

**1. PURPOSE**

To provide specific instructions for the following Six sections:

**Section 1:** Product Specifications and Product Description

**Section 2:** GEX B3 120 Matrix Scanner and Mount Installation to the Genesys 30 Baseplate

**Section 3:** Install the GEN30 Base plate inside the GEN30 Sample Compartment

**Section 4:** Software Installation – Setting up the Matrix 120 Scanner for use with GEX DoseControl

**Section 5:** Troubleshooting Guide for adjusting the Focus Dial Setting of the Matrix Scanner and the Gain and Exposure Time Setup Configuration

**Section 6:** GEN30 Cableway Lid with new cut out

**2. DESCRIPTION**

The Datalogic Matrix 120 Barcode Scanner is a component of the DoseControl® Dosimetry System. It is mounted inside the GENESYS 30 Spectrophotometer sample compartment using a specially designed bracket and connected to the dosimetry workstation PC with a USB interface cable.

**3. APPLICATION**

The device is capturing or verifying the sample ID at the time of measurement using the barcode ID for certain models of B3 Dosimeters, as part of the DoseControl® Dosimetry System. For the DoseControl® dosimetry system, the Matrix scanner feature is appropriate for 1 dosimeter/pouch (1 absorbance count) applications.

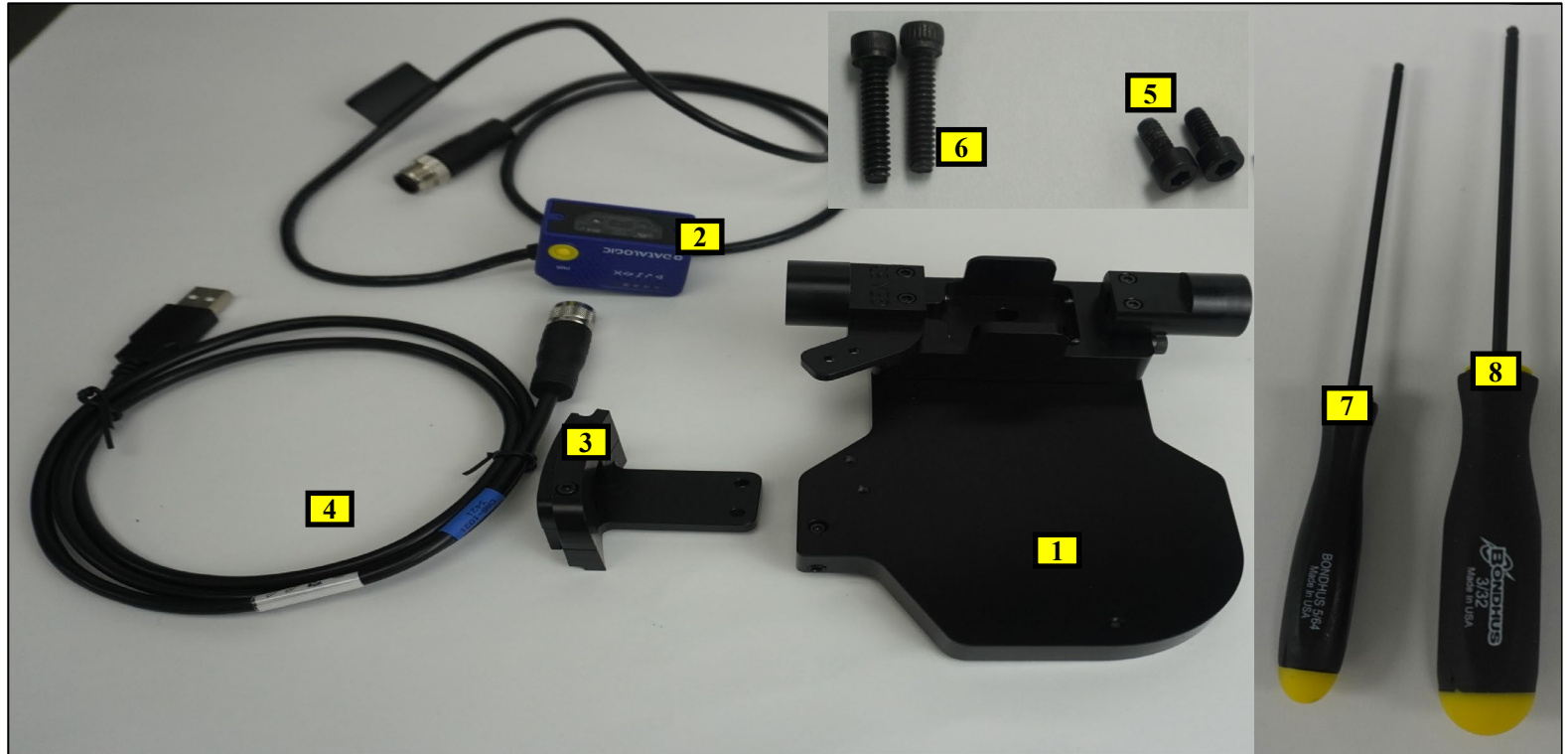
**4. SPECIFICATIONS**

<b>PRODUCT DIMENSIONS</b>	<b>PACKAGING DIMENSIONS</b>	<b>PRODUCT WEIGHT</b>
45.4mm (L) x 29.2mm (W) x 23.5mm (H) (1.79”L x 1.16”W x 0.93”H)	12.7cm (L) x 12.7cm (L) x 7.62 cm (H) (7.0”L x 5.3/4”W x 3.1/2”H)	0.8 lbs.
<b>MATERIAL</b>	Cast aluminum housing	
<b>COLOR</b>	Blue	
<b>PACKAGING</b>	Manufacturer’s cardboard box and wrapped in bulk packaging protection and prevent movement inside the product box during transport. A soft lens cleaning wipe is included.	

**G30 - Product Specifications and Usage (PSU) Information for the (P4450) Matrix 120 Barcode Scanner**

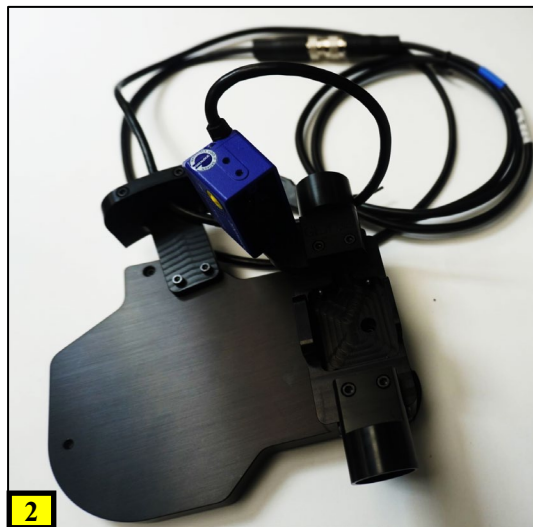
Bill of Material						
	RAW MATERIAL P/N	SUPPLIER P/N	GEX P/N	ITEM	QTY	DESCRIPTION
Product P/N: P4450	rP4405	7500-1502	P4405	1	1	G30 Dosimeter Baseplate and Beam Enclosure Assembly
Product Description: <b>Section 1</b> Genesys 30 (GEX B3 120 Matrix Scanner Assembly Specifications)	rP4390	937800000	P4390	2	1	GEX B3 120 Matrix Barcode Scanner Assembly
	N/A	7500-1527	N/A	3	1	Assy, Light Blocking Cable Way, GEN-30
	N/A	N/A	N/A	4	1	USB Converter Cable
	N/A	N/A	N/A	5	2	M 2.5 x 5 Metric Socket Cap Screw
<b>Process ID: WorkStation Setup</b>	N/A	N/A	N/A	6	2	#4 – 40 x 0.5" Cap Screw
	N/A	N/A	N/A	7	1	5/64" Hex Driver Tool
	N/A	N/A	N/A	8	1	3/32" Hex Driver Tool

Work Content   Verify

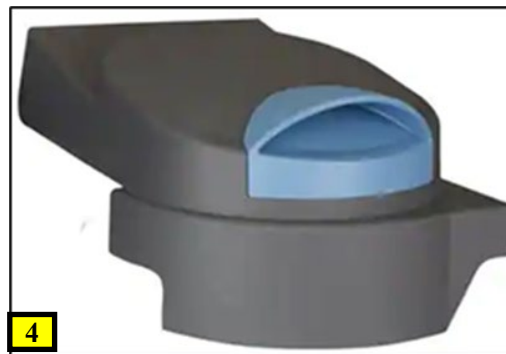


## G30 - Product Specifications and Usage (PSU) Information for the (P4450) Matrix 120 Barcode Scanner

Bill of Material						
	RAW MATERIAL P/N	SUPPLIER P/N	GEX P/N	ITEM	QTY	DESCRIPTION
Product P/N: P4450	rP4390	N/A	P4390	1	1	Datalogic Matrix 120 Barcode Scanner
Product Description: Genesys 30 Spectrophotometer (G30) with Genesys 30 Dosimeter Base Plate Assembly	rP4450	N/A	P4450	2	1	GEN 30 Baseplate Matrix Scanner Assembly
	N/A	N/A	N/A	3	1	GEN-30-GB3 Matrix Mount
	rP4402	840-278200	P4402	4	1	Genesys 30 Lid
<b>Process ID: Product Description</b>	<b>SECTION 1: PRODUCT SPECIFICATIONS AND DESCRIPTION</b>					



**IMPORTANT:** The product includes the Matrix 120 Barcode Scanner with the integrated USB cable, and the mount with screws to secure to the P4330 GEX Dosimeter Base Plate.



	<b>Bill of Material</b>					
	<b>RAW MATERIAL P/N</b>	<b>SUPPLIER P/N</b>	<b>GEX P/N</b>	<b>FIND</b>	<b>QTY</b>	<b>DESCRIPTION</b>
Product P/N: P4450	N/A	N/A	N/A	N/A	N/A	
Product Description: Genesys 30 Spectrophotometer (G30) with Genesys 30 Dosimeter Base Plate Assembly	N/A	N/A	N/A	N/A	N/A	
	N/A	N/A	N/A	N/A	N/A	
	N/A	N/A	N/A	N/A	N/A	
<b>Process ID: Product Description</b>	N/A	N/A	N/A	N/A	N/A	
<b>SECTION 1: PRODUCT SPECIFICATIONS AND DESCRIPTION</b>						

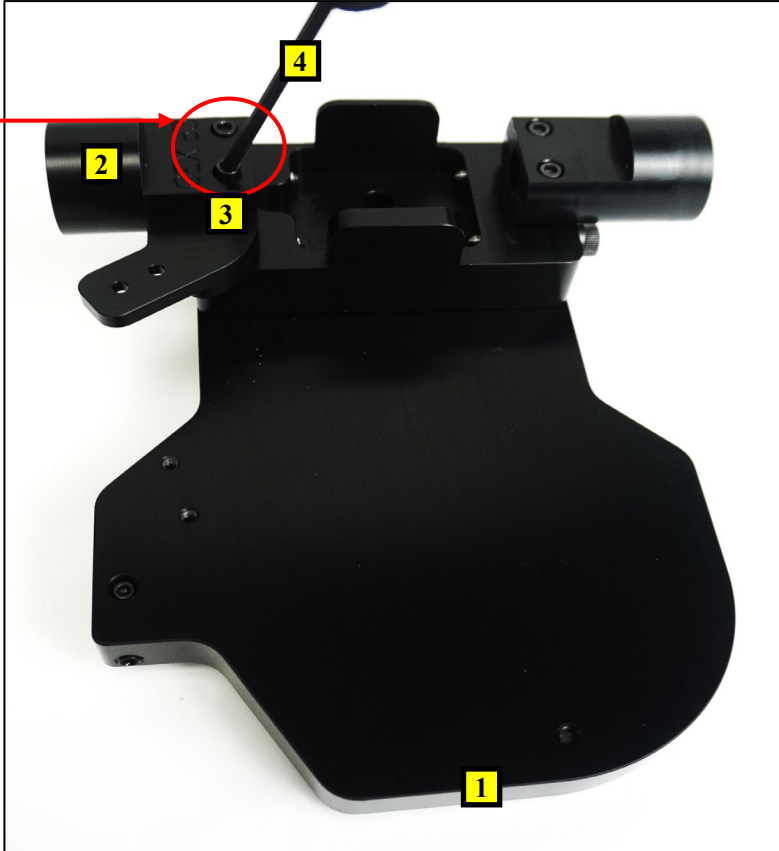
<p><b>4.1 Calibration</b> None is required.</p> <p><b>4.2 Required Software</b> 4.2.1 The Matrix 120 Barcode Scanner requires a USB Driver and Datalogic, DL.CODE Software, (Published by Datalogic) to be installed on a Windows OS PC. The Matrix integrates with GEX DoseControl® software, (See Section 8).</p> <p><b>4.3 Matrix 120 Barcode Scanner Focal Length Dial Setting</b> 4.3.1 None is required and ready for use. The scanner is preset for the Genesys 30 spectrometers.</p> <p><b>4.4 Configuration Setting</b> 4.4.1 None is required. The scanner is preloaded with the DoseControl® software “config” file and gain and exposure time setup configuration for the Genesys 30.</p> <p><b>4.5 Maintenance</b> 4.5.1 The barcode scanner must be installed in a location where it will not be exposed to excessive dust or other particulate matter.</p> <p>4.5.2 The barcode scanner must be cleaned as part of a preventive maintenance program at a frequency dependent on the level of cleanliness of the area. Any accumulated particulate can be removed using compressed air, and any smudges on the lens may be removed with a clean, soft wipe.</p> <p>4.5.3 Avoid dropping or physically damaging the scanner. If damage occurs, verify performance. Contact GEX Customer Service at <a href="mailto:support@gexcorp.com">support@gexcorp.com</a> for assistance.</p> <p><b>4.6 Storage</b> 4.6.1 Store the device in a cool and dry area.</p>
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## G30 - Product Specifications and Usage (PSU) Information for the (P4450) Matrix 120 Barcode Scanner

