

# ***SATLOC®***

# ***INTELLIFLOW 2™***

## **DRY INSTALLATION GUIDE**

875-0387-200 Rev B



**Overview:** This installation guide lists all the parts in the IntelliFlow 2 (IF2) dry kits and instructions on installing the IF2 components, associated cables, and switches.

Read this manual thoroughly before beginning the installation.  
If you have any questions, contact your local dealer or Satloc Customer Service.










## PRODUCT DESCRIPTION AND DETAILS

With the IntelliFlow 2™ (IF2) control system on board, the installed GPS, working with IF2, automatically controls application rates. This produces an accurate constant application rate or a variable rate based on prescription maps (PMAPs) and/or 3rd party software. The required application rates can be pilot selected, or PMAPs can be created using Satloc MapStar® desktop software.





Enter desired rates through the GPS interface, and the IF2 system will regulate and maintain selected rates. Once installed, the Falcon Pro™ or G4™ GPS controls the IntelliFlow 2™ system settings. Spray rates and dry gate openings are automatically controlled with an accurate constant application rate or a variable rate based on application selections or prescription maps (PMAPs) in the GPS system. Fine-tune applications through the rate bump feature for more precise applications.

Satloc Falcon Pro and Satloc G4 will switch between liquid and dry settings with ease. Control your Transland Hydraulic 5", 7.5", or 10" gate system inside Falcon Pro or Satloc G4 and IntelliFlow 2™ connections. The IntelliFlow 2™ control system comes with a controller, associated cabling, and required unlocks.

### Dry Application Features Include:

-  *Liquid and Dry control options*
-  *Regulate and maintain selected rates*
-  *Fine tune application with rate bump*
-  *Linear or rotary encoder support*
-  *5", 7.5", or 10" Gates*
-  *Constant or variable rate applications*
-  *Gate increments of 1/32"*

**This system sprays precise patterns using constant rate flow control, thereby reducing:**

-  *Fuel*
-  *Flying time*
-  *Application costs*
-  *Pilot fatigue*

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## Latest Version of the IntelliFlow 2 Dry Installation Guide

Satloc is dedicated to providing updated versions of installation guidebooks for its customers. Scan the QR code to verify you have the latest version of the IntelliFlow 2 Dry Installation Guide or click this link to ensure this is the newest version <https://satloc.com/products/intelliflow-2/>. Then, scroll down to the “Documentation” section.



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## SAFETY INFORMATION

### Read and Follow Safety Messages

- In these instructions, you may see the heading **⚠ WARNING:** and/or the safety alert symbol **⚠**. They indicate a hazardous situation that, if not avoided, could result in death or serious injury. The safety messages provide information to identify a hazard associated with potential injury.
- Read and understand this manual and all the warnings below before installing, operating, or performing maintenance or service. FAILURE TO DO SO MAY CAUSE IRREVERSIBLE DAMAGE TO YOUR SYSTEM.
- Keep this manual and all related safety information with the manuals for your aircraft.

**⚠ WARNING:** Plan your installation by considering the following:

- Cable lengths
- Clearance space
- Power source
- Aircraft structure
- Visibility

**⚠ WARNING:** Consider using existing hardware and hardware locations. Avoid drilling holes that may damage other equipment (such as structural frame members, electrical cables, or fluid lines).

**⚠ WARNING:** Do not obstruct the view of, or access to, other instruments or the flying visibility of the operator.

**⚠ WARNING:** Do not allow anyone to operate without instruction.

**⚠ WARNING:** For trouble-free operation and maintenance of your IF2 system, adhere to the following recommendations.

- Avoid using IF2 in extreme environmental conditions (40-140°F is recommended operating temperature range).
- Wash the hopper/boom system thoroughly and methodically after spray sessions.



# PARTS COVERED BY THIS INSTALLATION GUIDE

This guide applies to all IntelliFlow 2 dry installations for G4 and Falcon Pro and covers all IntelliFlow 2 kits. **The table describes the parts that may be included in your installation.**

