



**PRECISION**  
FLIGHT CONTROLS

# **CIRRUS RUDDER PEDALS USER GUIDE**



**GENERAL  
AVIATION**



**BOEING  
STYLE**

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## **1 | PRECAUTIONS & WARNINGS**

### **SAFETY**

THIS PRODUCT HAS BEEN DESIGNED WITH CONCERN FOR SAFETY. HOWEVER, ANY ELECTRICAL DEVICE, IF USED IMPROPERLY, HAS THE POTENTIAL FOR CAUSING FIRE, ELECTRICAL SHOCK OR PERSONAL INJURY.

TO HELP ENSURE ACCIDENT-FREE OPERATION, FOLLOW THESE GUIDELINES:

- OBSERVE ALL WARNINGS, PRECAUTIONS AND INSTRUCTIONS.
- REGULARLY INSPECT USB CONNECTIONS.
- STOP USE AND DISCONNECT USB CONNECTION IF THE CONNECTION IS DAMAGED OR IF DEVICE PRODUCES UNUSUAL SOUNDS OR SMELL OR BECOMES HOT TO THE TOUCH.

### **PRECAUTIONS**

BEFORE USING THE PRODUCT, CAREFULLY READ THIS MANUAL AND RETAIN IT FOR FUTURE REFERENCE. IT IS IMPORTANT TO ENSURE THAT ALL USERS FOLLOW SAFETY PRECAUTIONS AND WARNINGS.

### **WARNINGS**

THIS DEVICE IS ONLY FOR FLIGHT SIMULATION USE. NO OTHER USE IS RECOMMENDED.

THIS DEVICE IS FOR INDOOR USE ONLY. DO NOT EXPOSE TO MOISTURE, LIQUID OR HEAT.

THE DEVICE IS NOT A TOY. CHILDREN SHOULD NOT OPERATE IT WITHOUT ADULT SUPERVISION.

MAKE SURE THAT THE DEVICE IS ON A FLAT STABLE SURFACE. FAILURE TO DO SO MAY RESULT IN THE DEVICE TIPPING OVER WHICH MAY RESULT IN BODILY INJURY, DEATH AND DAMAGE TO THE DEVICE.

DO NOT REMOVE THE COVER. OPERATION WITHOUT THE COVER MAY RESULT IN ELECTRIC SHOCK.

DO NOT ATTEMPT TO SERVICE THE DEVICE. REFER SERVICING TO QUALIFIED PERSONNEL ONLY.

DO NOT PLACE DEVICE ON SURFACES THAT ARE UNSTABLE, TILTED OR SUBJECT TO VIBRATION.

DO NOT PLACE THE SYSTEM IN AN AREA SUBJECT TO EXCESSIVE DUST OR CIGARETTE SMOKE. DUST BUILD-UP OR CIGARETTE SMOKE RESIDUE ON THE INTERNAL COMPONENTS MAY CAUSE THE SYSTEM TO MALFUNCTION.

## **2 | INTRODUCTION**

CONGRATULATIONS ON YOUR PURCHASE OF THE PRECISION FLIGHT CONTROLS, INC. USB CIRRUS RUDDER PEDALS.

THE GENERAL AVIATION (GA) AND BOEING STYLE CIRRUS RUDDER PEDALS FEATURES A POWDER COATED SOLID ALUMINUM BASE WITH SOLID STEEL TILLER BAR AND SOLID STEEL PIVOT ARMS. THE ARMS ARE RECESSED IN OILITE BUSHINGS THAT PROVIDES A SMOOTH MOVEMENT.

THE POTENTIOMETERS FOR THE LEFT AND RIGHT BRAKE AXIS AS WELL AS THE YAW AXIS ARE WIRE WOUND POTENTIOMETERS.

THE PEDALS ON THE GA STYLE IS MADE WITH ABS PLASTIC WITH GLASS FIBERS WHICH MAKES IT IMPACT RESISTANT AND VERY TOUGH.

THE PEDALS ON THE BOEING STYLE IS MADE WITH ALUMINUM WITH HIGH QUALITY REALISTIC DESIGN.

### **DEFINITIONS AND ABBREVIATIONS**

**USB:** UNIVERSAL SERIAL BUS (CONNECTION USED BY THE CIRRUS RUDDER PEDALS TO THE COMPUTER)

**CRPUSB:** CIRRUS RUDDER PEDALS GA OR BOEING STYLE

### **COMPATIBILITY**

THE USB CRP IS COMPATIBLE WITH SOFTWARE THAT SUPPORTS USB JOYSTICK DEVICES.

### **DIMENSIONS & WEIGHT**

WIDTH: 16 IN. / 40.64 CM.

DEPTH: 19.25 IN. / 24.45 CM.

HEIGHT: 13.5. / 12.70 CM.

WEIGHT: 12 LBS / 15.88 KG

### **PACKAGE CONTENTS**

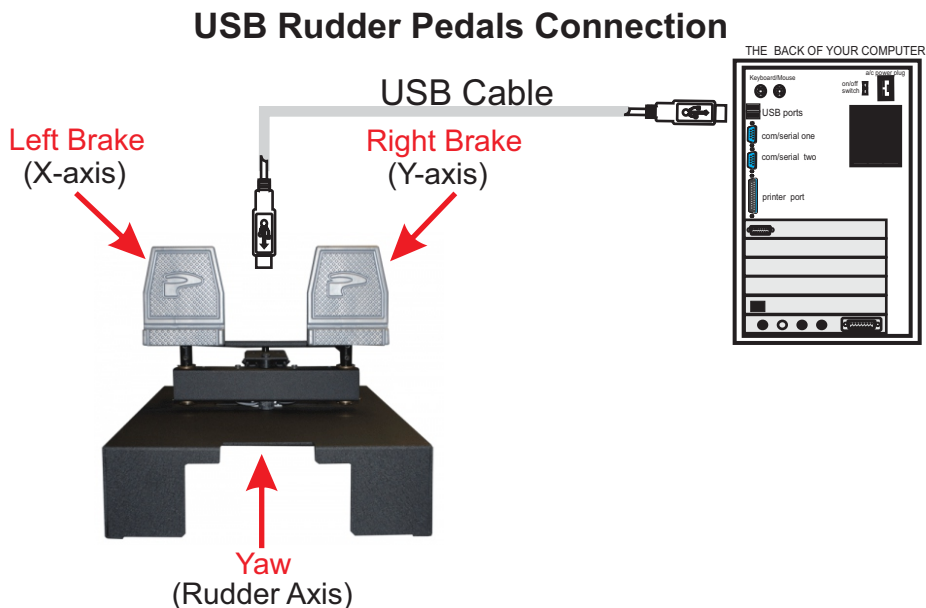
(1) USB CIRRUS RUDDER PEDALS GA OR BOEING STYLE