Bill of Material						
	RAW MATERIAL P/N	SUPPLIER P/N	GEX P/N	ITEM	QTY	DESCRIPTION
Product P/N: P4450	-	-	P4405	1	0	Holder System Baseplate
Product Description: Genesys 30 Spectrophotometer (G30) with Genesys 30 Dosimeter Base Plate Assembly	N/A	N/A	N/A	2	0	Matrix Scanner Tube Mount (Left)
	N/A	N/A	N/A	3	2	Soc HD Screw, #4-40NC x 0.625
	N/A	N/A	N/A	4	0	Hex Driver Tool (3/32")
Process ID: GEX B3 120 Matrix Scanner	N/A	N/A	N/A	N/A	N/A	
Installation	<b>SECTION 2: 120 MATRIX SCANNER AND MOUNT INSTALLATION ON GEN30 BASE PLATE</b>					

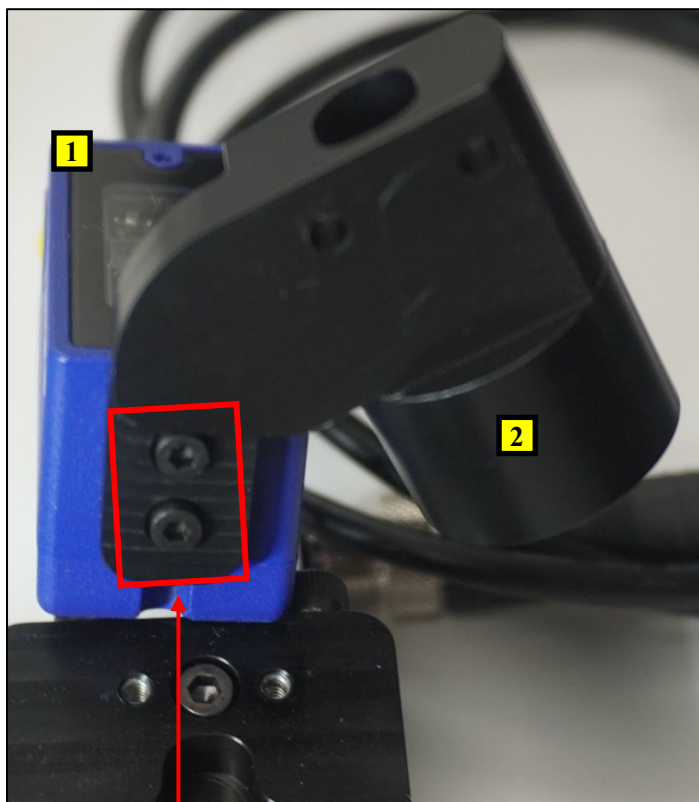
1. Remove item 2 using item 4 and retain item 3.

**NOTE:** See PSU 100-168 for the Dosimeter Holder System and baseplate with alternate beam tubes.

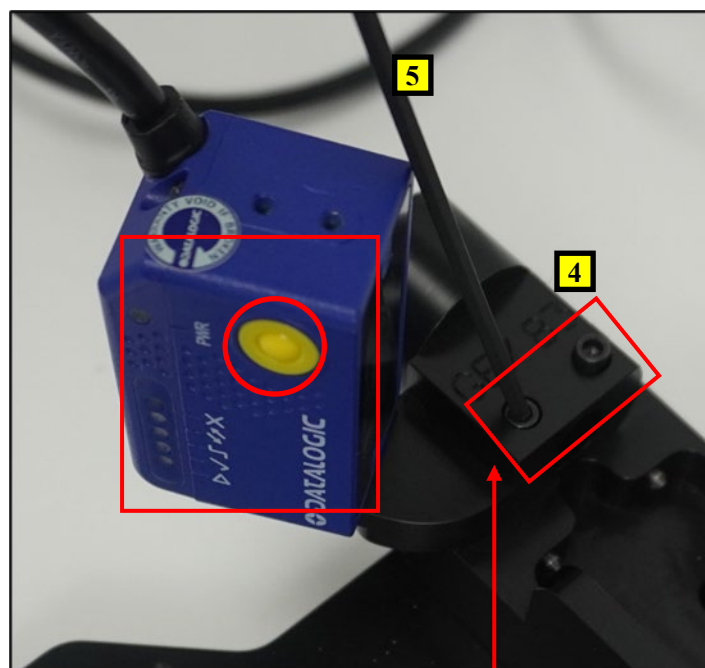


## G30 - Product Specifications and Usage (PSU) Information for the (P4450) Matrix 120 Barcode Scanner

Bill of Material						
	RAW MATERIAL P/N	SUPPLIER P/N	GEX P/N	ITEM	QTY	DESCRIPTION
Product P/N: P4450	N/A	N/A	N/A	1	0	GEX B3 120 Matrix Scanner
Product Description: Genesys 30 Spectrophotometer (G30) with Genesys 30 Dosimeter Base Plate Assembly	N/A	N/A	N/A	2	0	Matrix Scanner Tube Mount (Left)
	N/A	N/A	N/A	3	0	M 2.5 x 5 Metric Socket Cap Screw
	N/A	N/A	N/A	4	0	Soc HD Screw, #4-40NC x 0.625
	N/A	N/A	N/A	5	0	Hex Driver Tool (3/32")
Process ID: GEX B3 120 Matrix Scanner	N/A	N/A	N/A	6	0	Hex Driver Tool (5/64")
<b>Installation</b>	<b>SECTION 2: 120 MATRIX SCANNER AND MOUNT INSTALLATION ON GEN30 BASE PLATE</b>					



**3** 1. Secure item 1 to item 2 using items 3 and 6.



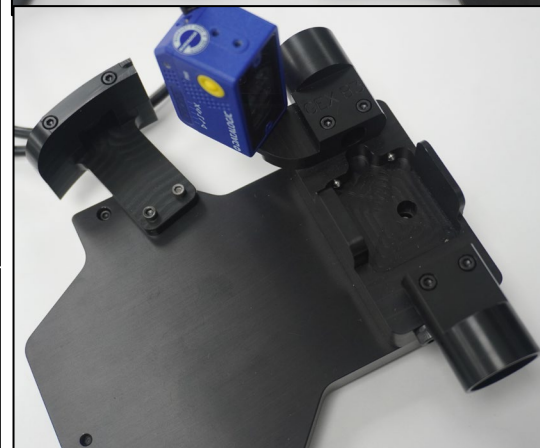
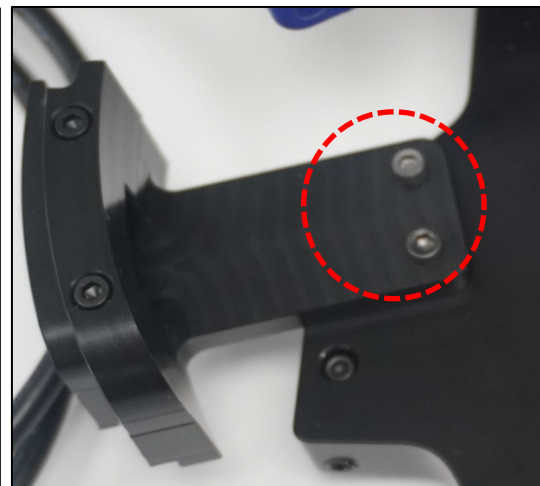
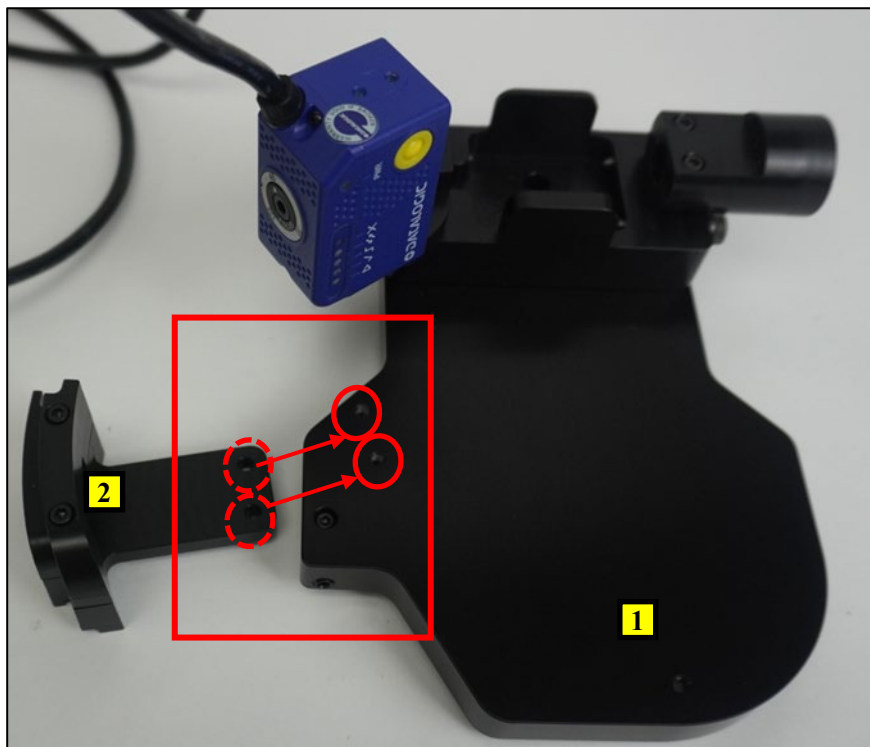
**5** 3. Reattached item 2 to the baseplate using items 4 and 5.

**2** 2. Mount the Matrix Scanner with the cable facing up and the yellow power button, facing the operator.



## G30 - Product Specifications and Usage (PSU) Information for the (P4450) Matrix 120 Barcode Scanner

Bill of Material						
	RAW MATERIAL P/N	SUPPLIER P/N	GEX P/N	ITEM	QTY	DESCRIPTION
Product P/N: P4450	-	-	P4405	1	0	Holder System Baseplate
Product Description: Genesys 30 Spectrophotometer (G30) with Genesys 30 Dosimeter Base Plate Assembly	N/A	7500-1527	N/A	2	1	Cable Way Base GEN-30
	N/A	N/A	N/A	3	2	#4 – 40 x 0.5" Cap Screw
	N/A	N/A	N/A	4	0	Hex Driver Tool (3/32")
<b>Process ID:</b> Cable Way Mount	N/A	N/A	N/A	N/A	N/A	
Installation	<b>SECTION 2: 120 MATRIX SCANNER AND MOUNT INSTALLATION ON GEN30 BASE PLATE</b>					

