

# ***Intelligent Flap Controller***™



***Intelligent Flap Controller (IFC)*** is an electronic control system to manage the electric flap system used on the RV series of aircraft.

## **Benefits**

- 1) Protects against flap deployment above Vfe
- 2) Dual Inputs: Allows for Pilot and Co-Pilot side flap switches
- 3) Uses the standard Up-off-Down flap switch or the Infinity stick grip
- 4) Controls the standard Van's flap actuator
- 5) Eliminates the need for a flap positioning sensor
- 6) Eliminates flap motor run-on associated with traditional relay systems

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## **About Intelligent Flap Controller:**

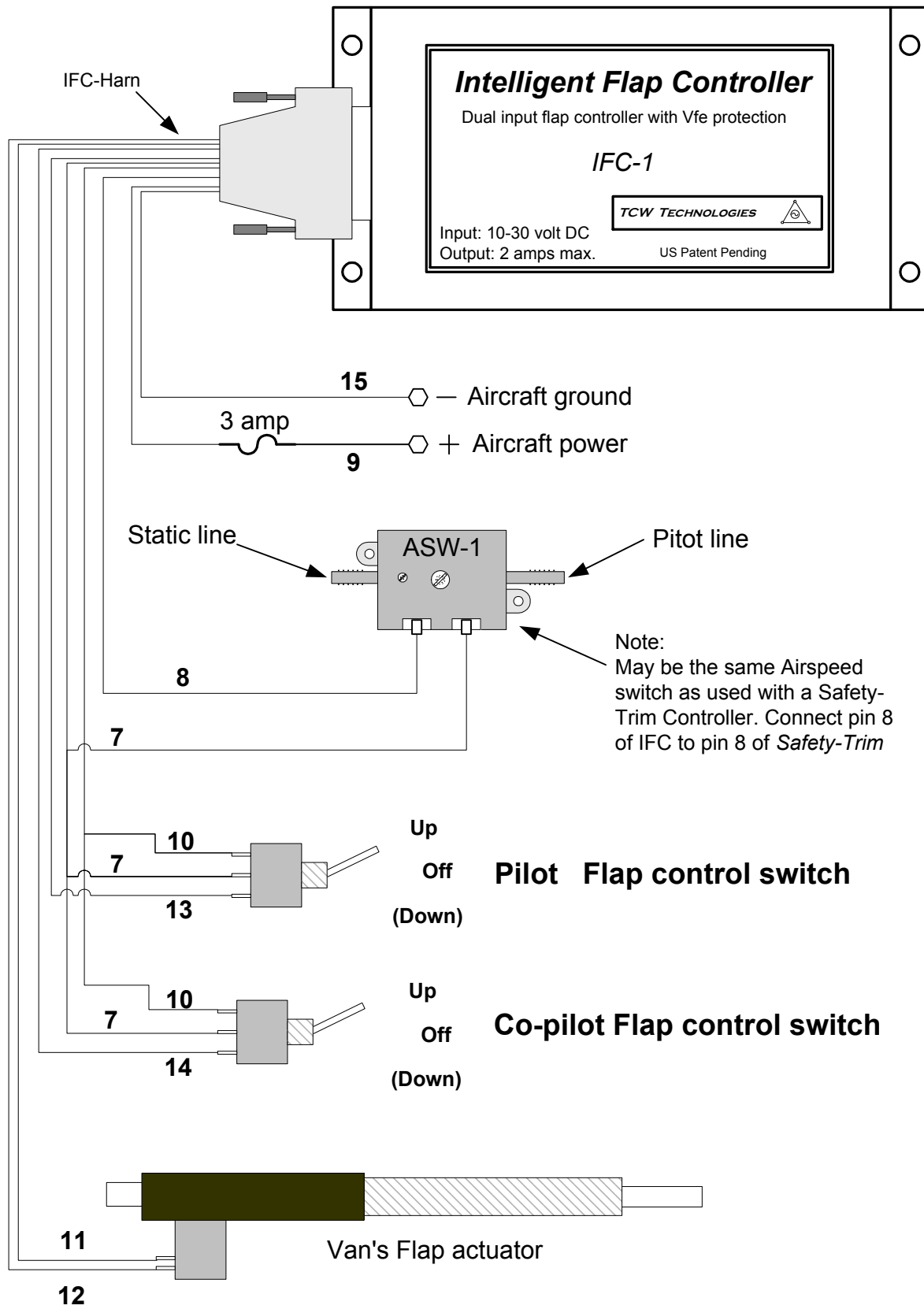
*Intelligent Flap Controller* (IFC) is an electronic control system specifically designed for use with the Van's Aircraft series of flap actuators. IFC connects to the standard up-off-(down) switches commonly used to control flap operation and directly drives the Van's flap actuator. IFC allows for Pilot and Co-Pilot Flap switches and resolves the possible conflicts if the switches are operated in opposite directions. IFC requires no flap positioning sensor and is fully compatible with Safety-Trim servo controllers.

Additionally, IFC provides protection against accidental flap deployment by interfacing with an airspeed switch. The airspeed switch may be shared with a Safety-Trim servo controller for system integration.

## **Here's how Intelligent Flap Controller works:**

IFC receives switch inputs from Pilot and Co-Pilot flap switches such as those found on the Infinity Stick Grips. These are the standard momentary Down, maintained Up closures to ground. Based on the switch inputs, IFC drives the standard Van's flap actuator. IFC resolves any conflicts between the Pilot and Co-Pilot switches as well as switches left in the UP position. The Van's actuator has no internal electrical limit switches and will run continuously if not controlled. IFC prevents the flap actuator from running endlessly if the flap switches are accidentally left in the UP position. After a 15 second time-out the flap actuator is shut off. Simply move the flap switch back to the off position to reset the operation of the actuator. Additionally, when used with an ASW-1 airspeed switch the IFC system will protect against accidental flap deployment above the preset air speed. However, this protection does not limit the retraction of the flaps, you can always retract the flaps regardless of your airspeed. IFC is also completely compatible with Safety-Trim servo controllers and may share the airspeed switch used with Safety-Trim.

# Wiring Diagram Model IFC-1



# Specifications

Input voltage :	10-30 volts DC, reverse polarity protected
Output voltage:	Short circuit protected, 2 amp maximum
Inputs:	Flap switch inputs are closures to ground Pilot and Co-pilot switches separately wire to IFC controller Air speed switch is a closure to ground
Output:	Time limited flap up voltage limited to 15 seconds
Wiring:	Standard 15-pin D-sub connector ( male on controller) pre-made wiring harness available
Enclosure:	Overall dimensions 5.7" x 2.5" x 1.5" UL 94V-0 rated material, 60 C° max temp.
Weight:	4 oz.
Model number:	IFC-1

For Experimental Aircraft ONLY not TSO'd  
Made in USA

Notes:

Compatible with all *Safety-Trim* products and may share the same Air Speed Switch ASW-1.

Standard 15 pin D-sub female connector required on the aircraft wiring harness.  
(not included with the IFC controller)

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