(1) 6 FOOT USB CABLE

(1) USER'S GUIDE

### **3 | INSTALLATION**

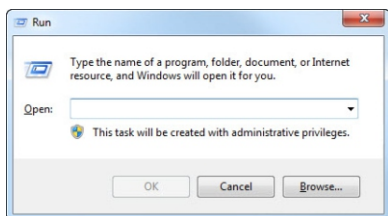
1. CHECK PACKAGING FOR DAMAGE. DO NOT UNPACK ITEM IF THERE ARE DAMAGES. REPORT ANY DAMAGE TO THE CARRIER AND PFC TECHNICAL SUPPORT. TAKE CLEAR PICTURES OF ANY DAMAGE AND EMAIL THE PICTURES TO [techsupport@flypfc.com](mailto:techsupport@flypfc.com).
2. IF THE PACKAGING IS UNDAMGE, OPEN THE BOX AND VISUALLY INSPECT THE PRODUCT. IF THE PEDALS ARE UNDAMAGED, CAREFULLY LIFT IT OUT OF THE BOX.
3. SET PEDALS ONTO YOUR FLOOR. IF YOU HAVE CARPETED FLOOR, REMOVE THE LOOP SIDE OF THE HOOK AND LOOP FASTENER (VELCRO) AND PUSH THE PEDAL DOWN TO YOUR CARPET WHICH WILL BE HELD BY THE HOOK SIDE.  
  
IF YOU DO NOT HAVE CARPET, PEEL THE COVER OF THE STICKY BACKING OF THE LOOP AND PUSH THE PEDAL INTO POSITION.
4. CONNECT THE USB CABLE ON THE BACK OF THE USB TQUAD.
5. CONNECT THE USB CABLE TO AN OPEN USB 2.0 PORT ON BACK OF THE COMPUTER.



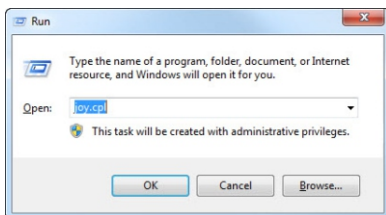
## 4 | WINDOWS CALIBRATION

### FOR WINDOWS 10, WINDOWS 8.1, WINDOWS 8 AND WINDOWS 7

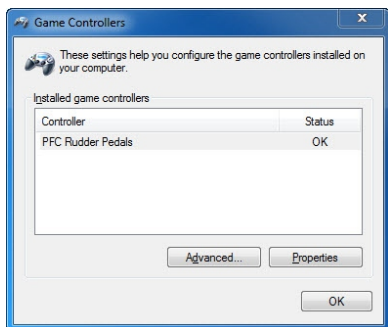
1. PRESS THE WINDOWS LOGO KEY  + R ON YOUR KEYBOARD.



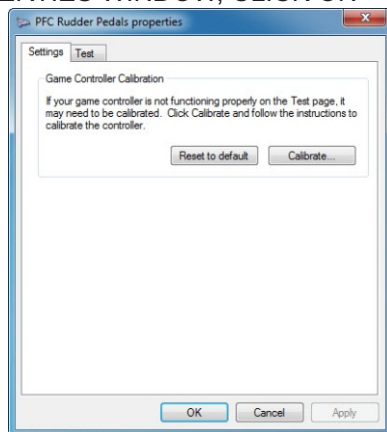
2. ON THE RUN BOX, TYPE "JOY.CPL" (WITHOUT QUOTATION MARKS) THEN PRESS THE ENTER KEY.



3. FROM THE GAME CONTROLLERS WINDOW DOUBLE CLICK ON "PFC RUDDER PEDALS."



4. FROM THE PFC RUDDER PEDALS PROPERTIES WINDOW, CLICK ON THE "SETTINGS" TAB.



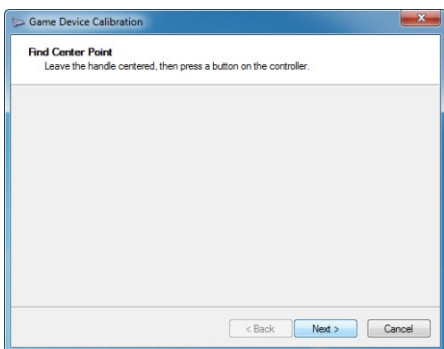
5. CLICK ON THE "RESET TO DEFAULT."

6. CLICK ON "CALIBRATE."

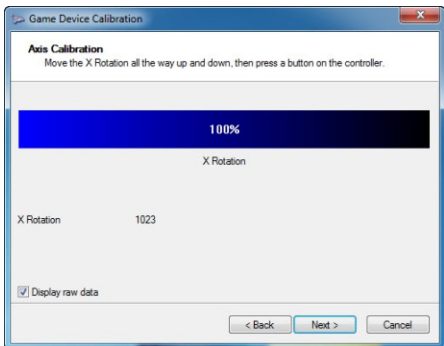
7. CLICK "NEXT" ON WELCOME TO DEVICE CALIBRATION WIZARD WINDOW.



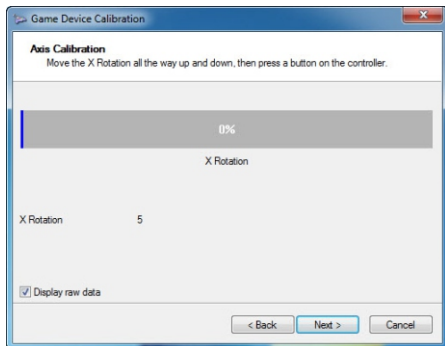
8. ON THE FIND CENTER POINT WINDOW, SET YOUR PEDALS SO THAT YAW IS NEUTRAL AND THEN CLICK ON "NEXT."



9. THE X ROTATION IS THE LEFT BRAKE. FOR CALIBRATION PURPOSES IT IS IMPORTANT TO APPLY FULL BRAKE AND RELEASE BOTH LEFT AND RIGHT BRAKES AT THE SAME TIME. REPEAT THIS ACTION THREE TIMES AND THEN CLICK ON "NEXT."