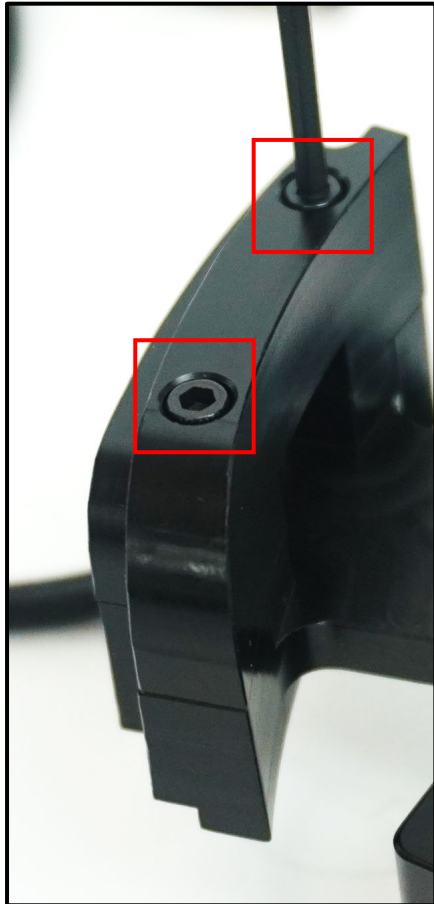
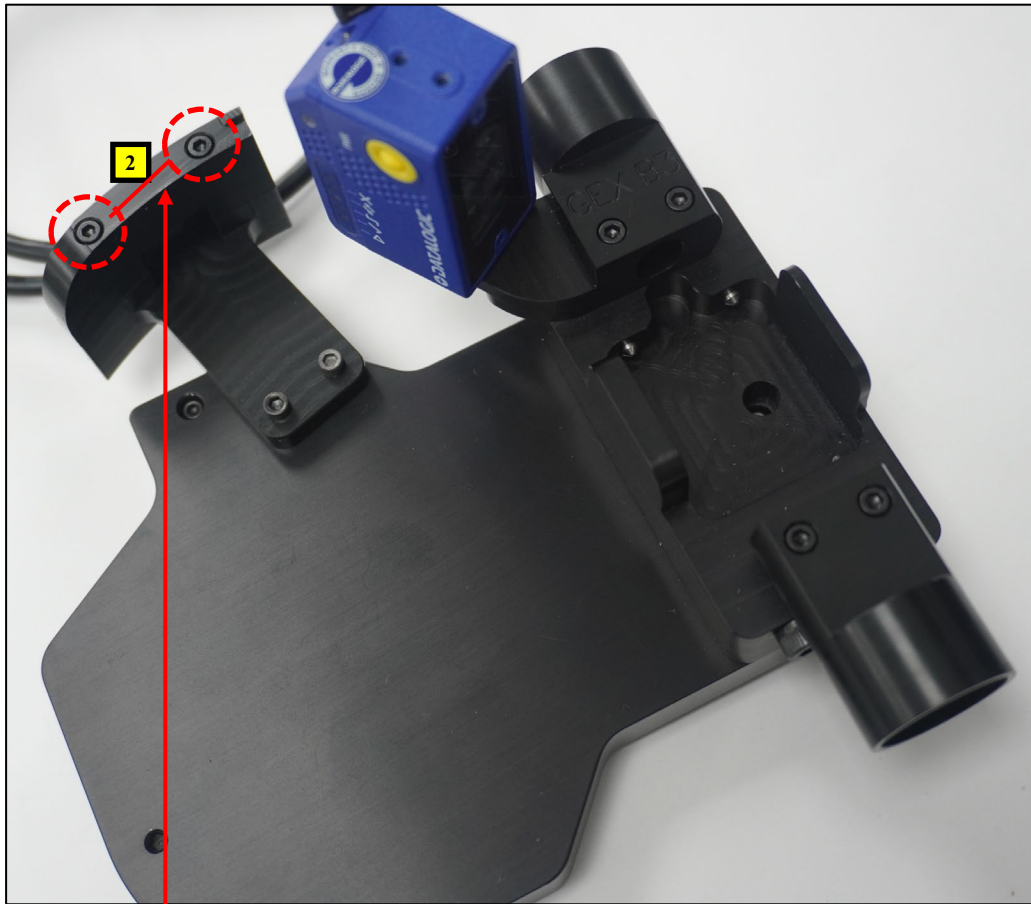


1 1. Attached item 2 to item 1 using items 3 and 4.



## G30 - Product Specifications and Usage (PSU) Information for the (P4450) Matrix 120 Barcode Scanner

Bill of Material						
	RAW MATERIAL P/N	SUPPLIER P/N	GEX P/N	ITEM	QTY	DESCRIPTION
Product P/N: P4450	N/A	7500-1527	N/A	1	0	Cable Way Base GEN-30
Product Description: Genesys 30 Spectrophotometer (G30) with Genesys 30 Dosimeter Base Plate Assembly	N/A	N/A	N/A	2	2	Soc Head Screw, #4-40 NC x 0.75
	N/A	N/A	N/A	3	0	Hex Driver Tool (3/32")
	N/A	N/A	N/A	N/A	N/A	
<b>Process ID: Cable Way Assembly</b>	<b>SECTION 2: 120 MATRIX SCANNER AND MOUNT INSTALLATION ON GEN30 BASE PLATE</b>					



2 1. Remove item 2 using item 3 and retain item 2.



## G30 - Product Specifications and Usage (PSU) Information for the (P4450) Matrix 120 Barcode Scanner

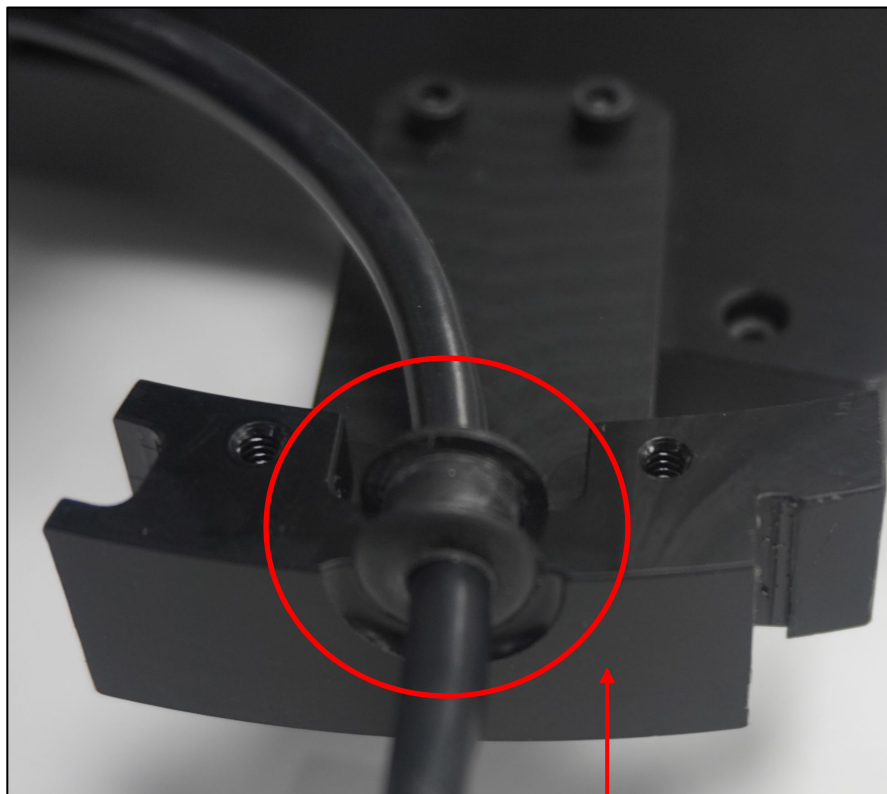
Bill of Material						
	RAW MATERIAL P/N	SUPPLIER P/N	GEX P/N	ITEM	QTY	DESCRIPTION
Product P/N: P4450	N/A	N/A	N/A	N/A	N/A	
Product Description: Genesys 30 Spectrophotometer (G30) with Genesys 30 Dosimeter Base Plate Assembly	N/A	N/A	N/A	N/A	N/A	
	N/A	N/A	N/A	N/A	N/A	
	N/A	N/A	N/A	N/A	N/A	
<b>Process ID: Matrix Cord Routing</b>	<b>SECTION 2: 120 MATRIX SCANNER AND MOUNT INSTALLATION ON GEN30 BASE PLATE</b>					



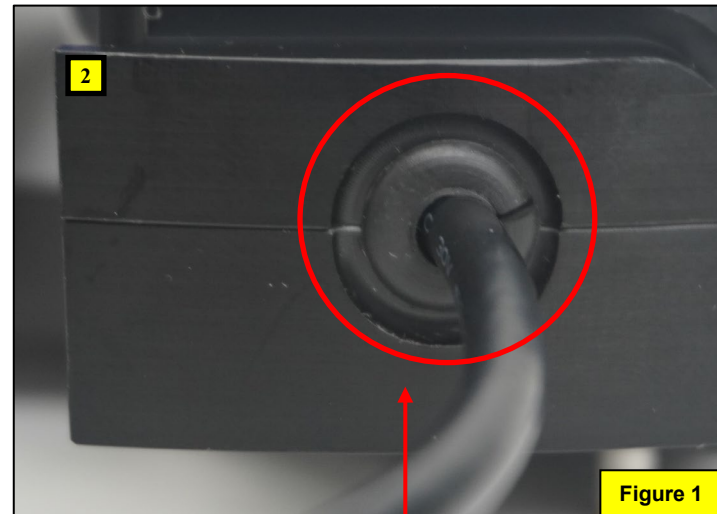
1. Run the Matrix scanner cable underneath the left bean tube.

# G30 - Product Specifications and Usage (PSU) Information for the (P4450) Matrix 120 Barcode Scanner

Bill of Material						
	RAW MATERIAL P/N	SUPPLIER P/N	GEX P/N	ITEM	QTY	DESCRIPTION
Product P/N: P4450	N/A	7500-1529	N/A	1	0	Grommet, Altered, Cable Way, Rubber Bushing
Product Description: Genesys 30 Spectrophotometer (G30) with Genesys 30 Dosimeter Base Plate Assembly	N/A	N/A	N/A	2	0	Gate Way Holder, GEN-30
	N/A	N/A	N/A	N/A	N/A	
	N/A	N/A	N/A	N/A	N/A	
	N/A	N/A	N/A	N/A	N/A	
<b>Process ID: Cable Way Assembly</b>		<b>SECTION 2: 120 MATRIX SCANNER AND MOUNT INSTALLATION ON GEN30 BASE PLATE</b>				



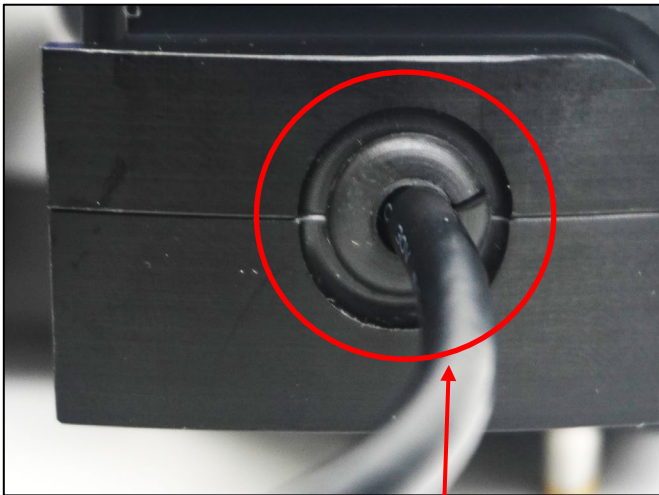
1. Insert the scanner cable into the rubber grommet opening of the Cable Way and fit rubber grommet to proper fitting as shown in figure 1.



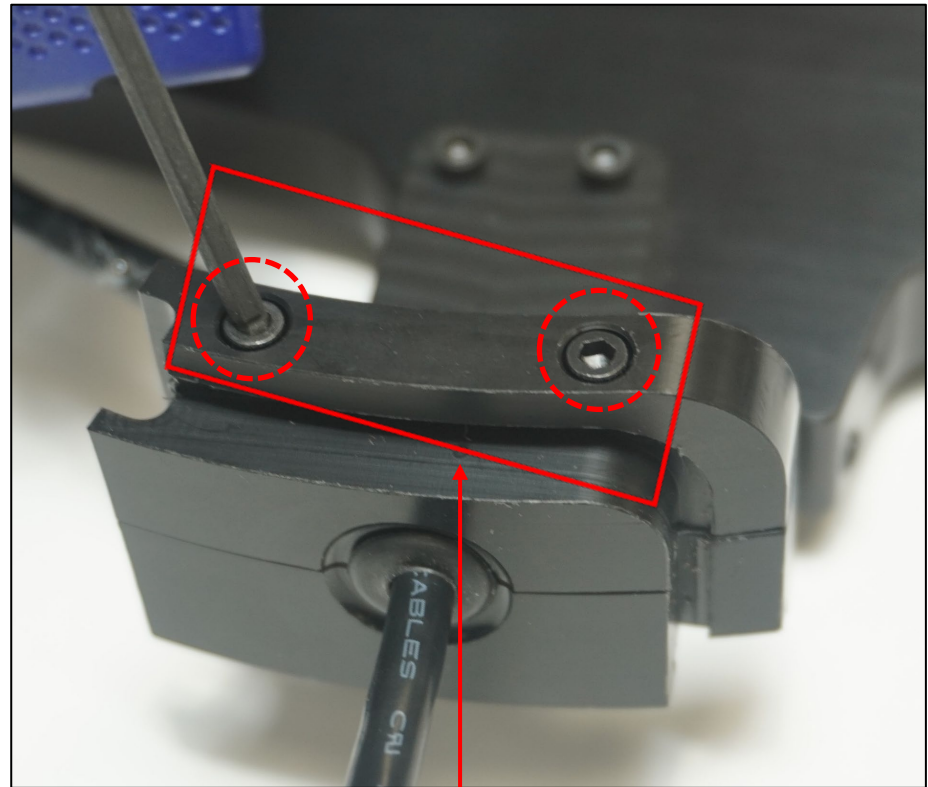
2. Verify the rubber grommet sits flush with the Cable Way opening before reattaching the cable way holder.

