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Section 6: When You're Ready – Optional Settings

6.4 Enter Event Data

6.4 Enter Event Data

Purpose	To enter event data into your Aviator Companion for a record of event history.
When	Do this procedure:
	 When you wish to enter insulin, meals, exercise, state of health, or generic event data into your companion.
Materials	Your companion operating with all settings programmed.
	Your pump operating with all settings programmed.

Helpful Information

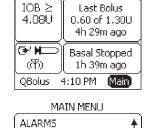
• You can ONLY perform this task using your companion. You **CANNOT** enter event data using your pump.

Procedure:

Steps Do This

1. Access the SELECT EVENT menu.

STATUS
PRIME
REPORTS
ADD EVENT



a.	From the Home screen,	notice Main	1 is highlighted.
----	-----------------------	-------------	--------------------------

- **b.** Press **Enter** button.
- **c.** Scroll to highlight ADD EVENT.

• Assistance from healthcare professional as needed.

d. Press **Enter** button to go to SELECT EVENT menu.

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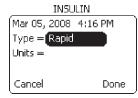
e. Decide what event you want to add.

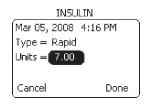
If you are adding an event for	Then do this
Insulin	Go to Step 2 .
Food	Go to Step 3 .
Exercise	Go to Step 4 .
State of Health	Go to Step 5 .
Generic	Go to Step 6 .

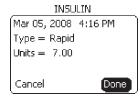
Steps

2. Go to the INSULIN menu.









Do This

- a. Notice **INSULIN** is highlighted.
- **b.** Press **Enter** button.
- **c.** Notice **Type** is highlighted.
- **d.** Press **Enter** button.
- **e.** Scroll to select insulin type (Rapid, Intermediate, Pre-Mix, Long Acting, Short-Acting, Inhaled)
- **f.** Press **Enter** button.
- g. Scroll to highlight Units.
- h. Press Enter button.
- i. Scroll to select the units of insulin.

Note: The range is 0.00 to 99.50.

j. Press Enter button.

Note: You can scroll to highlight **Cancel** and press **Enter** to cancel any entries at anytime.

- **k.** Scroll to highlight **Done**.
- **I.** Press **Enter** button to return to the **Home** screen.

You have completed adding an insulin event.







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Section 6: When You're Ready – Optional Settings

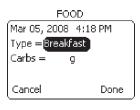
6.4 Enter Event Data

Steps

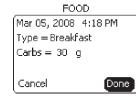
3. Go to the FOOD menu.

SELECT EVENT

INSULIN
FOOD
EXERCISE
STATE OF HEALTH
GENERIC







Do This

- **a.** Scroll to highlight **FOOD**.
- **b.** Press **Enter** button.
- **c.** Notice **Type** is highlighted.
- **d.** Press **Enter** button.
- e. Scroll to select meal type (Breakfast, Lunch, Dinner, and Snack).
- f. Press Enter button.
- g. Notice Carbs (CARBOHYDRATE) is highlighted.
- **h.** Press **Enter** button.
- i. Scroll to select the amount of Carbs.

Note: The range is 0 to 350 grams.

j. Press **Enter** button.

Note: You can scroll to highlight **Cancel** and press **Enter** to cancel any entries at anytime.

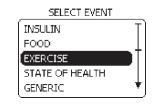
- **k.** Scroll to highlight **Done**.
- I. Press Enter button to return to the Home screen.

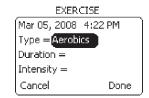
133

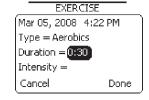
You have completed adding a meal event.

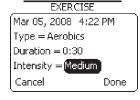
Steps

4. Go to the EXERCISE menu.











Do This

- a. Scroll to highlight **EXERCISE**.
- **b.** Press **Enter** button.

Note: You can just enter the exercise type and **NOT** the duration or intensity.

- **c.** Notice **Type** is highlighted.
- **d.** Press **Enter** button.
- **e.** Scroll to select exercise type (Aerobics, Walking, Jogging, Running, Swimming, Biking, Weights, or Other).
- **f.** Press **Enter** button.
- g. Scroll to highlight Duration.
- **h.** Press **Enter** button.
- i. Scroll to select the exercise duration.