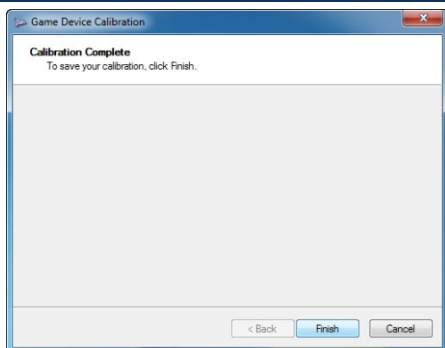


**BRAKES RELEASED**

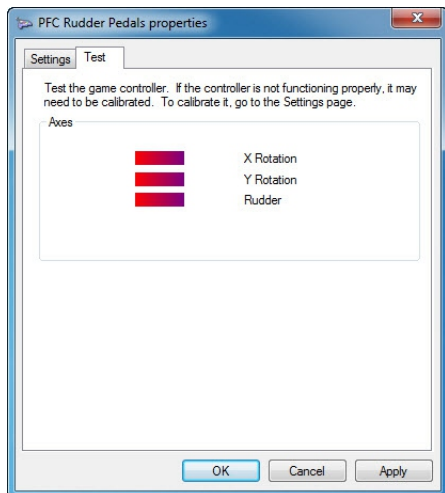


**FULL BRAKES APPLIED**

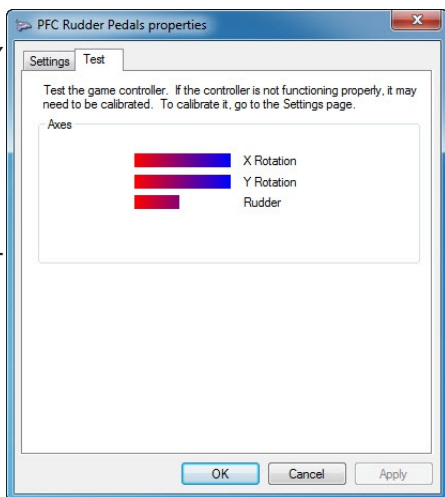
13. CALIBRATION IS NOW COMPLETE, CLICK ON FINISH.



14. ON THE TEST TAB, CLICK ON APPLY.



15. TEST ALL THE AXES ONE A TIME.  
THE X AND Y ROTATION BARS SHOULD BE ALMOST COMPLETELY CLEAR WHEN APPLYING FULL LEFT AND RIGHT BRAKES AND FULL BAR WHEN BRAKES ARE RELEASED.

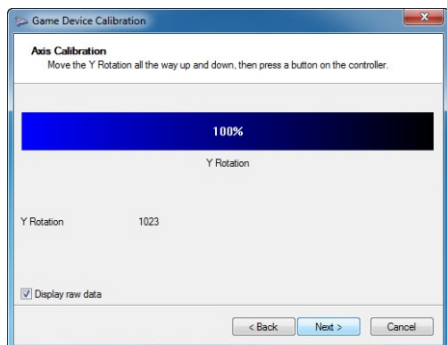


16. THE RUDDER SHOULD BE ALMOST CLEAR AT FULL LEFT RUDDER, FULL BAR AT FULL RIGHT RUDDER AND AT HALF BAR FOR NEUTRAL RUDDER.

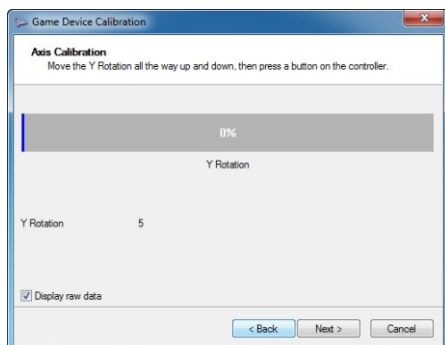
17. CLICK ON OK TO CLOSE THE GAME CONTROLLER SCREEN WINDOW.



10. THE Y ROTATION IS THE RIGHT BRAKE. FOR CALIBRATION PURPOSES IT IS IMPORTANT TO APPLY FULL BRAKE AND RELEASE BOTH LEFT AND RIGHT BRAKES AT THE SAME TIME. REPEAT THIS ACTION THREE TIMES AND THEN CLICK ON “NEXT.”

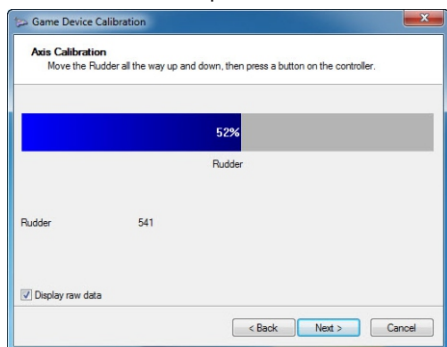


BRAKES RELEASED

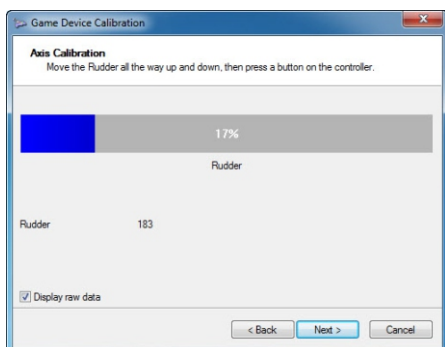


FULL BRAKES APPLIED

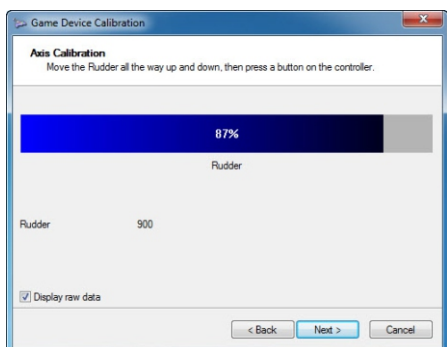
11. FOR THE RUDDER CALIBRATION, PUSH THE YAW ACTION FULL LEFT THEN FULL RIGHT. REPEAT THIS ACTION THREE TIMES AND CLICK ON “NEXT.”