## G30 - Product Specifications and Usage (PSU) Information for the (P4450) Matrix 120 Barcode Scanner

Bill of Material						
	RAW MATERIAL P/N	SUPPLIER P/N	GEX P/N	ITEM	QTY	DESCRIPTION
Product P/N: P4450	N/A	1500-1529	N/A	N/A	N/A	
Product Description: Genesys 30 Spectrophotometer (G30) with sub-part Genesys 30 Dosimeter Base Assembly	N/A	N/A	N/A	2	N/A	Soc Head Screw, #4-40 NC x 0.75
	N/A	N/A	N/A	3	N/A	5/64' Hex Driver Tool
	N/A	N/A	N/A	N/A	N/A	
Process ID: Cable Way Assembly	SECTION 2: 120 MATRIX SCANNER AND MOUNT INSTALLATION ON GEN30 BASE PLATE					



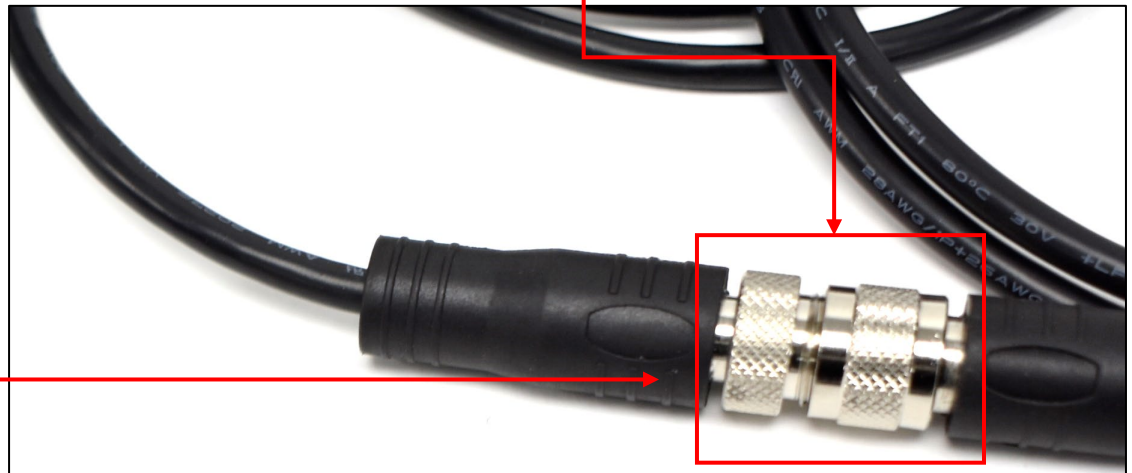
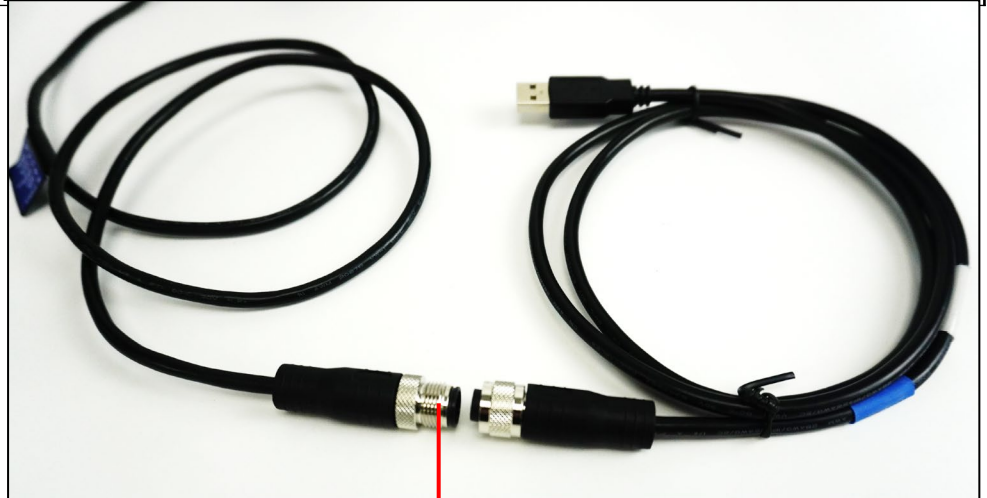
1. Verify the rubber grommet fits flush with the Altered, Cable Way. ■ ●



2. Secure the Cable Way Holder with items 2 and 3. ■

**G30 - Product Specifications and Usage (PSU) Information for the (P4450) Matrix 120 Barcode Scanner**

<b>Bill of Material</b>						
	<b>RAW MATERIAL P/N</b>	<b>SUPPLIER P/N</b>	<b>GEX P/N</b>	<b>ITEM</b>	<b>QTY</b>	<b>DESCRIPTION</b>
Product P/N: P4450	N/A	CAB-1021	N/A	1	1	USB Converter Cable
Product Description: Genesys 30 Spectrophotometer (G30) with sub-part Genesys 30 Dosimeter Base Plate Assembly	N/A	N/A	N/A	N/A	N/A	
	N/A	N/A	N/A	N/A	N/A	
	N/A	N/A	N/A	N/A	N/A	
<b>Process ID: USB Cable Connection</b>	<b>SECTION 2: 120 MATRIX SCANNER AND MOUNT INSTALLATION ON GEN30 BASE PLATE</b>					



1. Connect item 1 to the Matrix Scanner cable.

**G30 - Product Specifications and Usage (PSU) Information for the (P4450) Matrix 120 Barcode Scanner**

<b>Bill of Material</b>						
	<b>RAW MATERIAL P/N</b>	<b>SUPPLIER P/N</b>	<b>GEX P/N</b>	<b>ITEM</b>	<b>QTY</b>	<b>DESCRIPTION</b>
Product P/N: P4450	N/A	N/A	N/A	N/A	N/A	
Product Description: Genesys 30 Spectrophotometer (G30) with sub-part Genesys 30 Dosimeter Base Plate Assembly	N/A	N/A	N/A	N/A	N/A	
	N/A	N/A	N/A	N/A	N/A	
	N/A	N/A	N/A	N/A	N/A	
<b>Process ID: Complete Assembly</b>	<b>SECTION 2: 120 MATRIX SCANNER GEN30 BASE PLATE COMPLETE ASSEMBLY</b>					





## G30 - Product Specifications and Usage (PSU) Information for the (P4450) Matrix 120 Barcode Scanner

	Bill of Material					
	RAW MATERIAL P/N	SUPPLIER P/N	GEX P/N	ITEM	QTY	DESCRIPTION
Product P/N: P4450	N/A	N/A	N/A	N/A	N/A	
Product Description: Genesys 30 Spectrophotometer (G30) with sub-part Genesys 30 Dosimeter Base Plate Assembly	N/A	N/A	N/A	N/A	N/A	
	N/A	N/A	N/A	N/A	N/A	
	N/A	N/A	N/A	N/A	N/A	
<b>Process ID:</b> Prior to Installation	<b>Unbox the Matrix for Inspection before installation into the GEN30 Spectrophotometer</b>					

**5. Unbox the Matrix 120 Barcode Scanner and visually inspect for damage.**

5.1 If damage occurs, verify performance, and contact GEX Customer Service [support@gexcorp.com](mailto:support@gexcorp.com) for assistance.

***IMPORTANT:*** Do not adjust the Matrix Scanner focus dial setting or software configuration file.

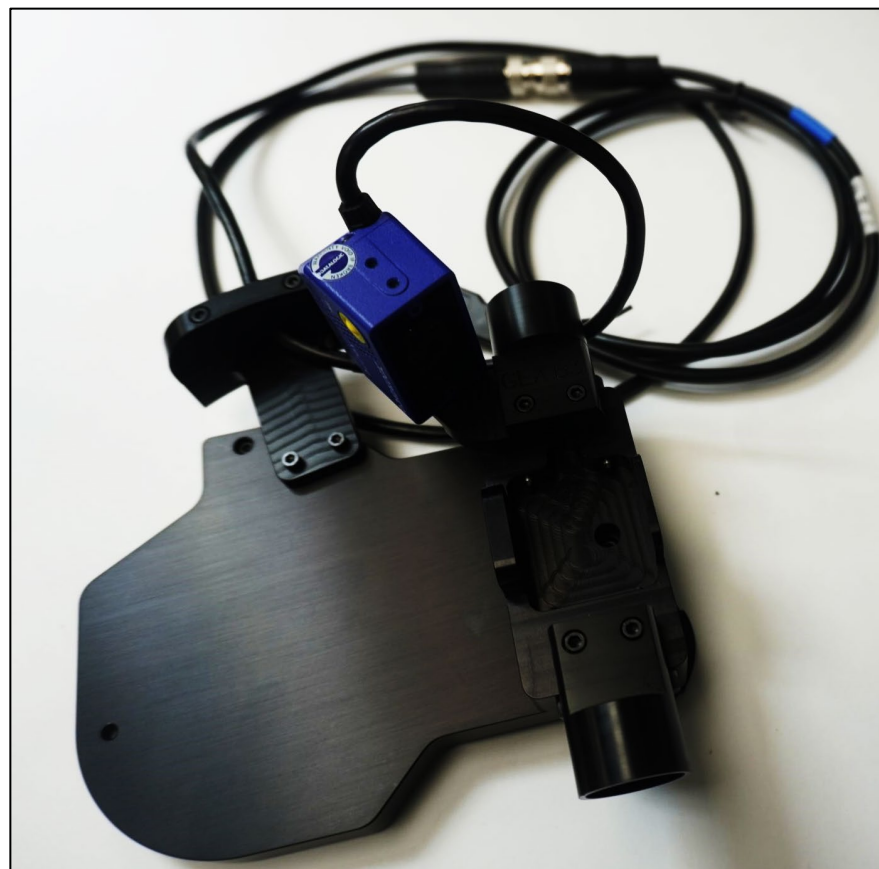
***IMPORTANT:*** GEX has preset the Matrix Scanner focus dial settings for the Genesys 30 prior to shipping.

***IMPORTANT:*** GEX has pre-loaded the scanner with the DoseControl® software “config” file for the Genesys 30 gain and exposure time setup configuration prior to shipping.

5.3 If the need arises where it is necessary to adjust the Matrix Scanner focus dial setting and/or the gain and exposure time setup configuration, refer to the troubleshooting guide below.

**NOTE:**

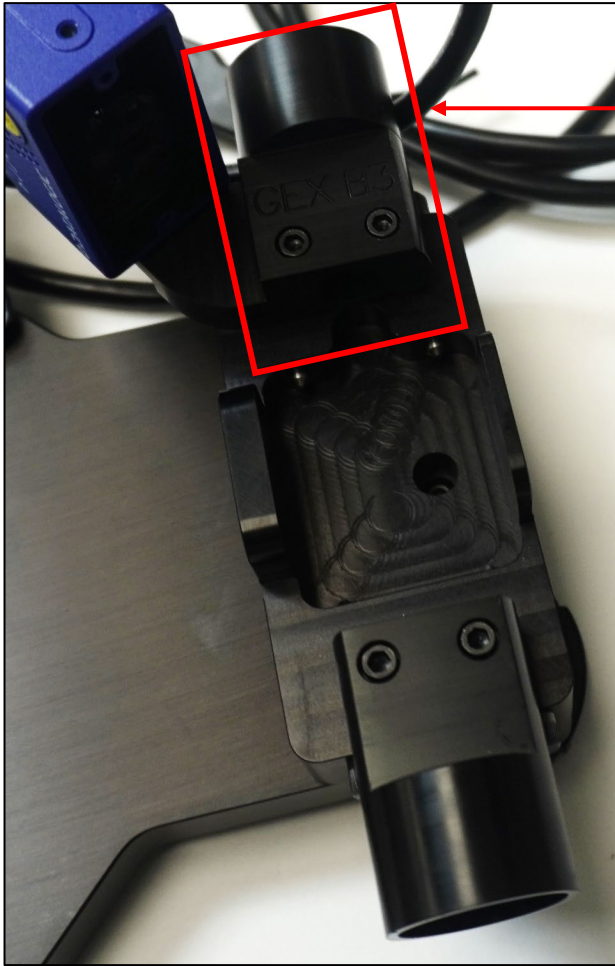
The Assembly (P4405) when ordered, the mount is attached to the base plate by GEX prior to shipment as seen in Figure 1.





**G30 - Product Specifications and Usage (PSU) Information for the (P4450) Matrix 120 Barcode Scanner**

Bill of Material						
	RAW MATERIAL P/N	SUPPLIER P/N	GEX P/N	ITEM	QTY	DESCRIPTION
Product P/N: P4450	N/A	N/A	N/A	1	N/A	Matrix Scanner Tube Mount (Left)
Product Description: Genesys 30 Spectrophotometer (G30) with sub-part Genesys 30 Dosimeter Base Plate Assembly	N/A	N/A	N/A	2	N/A	Soc HD Screw, #4-40NC x 0.625
	N/A	N/A	N/A	3	N/A	Hex Driver Tool (3/32")
	N/A	N/A	N/A	N/A	N/A	
<b>Process ID: Left Beam Tube Removal</b>	<b>SECTION 3: INSERTING THE GEN30 BASE PLATE INTO THE GEN30 SAMPLE COMPARTMENT</b>					



1. Remove items 1 and 2 using item 3 and retain item 2.

2. Insert the GEN 30 baseplate assembly gently into the GEN 30 sample compartment.

NOTE: Refer to the PSU 100-168 for complete instructions on lining up the locking pins and securing the baseplate into the Genesys 30 sample chamber.