Note: The range is 0:00 to 5:00 hours.

j. Press **Enter** button.

Note: You can scroll to highlight **Cancel** and press **Enter** to cancel any entries at anytime.

- **k.** Scroll to highlight **Intensity**.
- **I.** Press **Enter** button.
- m. Scroll to select exercise intensity (Low, Medium, High, None).
- **n.** Press **Enter** button.
- o. Scroll to highlight Done.
- Press **Enter** button to return to the **Home** screen.

You have completed adding an exercise event.

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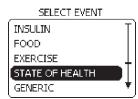
2/9/09 11:29:46 AM

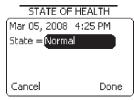
Section 6: When You're Ready - Optional Settings

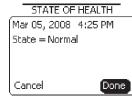
6.5 Review History, Status, and Reports

Steps

5. Go to the STATE OF **HEALTH menu.**







Do This

- a. Scroll to highlight STATE OF HEALTH.
- **b.** Press **Enter** button.
- c. Notice **State** is highlighted.
- d. Press Enter button.
- e. Scroll to select state of health (Normal, Cold, Sore Throat, Infection, Tired, Stress, Fever, Flu, Allergy, Period, Dizzy, Alcohol, Low Symptoms, or High Symptoms).
- f. Press Enter button.

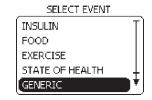
Note: You can scroll to highlight **Cancel** and press **Enter** to cancel any entries at anytime.

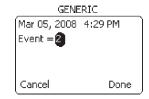
- **g.** Scroll to highlight **Done**.
- h. Press Enter button to return to the Home screen.

You have completed adding a state of health event.

Steps

6. Go to the GENERIC menu.

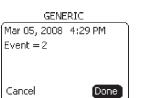




Event = 2

Cancel

7. Check your work.



Do This

- a. Scroll to highlight **GENERIC**.
- **b.** Press **Enter** button.

Note: You can enter up to **eight** generic events.

- **c.** Notice **Event** is highlighted.
- **d.** Press **Enter** button.
- e. Scroll to select event number.

Note: The range is 1 to 8. You need to define what the generic events 1 to 8 means and record in your Table of Settings in **Section 12-Appendix A**.

f. Press **Enter** button.

Note: You can scroll to highlight **Cancel** and press **Enter** to cancel any entries at

- g. Scroll to highlight Done.
- **h.** Press **Enter** button to return to the **Home** screen.

You have completed adding a generic event.

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Go back to each event menu to see if you have the correct information added.









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Section 6: When You're Ready – Optional Settings

6.5 Review History, Status, and Reports

6.5 Review History, Status, and Reports

Purpose	To review important system and diabetes care information using your Aviator Companion .	
When	Do this procedure when you need detailed information about:	
	Bolus status (up to 30 days)	
	Basal status (up to 30 days)	
	System status	
	Pump levels	
	Companion levels	
	Pump version	
	Companion version	
	Bolus History	
	BG History	
	Line Graph	
	BG Statistics	
 Event History (up to 150 most recent events) 		
	Pump Diary (Therapy, Events, Alarms)	
Materials	Your companion and pump fully operating.	

Helpful Information

• If you need to call Customer Care, you may be asked to provide information from your companion or pump screens.

• Assistance from healthcare professional as needed.

• If you have unexplained high or low blood glucose, review your recent bolus history to see if you missed delivering a bolus or if you delivered an incorrect dose (see **Section 11**), as well as review your basal rates and daily totals to assist you or your healthcare professional to resolve the cause of the observation.

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Section 6: When You're Ready – Optional Settings
6.5 Review History, Status, and Reports

Procedure:

Steps

Decide if you need to review system status or reports.

Do This

If you are reviewing	Then do this
Last Bolus Status	Go to Step 2 - STATUS menu.
Basal Status	
System Status (Battery/Insulin levels)	
Pump Levels	
Companion Levels	
Pump Version	
Companion Version	
Bolus History	Go to Step 3 - REPORTS menu.
BG History	
Line Graph	
BG Statistics	
Event History	
Pump Diary (Therapy, Events, Alarms)	







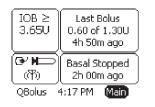
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Section 6: When You're Ready – Optional Settings

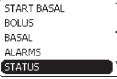
6.5 Review History, Status, and Reports

Steps

2. Go to the STATUS menu.



MAIN MENU



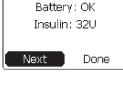
BOLUS STATUS



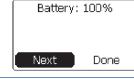
BASAL STATUS



PUMP LEVELS



COMPANION LEVELS



Do This

Note: The following screens will appear when the system is paired, Radio is ON, and pump communication is available.