RUDDER / YAW CENTER



RUDDER / YAW FULL LEFT



RUDDER / YAW FULL RIGHT

## 5 | CHANGING THE OUTPUT TYPE

THE DEFAULT OUTPUT TYPE FOR THE CRP USB IS “JOYSTICK”. THIS TYPE OF OUTPUT IS THE STANDARD FOR MOST WINDOWS COMPATIBLE CONTROLLERS. IN THIS MODE THE CALIBRATION IS PERFORMED IN WINDOWS GAME CONTROLLER SCREEN AND THEN MANUALLY ASSIGNED INTO THE FLIGHT SOFTWARE YOU WILL BE USING SUCH AS P3D, FSX OR X-PLANE.

THE OTHER OUTPUT TYPE IS PFC USB AND IS TO BE USED IF YOU ARE USING THE USB CIRRUS PEDALS WITH X-PLANE AS A PART OF OF AN FAA APPROVED SYSTEM. IN THIS MODE THE PEDALS COMMUNICATE THROUGH THE PFC USBHIDPLUGIN WHICH IS SIMILAR TO A DRIVER, TO CONTROL BRAKES AND YAW IN X-PLANE. THE FUNCTIONS CANNOT BE REASSIGNED. THEY ARE FIXED AS LEFT BRAKE, RIGHT BRAKE AND YAW/RUDDER.

### INSTALLATION OF THE PFC USB UTILITIES

THE PFC USB UTILITIES MUST BE INSTALLED TO CHANGE THE OUTPUT TYPE SETTING OF THE USB CIRRUS PEDALS.

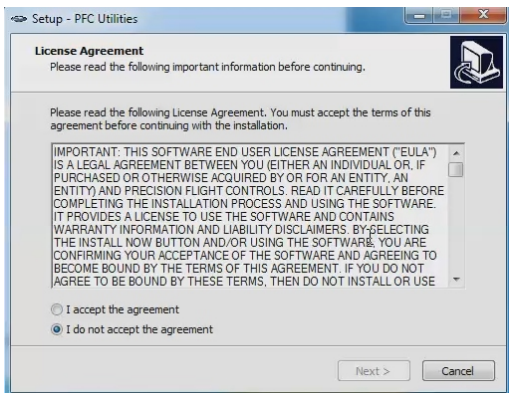
1. GO TO <https://flypfc.com/support/#usbdriverutils>
2. CLICK ON THE “DOWNLOAD THE PFC USB HARDWARE TEST AND CALIBRATION UTILITIES.”
3. SELECT THE DESKTOP AS YOUR DOWNLOAD DESTINATION.
4. UNZIP THE “PFC\_UTILITIES.ZIP” FILE.



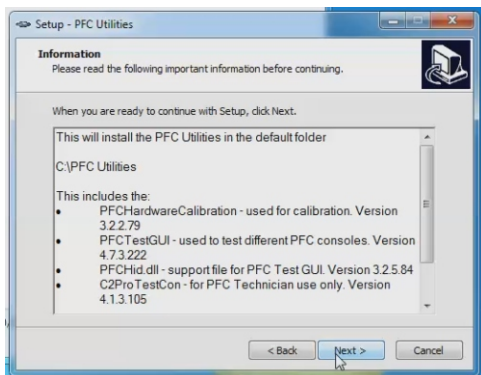
5. DOUBLE CLICK ON THE PFC\_UTILITIES.EXE



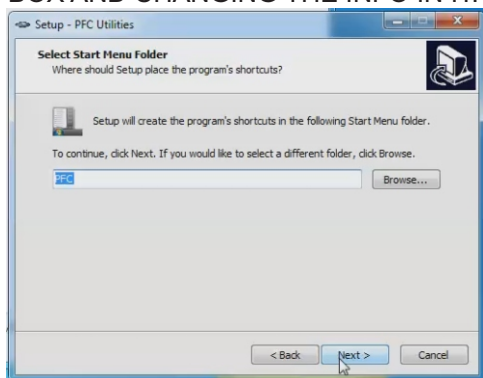
6. READ THE LICENSE AGREEMENT. CLICK ON I AGREE IF YOU AGREE WITH THE TERMS, THEN CLICK ON NEXT.



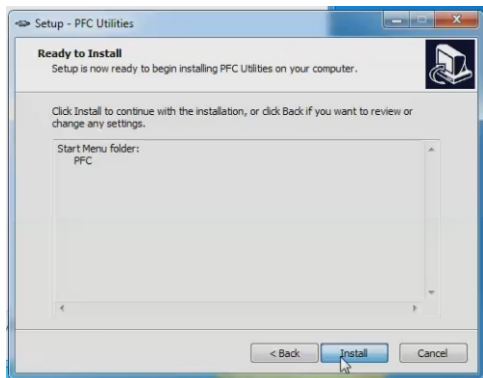
7. CLICK NEXT ON THE SUMMARY OF FILE THAT WILL BE INSTALLED ON YOUR COMPUTER.



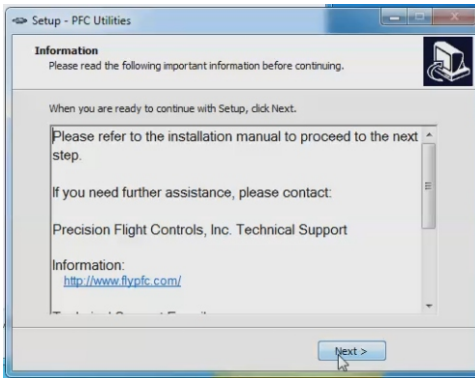
8. YOU CAN THE CHANGE START MENU FOLDER BY CLICKING ON THE BOX AND CHANGING THE INFO IN IT. CLICK NEXT TO PROCEED.



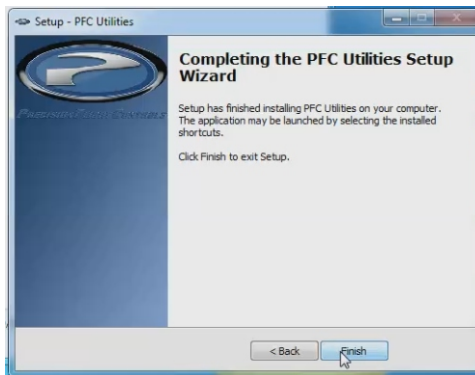
8. CLICK INSTALL TO COMMENCE INSTALLATION.