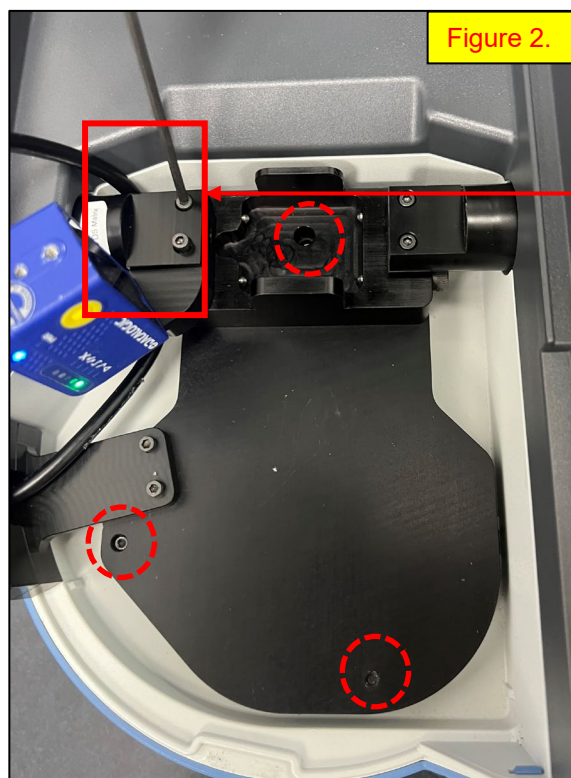
NOTE: Refer to Genesys 30 Dosimeter Baseplate and Holder System (PSU 100-168) for the various holders ( GEN30, DoseStix and WINdose) to be inserted and secured in and out of the P4405 Baseplate without the use of any tools.

## G30 - Product Specifications and Usage (PSU) Information for the (P4450) Matrix 120 Barcode Scanner

Bill of Material						
	RAW MATERIAL P/N	SUPPLIER P/N	GEX P/N	ITEM	QTY	DESCRIPTION
Product P/N: P4450	N/A	N/A	N/A	1	N/A	Matrix Scanner Tube Mount (Left)
Product Description: Genesys 30 Spectrophotometer (G30) with sub-part Genesys 30 Dosimeter Base Plate Assembly	N/A	N/A	N/A	2	N/A	Soc HD Screw, #4-40NC x 0.625
	N/A	N/A	N/A	3	N/A	Hex Driver Tool (3/32")
	N/A	N/A	N/A	N/A	N/A	
<b>Process ID:</b> Left Beam Tube Installation	<b>SECTION 3: INSERTING THE GEN30 BASE PLATE INTO THE GEN30 SAMPLE COMPARTMENT</b>					



1. Carefully insert the baseplate assembly into the GENESYS 30 sample chamber by lining up the locking pins with the cups in the base of the spectrophotometer. Gently tighten the screw (finger tight, 1/2-1 turn of the screw) into the brass locking nut. See Figure 2.



2. Secure item 1 using items 2 and 3 (See Figure 2).

**NOTE:** Refer to the PSU 100-168 for complete instructions on lining up the locking pins and securing the baseplate into the Genesys 30 sample chamber

## G30 - Product Specifications and Usage (PSU) Information for the (P4450) Matrix 120 Barcode Scanner

Bill of Material						
	RAW MATERIAL P/N	SUPPLIER P/N	GEX P/N	ITEM	QTY	DESCRIPTION
Product P/N: P4450	N/A	N/A	N/A	N/A	N/A	
Product Description: Genesys 30 Spectrophotometer (G30) with sub-part Genesys 30 Dosimeter Base Plate Assembly	N/A	N/A	N/A	N/A	N/A	
	N/A	N/A	N/A	N/A	N/A	
	N/A	N/A	N/A	N/A	N/A	
<b>Process ID:</b> Software Installation	<b>SECTION4: Software Installation for the GEN30 Matrix Scanner</b>					

6. Setup the Matrix 120 Barcode Scanner for use with GEX DoseControl® .



6.1. Connect the power cord from the front, right-side of the instrument to the outlet meeting the electrical supply requirements.



6.2. Install Thermo GENESYS 30 Driver.



**NOTE:** Integration with GEX's DoseControl® software requires the installation of the Thermo GENESYS 30 driver on the PC to be used. GEX supplies the driver with the DoseControl® software. Contact GEX Customer Service for assistance locating the driver.



## G30 - Product Specifications and Usage (PSU) Information for the (P4450) Matrix 120 Barcode Scanner

Bill of Material						
	RAW MATERIAL P/N	SUPPLIER P/N	GEX P/N	ITEM	QTY	DESCRIPTION
Product P/N: P4450	N/A	N/A	N/A	N/A	N/A	
Product Description: Genesys 30 Spectrophotometer (G30) with sub-part Genesys 30 Dosimeter Base Plate Assembly	N/A	N/A	N/A	N/A	N/A	
	N/A	N/A	N/A	N/A	N/A	
	N/A	N/A	N/A	N/A	N/A	
<b>Process ID:</b> Software Installation	<b>SECTION4: Software Installation for the GEN30 Matrix Scanner</b>					

6.1. Download the GEX-supported release of the DL.CODE Software.

1. Download the GEX-supported release (version 1.8.1 or higher) of the DL.CODE software from the [Datalogic website](#):



2. Click or scroll to Downloads.



3. Expand SW & Utilities, find, and click the download link for version 1.8.1 (or higher).



Window 1.

### DOWNLOADS FOR DL.CODE™

- DATA SHEETS
- PRODUCT BROCHURES
- COMPANY PROFILE
- SERVICES BROCHURES
- PRODUCT GROUP GUIDES
- SOLUTION GUIDES
- MANUALS
- SW & UTILITIES**

DL.CODE CONFIGURATION TOOL CURRENT RELEASE (24/09/2019)

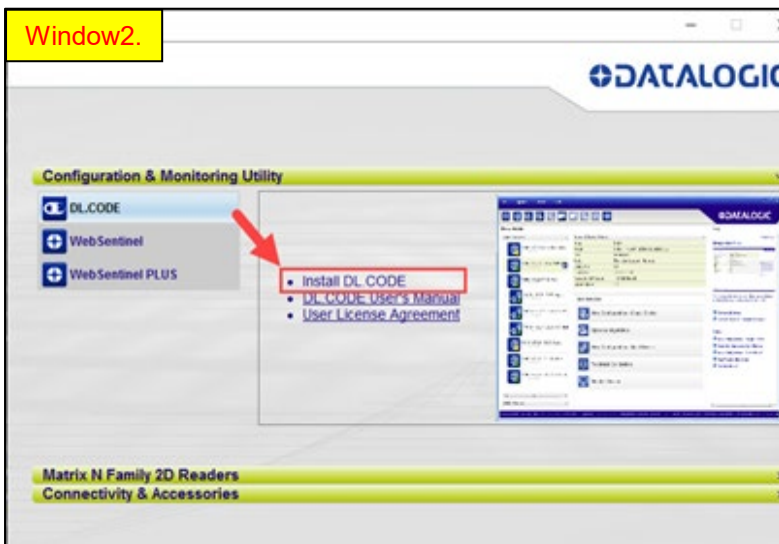
This is the most current release valid for all Matrix family readers.

dl.code\_minidvd\_1.8.1\_full\_version

## G30 - Product Specifications and Usage (PSU) Information for the (P4450) Matrix 120 Barcode Scanner

Bill of Material						
	RAW MATERIAL P/N	SUPPLIER P/N	GEX P/N	ITEM	QTY	DESCRIPTION
Product P/N: P4450	N/A	N/A	N/A	N/A	N/A	
Product Description: Genesys 30 Spectrophotometer (G30) with sub-part Genesys 30 Dosimeter Base Plate Assembly	N/A	N/A	N/A	N/A	N/A	
	N/A	N/A	N/A	N/A	N/A	
	N/A	N/A	N/A	N/A	N/A	
Process ID: Software Installation	<b>SECTION4: Software Installation for the GEN30 Matrix Scanner</b>					

### 6.2. Setup the Matrix 120 Barcode Scanner for use with GEX DoseControl®.



**IMPORTANT:** The USB Driver “Check” is very important for the installation process to occur. If skipped or missed, it is very difficult to fix the problem.

**Note:** Administrator privileges required to approve the installation (via UAC or Admin credentials).

1. Save the file to your computer.
2. Install the DL.CODE.
3. Extract the contents of the zip file previously downloaded.
4. Find and open the folder DL.CODE and double click the start.hta file.
5. **Click Run** if prompted with a security warning.
6. **Select DL.CODE** and **click the Install DL.CODE** link In the installation window's Configuration & Monitoring Utility section.

**See Window2 to the left.**

7. Click **Run** in the **View Downloads** window.
8. Check the **USB Driver** box and click **Install** in the DL.CODE **Welcome** window. **This step is very important, If skipped or missed, it is very difficult to fix the problem.**
9. Click **Next** in the Welcome window, accept the License Agreement. Click **Next** to continue.
10. Click **Next** to accept the defaults in the Destination Folder window, and then click **Install**.
11. Un-check the **Launch** checkbox if selected and click **Finish**.
12. Close the **DL.CODE Setup**, **View Downloads** and DataLogic Installation windows.



## G30 - Product Specifications and Usage (PSU) Information for the (P4450) Matrix 120 Barcode Scanner

Bill of Material						
	RAW MATERIAL P/N	SUPPLIER P/N	GEX P/N	ITEM	QTY	DESCRIPTION
Product P/N: P4450	N/A	N/A	N/A	N/A	N/A	
Product Description: Genesys 30 Spectrophotometer (G30) with sub-part Genesys 30 Dosimeter Base Plate Assembly	N/A	N/A	N/A	N/A	N/A	
	N/A	N/A	N/A	N/A	N/A	
	N/A	N/A	N/A	N/A	N/A	
Process ID: Software Installation	SECTION4: Software Installation for the GEN30 Matrix Scanner					

6.3 Launch the DL.CODE and attach it to the Matrix 120 scanner

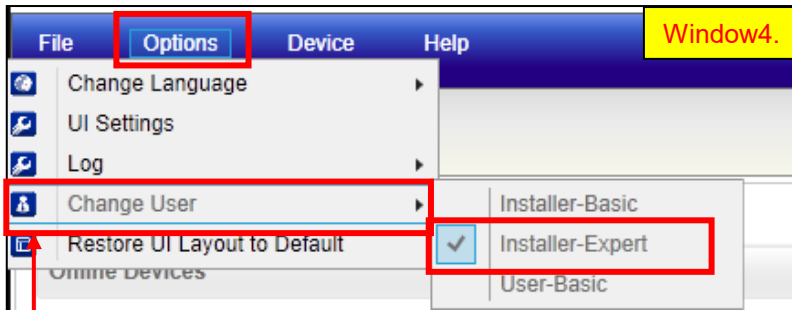


1. Plug the scanner into one of your computer's USB ports.
  2. Wait 30 seconds, then launch the DL.CODE from the shortcut on your desktop.
- NOTE1:** The scanner will be ready to operate once the steady green Run LED appears on the hardware.
- NOTE2:** DL.CODE should locate the scanner automatically on startup.
3. If it does not, click the Find Devices button in the DL.CODE menu bar until the scanner appears in the **Online Devices** lists (See Window3).

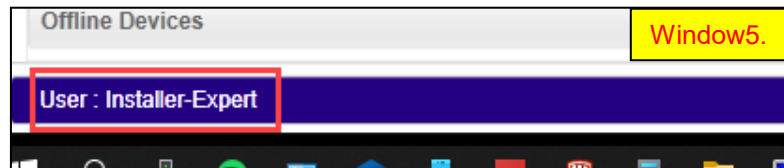


# G30 - Product Specifications and Usage (PSU) Information for the (P4450) Matrix 120 Barcode Scanner

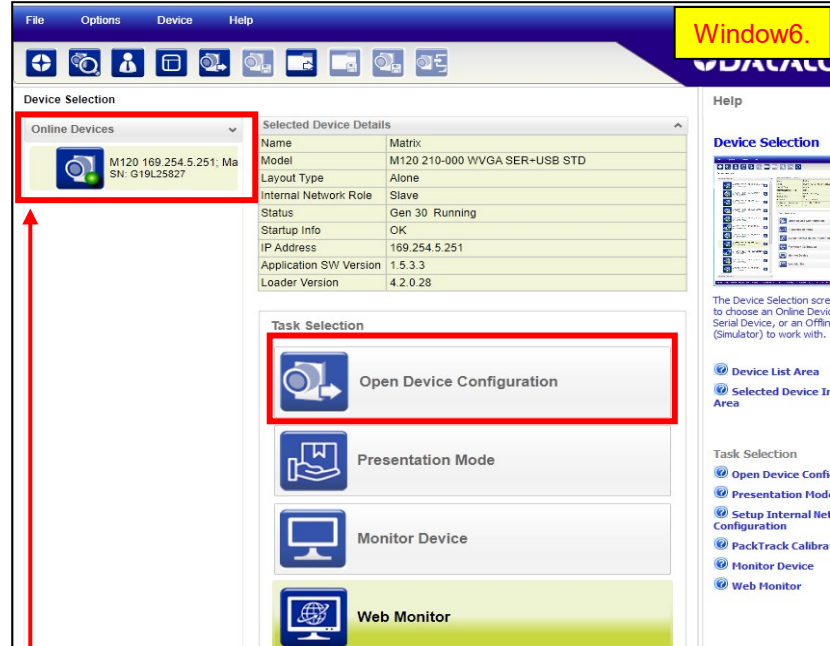
Bill of Material						
	RAW MATERIAL P/N	SUPPLIER P/N	GEX P/N	ITEM	QTY	DESCRIPTION
Product P/N: P4450	N/A	N/A	N/A	N/A	N/A	
Product Description: Genesys 30 Spectrophotometer (G30) with sub-part Genesys 30 Dosimeter Base Plate Assembly	N/A	N/A	N/A	N/A	N/A	
Process ID: Open Device Configuration	SECTION4: Software Installation for the GEN30 Matrix Scanner					



1. Click the **Options** menu, select **Change User** and if not selected, click **Installer-Expert**:



2. User bar at the bottom of the application will reflect the current user (expect a short delay to occur when changing a user).