- **a.** From the **Home** screen, Notice **Main** is highlighted.
- **b.** Press **Enter** button.

Note: You can also access System Status screens from the **System Status** panel.

- **c.** Scroll to highlight **STATUS**.
- **d.** Press **Enter** button.
- e. Review the bolus status.
- f. Notice Next is highlighted.

Note: You can scroll to highlight **Done** and Press **Enter** button to return to the **MAIN MENU** screen at any time.

- g. Press Enter button.
- **h.** Review the basal status.
- i. Notice **Next** is highlighted.
- **j.** Press **Enter** button.
- **k.** Review the pump's battery and insulin levels.
- I. Notice **Next** is highlighted.
- m. Press Enter button.
- **n.** Review the companion's battery level.
- o. Notice Next is highlighted.
- **p.** Press **Enter** button.

Continued on next page.

Steps Do This

PUMP VERSION

#1234567890 H8: 0.4.0 TI: 0.4.0 Next Done

COMPANION VERSION

#BBAK284-D0035 AV2CTL 0.00.19 DEKACTL 0.04.00 Next Done **q.** Review the pump's version.

Note: The version numbers displayed on your system may be different.

- r. Notice **Next** is highlighted.
- s. Press Enter button.
- t. Review the companion's version.
- **u.** Decide whether to return to **MAIN MENU** or **Home** screen.

If	Then do this	
MAIN MENU	Notice Next is highlighted. Press Enter button.	
Home screen	Home screen Scroll to highlight Done. Press Enter button	

You have completed reviewing status information about your pump.

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2/9/09 11:29:46 AM

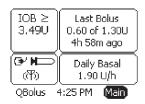


6.5 Review History, Status, and Reports

Steps

Do This

3. Go to the REPORTS menu.



a. From the **Home** screen, Notice **Main** is highlighted.

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b. Press **Enter** button.

c. Scroll to highlight **REPORTS**.

d. Press **Enter** button.

Note: The pump screen will only display Bolus History, Pump Diary, and Send Diary.

MAIN MENU

BASAL
ALARMS
STATUS
PRIME
REPORTS

e. Decide what to review.

If you are reviewing	Then do this
Bolus History	Go to step 4.
BG History	Go to Step 5 .
Line Graph	Go to Step 6 .
BG Statistics	Go to Step 7 .
Event History	Go to Step 8.
Pump diary including	Go to Step 9.
therapy, events, and alarms	

REPORTS MENU

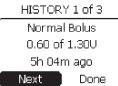


Section 6: When You're Ready – Optional Settings
6.5 Review History, Status, and Reports

Steps

Do This

4. View Bolus History.



a. Scroll to highlight **BOLUS HISTORY**.

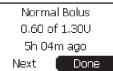
b. Press **Enter** button.

c. Review your bolus history starting from the most recent bolus.

d. Notice **Next** is highlighted.

e. Press Enter button to review another bolus.

HISTORY 1 of 3



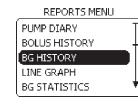
f. Press **Enter** button on **Next** to review as many bolus records as needed.

g. Highlight **Done** when you have reviewed enough bolus history records.

h. Press **Enter** button to return to the **Home** screen.

You have completed reviewing your Bolus history.

5. View BG History.



a. Scroll to highlight **BG HISTORY**.

b. Press **Enter** button.

•



c. Scroll to review your blood glucose readings.

d. Press **Enter** button when you are done reviewing.

e. Notice **Done** is highlighted.

f. Press **Enter** button to return to the **Home** screen.

You have completed reviewing your BG history.