## 9. CLICK NEXT ON THE SUMMARY OF FILE THAT WILL BE INSTALLED ON



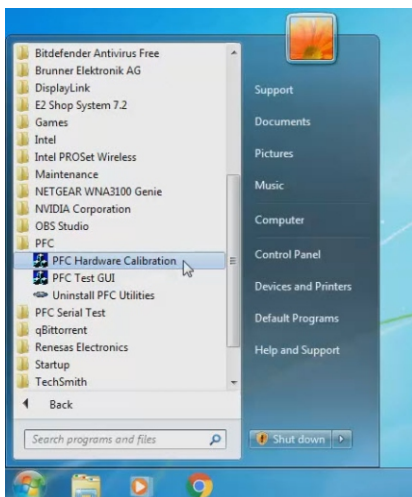
## 10. CLICK ON FINISH.



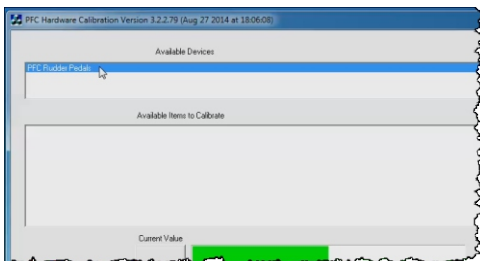
## RUNNING THE PFC HARDWARE CALIBRATION

### 11. CLICK ON THE WINDOWS START ICON AND ON THE SEARCH BOX TYPE PFC HARDWARE.

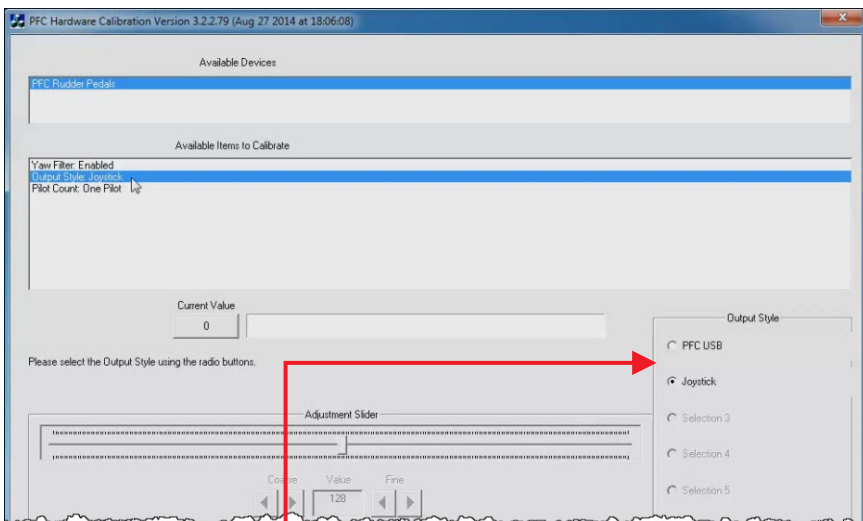
### 12. CLICK ON PFC HARDWARE CALIBRATION.



13. CLICK ON PFC RUDDER PEDALS UNDER AVAILABLE DEVICES.



14. UNDER THE AVAILABLE ITEMS TO CALIBRATE, CLICK ON THE OUTPUT STYLE.



15. CLICK ON THE PFC USB OR JOYSTICK TO THE APPLICABLE SETTING FOR YOUR USE.

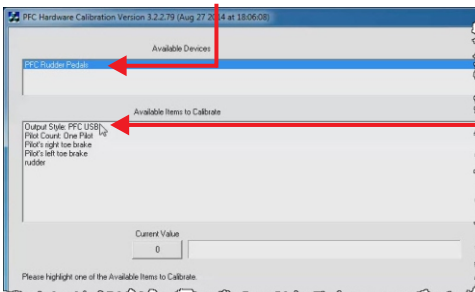
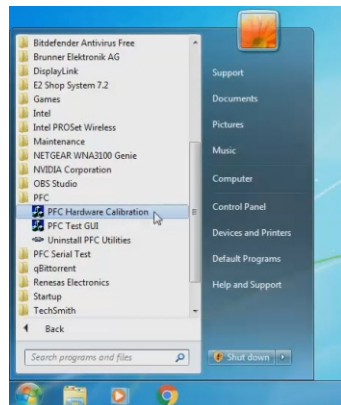
16. ONCE YOU HAVE SELECTED THE OUTPUT STYLE THE OPTION WILL BE GREYED OUT INDICATING THE OUTPUT STYLE HAS BEEN CHANGED.

## 4 | CALIBRATION WITH PFC HARDWARE CALIBRATION

1. CLICK ON THE WINDOWS START ICON AND ON THE SEARCH BOX TYPE PFC HARDWARE.

2. CLICK ON PFC HARDWARE CALIBRATION.

3. UNDER AVAILABLE DEVICES, CHOOSE PFC RUDDER PEDALS.

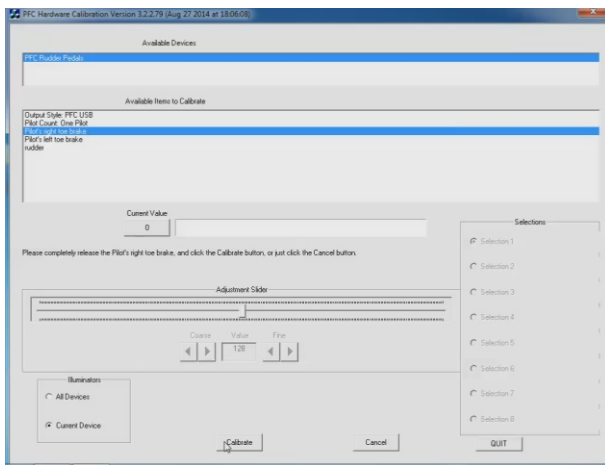


4. VERIFY THAT THE OUTPUT STYLE IS SET TO PFC USB.

5. UNDER AVAILABLE ITEMS TO CALIBRATE, CLICK ON "PILOT'S RIGHT TOE BRAKE."

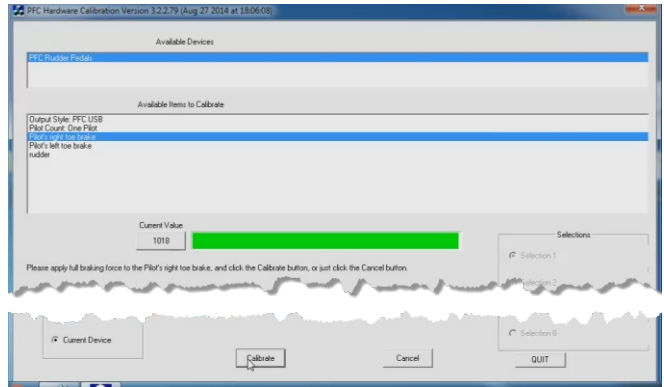
6. APPLY FULL RIGHT BRAKE AND IMMEDIATELY RELEASE. YOU SHOULD SEE THE GREEN BAR MOVE FROM LEFT TO RIGHT.