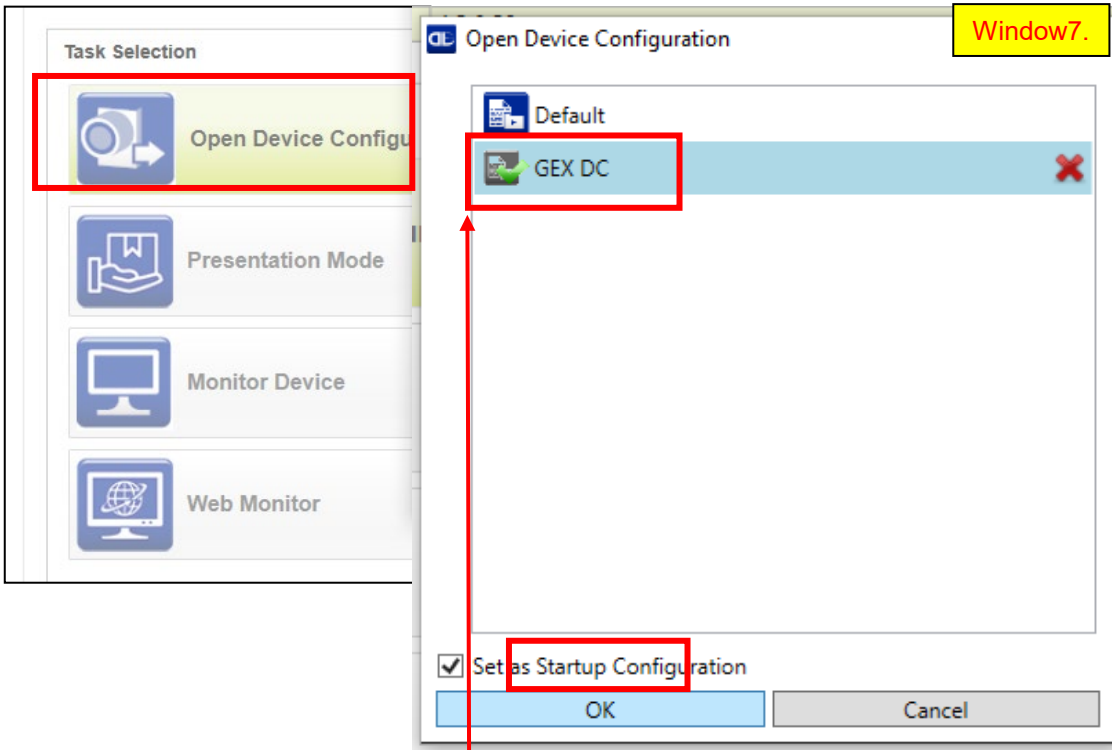


3. **Double Click** the scanner that appears in the **Online Devices** section. The scanner now appears in the **Selected Device Information Area** (See Window 6).

4. **Double Click** the "Open Device Configuration" button under Task Selection; this opens the Open Device Configuration screen (See Window 7).

G30 - Product Specifications and Usage (PSU) Information for the (P4450) Matrix 120 Barcode Scanner

Bill of Material						
	RAW MATERIAL P/N	SUPPLIER P/N	GEX P/N	ITEM	QTY	DESCRIPTION
Product P/N: P4450	N/A	N/A	N/A	N/A	N/A	
Product Description: Genesys 30 Spectrophotometer (G30) with sub-part Genesys 30 Dosimeter Base Plate Assembly	N/A	N/A	N/A	N/A	N/A	
	N/A	N/A	N/A	N/A	N/A	
	N/A	N/A	N/A	N/A	N/A	
Process ID: Setup Configuration	SECTION4: Software Installation for the GEN30 Matrix Scanner					



Window7.

This confirms the GEX configuration is loaded on the scanner and is selected as the default.

**IMPORTANT:** The Matrix scanner is preloaded with the GEX DoseControl® software “config” file for the Genesys 30 gain and exposure time setup configuration prior to shipping the scanner.

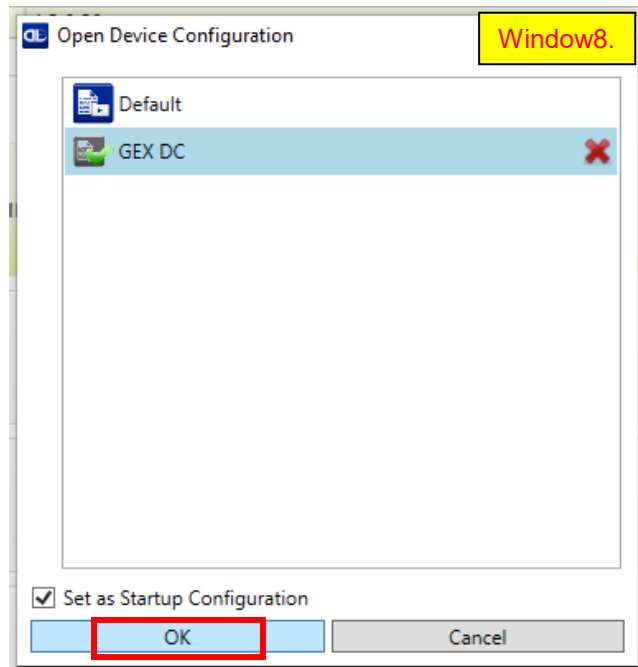
**NOTE:** If there is not a GEX DC configuration loaded on the scanner, load the GEX DC.dlcfg file to the scanner before use with GEX DoseControl® software.

Go to Section 5 (Troubleshooting Guide) below and follow the instructions in **Fixing problems with the Matrix 120 Scanner** . If you are unable to fix the problem, contact GEX Customer Service [support@gexcorp.com](mailto:support@gexcorp.com) for assistance.

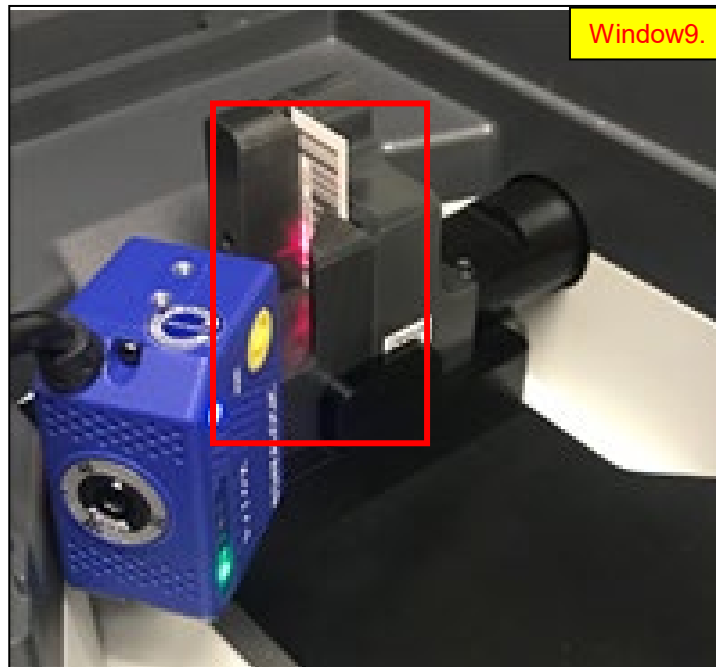
6.4 Select the “GEX DC Configuration” and verify the “Set as Startup Configuration” box is “Checked”.

## G30 - Product Specifications and Usage (PSU) Information for the (P4450) Matrix 120 Barcode Scanner

Bill of Material						
	RAW MATERIAL P/N	SUPPLIER P/N	GEX P/N	ITEM	QTY	DESCRIPTION
Product P/N: P4450	N/A	N/A	N/A	N/A	N/A	
Product Description: Genesys 30 Spectrophotometer (G30) with sub-part Genesys 30 Dosimeter Base Plate Assembly	N/A	N/A	N/A	N/A	N/A	
	N/A	N/A	N/A	N/A	N/A	
	N/A	N/A	N/A	N/A	N/A	
Process ID: Checking Correct Scanning		SECTION4: Software Installation for the GEN30 Matrix Scanner				



6.5. Click **“OK”** on the Open Device Configuration screen. DL.CODE will open the Automatic Setup window for the attached scanner. The scanner will enter Continuous Mode, and its strobe will start to pulse.



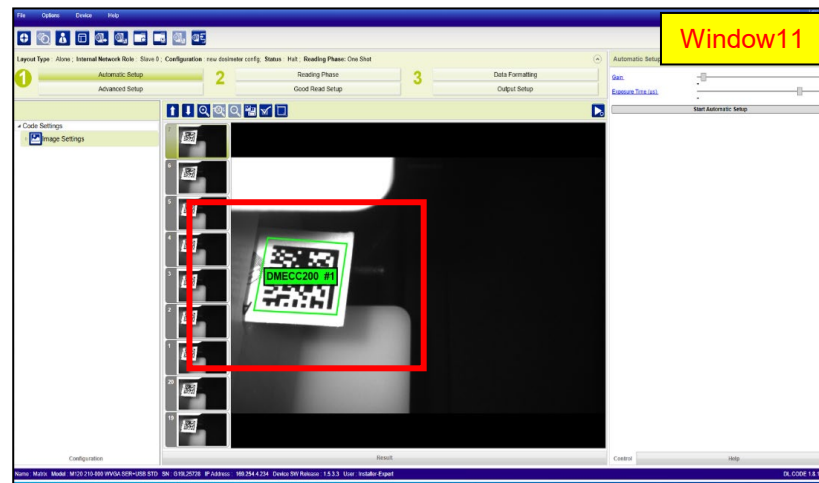
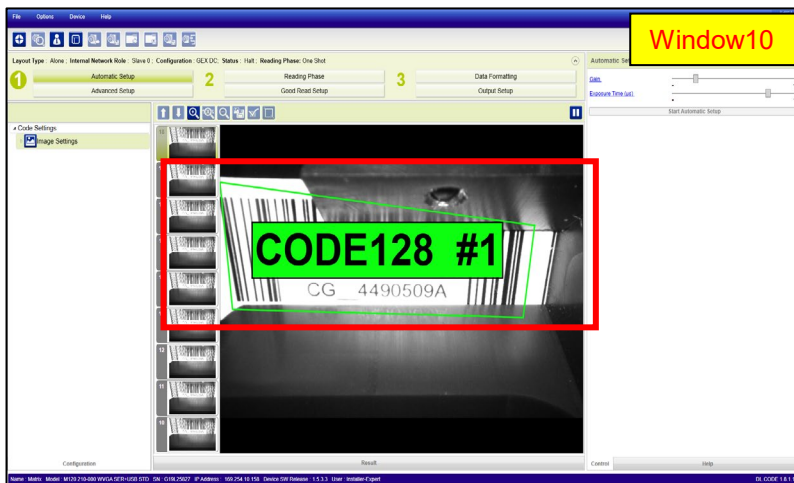
6.6 Perform a scan test to ensure the Matrix scans the dosimeter barcode correctly.

6.7 Insert a DoseStix holder in into the baseplate cavity.

6.8 Place a DoseStix dosimeter sample in the holder, with the barcode facing the scanner.

# G30 - Product Specifications and Usage (PSU) Information for the (P4450) Matrix 120 Barcode Scanner

Bill of Material						
	RAW MATERIAL P/N	SUPPLIER P/N	GEX P/N	ITEM	QTY	DESCRIPTION
Product P/N: P4450	N/A	N/A	N/A	N/A	N/A	
Product Description: Genesys 30 Spectrophotometer (G30) with sub-part Genesys 30 Dosimeter Base Plate Assembly	N/A	N/A	N/A	N/A	N/A	
	N/A	N/A	N/A	N/A	N/A	
	N/A	N/A	N/A	N/A	N/A	
Process ID: Confirming Barcode Scanning	<b>SECTION4: Software Installation for the GEN30 Matrix Scanner</b>					



- 6.8 Confirm the barcode is scanned correctly in the DL.CODE.
- 6.9 Good scans will appear with a green highlight around them in the Result Window (See Window 10).
- 6.10 Click the pause button to pause the scanning.

