DF-G and Key Fibers Demo Kit

Demo Kit (DK-DF-G) Components

	Models	Description
1	DF-G3-PI-Q5	The third generation of the DF series amplifiers. This amplifier is the most powerful of the DF-G series and the only one with analog and discrete output.
2	PIT43U-VL	Opposed mode fiber for beam break applications
3	PBAT43UTA-VL	90° Angle bifurcated fiber for diffuse mode applications
4	PBT23U-VL	Bifurcated fiber for diffuse mode applications
5	PIR1X323T-VL	In-Line opposed mode array fiber with 14.5 mm sensing width
6	Fiber Mounts	Included are two styles of fiber mounts. You can use the multi holed mounts for opposed mode or diffuse fibers and the slot mounts for the array fibers.
7	Demo Board	The demo board has a din rail for multiple amplifiers, blocks for your fiber mounts and a slide with ruler that the blocks run back and forth on. NOTE: The blocks have two ways to orient the fiber mounts.
8	Board Stand	The board stand can be used by sliding the large demo board into it so the DF-G displays face outward toward you. It is useful while demoing diffuse fibers, so the fiber sensing tip can be mounted looking down at an object on the table as well as easily showing the display on the DF-G

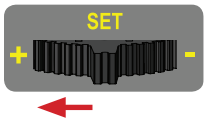
Factory Default Restore

1. Flip open the display cover on amplifier.

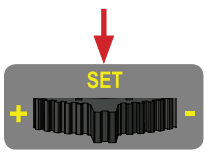
2. Slide the left selector switch to **CH1.**

3. Slide the right selector to **PRG**. You will see **tch SEL1**.

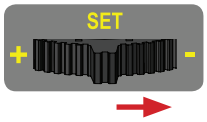
4. Toggle the rocker to the left once. You will see **Fcty deF**.



5. Push in on rocker. You will see **no**.



6. Toggle the rocker to right one. You will see **yes.** Push in rocker to select.



Two-Point Teach with Opposed Mode Fiber (Discrete ⎍⎍)

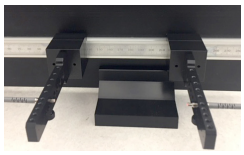
1. Flip open the display cover on amplifier.

2. Flip down the fiber locking switch.

3. Fully insert the PIT43U-VL fibers into the front port holes.

4. Flip the fiber locking switch back up to lock fibers in place.

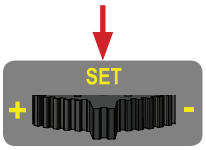
5. Place fiber mounts onto the slide and mount the fibers into the fiber mounts so they are facing each other.



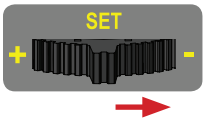
6. Slide the left selector switch to **CH2**. (This is the discrete output and changes all menus to reflect the discrete output adjustments).

7. Slide the right selector switch to **PRG**, you will see **out.**

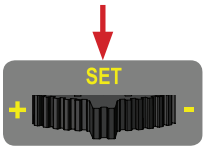
8. Push in on rocker. You will see **lo**.



9. Toggle the rocker to the right once. You will see **do.**

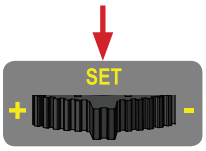


10. Push in on the rocker again to select **do.**

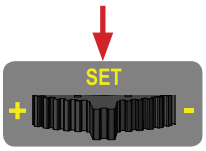


11. Slide right selector switch to **ADJ.**

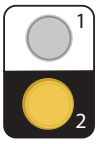
12. Hold business card between the fibers and push in on the rocker switch. You will see **2nd**.



13. Remove business card and push in on rocker again. You will see **PASS**.



14. The **CH2** output light will now turn on when beam is blocked. (Your discrete PNP output is on when beam is blocked).



Two-Point Teach with Opposed Mode Fiber (Analog ⎍)

If you have completed the Two Point Teach Discrete, start at step 6.