7. AFTER YOU HAVE COMPLETELY RELEASE THE RIGHT BRAKE, CLICK ON THE CALIBRATE BUTTON.

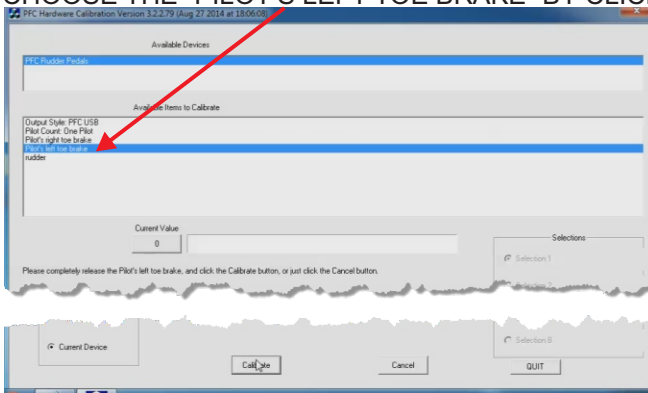


**NOTE: FOR PROPER FULL BRAKE OPERATION, WHEN SETTING THE FULL BRAKING FORCE, YOU MUST SET FULL BRAKING FORCE ON BOTH THE LEFT AND RIGHT AT THE SAME TIME. FAILURE TO DO SO WILL RESULT IN UNEVEN BRAKING.**

8. APPLY AND THEN HOLD BOTH LEFT AND RIGHT BRAKES THEN CLICK ON CALIBRATE.

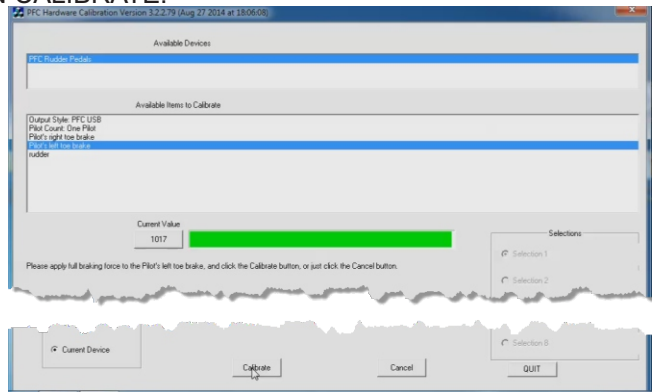


9. CHOOSE THE "PILOT'S LEFT TOE BRAKE" BY CLICKING ON IT.

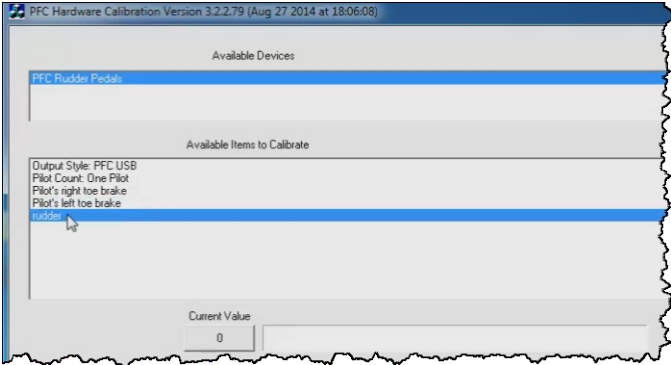


10. APPLY FULL LEFT BRAKE THEN IMMEDIATELY RELEASE IT. AFTER RELEASING THE LEFT BRAKE, CLICK ON "CALIBRATE."

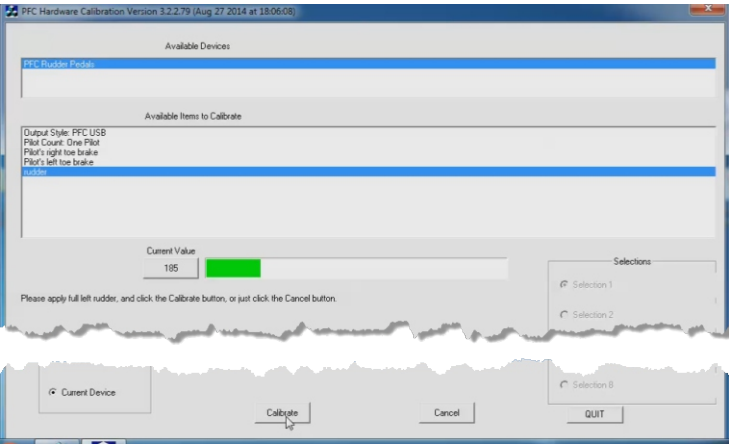
11. APPLY AND THEN HOLD BOTH LEFT AND RIGHT BRAKES. WHILE HOLDING CLICK ON CALIBRATE.



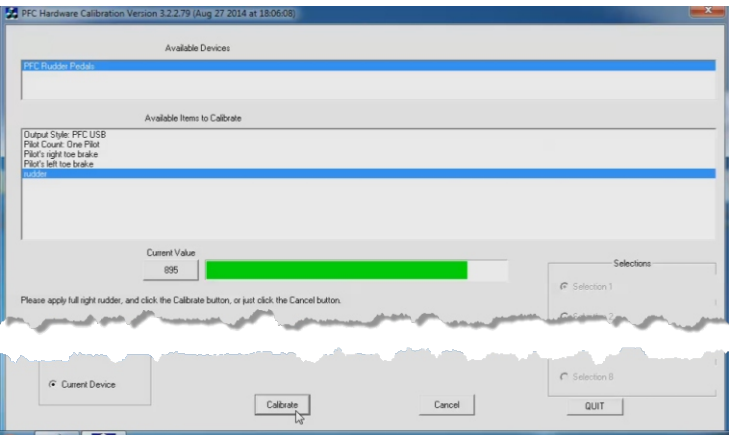
12. CHOOSE THE “RUDDER” BY CLICKING IT.



