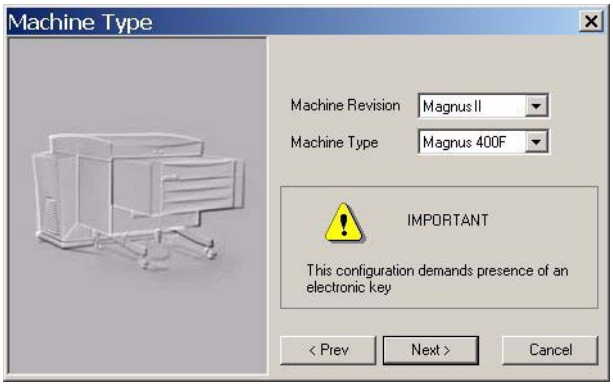
3. When the Magnus Family Installation Setup dialog box appears, click **Next**.

   The Customer Information screen appears.



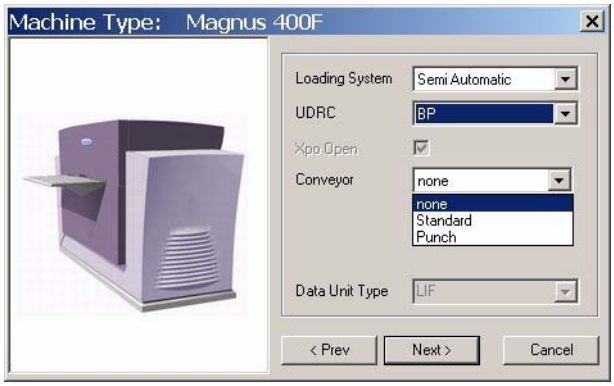
4. Type the following customer information, and click **Next**.
   - User Name: Kodak (or customer's name)
   - Company Name: Kodak (or customer's name)
   - Serial Number: (the Magnus 400/Magnus 400 II platesetter serial number)

   The Machine Type dialog box appears.



5. Perform the following steps:
   a. In the **Machine Revision** list, select **Magnus** or **Magnus II**.
   b. In the **Machine Type** list, select the platesetter configuration that you are installing.
   c. Click **Next**.

      The Machine Type dialog box is refreshed, and the selected platesetter type appears in the title bar.



6. Perform the following steps:
   a. In the **Loading System** list, select either **Semi Automatic** or **Auto Loader**.
   b. In the **UDRC** list, select either **None**, **BP**, or **Other**.

      Note: If you select BP, verify that the UDRC BP cable and the nozzle vacuum detector and wiring are installed on the platesetter.
   c. The **Xpo Open** check box is predefined and cannot be changed.
   d. In the **Conveyor** list, select either **none**, **Standard**, or **Punch**.
   e. In the **Data Unit Type** list, **LIF** is predefined and cannot be changed.
   f. Click **Next**.

      A progress indicator appears, and then the following message appears.



   g. Click **OK**.

The Magnus 400 Controller 1.05.394 software takes a few minutes to load.

After the software is successfully installed, the Reboot screen appears.



7. Remove the **Magnus 400 Controller Version 1.05.394** CD from the CD-ROM drive and close all open platesetter doors.
8. Select **Yes, I want to restart my computer now**, and click **Finish**.
9. For LDA configuations only: Install the Xpo 3.2 software. See Downloads on the Xpo for Magnus 400/Lotem 400 Xpose site on TechPlanet.

   Important: Proceed to the next section, Verifying Firmware Versions on a Magnus 400 LDA/Magnus 400 II LDA Platesetter on page 24. Do not start the Magnus 400 Controller 1.05.394 software until you verify that the correct firmware versions are installed.

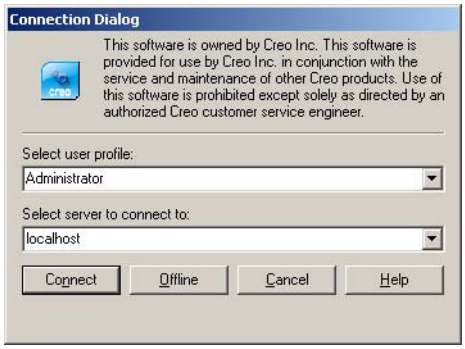
Verifying Firmware Versions on a Magnus 400 LDA/Magnus 400 II LDA Platesetter

Note: To use Service Shell 3.5, you must insert a service dongle.