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BG HISTORY

Mar 05, 2008 3:09 PM

LO

Done

DOC15736_Rev-A-Man.indd 141-142 2/9/09 11:29:47 AM

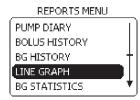
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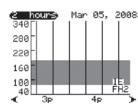
Section 6: When You're Ready - Optional Settings

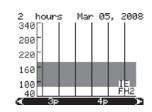
6.5 Review History, Status, and Reports

Steps

6. View BG Line Graph.







Do This

- a. Scroll to highlight LINE GRAPH.
- **b.** Press **Enter** button.
- **c.** Review your blood glucose line graph.
- d. Press Enter button.
- **e.** Scroll to select the time period to display on the line graph. (If a 4 hour time range is selected, then the bottom scroll displays data in 4 hour time periods from 12am to 11pm), and press **Enter** button.
- **f.** Notice the time period highlighted at the bottom of the line graph. Press **Enter** button again to use the scroll to select a specific time period to view, for example, 5pm to 6pm.
- g. Press Back button to return to the REPORTS menu.

You have completed reviewing your BG line graph.

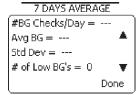
Steps Do This

7. View BG Statistics.

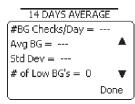


b. Press **Enter** button.

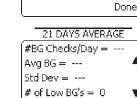
a. Scroll to highlight BG STATISTICS.



c. Scroll to review your blood glucose information for 7, 14, or 21 days as needed.



d. Press **Enter** button when you are done reviewing.

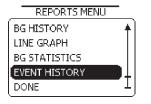


e. Notice **Done** is highlighted.

f. Press **Enter** button to return to the **Home** screen.

You have completed reviewing your BG statistics.

8. View Event History.



Done

- **a.** Scroll to highlight **EVENT HISTORY**.
- **b.** Press **Enter** button.



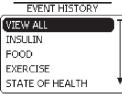


Section 6: When You're Ready - Optional Settings

6.5 Review History, Status, and Reports

Steps

Do This



INSULIN

Mar 05, 2008 4:16 PM

Type = Rapid

Units = 7.00

Edit Done

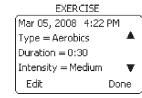
FOOD

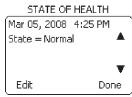
Mar 05, 2008 4:18 PM

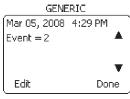
Type = Breakfast

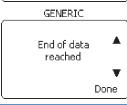
Carbs = 30 g

Edit Done









c. Scroll to select (View All, Insulin, Food, Exercise, State of Health, or Generic) event history to review.

Note: You can review up to the last 150 events, starting from the most recent events.

d. Press **Enter** button.

Note: Press the **Back** button to go backwards to a previous screen.

- e. Press Enter button when you reach the end of data.
- f. Notice **Done** is highlighted.
- g. Press Enter to return to the Home screen.

You have completed reviewing your Event history.

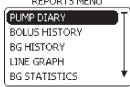
145

Section 6: When You're Ready – Optional Settings 6.5 Review History, Status, and Reports

Steps

9. View Pump Diary.

REPORTS MENU



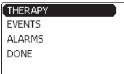
Do This

- **a.** Notice **PUMP DIARY** is highlighted.
- **b.** Press **Enter** button.
- **c.** Decide whether to view therapy, events, or alarms.

If you want to review	Then do this
Insulin therapy amounts	Go to Step 10.
Pump events	Go to Step 11.
Alarm history	Go to Step 12 .

10. Review Therapy amounts.

PUMP DIARY



Mar 05, 2008 / 0.9U

Bolus 0.0U Basal 0.9U 100% Basal Next Done

- a. Notice Therapy is highlighted.
- **b.** Press **Enter** button.
- **c.** Review the bolus and basal insulin units, and basal percentage.
- **d.** Notice **Next** is highlighted.
- e. Press Enter button.

Note: You can scroll to highlight **Done** and Press **Enter** button to return to the **Home** screen at any time.

Note: If you want to go back to previous therapy screens, press the **Back** button.

You can press **Enter** button on **Next** to go through all the therapy screens logged on the pump.

When you press **Enter** button for the **Next** action on the last therapy screen, you will return to the **PUMP DIARY** screen.

You have completed reviewing your insulin therapy amounts.



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Section 6: When You're Ready – Optional Settings 6.6 Upload Data

Steps

11. Review Events.

PUMP DIARY



Mar 05, 2008 4:25 PM



Mar 05, 2008 5:02 PM



Mar 05, 2008 4:25 PM



Do This

Note: Pump diary events provide information about your basal delivery programs and basal rates.