13. APPLY AND HOLD FULL LEFT RUDDER, THE GREEN BAR SHOULD MOVE CLOSER TO THE LEFT. WHILE HOLDING FULL LEFT RUDDER CLICK ON “CALIBRATE.”



14. APPLY AND HOLD FULL RIGHT RUDDER AND THE GREEN BAR SHOULD MOVE CLOSER TO THE RIGHT. WHILE HOLDING FULL RIGHT RUDDER CLICK ON “CALIBRATE.”

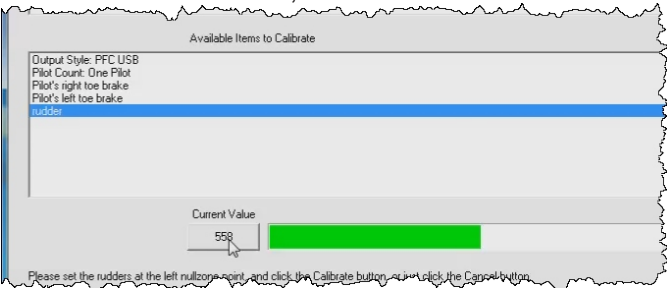




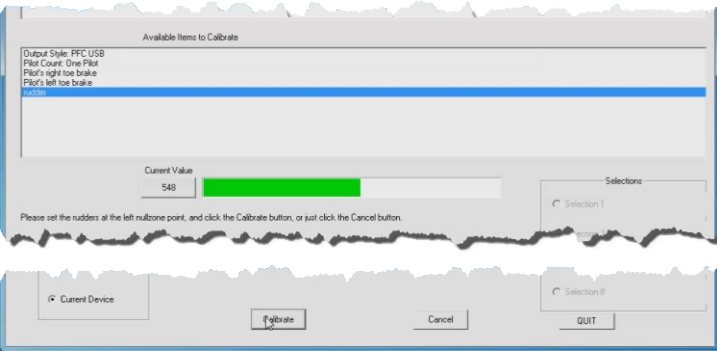
# NULLZONE CALIBRATION

NOTE: THE NULLZONE POINT IS A SMALL GAP IN THE NEUTRAL POSITION WHERE THE PEDALS WILL NOT SEND ANY RUDDER INPUT.

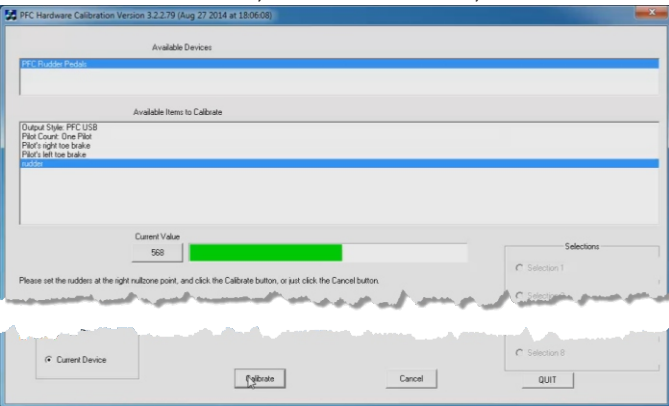
15. EQUALIZE BOTH PEDALS AND NOTE THE NUMBER SHOWN ON THE CURRENT VALUE BOX; IN THE EXAMPLE BELOW IT IS 558.



16. SET THE LEFT NULL ZONE POINT BY APPLYING A SMALL AMOUNT OF LEFT RUDDER UNTIL THE CURRENT VALUE IS 10 POINTS LESS THAN THE NEUTRAL POSITION AND THEN CLICK ON CALIBRATE. IN THE SAMPLE, THAT VALUE WILL BE 548 ( $558-10=548$ ).



16. SET THE RIGHT NULL ZONE POINT BY APPLYING RIGHT RUDDER UNTIL THE CURRENT VALUE IS 10 POINTS MORE THAN THE NEUTRAL POSITION, IN THE SAMPLE, THAT VALUE WILL BE 568.



17. CALIBRATION IS NOW COMPLETE, CLICK ON QUIT.

## 5 | CONTACT INFORMATION

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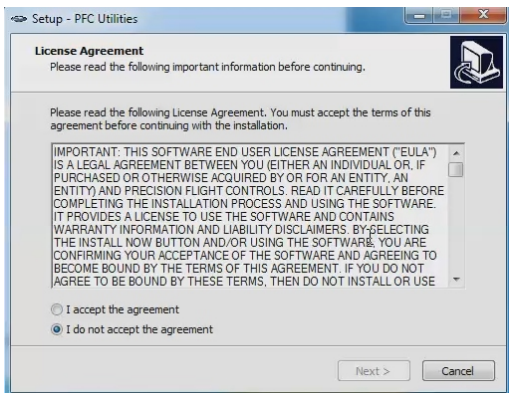
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5. DOUBLE CLICK ON THE PFC\_UTILITIES.EXE



6. READ THE LICENSE AGREEMENT. CLICK ON I AGREE IF YOU AGREE WITH THE TERMS, THEN CLICK ON NEXT.



## **7 | LIMITED WARRANTY INFORMATION**

### **WHAT'S COVERED BY OUR LIMITED WARRANTY**

PRECISION FLIGHT CONTROLS, INC. (HEREAFTER "PFC") WARRANTS ITS HARDWARE PRODUCTS TO THE ORIGINAL OWNER TO BE FREE FROM DEFECTS IN WORKMANSHIP AND MATERIALS WHEN USED PROPERLY FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF DELIVERY.