1. On the Microsoft Windows desktop, double-click the **Service Shell Client** icon.

   The Connection Dialog dialog box appears.



2. Click **Connect**.

   The Service Shell workspace appears.

3. On the left panel in the Service Shell workspace, click **Device Monitor**.

4. At the `LMCE>>` command prompt, type `fw dir` and press ENTER.

   For platesetters with an LDA head (LMCE firmware), the following application versions should appear:

   - `MCE_MAIN: 1.04.01`
   - `MCE_LCA: 70.89`
   - `MCE_BOOT: 1.16.01`
   - `MCE_POST: 1.06`

5. If your platesetter is connected to a punch conveyor, verify that the MSB_C (Machine System Board) is installed on it.

   a. In Magnus 400 Controller, go to **Utilities > Hardware > Boards** and double-click **MSB board**.

   b. In the MSB Veriosns dialog box, verify that the following MSB firmware versions appears:

Component	Version
SW MSB	1.1.1.042
SW BOOT	1.0.0.6
FPGA MSB	0.0.1.27

   c. If these versions do not appear, see Installing MSB firmware manually.

6. Quit the Service Shell workspace and start the Magnus 400 Controller 1.05.394 software.

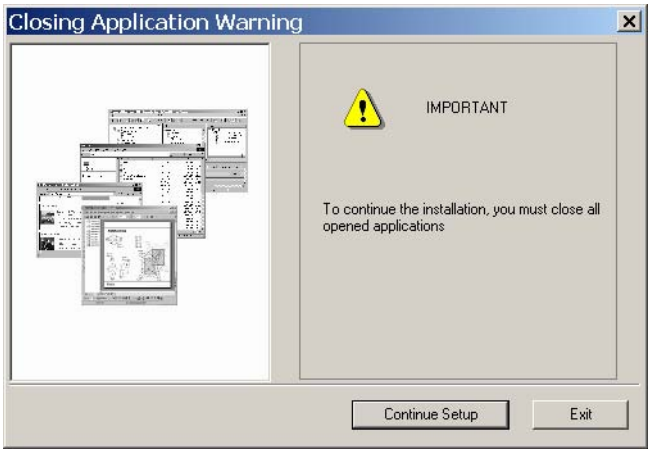
7. If you do not have the correct firmware versions installed, see the *Magnus 400 II and Magnus 400 II Quantum Cold Start Software Installation Guide* (731-01206A).

8. For platesetters with multi-cassette unit (MCU) and MCU II configurations: Verify that values of the plate-loading and paper disposal parameters that are configured on the platesetter are within the minimum-maximum range for these parameters. See *MCU/MCU II Loading System Parameters* on page 31.
9. Start the Xpo software and verify that the correct version is installed on the platesetter, and then perform reconfig.

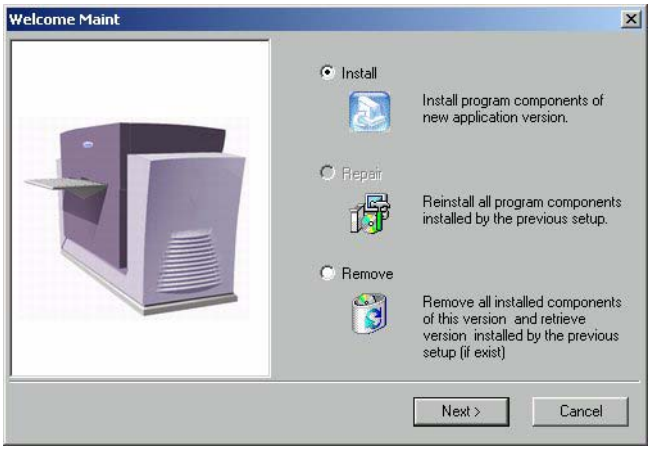
Installing the Software on a Magnus 400 Quantum/ Magnus 400 Quantum II Platesetter

This section describes how to install the Magnus 400 Controller 1.05.394 software on Magnus 400 and Magnus 400 II Quantum configurations.

1. Insert the **Magnus 400 Controller Version 1.05.394** CD (651-00902A) into the CD-ROM drive. When the Closing Application Warning dialog box appears, verify that all software is closed, and click **Continue Setup**.