- a. Scroll to highlight Events.
- **b.** Press **Enter** button.
- **c.** Review the basal delivery events that have occurred on your pump.
- **d.** Notice **Next** is highlighted.

Note: You can scroll to highlight **Done** and Press **Enter** button to return to the **Home** screen

e. Press Enter button on Next to review as many events as you need.

Note: If you want to go back to previous event screens, press the **Back** button.

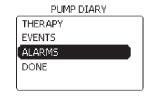
- **f.** When you are done reviewing, scroll to highlight **Done**.
- g. Press Enter button to return to the Home screen.

You have completed reviewing your pump events.

Do This

12. View Alarms history.

Steps



a. Scroll to highlight Alarms.

b. Press **Enter** button.



c. Review the alarm history of your pump.

d. Notice **Next** is highlighted.

e. Press Enter button on Next to review your last 10 alarms as needed.



f. When you are done reviewing, scroll to highlight **Done**.

g. Press **Enter** button to return to the **Home** screen.

You have completed reviewing the alarm history of your pump.

13. Check your work.

You are able to obtain all information related to your companion and pump status and reports following the steps above.









6.7 Companion Self Test

6.6 Upload Data

Purpose	To upload event data from your companion to your computer.	
When	Do this procedure:	
	 When you wish to upload data from your companion to your computer. 	
Materials	Your companion and pump fully operating.	
	Assistance from healthcare professional as needed.	

Helpful Information

- You will perform this task using the companion.
- Make sure the USB cable is connected and the battery is charging.

WARNING: Use **ONLY** the USB cable provided. Use of an unapproved cable may lead to loss of electromagnetic compatibility, and make the system more susceptible to electronic interference.

Procedure:

(

Steps Do This

1. Go to the Home screen.



a. Follow instructions detailed in the *CoPilot for FreeStyle Aviator* user's guide to perform the data upload

2. Upload data.



a. The Aviator Companion will display the data transfer screen during the data transfer process.

Section 6: When You're Ready - Optional Settings

6.7 Companion Self Test

Steps Do This

- 3. Check your work.
- **a.** Check that uploaded data is displayed on the **CoPilot for FreeStyle Aviator** screen.







6.7 Companion Self Test

6.7 Companion Self Test

To perform a self test for the **Aviator Companion** to ensure that the display, audio, **Purpose** vibrator, backlight, test light, and memory functions are working. When Do this procedure: • Before you set up and use your companion and pump for the first time. • When you wish to self test the companion because you are **NOT** sure if all the functions are working properly. • Anytime you see the **Low Battery Alert** screen. **Materials** • Your companion operating with all settings programmed. • Assistance from healthcare professional as needed.

Procedure:

Do This Steps

1. Go to the SETUP menu.



b. Press **Enter** button.

a. From the **Home** screen, notice **Main** is highlighted.



SETUP

TARGET RANGE

WIZARD NAME

VALUES SELF TEST

- c. Scroll to highlight **SETUP**.
- d. Press Enter button.
- **f.** Press **Enter** button.

e. Scroll to highlight **SELF TEST**.



Section 6: When You're Ready - Optional Settings 6.8 Pair Companion and Pump

Do This Steps

2. Observe Self Test.

a. Check the display (the display will highlight).

SELF TEST

Check Display

Note: The display automatically advances through the sequence of screens at a rate of 0.5 seconds per screen.

SELF TEST

Confirm Audio

b. Confirm audio sounds (you will hear beeps).

SELF TEST

Confirm Vibrator

c. Confirm vibrator (you will feel short vibes).

SELF TEST

Confirm Backlight

d. Confirm backlight (the backlight turns on).

SELF TEST

Confirm Test Light

e. Confirm test light (the test light turns on).

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SELF TEST

Checking Memory

f. Check memory.

Note: You will automatically return to the **SETUP** menu, and **Home** screen if no other actions are taken.









6.8 Pair Companion and Pump

Section 6: When You're Ready – Optional Settings 6.8 Pair Companion and Pump

Steps

Do This

3. Check your work.

Confirm that ALL functions are working properly when you performed the companion self-test. Call Customer Care, if any of the functions are NOT working, or you get a "**Companion Memory Error**" warning.