### **WHAT'S NOT COVERED BY OUR LIMITED WARRANTY**

PRODUCT FAILURE DUE TO IMPROPER INSTALLATION, MAINTENANCE, MISUSE, ACCIDENT, ABUSE, NEGLECT, UNAUTHORIZED REPAIR, MODIFICATION OR ALTERATION REMOVAL OR REPLACEMENT COSTS OR LOSS OF REVENUE INCURRED DUE TO DOWNTIME DAMAGE TO RELATED COMPONENTS NORMAL WEAR-AND-TEAR DAMAGE INCURRED DURING SHIPPING TRANSIT, IMPORTATION OR CUSTOMS CLEARANCE PRODUCTS OR SOFTWARE MANUFACTURED BY OTHER COMPANIES SOFTWARE OR DATA LOSS COSMETIC DAMAGES SUCH AS UPHOLSTERY, PAINT, POWDER COAT, STICKERS, WRAPS, SILK SCREEN OR ANY OTHER DAMAGES THAT DO NOT DIRECTLY IMPACT THE USE OF THE PRODUCT IN ITS INTENDED ROLE AS A AVIATION TRAINING DEVICE (ATD) OR GAME CONTROLLER EXPENDABLE ITEMS SUCH AS LIGHT BULBS, BATTERIES AND ETC. LANDING GEAR SWITCH

### **WHAT PFC WILL DO ON AN APPROVED WARRANTY CLAIM**

IF DURING THE WARRANTY PERIOD YOU SUBMIT A WARRANTY CLAIM AND IT IS APPROVED BY PFC, AT PFC'S SOLE DISCRETION WE WILL:

**REPAIR THE PRODUCT** - USING NEW OR RECONDITIONED PARTS WHICH ARE FUNCTIONALLY EQUIVALENT TO NEW IN PERFORMANCE AND RELIABILITY.

**REPLACE THE PRODUCT**- USING NEW OR RECONDITIONED PRODUCTS WHICH ARE FUNCTIONALLY EQUIVALENT TO NEW IN PERFORMANCE AND RELIABILITY.

**IN THE EVENT A WARRANTY CLAIM IS APPROVED** AND THE PRODUCT IS RETURNED DUE TO DEFECT AS STATED ABOVE, A REFUND IN FULL WILL BE ISSUED. IF PRODUCT IS RETURNED WITHIN THE WARRANTY PERIOD, BUT THE RETURN IS NOT RELATED TO DEFECT, A REFUND WILL BE ISSUED LESS A FIFTEEN PERCENT (15%) RESTOCKING FEE.

### **OBTAINING WARRANTY EVALUATION & SERVICE**

ALL WARRANTY QUESTIONS OR CLAIMS MUST FIRST BE DIRECTED TO THE PFC TECHNICAL SUPPORT TEAM. PLEASE BE PREPARED TO PROVIDE THE PFC WITH THE PRODUCT SERIAL NUMBER AND/OR PURCHASE INVOICE NUMBER FOR VERIFICATION. PFC'S TECHNICAL SUPPORT TEAM MAY BE REACHED BY PHONE: (916) 414-1316 OR EMAIL: [techsupport@flypfc.com](mailto:techsupport@flypfc.com)

PFC WILL DETERMINE IF THE PRODUCT HAS FAILED DUE TO DEFECTIVE WORKMANSHIP OR MATERIALS. PFC RESERVES THE RIGHT TO ASSESS FEES ASSOCIATED WITH DIAGNOSTIC SERVICES. IF THE PRODUCT IS DETERMINED TO HAVE AN ISSUE WHICH IS COVERED BY THE WARRANTY, THE CUSTOMER MAY CHOOSE ONE OF SERVICE OPTIONS BELOW:

### **MAIL IN SERVICE**

THIS SERVICE WILL REQUIRE THE CUSTOMER TO SEND THE DEFECTIVE PRODUCT OR PART TO PFC. THE CUSTOMER MUST FOLLOW PFC'S RETURN MATERIAL AUTHORIZATION (RMA) PROCEDURE PRIOR TO RETURNING ANY ITEM. PLEASE NOTE THAT IN THE EVENT AN ITEM IS RETURNED AND THE PACKAGE DOES NOT DISPLAY THE RMA NUMBER (PER THE RMA PROCESS), THE DELIVERY MAY BE REFUSED. FULL INSTRUCTIONS FOR PFC'S RMA PROCESS CAN BE FOUND AT: [https://flypfc.com/wp-content/uploads/suppoprt/rma\\_form.pdf](https://flypfc.com/wp-content/uploads/suppoprt/rma_form.pdf)

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### **ADVANCE REPLACEMENT PART SERVICE**

THIS SERVICE ALLOWS OUR CUSTOMERS TO SERVICE THEIR OWN PFC PRODUCT. PFC WILL SEND THE REPLACEMENT PART SO THE CUSTOMER MAY PERFORM THE INSTALLATION OF THE PART. PFC WILL REQUIRE ADVANCE PAYMENT FOR THE PART AND SHIPPING CHARGES. THE ORIGINAL PART MUST BE RETURNED TO PFC VIA A REPUTABLE SHIPPING SERVICE WITHIN TEN (10) BUSINESS DAYS. IN THE EVENT THE CUSTOMER DOES NOT RETURN THE PART WITHIN THE ALLOTTED TIME PERIOD, NO REFUND WILL BE ISSUED.

### **ON-SITE REPAIR SERVICE**

THIS SERVICE IS AVAILABLE FOR ADVANCED AVIATION TRAINING DEVICE (AATD) ONLY. SCHEDULE PERMITTING, PFC WILL SEND A TECHNICIAN TO YOUR LOCATION TO SERVICE THE AATD. AFTER THE FIRST 90 DAYS FROM THE DATE OF SHIPMENT, THE CUSTOMER WILL BE RESPONSIBLE FOR ALL EXPENSES AND LABOR COST FOR THE ON-SITE SERVICE.

### **WARRANTY FOR REPLACEMENT PARTS OR UNITS**

ANY REPLACEMENT PARTS OR UNIT PROVIDED DURING THE WARRANTY PERIOD WILL BE COVERED BY THE REMAINING BALANCE OF TIME ON THE CUSTOMER'S ORIGINAL LIMITED WARRANTY. REPLACEMENT PARTS WILL NOT BE COVERED BY AN EXTENDED OR SEPARATE WARRANTY PERIOD.

### **RETURN SHIPMENT OPTIONS**

PFC, AT ITS OWN EXPENSE, WILL SHIP THE REPAIRED OR REPLACEMENT PRODUCT TO THE CUSTOMER'S ORIGINAL SHIPPING ADDRESS AS REFLECTED ON THE ORIGINAL ORDER/INVOICE. PFC WILL SHIP VIA UPS GROUND OR AN EQUIVALENT SERVICE. IF EXPEDITED SHIPPING IS REQUIRED, THE CUSTOMER WILL BE RESPONSIBLE FOR SHIPPING CHARGES.

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