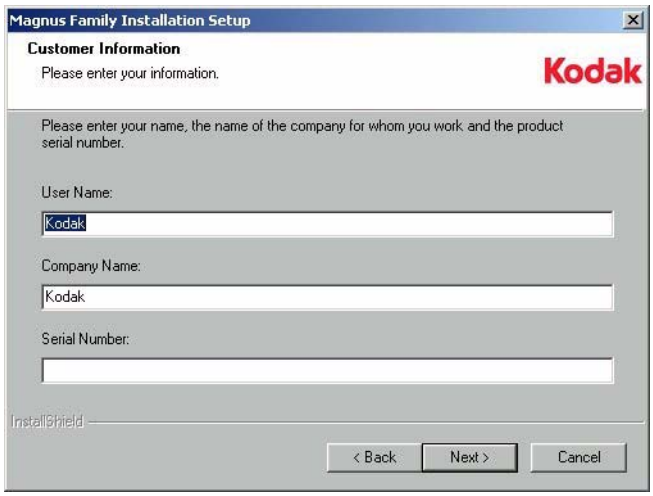


2. When the Welcome Maint dialog box appears, select **Install**, and click **Next**.



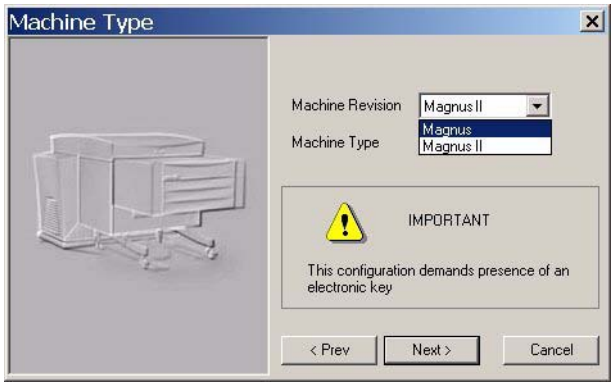
3. When the Magnus Family Installation Setup dialog box appears, click **Next**.

   The Customer Information screen appears.



4. Type the following customer information, and click **Next**.
   - User Name: Kodak (or customer's name)
   - Company Name: Kodak (or customer's name)
   - Serial Number: (the Magnus 400/ Magnus 400 II Quantum platesetter serial number)

   The Machine Type dialog box appears.



5. Perform the following steps:
   a. In the **Machine Revision** list, select **Magnus** or **Magnus II**.
   b. In the **Machine Type** list, select the platesetter that you are installing.
   c. Click **Next**.

      The Machine Type dialog box is refreshed, and the selected platesetter type appears in the title bar.



6. Perform the following steps:
   a. In the **Loading System** list, select either **Semi Automatic** or **Auto Loader**.
   b. In the **UDRC** list, select either **none**, **BP,** or **Other**.

      Note: If you select **BP**, verify that the UDRC BP cable and the nozzle vacuum detector and wiring are installed on the platesetter.
   c. In the **TH Config** list, select either **2400** or **2540**.
   d. In the **Conveyor** list, select **none**, **Standard**, or **Punch**.
   e. Click **Next**.

   The Magnus 400 Controller software takes a few minutes to load.

After the software is successfully installed, the Reboot screen appears.



7. Remove the **Magnus 400 Controller Version 1.05.394** CD from the CD-ROM drive and close all open platesetter doors.
8. Select **Yes, I want to restart my computer now**, and click **Finish**.

   Important: Proceed to the next section, Verifying Firmware Versions on a Magnus 400/Magnus 400 II Quantum Platesetter on page 28. Do not start the Magnus 400 Controller 1.05.394 software until you verify that the correct firmware versions are installed.

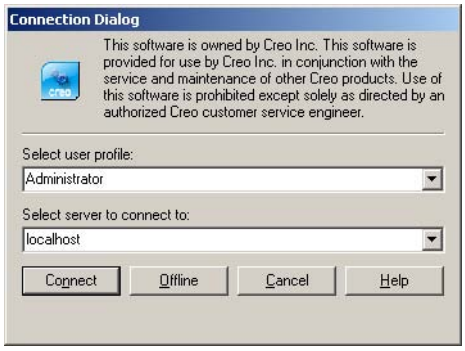
Verifying Firmware Versions on a Magnus 400/Magnus 400 II Quantum Platesetter

Note: To use Service Shell 3.5, you must insert a service dongle.



