LIQUIP
PART OF OPW a DOVER company

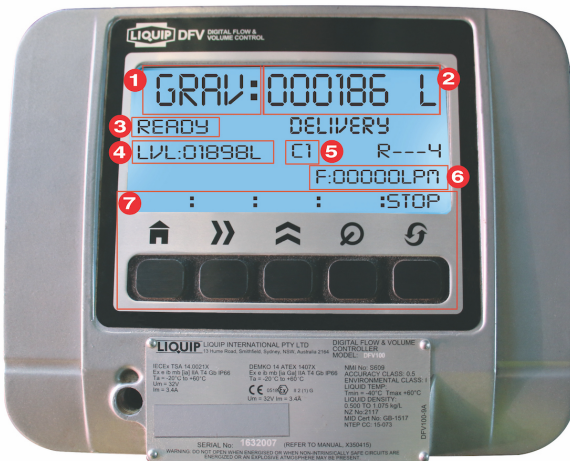

Swift Delivery System

Driver's Manual

1 Introduction

The SWIFT Delivery System utilizes proven components that are readily available and that users are familiar with. The SWIFT system makes complex fueling deliveries simpler, faster and highly accurate. The SWIFT system allows users to perform NMI-approved:

- Gravity Deliveries: Section 2
- Pumped Deliveries – Section 3
    - Bulk Diesel Deliveries – up to 1,000 L/min (264 GPM): Section 3
    - Hose Reel Deliveries (Petrol) and (Diesel): Section 3
- Dual -Trailer Configuration: Section 4

Deliveries can be preset, full compartment or manually monitored.

1.1 SWIFT System Screens

Home Screen	Delivery Screen	Compartment-Level Screen
Figure 1.1 Home Screen		Figure 1.3 Compartment-Level Screen Press "MENU" twice.

Figure 1.2 Delivery Screen

Delivery Screen Callouts:

1. Delivery Type: GRAV, BULK, DISL, PTRL
2. Amount of Product Delivered
3. Status of Delivery
4. Remaining Amount of Product in Compartment
5. First Compartment Delivered From
6. Flow Rate of Delivery
7. Function Instructions and Buttons

Batch-Selection Screen	Pipework Dry/Full
Figure 1.4 Batch-Selection Screen Press "MENU" twice.	Figure 1.5 Pipework Dry/Full Screen

---

NOTICE: After each button is pressed on the DFV, there will be a noise and brief flash to confirm input has been received by the DFV.

NOTICE: If at any time "Deselected" is shown on the DFV-Swift screen. This indicates that you are using a Dual-Trailer configuration (refer to Section 4).

---

2 Gravity

TIP: Please note that the following options are available for Gravity deliveries:

- Full-Compartment Delivery (via Batch): Section 2.1
- Single-Compartment Drop (Manual Partial or Full Delivery): Section 2.2
- Batch (Preset Partial Delivery): Section 2.3
- Multi-Compartment Drop (Partial or Full): Section 2.4

TIP: Ensure there is appropriate space for delivered product in tank prior to and during delivery.

2.1 Full-Compartment Gravity Delivery (via Batch)

1. Press "MENU" button twice to get to the Batch screen (refer to Figure 1.4, page 2).
2. Press "ALL" button to program complete compartment delivery.

   NOTICE: The DFV-Swift will display 99999L to be delivered when "ALL" is selected.

3. Press "MENU" button to return to the DFV-Swift Home screen (refer to Figure 1.1, page 2).
4. Connect delivery hose to the API and connect the product delivery elbow, as required.
5. Select "GRAV" on DFV-Swift home screen (refer to Figure 1.1, page 2).
6. Open foot valves by pushing down of the "FOOT VALVES" button on the Swift-Mx Box.
7. Physically open the API and then product is dispensed (refer to Figure 1.2, page 2 for delivery diagnostics).
8. Monitor delivery as required and press "STOP" if required to stop the flow of product. This will also close the foot valve.

   NOTICE: The flow will also stop after ALL product in compartment has be delivered.

9. Physically close the API and <u>confirm the close</u> on the DFV-Swift screen. This will reopen the foot valves and flood the pipework (if any product remains).
10. Select "PRNT" to complete delivery and print docket.

2.2 Single-Compartment Gravity Drop (Manual Partial or Full Delivery)

1. Connect the delivery hose to the API and connect the product delivery elbow, as required.
2. Select "GRAV" on DFV-Swift home screen (refer to Figure 1.1, page 2).
3. Open the foot valves by pushing down on the "FOOT VALVES" button the Swift-Mx Box.
4. Physically open the API valve and then product is dispensed (refer to Figure 1.2, page 2 for delivery diagnostics)
5. Monitor amount of product delivered and select "STOP" when required to stop the flow of product. This will also close the foot valve.
6. Physically close the API and <u>confirm the close</u> on the DFV-Swift screen. This will reopen the foot valves and flood the pipework.
7. Select "PRNT" to complete delivery and print docket.