- 6.11 The Matrix is scanning correctly, and the scanner is functioning properly if a green highlight is present on the Continuous Mode Screen Window (See Window 11 above).
- IMPORTANT:*** If a green highlight is **not** present on the Continuous Mode Window in DL.CODE, adjust the focal setting.
- 6.12 See the troubleshooting guide in section 5 to adjust the focal dial **setting the Matrix 120 Scanner – Section (5), Adjusting the Focus Setting of the Matrix Scanner.**

# G30 - Product Specifications and Usage (PSU) Information for the (P4450) Matrix 120 Barcode Scanner

Bill of Material						
	RAW MATERIAL P/N	SUPPLIER P/N	GEX P/N	ITEM	QTY	DESCRIPTION
Product P/N: P4450	N/A	N/A	N/A	N/A	N/A	
Product Description: Genesys 30 Spectrophotometer (G30) with sub-part Genesys 30 Dosimeter Base Plate Assembly	N/A	N/A	N/A	N/A	N/A	
	N/A	N/A	N/A	N/A	N/A	
<b>Process ID: Section 5 - Troubleshooting Guide</b>	<b>Section5: Troubleshooting Guide First-time Configuration of the Matrix Scanner (Only if GEX DC Configuration is not preloaded on the scanner)</b>					

- 7.1 Perform first-time configuration for the Matrix 120 scanner.
- 7.2 Access the DoseControl® configuration file provided by GEX. (The **GEX DC.dlcfg** file is provided with the software installation package.)
- 7.3 In DL.CODE, click the **File** menu, select **Open** and click **"Open Configuration from PC"**.

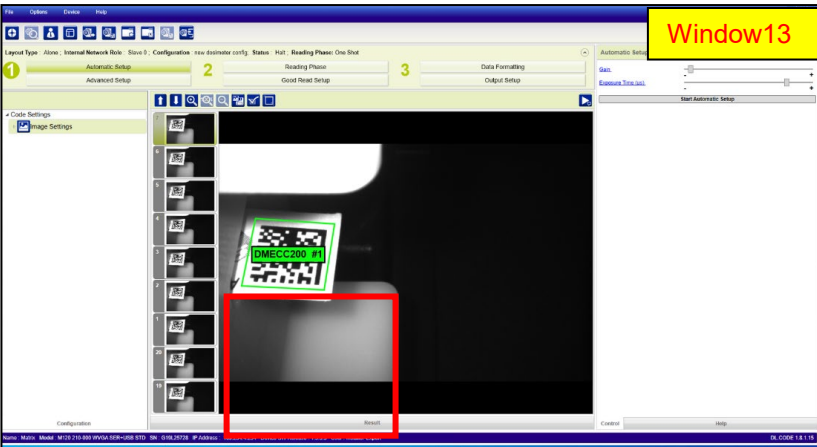
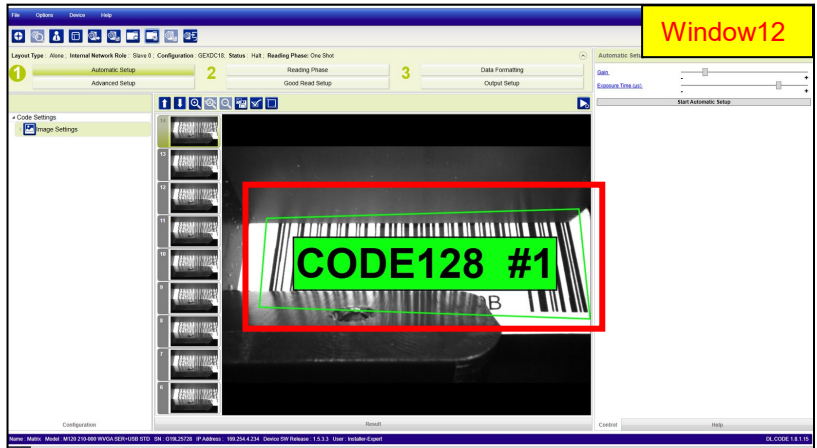
**Attention**

Current device temporary configuration will be lost. Do you want to proceed?



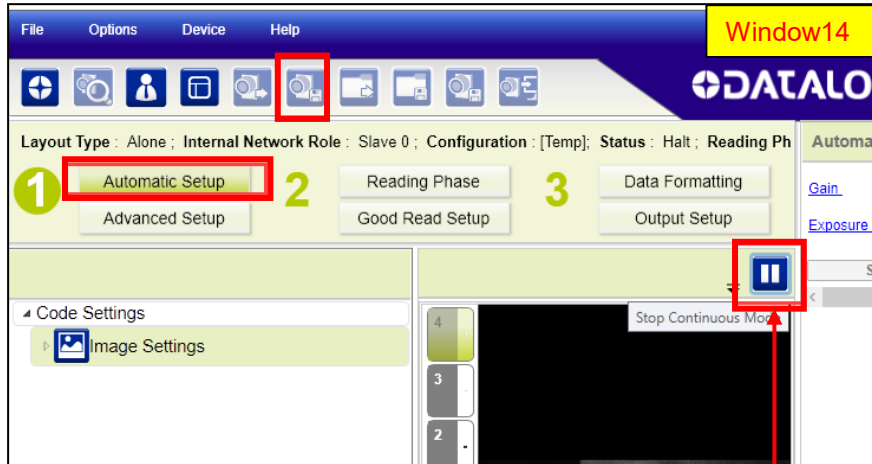
7.4 Select the **"GEX Config-2022.dlcfg"** file and click Open. Click **"Yes"** in the **Attention** dialog box.

**NOTE:** The DL.CODE will open the Automatic Setup window for the attached scanner. The scanner will enter Continuous Mode, and its strobe will start to pulse. Good scans will appear with a green highlight around them in the Result windows (See Windows 12 and 13).



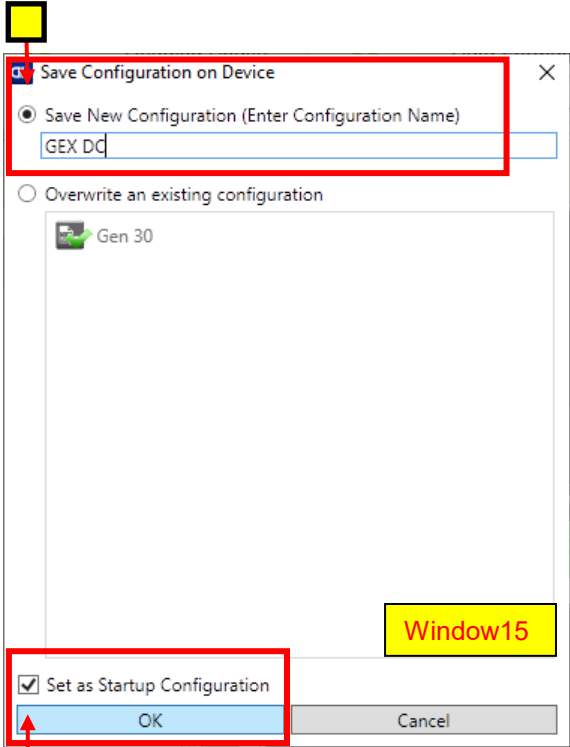
# G30 - Product Specifications and Usage (PSU) Information for the (P4450) Matrix 120 Barcode Scanner

Bill of Material						
	RAW MATERIAL P/N	SUPPLIER P/N	GEX P/N	ITEM	QTY	DESCRIPTION
Product P/N: P4450	N/A	N/A	N/A	N/A	N/A	
Product Description: Genesys 30 Spectrophotometer (G30) with sub-part Genesys 30 Dosimeter Base Plate Assembly	N/A	N/A	N/A	N/A	N/A	
	N/A	N/A	N/A	N/A	N/A	
	N/A	N/A	N/A	N/A	N/A	
Process ID: Troubleshooting Guide	<b>Section5: Troubleshooting Guide</b> <b>First-time Configuration of the Matrix Scanner (Only if GEX DC Configuration is not preloaded on the scanner)</b>					



7.7 In the **Save Configuration on Device** window, select **Save New Configuration**.

7.8 Enter the name GEX DC.

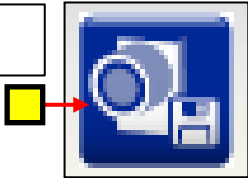


7.4 Click the pause button to pause the scanning.

7.5 Save the GEX Config-2022.dlcfg configuration to the scanner.

**NOTE:** Saving the GEX DC configuration is only required one time and allows the scanner to interface with DoseControl@ .

7.6 Click the SAVE icon on the Device button.



7.9 Check the **Set as Startup Configuration** box and click **OK**.



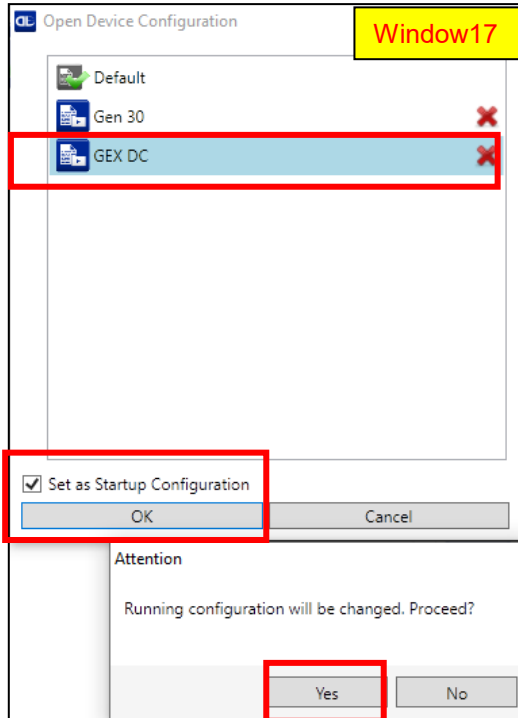
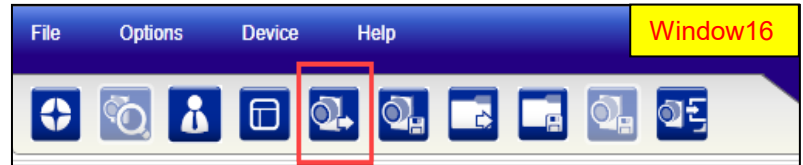
# G30 - Product Specifications and Usage (PSU) Information for the (P4450) Matrix 120 Barcode Scanner

Bill of Material						
Product P/N: P4450	RAW MATERIAL P/N	SUPPLIER P/N	GEX P/N	ITEM	QTY	DESCRIPTION
Product Description: Genesys 30 Spectrophotometer (G30) with sub-part Genesys 30 Dosimeter Base Plate Assembly	N/A	N/A	N/A	N/A	N/A	N/A
<b>Process ID: Troubleshooting Guide</b>	<b>Section5: Troubleshooting Guide First-time Configuration of the Matrix Scanner (Only if GEX DC Configuration is not preloaded on the scanner)</b>					

8. Load the GEX DC Configuration to the scanner.

**NOTE:** If the configuration changes for the scanner for unknown reason, (for example, if GEX DC is not set to startup as the default), the GEX DC configuration must be loaded for the scanner to operate correctly with DoseControl®.

- 8.1 Perform the following steps on a scanner where the GEX DC first time configuration has been performed.
  - 8.1.1 Verify the scanner is attached in the “Getting Started” Window.
  - 8.1.2 Click the Open Device Configuration button in the DL.CODE menu bar.
  - 8.1.3 **Click** the “Open Device Configuration” button in the DL.CODE menu bar( See Window 16).