1. On the Windows desktop, double-click the **Service Shell Client** icon.

   The Connection Dialog dialog box appears.



2. Click **Connect**.

   The Service Shell workspace appears.
3. On the left panel in the Service Shell workspace, click **Device Monitor**.

4. At the `Quantum>>` command prompt, type `fw dir` and press ENTER.

   For platesetters with a thermal 2 imaging head (TMCE firmware), the following application versions should appear:

   - `MCE_MAIN: 1.40.02`
   - `MCE_LCA: 2.28`
   - `MCE_BOOT: 1.16.1`
   - `MCE_POST: 1.06`

5. To view the thermal 2 imaging head application version, at the `Quantum>>` command prompt, type `th2 "ver.`
   The following application version should appear:

   - `TH2: 1.05d Release`

6. If your platesetter is connected to a punch conveyor, verify that the MSB_C (Machine System Board) is installed on it.

   a. In Magnus 400 Controller, go to **Utilities > Hardware > Boards** and double-click **MSB board**.

   b. In the MSB Versions dialog box, verify that the following MSB firmware versions appear:

Component	Version
SW MSB	1.1.1.042
SW BOOT	1.0.0.6
FPGA MSB	0.0.1.27

   c. If these versions do not appear, see Installing MSB firmware manually.

7. Quit the Service Shell workspace and start the Magnus 400 Controller 1.05.394 software.

8. If you do not have the correct firmware versions installed, see the *Magnus 400 II and Magnus 400 II Quantum Cold Start Software Installation Guide* (731-01206A).

9. For platesetters with multi-cassette unit (MCU) and MCU II configurations: Verify that values of the plate-loading and paper disposal parameters that are configured on the platesetter are within the minimum-maximum range for these parameters. See *MCU/MCU II Loading System Parameters* on page 31.

Appendix A: MCU/MCU II Loading System Parameters

The multi-cassette unit (MCU)/MCU II loading system parameters for the Magnus 400 Controller 1.05.394 software are listed in tables on the following pages. The parameters, which are grouped according to the series of movements (stages) performed by the platesetter during the loading sequence, are located in the registry at the following locations:

- Table 1: Loading system setup parameters: **\Magnus400\IO OBJECTS\Loading System\Loading System Setup**
- Table 2: Paper disposal parameters: **\Magnus400\IO OBJECTS\Loading System\Load Plate\Paper Disposal Stage**
- Table 3: Cassette entry to punch entry parameters: **\Magnus400\IO OBJECTS\Loading System\Load Plate\From Cassette To Punch Entry Stage**
- Table 4: Punch entry to drum entry parameters: **\Magnus400\IO OBJECTS\Loading System\Load Plate\From Punch Entry To Drum Entry Stage**
- Table 5: Drum entry to drum parameters: **\Magnus400\IO OBJECTS\Loading System\Load Plate\From Drum Entry to Drum Stage**

Loading System Setup

Table 1: Loading system setup parameters

Parameter	Default	Minimum	Maximum
Centering HP Speed	25	20	25
Enable FlyOff Detection(0=No, 1=First Loading, 2=Always)	1	0	2
Enable Pre-Loading Detectors Check [Yes=1,No=0]	1	0	1
High Speed	40	15	40
Is Mask Air Pressure Check No=1/Yes=0	0	0	1
Load Head Gripper Location (mm)	-218	-222	-214
Max Media Height Size For Small Plate	250	220	300
Max Media Width Size For Small Plate	350	300	400
Min Media Height For Operate All Valav (mm)	635	600	700
Min Media Height For Operate Middle Valav (mm)	330	300	400
Normal Speed	20	5	20
Sleep After Extra to Bar Flag Det [mSec]	500	0	3000
X HP Speed	15	10	15
Y Extra to Bar Flag Det For 0.15 (mm) Rel	7	5	12
Y Extra to Bar Flag Det For 0.3 - 0.2 (mm) Rel	10	5	12
Y Extra to Bar Flag Det Speed	5	3	5
Y HP Speed	15	10	15
Y Max Up (mm)	1	0	2
Y to Bar Flag Det Speed	8	3	10
Y To Read Paper Metal Det [mm] Rel	-15	-30	-6
Enable Detecting no Plate	0	0	1