TIP: Key Considerations:

- The delivery will stop once the 200L **remaining** level is reached and you will be prompted to verify that you are able to deliver the remaining amount.
  - Confirm if the compartment has been emptied upon completion of delivery.

2.3   Batch Gravity (Preset Partial Delivery)

TIP: Ensure there is appropriate space for delivered product in tank prior to and during delivery.

1. Press "MENU" button twice to get to the Batch Selection screen (refer to Figure 1.4, page 2).
2. Input quantity to be delivered using the "ARROW" buttons.
3. Confirm amount by selecting the "OK" button.
4. Press "MENU" button to return to the DFV-Swift Home screen (refer to Figure 1.1, page 2).
5. Connect delivery hose to the API and connect the product delivery elbow, as required.
6. Select "GRAV" on DFV-Swift home screen (refer to Figure 1.1, page 2).
7. Wait for the DFV request and then open foot valves by pushing down of the "FOOT VALVES" button on the Swift-Mx Box.
8. Physically, open the API valve and then product is dispensed (refer to Figure 1.2, page 2 for delivery diagnostics).
9. Monitor delivery as required.

   NOTICE: The flow will stop once preset quantity has be delivered. This will also close the foot valves.

10. Physically close the API and confirm the close on the DFV-Swift screen.
11. Select "PRNT" to complete delivery and print docket.

2.4   Multi-Compartment Gravity Drop (Partial or Full)

TIP: Ensure there is appropriate space for delivered product in tank prior to and during delivery.

1. Connect delivery hoses to ALL APIs and connect the product-delivery elbows to be delivered from.
2. Select "GRAV" on the DFV-Swift Home screen (refer to Figure 1.1, page 2).
3. Wait for the DFV request and then open foot valves by pushing down of the "FOOT VALVES" button on the Swift-Mx Box.
4. Product is dispensed (refer to Figure 1.2, page 2 for delivery diagnostics).
5. Physically open the first API valve to be delivered from and then product will be dispensed (refer to Figure 1.2, page 2 for delivery diagnostics).
6. Open the remaining API outlet valves to commence delivery of other compartments.
7. Monitor delivered quantity and select "STOP" when required to stop the flow of all product. This will also close the foot valves.
8. Physically close the API and confirm the close on the DFV-Swift screen. This will reopen the foot valves and flood the pipework.

   NOTICE: Only the first compartment delivered from will be displayed. Other compartment's delivery details are being recorded in the background and will be displayed once this procedure is complete.

9. Select "MULTI" on the DFV-Swift. (**DO NOT** SELECT "PRNT.")
10. A summary of deliveries will be displayed on the DFV-Swift.
11. Select "PRNT" to complete delivery and print dockets.

3 Pumped Deliveries:
Bulk (Diesel) Deliveries & Hose Reel Deliveries (Diesel/Petrol)

> **TIP:** Please note following options are available for Bulk and Hose Reel deliveries:
>
> - Manual Single-Compartment Drop (Partial): Section 3.1
> - Batch (Preset Partial Delivery): Section 3.2
> - Batch (Full-Compartment Delivery): Section 3.3

3.1 Manual Single-Compartment Pump Delivery (Partial)

1. Select "BULK", "DISL" or "PTRL" on the DFV-Swift (refer to Figure 1.1, page 2).
2. Look at sightglass to see if the manifold has product in it and select "DRY" or "FULL"
3. Hold down the "Manifold valve" button and press down the desired compartment button on the Swift- Mx Box for three (3) seconds.
4. Turn on the pump.
5. Product is dispensed via bulk outlet (Bulk) or nozzle (Diesel or Petrol).
6. Monitor delivered quantity (refer to Figure 1.2, Page 2 for delivery diagnostics).
7. Complete the delivery by selecting one of the following options. There are two options for ending a delivery, "PIPE" OR "STOP."
    a. PIPE = End delivery and purge manifold pipework. This is used when the next delivery is a different product type. Purging the pipework will deliver all remaining product in the pipework via the bulk or nozzle used.
    b. STOP = End delivery and leave product in the manifold pipework. This is used when the next delivery is the same product type.

    HINT: Before product changeover occurs, e.g., switching from Diesel to Petrol, the manifold should be empty (dry). The best time to empty the manifold is at the end of a delivery.

