

**DESCRIPTION**

The Thermo Genesys 30 Spectrophotometer (G30) is supplied with specially designed dosimeter holders to fit a variety of dosimeters, including the B3 DoseStix and B3 WINdose dosimeters. The holders are ‘hot-swappable’ making it quick and easy to install in and out of the baseplate without the use of any tools, and requires no additional action once installed.

**APPLICATION**

For use in conjunction with the Genesys 30 Spectrophotometer to measure the optical absorbance of dosimeters.

**SPECIFICATIONS**
**Physical Specifications:**

GEX Part No.	Product Description	Product Dimensions	Packaging Dimensions	Product Weight
P4405	Hot-swappable Baseplate with beam tubes	14.5cm (L) x 11.2cm (W) x 1.3cm (H) (5.7" L x 4.4" W x 0.5" H)	12.7 cm x 12.7 cm x 12.7cm (13" x 10" x 2")	0.6 kg (1.3 lbs.)
P4410	DoseStix Holder	30.0mm (L) x 50.0mm (W) x 60.0mm (H) (1.2" L x 2.0" W x 2.4" H)	12.7 cm x 12.7 cm x 12.7cm (5" x 5" x 5")	0.06 kg (0.14 lb.)
P4420	WINdose Holder <ul style="list-style-type: none"> <li>• Receiver component</li> <li>• Hinged Holder component</li> </ul>	41.0mm (L) x 55.0mm (W) x 44.0mm (H) (1.6" L x 2.2" W x 1.7" H)  <b>Outer Dimensions:</b> 2.900" (L) x 0.500" (W) x 0.525" (H) (±0.005") <b>Inner Window Pocket:</b> 0.414" (W) x 0.413" (L) (±0.005") <b>Slot Dimensions:</b> 1.330" (L) x 0.200" (W) (±0.005") <b>Aperture Dimensions:</b> 0.315" ±0.002"	12.7 cm x 12.7 cm x 12.7cm (5" x 5" x 5")	0.08 kg (0.18 lb.)
<b>Material</b>	Holders: Nylatron Baseplate: Anodized aluminum			
<b>Color</b>	Grey			
<b>Packaging</b>	Cardboard box and wrapped in bulk packaging to provide protection and prevent movement inside the product box during transport.			

**Calibration:**

Not applicable.

**Maintenance:**

The G30 Spectrophotometer and holders should be installed in a location where they will not be exposed to excessive dust or other particulate matter. The holders should 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. The holders should be cleaned annually at minimum, and physically taken apart and cleaned with a lint-free wipe and isopropyl alcohol.

Avoid dropping or physically damaging the holders. Although they are made of very hard plastic, they can still become damaged. If damage occurs, verify performance and consult GEX Customer Service.

**Storage:**

There are no environmental storage requirements.

**PRODUCT PHOTOS**

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**USAGE**

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**Installation:**

1. Remove the Thermo baseplate from the G30 Spectrophotometer. It is held in place with magnets and lifts out.



**FIGURE 1: Thermo baseplate**

2. Remove the beam tubes from the GEX baseplate using a 3/32" Allen driver.



**Figure 2: GEX baseplate with beam tubes removed**

3. Remove the spring-detent mount from the plate using a 7/64" Allen driver. There is a locking pin screw underneath.



**Figure 3: Locking pin screw head**

4. Loosen the two baseplate locking pin screws by one half to one full turn using a 5/64" Allen driver.

**NOTE:** Do not loosen the locking pin screws by more than a full turn or else the threads may disengage and components could be misplaced.

5. Carefully insert the bare baseplate into the G30 sample chamber by lining up the locking pins with the cups in the base of the spectrophotometer.

**NOTE:** There are securing magnets in both the baseplate and in the bottom of the G30 sample chamber. The magnets are aggressive and may snap the baseplate down into the G30. Be careful when lowering the baseplate into the G30 to avoid damage to the equipment or injury to fingers.

6. Gently tighten the two locking pins and ensure that the baseplate does not move.

**NOTE:** The pins are made from brass and could be easily stripped if tightened strongly.

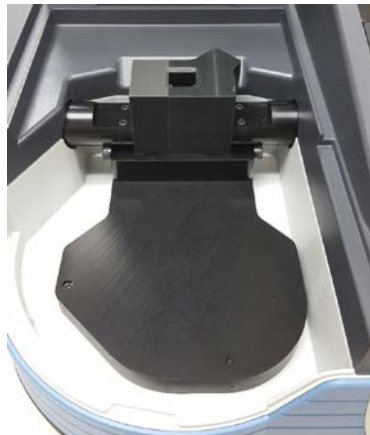
7. Reinstall the spring detent assembly onto the baseplate with the notch on the left as seen in figure 2 above.

**NOTE:** The dosimeter holders are indexed to only insert in one orientation. Please ensure the cutout notch is on your left as you face the front of the spectrophotometer.

8. Reinstall the beam tubes. Ensure the beam tubes fit into the G30 lens cavities without interference.

9. Test fit a dosimeter holder into the spring detent pocket. The holder should snap in easily yet securely.

**NOTE:** The beam tubes may need to be loosened and adjusted to allow the dosimeter holder to insert properly.



**Figure 4: Baseplate and dosimeter holder installed in G-30**

**DoseStix Dosimeter Holder (GEX P/N: P4410)**

The DoseStix dosimeter holder allows any DoseStix dosimeter to be inserted with the barcode facing out of the slot to allow for barcode scanning. The user slides the dosimeter into position, pushing the DoseStix until it stops. See Figures 7 and 8.



FIGURE 7: DoseStix Dosimeter Holder installation



FIGURE 8: DoseStix Dosimeter Holder installation

**WINdose Dosimeter Holder (GEX P/N: P4334)**

The WINdose dosimeter holder is used for 1 cm square radiochromic films. There are two parts; the receiver and the holder (see Figure 9).

1. The dosimeter holder is keyed to the receiver and can only be inserted when properly aligned. The dosimeter is inserted into the hinged holder and is closed (see Figure 10).



FIGURE 9: WINdose Dosimeter Holder - Receiver and hinged holder



FIGURE 10: WINdose Dosimeter Holder loaded with dosimeter and featured keyed slot

2. The WINdose dosimeter holder is inserted into the receiver.



**FIGURE 11: WINdose Dosimeter Holder outside receiver**



**FIGURE 12: WINdose Dosimeter Holder inside receiver**

## **GUARANTEE**

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### **Guarantee:**

1 year satisfaction guarantee. Product may be returned within one year from the date of delivery for any customer dissatisfaction.

## **REFERENCES**

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### **GEX Product Specification and Usage (PSU):**

- GEX Doc# 100-167 P4400 Genesys 30 Spectrophotometer

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.