8.1.4 In the **Open Device Configuration** window, select **GEX DC**.



8.1.5 Check the **Set as Startup Configuration** box and click **“OK”**.



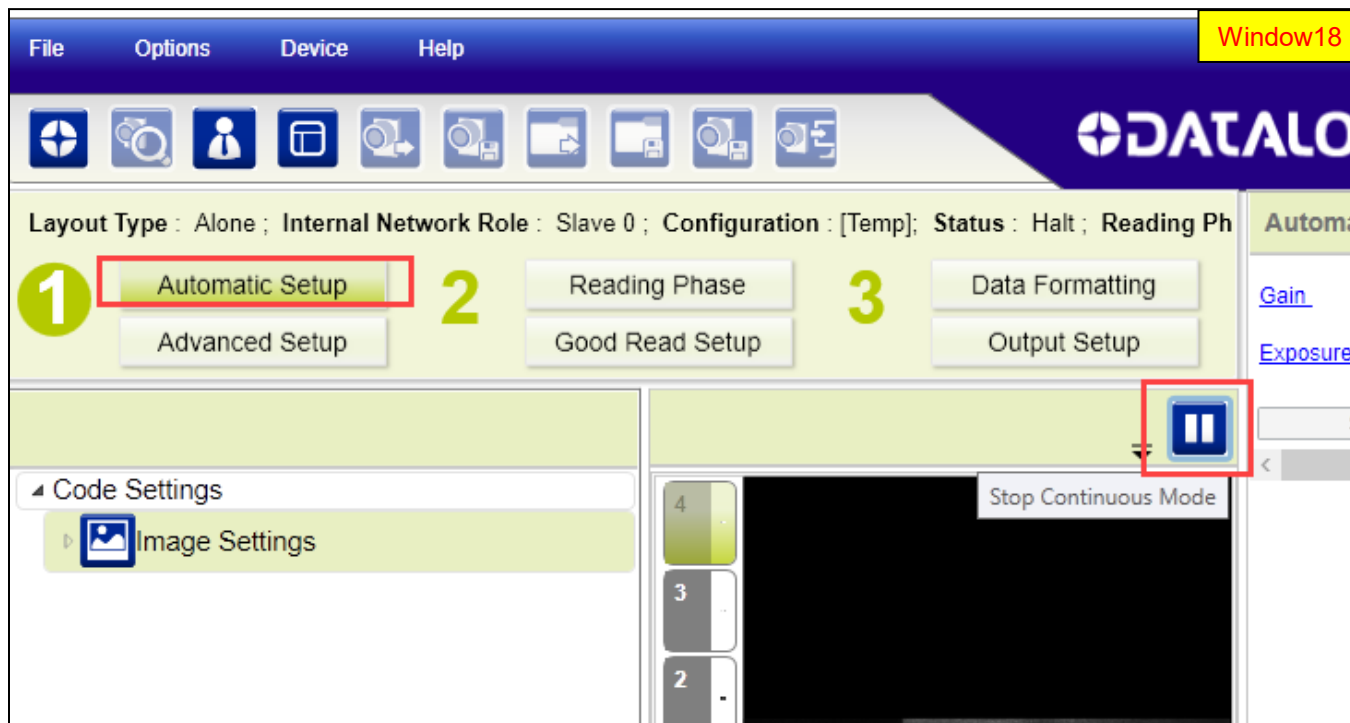
8.1.6 Click **“Yes”** in the Attention dialog box:



## G30 - Product Specifications and Usage (PSU) Information for the (P4450) Matrix 120 Barcode Scanner

Bill of Material						
Product P/N: P4450	RAW MATERIAL P/N	SUPPLIER P/N	GEX P/N	ITEM	QTY	DESCRIPTION
Product Description: Genesys 30 Spectrophotometer (G30) with sub-part Genesys 30 Dosimeter Base Plate Assembly	N/A	N/A	N/A	N/A	N/A	N/A
<b>Process ID:</b> Troubleshooting Guide	<b>Section5: Troubleshooting Guide</b> <b>First-time Configuration of the Matrix Scanner (Only if GEX DC Configuration is not preloaded on the scanner)</b>					

8. Load the GEX DC Configuration to the scanner.




8.1.8 Click the pause button (See Window 18).

8.1.7 DL.CODE will open the Automatic Setup window for the attached scanner. The scanner will enter Continuous Mode, and its strobe will start to pulse (See Window 18 below).

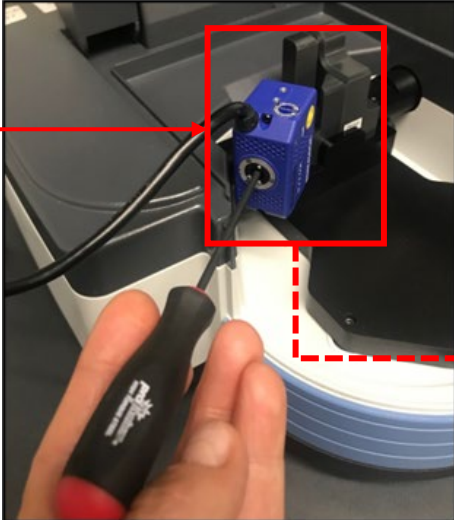
Bill of Material						
	RAW MATERIAL P/N	SUPPLIER P/N	GEX P/N	ITEM	QTY	DESCRIPTION
Product P/N: P4450	N/A	N/A	N/A	N/A	N/A	
Product Description: Genesys 30 Spectrophotometer (G30) with sub-part Genesys 30 Dosimeter Base Plate Assembly	N/A	N/A	N/A	N/A	N/A	
	N/A	N/A	N/A	N/A	N/A	
	N/A	N/A	N/A	N/A	N/A	
<b>Process ID: Adjust the GEX B3 Focus Dial Setting</b>						

**Section 5: Adjusting the Focus Dial Setting of the Matrix Scanner**

9. Adjusting the Focus Dial Setting of the Matrix Scanner. 

- 9.1 Open DL.CODE and set up the Matrix 120 Scanner for DoseControl® .
- 9.2 Connect to the Matrix scanner and open the Automatic Setup screen and start the Continuous Mode with the scanner pulse functioning.
- 9.3 Insert a dosimeter sample with a barcode facing the scanner. The dosimeter barcode will appear in the Continuous Mode window.
- 9.4 Locate the focal adjustment dial on Matrix 120 (See Window 19 below).
- 9.5 Adjust the scanner dial settings for Genesys 30 using a 2.5mm hex driver to adjust the focus dial as given below (Step Windows 19 – 23).

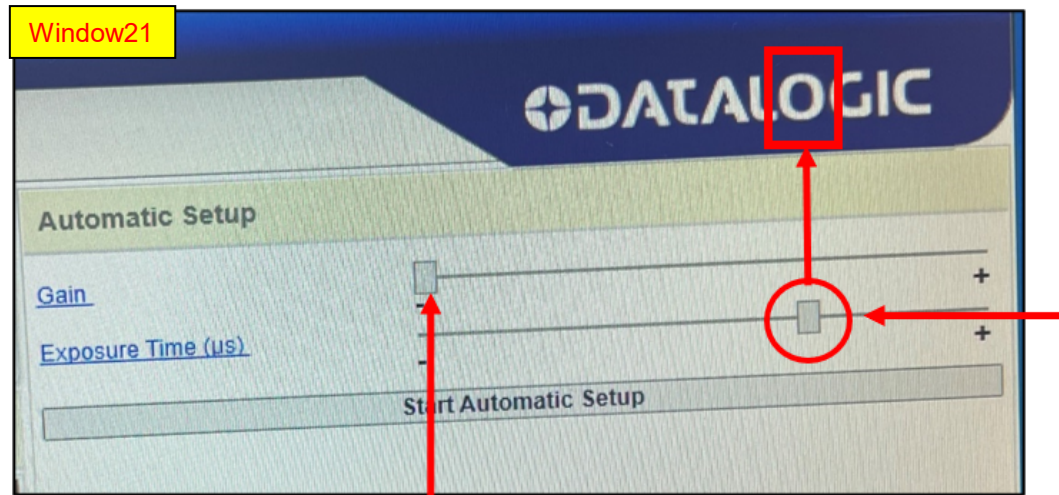
9.6 **Genesys 30 Focus Setting:** Turn the dial setting anti-clockwise (Left) as far as possible. A good scan is achieved when the green highlight appears around the barcode (See Window 20 below).



Bill of Material						
	RAW MATERIAL P/N	SUPPLIER P/N	GEX P/N	ITEM	QTY	DESCRIPTION
Product P/N: P4450	N/A	N/A	N/A	N/A	N/A	
Product Description: Genesys 30 Spectrophotometer (G30) with sub-part Genesys 30 Dosimeter Base Plate Assembly	N/A	N/A	N/A	N/A	N/A	
	N/A	N/A	N/A	N/A	N/A	
Process ID: Adjust the GEX 30 Gain and Exposure Time Setup Configuration	Section 5: Adjusting Genesys 30 Gain and Exposure Time Setup Configuration					

10.

**DIAGRAM#1 – GENESYS 30 Gain and Exposure Time Setup Configuration**



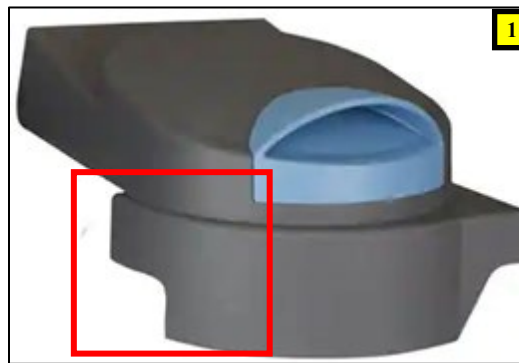
1. Set the Gain to the Off position.

2. Set the Exposure Time to align with the letter “O” for Datalogic as appear above.

## G30 - Product Specifications and Usage (PSU) Information for the (P4450) Matrix 120 Barcode Scanner

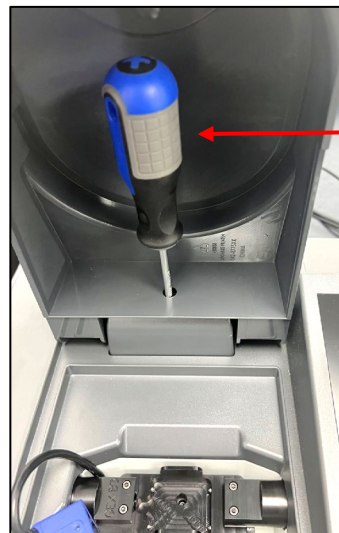
Bill of Material						
	RAW MATERIAL P/N	SUPPLIER P/N	GEX P/N	ITEM	QTY	DESCRIPTION
Product P/N: P4450	rP4402	840-278200	P4402	1	1	Genesys 30 Lid with Cableway
Product Description: Genesys 30 Spectrophotometer (G30) with sub-part Genesys 30 Dosimeter Base Plate Assembly	N/A	N/A	N/A	N/A	N/A	
	N/A	N/A	N/A	N/A	N/A	
	N/A	N/A	N/A	N/A	N/A	
<b>Process ID: Section 6: Product</b>	N/A	N/A	N/A	N/A	N/A	
<b>GEN30 New Cut Out Lid</b>	<b>SECTION 6: GEN30 Cableway Lid with new cut out and Installation</b>					

**NOTE:** Customers ordering the new matrix mount baseplate will need to convert to the new Spectrophotometer lid with the cut out to accommodate the cable. Discard the old lid upon receiving the new lid.



Specs:  
Compartment lid for GENESYS 30 Spectrophotometer with cableway accessory

Packaging Dimensions:  
11.75" x 9.00" x 5.75" (L x W x H)



1. Lift the lid and locate the screw in the center of lid. 2. Use a Phillips screwdriver to remove the screw and retain for the new lid.



3. Install the new lid and secure with screw. 4. Discard the old lid.

## G30 - Product Specifications and Usage (PSU) Information for the (P4450) Matrix 120 Barcode Scanner

### 11. GUARANTEE

11.1 Guarantee: 1 year satisfaction guarantee. Undamaged products may be returned within one year from the date of delivery for any customer dissatisfaction.

### 12. CAUTIONS

As part of the DoseControl® dosimetry system, the Matrix scanner feature is appropriate for 1 dosimeter/pouch (1 absorbance count) applications ONLY. Applications using 2 dosimeters/pouch (2 absorbance count) or 4 dosimeters/pouch (4 absorbance count) must use a different solution to capture the dosimeter ID or dosimeter barcode such as a hand-held scanner or manual entry.

### 13. REFERENCES

Download from the GEX website document library: <https://library.gexcorp.com/>  
*GEX Doc#100-167, P4400 GENESYS 30 Spectrophotometer*  
*GEX Doc#100-168, Genesys 30 Dosimeter Holder System*  
*GEX Doc#100-278, Matrix 120 Integrated Barcode Scanner IQOQ Procedure*

## 14. REVISION HISTORY

DATE	CHANGE DESCRIPTION	REVISION
11/15/2023	- Added to Application section: The Matrix scanner feature is appropriate for 1 dosimeter/pouch (1 absorbance count) applications. - Added new Cautions section to include the above information. ECO 70651	E
03/28/2024	- Rephrased Step 4 to include “Install the Matrix scanner on the scanner mount with the Matrix cord facing up”. - Rephrased Step 5 to include “Attach the mount to the EVO baseplate and install a DoseStix dosimeter holder”. ECO 70668	F
5/16/2024	- Rewrite the entire PSU. Added Six (6) Sections: Product Specifications and Description; GEX B3 120 Matrix Scanner and Mount Installation; Installation of GEN30 Baseplate into the GEN30 Sample Compartment; Software Installation; Trouble Shooting instructions for the Focus Dial Setting and Gain and Exposure Time Setup Configuration for the GEN30 and GEN30 Cableway Lid with new cut out. ECO 75000	G

APPROVED

By Dominique Taylor at 9:29 am, May 17, 2024

To learn more about GEX products and services, visit [www.gexcorp.com](http://www.gexcorp.com) or contact a GEX representative at +1 303 400-9640.