    Use the "PURGE BULK HOSE" button at the end of the bulk delivery to assist with emptying the hose.
8. Look at sightglass to see if the manifold has product in it and select "DRY" or "FULL"
9. Close the nozzle/outlet and stop the pump.
10. Select "PRNT" to complete delivery and print docket.

> **TIP:** Key Considerations:
>
> - The delivery will stop once the 200L **remaining** level is reached and you will be prompted to verify that you are able to deliver the remaining amount.
>   - Confirm if the compartment has been emptied upon completion of delivery.
> - If changing over product, use the "PIPE" option to purge the manifold pipework.

> ⚠️ **WARNING**
>
> **SAFETY ADVICE: DO NOT press "PURGE" with the cap on the bulk outlet, this will pressurise the cap.**

3.2 Batch Pump Delivery (Preset Partial Delivery)

> **(!)** **TIP:** Ensure that there is appropriate space for delivered product in tank prior to and during delivery.

1. Press "MENU" button twice to get to the Batch Selection screen (refer to Figure 1.4, page 2).
2. Input quantity to be delivered using the "ARROW" buttons.
3. Confirm amount by selecting the "OK" button.
4. Press "MENU" button to return to the DFV-Swift Home Screen (refer to Figure 1.1, page 2).
5. Select "BULK", "DISL" or "PTRL" on the DFV-Swift (refer to Figure 1.1, page 2).
6. Look at sightglass to see if the manifold has product in it and select "DRY" or "FULL"
7. Hold down the "Manifold valve" button and press down the desired component button on the Swift-Mx Box for three (3) seconds.
8. Turn on the pump.
9. Product is dispensed via bulk outlet (Bulk) or nozzle (Diesel or Petrol).
10. Monitor delivered quantity (refer to Figure 1.2, page 2 for delivery diagnostics).
11. Complete the delivery by selecting one of the following options. There are two options for ending a delivery, "PIPE" OR "STOP."
    a. PIPE = End delivery and purge manifold pipework. This is used when the next delivery is a different product type. Purging the pipework will deliver all remaining product in the pipework via the bulk or nozzle used.
    b. STOP = End delivery and leave product in the manifold pipework. This is used when the next delivery is the same product type.
    c. Batch Quantity Delivered: The pipework will purge if the batch quantity is delivered.

    HINT: Before product changeover occurs, e.g., switching from Diesel to Petrol, the manifold should be empty (dry). The best time to empty the manifold is at the end of a delivery.

    Use the "PURGE" button at the end of the bulk delivery to assist with emptying the hose.

12. Look at sightglass to see if the manifold has product in it and select "DRY" or "FULL"
13. Close the nozzle/outlet and stop the pump.
14. Select "PRNT" to complete delivery and print docket.

> **⚠ WARNING** **SAFETY ADVICE: DO NOT press "PURGE" with the cap on the bulk outlet, this will pressurise the cap.**

3.3 Batch Pump Delivery (Full-Compartment Delivery)

TIP: Ensure there is appropriate space for delivered product in tank prior to and during delivery.

1. Press "MENU" button twice to get to the Batch screen (refer to Figure 1.4, page 2).
2. Press "ALL" button to program complete compartment delivery.

    NOTICE: The DFV-Swift will display 99999L to be delivered when "ALL" is selected.

3. Confirm full compartment drop by selecting the "OK" button.
4. Press "MENU" button to return to the DFV-Swift Home screen (refer to Figure 1.1, page 2).
5. Select "BULK", "DISL" or "PTRL" on the DFV-Swift (refer to Figure 1.1, page 2).
6. Look at sightglass to see if the manifold has product in it and select "DRY" or "FULL."
7. Hold down the "Manifold valve" button and press down the desired component button on the Swift Mac Box for three (3) seconds.
8. Turn on the pump.
9. Product is dispensed via bulk outlet (Bulk) or nozzle (Diesel or Petrol).
10. Monitor delivered quantity (refer to Figure 1.2, page 2 for delivery diagnostics).
11. Complete the delivery by selecting one of the following options. There are two options for ending a delivery, "PIPE" OR "STOP".
    a. PIPE = End delivery and purge manifold pipework. This is used when the next delivery is a different product type. Purging the pipework will deliver all remaining product in the pipework via the bulk or nozzle used.
    b. STOP = End delivery and leave product in the manifold pipework. This is used when the next delivery is the same product type.
    c. Batch Quantity Delivered: The pipework will purge if the batch quantity is delivered.

    HINT: Before product changeover occurs, e.g., switching from Diesel to Petrol, the manifold should be empty (dry). The best time to empty the manifold is at the end of a delivery.