Paper Disposal Stage

Table 2: Paper Disposal parameters

Parameter	Default	Minimum	Maximum
Delay For Y Up (Mili Sec)	0	0	2000
Operate Vacuum During Paper Disposal	0	0	1
Time To Sleep After Extra In cassette [mSec]	500	0	2000
Time To Wait For Clips are Full Open [mSec]	500	0	1000
X Paper Disposal Final(mm)	660	620	680
X Paper in disposal (mm)	625	600	645
X Paper in disposal speed	5	2	10
X Paper Position In Cassette For Cst 1(mm)	322	317	348
X Paper Position In Cassette For Cst 2(mm)	175	160	195
X Paper Position In Cassette For Cst 3(mm)	32	24	60
X Prepare To Paper Disposal (mm)	600	560	620
X Prepare To Paper Disposal Speed (mm)	40	20	40
Y Down To Paper Disposal Speed	12	5	15
Y Down To Paper Disposal(mm)	102	90	135
Y Extra to catch paper (mm) Rel	4	3	8
Y High Up Speed	15	5	15
Y Prepare To Paper Disposal(mm)	82	70	100
Y to Bar Flag Det. Speed For Paper	7	1	10
Y Up After Extra To Catch Paper (mm) Rel	5	2	6
Y Up Before Down To Paper Disposal (mm)	0	-20	0
Y Up for Init Catcher (mm) Rel	-25	-30	-24

Cassette to Punch Entry

Table 3: Cassette to punch entry parameters

Parameter	Default	Minimum	Maximum
Centering Speed	1	1	5
Centering Wait Dis (mm) Rel	10	0	20
Max Media WSize Ramp Up After Punch [mm]	625	600	650
Measure Centering Tolerance (mm)	3	1	4
Min Media Width Size To Operate Paper Disposal During Loading Plate [mm]	450	400	600
Min Media WSize Ramp Up After Punch [mm]	550	500	600
Min Plate High Size For Centtering wait distance[mm]	763	700	770
Number of Plate BackWard Seperations	4	1	5
Prepare Y to catch Plate Speed	5	2	7
Sleep in Punch Short Detctor [Msec]	500	500	2000
Time To Sleep After Plate Seperation [mSec]	0	0	2000
Time To Wait In Punch Before Stop Paper Dis[Msec]	500	0	3000
Wait For Fufu For Tray2 msec	500	0	3000
Wait For Fufu msec	500	0	3000
X Backward For 0.15 plate [mm] Rel	16	5	20
X Backward For 0.2 plate [mm] Rel	16	5	20
X Backward For 0.3 plate [mm] Rel	16	5	20
X Do Plate Sep Speed	5	2	7
X for Centering (mm)	820	800	840
X for Centering Final (mm)	833	810	855
X for Centering Speed	40	10	40
X Pick Up Plate Before in Punch (mm)	750	735	765
X Plate Forward in Cassette For 0.15 (mm) Rel	1	1	3
X Plate Forward in Cassette For 0.2 (mm) Rel	2	1	3
X Plate Forward in Cassette For 0.3 (mm) Rel	2	1	3
X Position in Cassette For Cst 1(mm)	315	310	325
X Position in Cassette for Cst 2(mm)	175	160	180

Parameter	Default	Minimum	Maximum
X Position in Cassette for Cst 3(mm)	30	22	33
X Pre Extra To Short Pins For 0.15 (mm) Rel	48	20	54
X Pre Extra To Short Pins For 0.2 (mm) Rel	48	20	54
X Pre Extra To Short Pins For 0.3 (mm) Rel	48	20	54
X To Fufu Off Cassette 1 (Rel)	110	50	200
X To Fufu Off Cassette 3 (Rel)	200	100	300
Y Above Air Nozzle In Tray 1(mm)	181	178	184
Y Above Air Nozzle In Tray 2(mm)	110	107	113
Y Above Air Nozzle In Tray 3(mm)	37	34	40
Y After Plate Seperation [mm] Rel	3	3	10
Y Down After Centering to catch Plate For 0.15 (mm) Rel	7	3	10
Y Down After Centering to catch Plate For 0.3 - 0.2 (mm) Rel	10	3	13
Y Down After Centering to catch Plate Speed	5	2	6
Y for Centering (mm)	89	85	90
Y In Punch Speed	15	10	16
Y Movement for 0.15 plate [mm] Rel	0	0	4
Y Movement for 0.2 plate [mm] Rel	0	0	4
Y Movement for 0.3 plate [mm] Rel	0	0	4
Y Plate High Up In Cassette For 0.15 (mm)	0	0	5
Y Plate High Up In Cassette For 0.2 (mm)	0	0	5
Y Plate High Up In Cassette For 0.3 (mm)	0	0	5
Y Plate High Up In Cassette Speed	1	1	3
Y Plate Up In Cassette_1 (mm)	150	135	150
Y Plate Up In Cassette_2 (mm)	85	70	85
Y Plate Up In Cassette_3 (mm)	20	15	30
Y Prepare To Take Out Plate From Cst 1(mm)	160	158	162
Y Prepare To Take Out Plate From Cst 2(mm)	70	68	72
Y Prepare To Take Out Plate From Cst 3(mm)	25	23	27
Y Ramp Position mm	90	85	95

