Raptor SRX

(Single Robot X-Ray)





<u>Use</u>

- Allows a single robot to carry an X-ray source and panel in the gripper to image a package without the need to send a person in to set up the source and panel
 - Can be carried by hand for a quick way to carry the source and panel down by a person
- Holds the source and panel in a way that allows them to float in relation to the robot gripper so that they always hang down no matter the gripper orientation, making it easy to line up over the package being x-rayed
- Telescopic length gives source to panel distance intervals between 30" and 50"
- Adjustable source and panel height allows for a taller package and aiming of the source to a particular point on the panel
- Tool-less design makes adjustments quick and easy





5776-1 Robot Grip



5776-4 H&L Panel



5776-2 Source Arm





5776-5 Source Mount 5776-6 Panel Mount

- Grab the Robot Grip and flip the levers open on both ends (away from the middle)
- Slide the short end of the Source Arm (the end without holes in it) in to one end of the robot grip and push until the black plastic bumps against the Robot Grip
- Align the robot grip's locks (the black plastic parts with the levers) so that the lever is flat on the top of the Source Arm's black plastic piece
- Lock the lever by flipping it back toward the Robot Grip
- Check the grip of the lock, if it is loose flip the lock open and tighten the small screw on the lock (lefthand thread so "lefty tighty") and check the lock again, tighten until the Source Arm can move freely when the lock is open but not move when locked

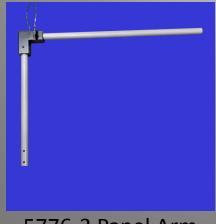


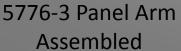
5776-1 Robot Grip



5776-2 Source Arm

- Take the Long shaft from the Panel Arm and insert the end with the hole in it in to the black plastic of the second piece of the Panel Arm, insert the pin attached to the second part pinning both together
- Insert the Longer end in to the Robot grip and adjust the same as the Source Arm
- Slide the Source Mount on to the Source Arm and pin in place with the provided pin so that the black angle is directly under the black plastic of the Source Arm (this balances the weight of the source when it is attached so that the system hangs straight down)







5776-5 Source Mount

Assembly

 If using a cassette panel follow "a" and follow "b" if using a rigid/digital panel

a. Cassette

- Take the H&L Panel (Hook & Loop) and loosen the lock on the back
- Slide on to the bottom of the Panel Arm with the lock to the top and slide up to the desired height
- Lock the H&L Panel on using the same steps for adjusting the lock as in the Source Arm installation
- Attach the cassette or hook-and-loop/Velcro holder to the H&L Panel

b. Rigid/Digital

- Slide the part with the lock and pin on to the Panel Arm so that the radius in the black plastic faces down and points inward, toward the Source Arm/Mount
- Slide this part to the top of the arm and lock in place using the same steps for adjusting the lock as in the Source Arm installation
- Slide the other part so that the shaft goes inside the Panel Arm shaft and position to where the bottom of the panel will sit, pin in place with the pin attached to the first part with the radiused part pointing inward, toward the Source Arm/Mount
- Set panel in the radius on the bottom and hold in place as you drop the top/first part down
- Squeeze the top/first part down on to the top of the panel, being careful not to brake the panel, and lock in place



- Mount the source to the Source Mount using the camera tripod screw on the black angle part
- Be sure to point the source toward the panel
- Mount the Relay Switch (5775, next page) to the picatinny rail on the Source Mount and plug it in to the source using the correct adapter cable
- You are ready to use the Raptor SRX
- Optional
 - If needed, the Source Hanger (part number 5771) can be attached around the Robot Grip to provide more grip options
 - Mount the hanger at the balance point on the Robot Grip when all parts/components are installed by separating the halves and clamping them around the Robot Grip

5775 Relay Switch

- Designed to attach to the picatinny rail on the Source Hanger (5771), Source Platform (5774), and Raptor SRX
- Plugs in to the source and firing circuit on the robot
- Available with either a 4 or 5 pin connector depending on the x-ray source
- Allows the robot to operate the x-ray source by using the firing circuit
- Cam type picatinny latch requires no tools to adjust or lock



<u>Use</u>

- Open the gripper of the robot and insert the Raptor SRX Robot Grip
- Close the gripper so that it clamps down on the Robot Grip on the SRX (If the gripper cannot clamp down tightly then refrain from using the Raptor SRX in this fashion, try using the Source Hanger, 5771, mentioned earlier)
- Plug the leads from the Relay Switch in to the firing circuit of the robot, tie the wire down so that the arm of the robot can move freely without pinching the wire and so that the wire isn't hanging loose, possibly in the way
- Drive to the package with the Raptor SRX in front of the robot
- When near to the package it may be easier to hang the Raptor SRX to the side of the robot, making sure to not upset the balance of the robot, and using the arm to stretch out and the robot's drive to move the source and panel in to position
- As always, practice makes perfect, be sure to practice driving and operation of the Raptor SRX

Questions?

 Fell free to call or email with any questions, concerns, or issues with or about the Raptor SRX and other tools from Ideal Products

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