**Table 1: IntelliFlow 2 Dry Installation Parts**

<p><b>A</b> 051-0404-000</p>  <p><b>G4 CAN Cable</b> (1) (red cable)</p> <p>Connects part G's TERMINAL cable to G4's FLOW port</p>	<p><b>B</b> 054-0101-000</p>  <p><b>IF2 Power Cable</b> (1) (black and white cable)</p> <p>Connects part G's POWER cable to aircraft power source, see part C</p>	<p><b>C</b> 424-0004-222</p>  <p><b>Power Switch/Circuit Breaker</b> (1) (10A)</p> <p>Use with part B, wire in with aircraft power</p>	<p><b>D</b> 051-0405-000</p>  <p><b>Trim Pressure Cable</b> (1) (red cable)</p> <p>Connects part G's TRIM/PRESSURE cable</p>
<p><b>E</b> 051-0408-000</p>  <p><b>Dry Gate Enconder Cable</b> (1) (red and white cable)</p> <p>Connects to part G's DRY FLOW cable to triggers, security switches, arm switch, and motor solenoids</p>	<p><b>F</b> 075-3022-000</p>  <p><b>Security Switch</b> (1)</p>	<p><b>G</b> 054-0225-000</p>  <p><b>Main Harness Cable</b> (1) (red cable with 10 extensions) Connects to IF2 controller part H</p>	<p><b>H</b> 800-0004-01</p>  <p><b>IF2 Controller</b> (1) Liquid and Dry Controller</p>
<p><b>I</b> Kit #711-0001-01</p>  <p><b>Bolt, 1/4" (2)</b> <b>Washer, 1/4", locking (2)</b> <b>Washer, 1/4" plain, flat (4)</b> <b>Nut, 1/4", locking (2)</b> Use items as required for your specific installation</p>	<p><b>J</b> Kit #711-0001-01</p>  <p><b>Terminal Ring</b> (2)</p>	<p><b>K</b> #27676</p>  <p><b>Control Panel for Standard Hydraulic Gate</b> (1) <i>*For Standard Hydraulic Gate</i></p>	<p><b>L</b> #27677</p>  <p><b>Control Panel for Accumulator Hydraulic Gate</b> (1) <i>*For Accumulator Hydraulic Gate</i></p>
<p><b>M</b> 050-2207-000</p>  <p><b>Falcon, Extension Cable</b> (1) (red cable)</p> <p>Connects part I's TERMINAL cable to one of Falcon Pro's extension ports</p>			

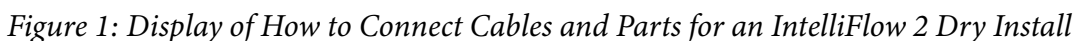
## INSTALLING INTELLIFLOW 2

### Controller Installation

Mount the controller in an available space on the aircraft, for example, in or around the baggage compartment. Ensure there is enough space for making connections. Access is needed behind the mounting surface to attach the nuts to the



## Cables and Connections for IF2 Dry Install



- Store excess cable lengths with a minimum six-inch bend radius.
- Do not coil cables (introduces noise).
- Avoid high-temperature exposure (for example - the exhaust, exhaust manifold) when routing.
- Hand tighten connections only; do not use tools (overtighten).

Please refer to Transland document 98607 for more details.

[illegible]

## Terminal Block Connection Steps

- ## Control Panel Connection Steps

- ## Pilot Stick Connection Steps

- ## Security Switch Connection Steps

1. Connect part E's SECURITY SW cable to part F.

Please refer to Transland document 98608 for more details.

# for Accumulator Hydraulic Gate

The diagram illustrates the wiring for an Accumulator Hydraulic Gate. It shows a bundle of wires on the left, with individual wires labeled: ARM, SECURITY SW, TRIGGER, MOTOR SLND, OPEN SLND, and CLOSE SLND. The TRIGGER wire is connected to a red box labeled "Connect to Pilot Stick". The MOTOR SLND, OPEN SLND, and CLOSE SLND wires are connected to a blue terminal block labeled "Terminal Block". The ARM wire is connected to a red box labeled "Connect wires to top and bottom terminals" with the phone number 075-3022-000. The SECURITY SW wire is connected to a red box labeled "Connect to Pilot Stick". The diagram also shows a "Backside of Control Panel for Accumulator Hydraulic" with a terminal block and a red wire connecting it to the TRIGGER wire.

Connect wires to top and bottom terminals  
075-3022-000

Connect to Pilot Stick

Terminal Block

Backside of Control Panel for Accumulator Hydraulic

## Terminal Block Connection Steps

- ## Control Panel Connection Steps

- ## Pilot Stick Connection Steps

- ## Security Switch Connection Steps

1. Connect part E's SECURITY SW wire to part F.



# DRY FLOW COCKPIT CONTROLS INSTALLATION

1. Install the Transland part #27676 or part #27677 3-switch mounting panel.
2. Install part F so that mechanics/technicians on the ground can work safely around the gate.
3. Ensure all cockpit switches are easily accessible to the pilot (see also [Figure 1: Display of How to Connect Cables and Parts for an IntelliFlow 2 Dry Install](#)).

**Table 2: Arm, Security, and Trigger Switches**

Switch	Description/Usage
Arm	<p>To ensure unintentional use of the trigger switch does not activate the gate, the Arm switch must be OFF until the pilot nears the work area.</p> <p>When ON the system is pre-energized in preparation of operation of the gate by the trigger switch.</p>
Security	<p>The Security switch disables the IF2 system from making any commands to the gate (it is effectively a gate isolation switch).</p> <p>When ON, the gate cannot be activated, ensuring that it is, for example, safe for a mechanic/technician to work on or around the gate.</p>
Trigger	<p>When the Arm switch is ON, and the Security switch OFF, the trigger switch activates the gate. If the operator is applying at a constant rate, he/she will press and hold the trigger switch when entering the polygon (if the trigger switch is wired to the joystick, and on a momentary switch), and release it when exiting.</p>

## Technical Support

To find an authorized dealer near you, visit [www.satloc.com](http://www.satloc.com).

### Satloc

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