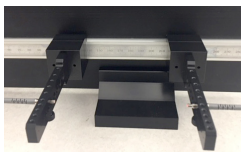
1. Flip open the display cover on amplifier

2. Flip down the fiber locking switch

3. Fully insert the PIT43U-VL fibers into the front port holes

4. Flip the fiber locking switch back up to lock fibers in place

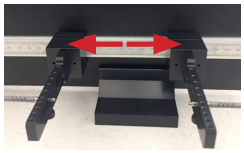
5. Place fiber mounts onto the slide and mount the fibers into the fiber mounts so they are facing each other



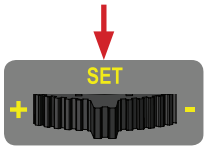
6. Slide the left selector switch to **CH1**. (This is the analog output and changes all menus to reflect the analog output adjustments).

7. Slide the right selector switch to **ADJ**

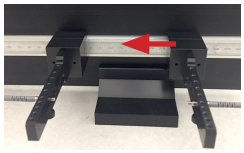
8. Slide the left fiber mount to the 50 mm location, and the right fiber mount to the 250 mm location



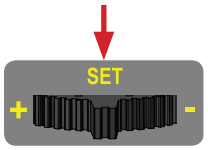
9. Push in on the rocker to start Teach. Push in on rocker again to teach 4 mA light level.



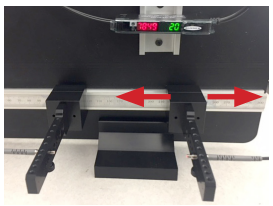
10. Move the right fiber mount to 120 mm location.



11. Push in on the rocker to teach the 20 mA light level

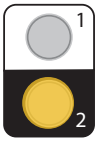


12. Slide the right fiber mount back and forth to watch the mA output change from 4 to 20 based on the light level/distance



13. Optional: (If you already set up the discrete output as described in "**Two Point Teach(Discrete)**". Notice that the discrete output still operates, you will get a discrete output on **CH2** if the fibers are either too far apart, or if you block the beam with the business card.

    The Analog output could be used to show when the sensing tips are impeded by dirt or debris and require cleaning.



Two-Point Teach with Array (Analog ⎍)

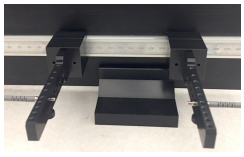
1. Flip open the display cover on amplifier.

2. Flip down the fiber locking switch.

3. Fully insert the PIRIX323T-VL fibers into the front port holes.

4. Flip the fiber locking switch back up to lock fibers in place.

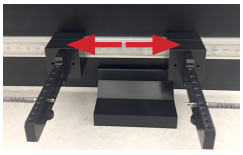
5. Place the array fiber mounts onto the slide and mount the fibers into the fiber mounts so they are facing each other.



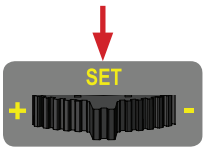
6. Slide the left selector switch to **CH1**. (This is the analog output and changes all menus to reflect the analog output adjustments).

7. Slide right selector switch to **ADJ.**

8. Slide the left fiber mount to the 120 mm location, and the right fiber mount to the 170 mm location.

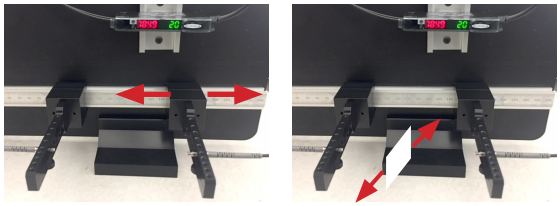


9. Push in on the rocker to start Teach. While holding business card to block the entire array, push in on rocker to teach 4 mA light level.



10. Remove the business card and push in on the rocker again to teach the 20 mA light level.

11. Slowly insert the business card into the array or slide the right fiber mount back and forth to watch the mA output change from 4 to 20 based on the light level/distance.



12. Optional: (If you already set up the discrete output as described in "**Two Point Teach(Discrete)**". Notice that the discrete output still operates, you will get a discrete output on **CH2** if the fibers are either too far apart, or if you block the beam with the business card.