Caution:

If your pump audio or vibratory annunciators are not functioning, switch to insulin injections immediately AND contact your healthcare professional and/or Customer Care.

6.8 Pair Companion and Pump

Purpose When

To pair your **Aviator Companion** and **Aviator Pump** to operate as a system.

Do this procedure:

- When you receive a new companion or pump that's a replacement for your system.
- **Materials**
- Your companion fully charged.
- Your pump with battery installed and initialized.
- Assistance from healthcare professional as needed.

Helpful Information

- Pairing establishes an association of your pump with your companion so that the two will only communicate with each other.
- Your companion and pump should already be paired when you receive your FreeStyle Aviator System package.

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• The RF will automatically turn ON when pairing, if it is NOT already on.

Procedure:

Steps

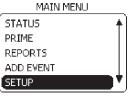
1. Go to the Companion's SETUP menu.



Do This

Note: The following steps are performed using your companion.

- a. Notice Main is highlighted.
- **b.** Press **Enter** button.
- **c.** Scroll to highlight **SETUP**.
- d. Press Enter button.













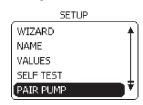
(

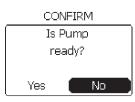
Section 6: When You're Ready – Optional Settings 6.8 Pair Companion and Pump

Steps

Do This

2. Go to the Companion's PAIR PUMP menu to prepare the Companion.





a. Scroll to highlight PAIR PUMP.

b. Press **Enter** button.

c. Notice **CONFIRM** screen with "Is Pump ready?" message displays.

d. Notice **No** is highlighted.

3. Go to the Pump's SETUP menu.

(



Note: The following steps are performed using your pump.

a. Notice **Main** is highlighted.

b. Press **Enter** button.



c. Scroll to highlight **SETUP**.

d. Press **Enter** button.

Do This

4. Go to the Pump's PAIR DEVICE menu to prepare the Pump.

Steps



PUMP

Searching

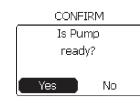
for companions...

a. Scroll to highlight PAIR DEVICE.

b. Press **Enter** button.

c. Notice **PUMP** screen is searching for companions.

5. Go to the Companion's CONFIRM screen to pair pump.



COMPANION Searching for Pumps... **Note:** The following steps are performed using your companion.

a. Scroll to highlight Yes.

b. Press **Enter** button.

c. Notice **COMPANION** screen is searching for pumps.

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6.9 Turn RADIO Off/On

Steps

(

8. Check your work.

Verify that the companion and pump are paired by the serial numbers displayed on the Status screens.

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<incort nump Status
scream vian ai ed</pre> companion information>

Do This

<insert companion Status screet with pare pump information>

b. Notice **No** is highlighted.

c. Scroll to highlight **Yes** if pump is correct.

Note: The following steps are performed using your companion.

a. Notice CONFIRM screen with "Pair with Pump S/NPPPPP."

d. Press **Enter** button.

Do This

7. Verify paired pump and Companion

6.9 Turn RADIO Off/On

6. Confirm pairing of

pump with Companion

No

No

CONFIRM

Pair with pump

1234567890?

CONFIRM Pair with pump

1234567890?

Yes]

Steps

Section 6: When You're Ready - Optional Settings



Verify that the companion and pump are paired by the Radio On signal in both devices displayed on the **Home** screens.

SETUP WIZARD NAME VALUES SELF TEST PAIR DEVICE

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2/9/09 11:29:48 AM

Section 6: When You're Ready - Optional Settings 6.9 Turn RADIO Off/On

6.9 Turn RADIO Off/On

Purpose	To turn off the radio frequency signal between your Aviator Companion and Aviator Pump before you get on an airplane.	
When	Do this procedure:	
	Before you take off in an airplane or as directed by any other official.	
Materials	Your companion and pump fully operating.	
	Your companion and pump already paired.	
	 Assistance from healthcare professional as needed. 	

Helpful Information

MAIN MENU

STATUS

PRIME

SETUP

REPORTS

ADD EVENT

• If your companion and pump are **NOT** paired, radio setting will be **Off**.

