

Evolution 220 Dosimeter Holder System

DESCRIPTION

A baseplate and dosimeter holders to fit B3 film, FWT-60, and PMMA dosimeters. The holders integrate into the sample compartment of the Evolution 220 (Evo220) Spectrophotometer. The holders are 'hot-swappable' making it quick and easy to take in and out of the baseplate without the use of any tools.

APPLICATION

For use in conjunction with the Evolution 220 Spectrophotometer to measure the optical absorbance of the dosimeters.

SPECIFICATIONS

Physical Specifications:

GEX Part No.	Product Description	Product Dimensions	Packaging Dimensions	Product Weight
P4330	Evo220 Dosimeter Holder System	20.0 (L) x 17.2 (W) x 3.7 (H) cm	12.7cm x 12.7cm x 12.7cm (13" x 10" x 2")	1.5 kg (1.1 lbs.)
P4332	Evo220 DoseStix Holder	44.5 (L) x 50.9 (W) x 60.6 (H) mm	12.7cm x 12.7cm x 12.7cm (5" x 5" x 5")	0.08 kg (0.18 lb.)
P4334	Evo220 WINdose Holder	Receiver: 44.5 (L) x 50.9 (W) x 44.3 (H) mm Hinged Holder: 73.7 (L) x 12.7 (W) x 13.34 (H) mm	12.7cm x 12.7cm x 12.7cm (5" x 5" x 5")	0.15 kg (0.32 lb.)
P4336	Evo220 PMMA Holder	44.5 (L) x 50.9 (W) x 33.5 (H) mm	12.7 cm x 12.7 cm x 12.7cm (5" x 5" x 5")	0.06 kg (0.14 lb.)

Material Holders: Nylatron Baseplate: Anodized aluminum	
Color	Grey
Packaging	Cardboard box and wrapped in bulk packaging to provide protection and prevent movement inside the product box during transport.

Calibration:

Not applicable.

Maintenance:

The holders should be cleaned as part of a Preventative 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 physically taken apart and cleaned with a lint-free wipe and isopropyl alcohol or equivalent at least annually.

Avoid dropping or physically damaging the holders. If damage occurs, verify performance and consult GEX Customer Service.

Storage:

No environmental storage requirements.

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PRODUCT PHOTOS









USAGE

Installation:

1. Remove the aluminum base from the Evolution 220 Spectrophotometer. Remove the provided cuvette holder but retain the flathead screw. See Figure 1.



FIGURE 1: Aluminum Baseplate

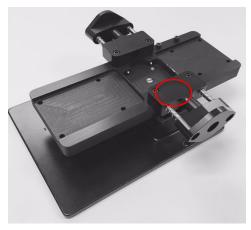


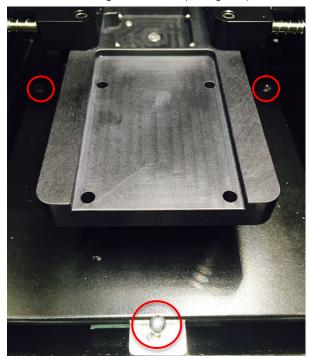
FIGURE 2: Thermo base with GEX P4330 baseplate attached

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- 2. Attach the GEX hot-swappable baseplate (P4330) to the Thermo base using the flathead screw that is provided. See Figure 2 above. The longer end of the platform faces forward and will face the front of the Evo220.
- 3. Insert the baseplate assembly into the sample compartment of the Evolution 220 using the registration pins at the back, and then push down to secure the plate against the front slip-pin (see Figure 3). Ensure that the spring-loaded beam tubes fit flush against the walls (see Figure 4).