Parameter	Default	Minimum	Maximum
Y to bar flag det. Speed In Cassette	15	10	16
Y to short pins (mm)	86	85	90
Y to short pins Speed	10	5	10
Y Up For Centering (mm) Rel	–15	–20	–10

Punch Entry to Drum Entry

Table 4: Punch entry to drum entry

Parameter	Default	Minimum	Maximum
X After DoPunch For 0.15	705	700	710
X After DoPunch For 0.2	705	700	710
X After DoPunch For 0.3	705	700	710
X Extra To Short Pins For 0.15 (mm) Rel	2	2	4
X Extra To Short Pins For 0.2 (mm) Rel	3	2	4
X Extra To Short Pins For 0.3 (mm) Rel	3	2	4
X Move X Upto Wheels For 0.15 (mm)	0	–10	10
X Move X Upto Wheels For 0.2 (mm)	0	–10	10
X Move X Upto Wheels For 0.2 (mm)	0	–10	10
X Near to Drum For 0.15 Seq (mm)	900	880	910
X Near to Drum For 0.2 Seq (mm)	900	880	910
X Near to Drum For 0.3 Seq (mm)	900	880	910
X Pick Up Plate Before In Drum (mm)	750	735	765
X Prepare In Drum Speed	15	10	15
X Speed Extra To Short Pins	3	2	4
Y In Drum For 0.15 (mm)	10	0	35
Y In Drum For 0.2 (mm)	30	0	35
Y In Drum For 0.3 (mm)	30	0	35
Y Min Media WSize to Go Up After Punch [mm]	550	400	700
Y Prepare To Drum Speed	15	10	15
Y Up After DoPunch for 0.15	85	75	90

Parameter	Default	Minimum	Maximum
Y Up After DoPunch for 0.2	85	75	90
Y Up After DoPunch for 0.3	85	75	90
Y Up For Backward After Centering (mm) Rel	–15	–20	–10
Y Up Prepare To Drum	–4	–12	–2

Drum Entry to Drum Stage

Table 5: Drum entry to drum stage parameters

Parameter	Default	Minimum	Maximum
Drum To Plate After Extra For 0.15 (mm)	0	0	2
Drum To Plate After Extra For 0.2 (mm)	0	0	2
Drum To Plate After Extra For 0.3 (mm)	0	0	2
Thickness For 0.15 Seq (mm)	0.15	0.15	0.15
Thickness For 0.2 Seq (mm)	0.2	0.2	0.2
Thickness For 0.3 Seq (mm)	0.3	0.3	0.3
X In Drum Final For 0.15 Plates (mm) Rel	6	0	16
X In Drum Final For 0.2 Plates (mm) Rel	6	0	16
X In Drum Final For 0.3 Plates (mm) Rel	6	0	16
X In Drum Final Speed	1	1	3
X In Drum For 0.15(mm)	1006	1000	1012
X In Drum For 0.2(mm)	1006	1000	1012
X In Drum For 0.3(mm)	1006	1000	1012
X In Drum Speed	10	4	10
X Run Away From Plate On Drum	300	1	700
Y After Extra to Drum (mm)	0	0	10
Y Before Extra to Drum (mm) Rel	0	0	10
Y Down After Plate Drop For 0.15 (mm) Abs	10	0	40
Y Down After Plate Drop For 0.2 (mm) Abs	30	0	40
Y Down After Plate Drop For 0.3 (mm) Abs	30	10	40
Y Up Before Back Abs (mm)	16	10	25