    Use the "PURGE" button at the end of the bulk delivery to assist with emptying the hose.
12. Look at sightglass to see if the manifold has product in it and select "DRY" or "FULL"
13. Close the nozzle/outlet and stop the pump.
14. Select "PRNT" to complete delivery and print docket.

TIP: Key Considerations:

- The delivery will stop once the 200L **remaining** level is reached and you will be prompted to verify that you are able to deliver the remaining amount.
    o You will be prompted to confirm if the compartment has been emptied upon completion of delivery.

SAFETY ADVICE: DO NOT press "PURGE" with the cap on the bulk outlet, this will pressurise the cap.

3.4   Multi-Compartment Delivery (COMP)

1.   Select "BULK", "DISL" or "PTRL" on the DFV-Swift (refer to Figure 1.1, page 2).
2.   Look at sightglass to see if the manifold has product in it and select "DRY" or "FULL."
3.   Hold down the "Manifold valve" button and press down the desired compartment button on the Swift- Mx Box for three (3) seconds.
4.   Turn on the pump.
5.   Product is dispensed via bulk outlet (Bulk) or nozzle (Diesel or Petrol).
6.   Monitor delivered quantity (refer to Figure 1.2, Page 2 for delivery diagnostics).
7.   Complete the compartment delivery by selecting one of the following options. There are two options for ending a compartment delivery, "PIPE" OR "STOP."
     a.   PIPE = End delivery and purge manifold pipework. This is used when the next delivery is a different product type. Purging the pipework will deliver all remaining product in the pipework via the bulk or nozzle used.
     b.   STOP = End delivery and leave product in the manifold pipework. This is used when the next delivery is the same product type.

     HINT: Before product changeover occurs, e.g., switching from Diesel to Petrol, the manifold should be empty (dry). The best time to empty the manifold is at the end of a delivery.

     Use the "PURGE BULK HOSE" button at the end of the bulk delivery to assist with emptying the hose.
8.   Close the nozzle/outlet and stop the pump.
9.   Select "NEXT" when the product has stopped flowing.
10. Look at sightglass to see if the manifold has product in it and select "DRY" or "FULL"
11. Select "COMP" when the delivered volume and levels are displayed.
12. Select "COMP" again to deliver the same product from another compartment.
13. Hold down the "Manifold valve" button and press down the desired compartment button on the Swift- Mx Box for three (3) seconds.
14. Turn on the pump.
15. Product is dispensed via bulk outlet (Bulk) or nozzle (Diesel or Petrol).
16. Monitor delivered quantity (refer to Figure 1.2, Page 2 for delivery diagnostics).
17. Complete the delivery by selecting one of the following options. There are two options for ending a delivery, "PIPE" OR "STOP."
18. Select "NEXT" when the product has stopped flowing.
19. Look at sightglass to see if the manifold has product in it and select "DRY" or "FULL."
20. Close the nozzle/outlet and stop the pump.
         HINT: If you wish to delivery a 3rd or more compartment repeat Steps 10 - 20 in Section 3.4.

21. Select "PRNT" to complete the multi-compartment delivery and print docket.

TIP: Key Considerations:

- ▪ The delivery will stop once the 200L **remaining** level is reached and you will be prompted to verify that you are able to deliver the remaining amount.
  - ○ Confirm if the compartment has been emptied upon completion of delivery.
- ▪ If changing over product, use the "PIPE" option to purge the manifold pipework.

SAFETY ADVICE: DO NOT press "PURGE" with the cap on the bulk outlet, this will pressurise the cap.

WARNING

---

4 Dual-Trailer Configuration

Use the following instructions to switch between Trailer A or B control for unloading.

Figure 4.1 Deselected Screen

Figure 4.2 Swift-Mx Box

NOTICE: Switching control between Trailer A or B can only be controlled using the "TRANSFER VALVES" button on the trailer B Swift-Mx Box.

Ensure any jumper hoses are connected as per delivery procedures.

To enable delivery via Trailer B:

1. Pull out "TRANSFER VALVE" button on the trailer B Swift-Mx Box.

To enable deliver via Trailer A:

1. Press down both the "MANIFOLD VALVE" and "TRANSFER VALVE" button for three (3) seconds on the Trailer B Swift-Mx Box.
2. To complete a Gravity, Bulk or Hose Reel (Diesel or Petrol) delivery, follow the procedures in Sections 2 and 3. You must use the DFV-Swift on Trailer A.

   NOTICE: If the DFV-Swift displays "DESELECTED' it means that the DFV-Swift (DFV101S) on the opposite trailer is in use.