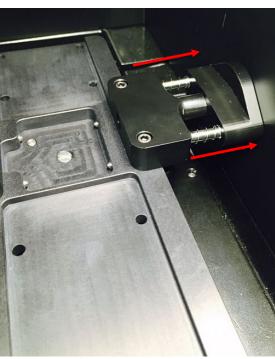


FIGURE 3: Registration pins and front slip-pin

FIGURE 4: Spring-loaded beam tubes

4. All dosimeter holders are keyed and only insert into the baseplate in one orientation. Ensure proper orientation (see Figure 5) and insert the selected dosimeter holder so that it clicks firmly into place (see Figure 6). The holder is held in place by spring-loaded detent pins.

NOTE: If the fit is too tight, loosen the screws that hold the beam tube mounts to the baseplate with the 7/64" driver tool (see Figure 6). These screws do not need to be very tight and loosening them slightly will allow a very good fit.

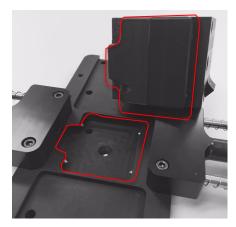


FIGURE 5: PMMA Dosimeter Holder orientation

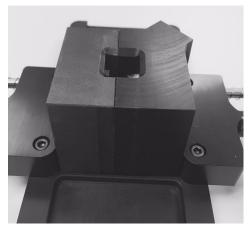


FIGURE 6: PMMA Dosimeter Holder installation

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DoseStix Dosimeter Holder (P4332)

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

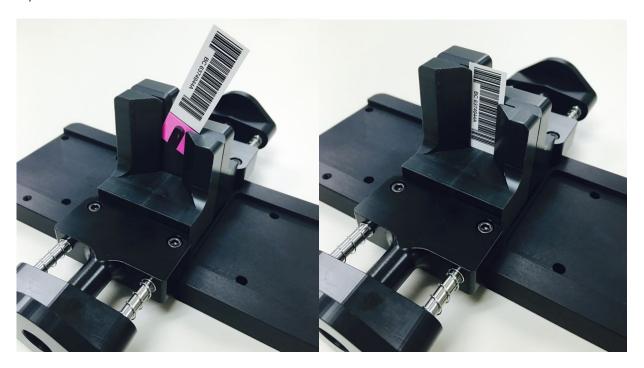


FIGURE 7: DoseStix Dosimeter Holder installation

FIGURE 8: DoseStix Dosimeter Holder installation

WINdose Dosimeter Holder (P4334)

The WINdose dosimeter holder is used for 1 cm square radiochromic films. There are two parts; the receiver and the Hinged Holder (see Figures 9 to 11).



FIGURES 9 - 11: WINdose Dosimeter Holder

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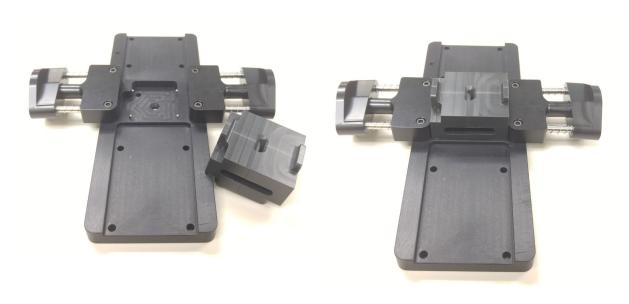


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PMMA Dosimeter Holder (P4336)

The PMMA dosimeter holder is used for Red or Amber Perspex dosimeters.

1. The dosimeter is inserted into the holder and the spring-loaded pin will position the dosimeter repeatably (see Figures 12 & 13).



FIGURES 12 & 13: PMMA Dosimeter Holder

GUARANTEE

Guarantee:

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

RELATED DOCUMENTS

- GEX Doc #100-156, P4300 Evolution 220 Spectrophotometer Product Specifications and Usage
- GEX Doc #100-280, IQOQ Plan and Protocol for DoseControl System

REVISION HISTORY

DATE	CHANGE DESCRIPTION	
10/01/16	Initial release.	Α
05/23/19	Added related documents and product photos. Improved layout. ECO 70444.	В

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