Procedure:

Do This Steps 1. Go to the SETUP menu on the Companion. **a.** From the **Home** screen, notice **Main** is highlighted. IOB≥ Last Bolus **b.** Press **Enter** button. 4.310 2.00 of 2.00U 0h 20m ago Oh 09m ago QBolus 4:31 PM Main

c. Scroll to highlight **SETUP**.

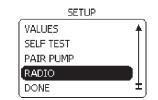
d. Press **Enter** button.

6.10 Therapy Lockout

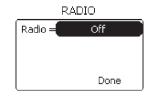
Do This

2. Go to the RADIO menu on your Companion.

Steps



- a. Scroll to highlight RADIO.
- **b.** Press **Enter** button.
- c. Notice **Done** is highlighted.

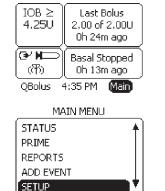


- **d.** Scroll to highlight **Radio**.
- e. Press Enter button.
- **f.** Scroll to **Off**.
- Press **Enter** button.



- **h.** Notice **Done** is highlighted.
- Press **Enter** button.

3. Go to the SETUP menu on the pump.



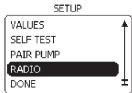
- **a.** From the **Home** screen, notice **Main** is highlighted.
- **b.** Press **Enter** button.
- c. Scroll to highlight **SETUP**.
- **d.** Press **Enter** button.

Section 6: When You're Ready - Optional Settings 6.10 Therapy Lockout

Steps

4. Go to the RADIO menu

on your Pump.





Done

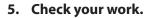
RADIO



Do This

- a. Scroll to highlight RADIO.
- **b.** Press **Enter** button.
- **c.** Notice **Done** is highlighted.
- d. Scroll to highlight Radio.
- e. Press Enter button.
- **f.** Scroll to **Off**.
- **g.** Press **Enter** button.
- **h.** Notice **Done** is highlighted.

Press **Enter** button.



Look at the system status panel on the **Home** screen to verify that the radio signal is off.

To turn the radio signal back on, repeat all the steps above and scroll to select Radio to On.

Therapy Lockout 6.10

Purpose	To lock and unlock the Aviator Pump 's basal and bolus features from your Aviator Companion .	
When	Do this procedure when you wish to prevent access to the following pump options:	
	 Selecting either the basal or bolus panels on the Home screen. 	
	 Using the QBolus soft key on the Home screen. 	
	 Selecting any of the following on the MAIN MENU screen. 	
	>> START/STOP	
	➢ BOLUS	
	➢ BASAL	
	➢ PRIME	
Materials	Your companion fully operating.	

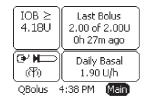
Helpful Information

• The **Lockout** setting is **Off** by default.

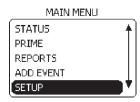
Procedure:

Do This Steps

1. Go to the SETUP menu.



- **a.** From the **Home** screen, notice **Main** is highlighted.
- **b.** Press **Enter** button.



- c. Scroll to highlight **SETUP**.
- d. Press Enter button.

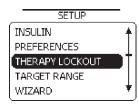


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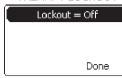
7.1 Edit a Basal Program

Steps

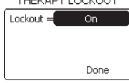
2. Go to the THERAPY LOCKOUT screen.







THERAPY LOCKOUT



Do This

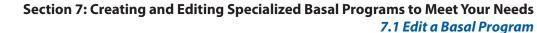
- a. Scroll to highlight THERAPY LOCKOUT.
- **b.** Press **Enter** button.
- c. Notice Lockout is Off.
- **d.** Scroll to highlight **Lockout**.
- e. Press Enter button.
- **f.** Scroll to **On**.
- **g.** Press **Enter** button.



(







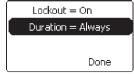
Steps

(

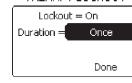
Do This

3. Set Duration for lockout.

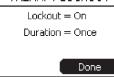
THERAPY LOCKOUT



THERAPY LOCKOUT



THERAPY LOCKOUT



Note: The duration is set to **Always** by default when lockout is **On**.

- a. Notice **Duration** is highlighted.
- **b.** Decide what to do next.

If you want duration to be	Then do this
Once	1. Press Enter button.
	2. Scroll to select Once .
	3. Press Enter button.
	4. Scroll to highlight Done .
	5. Press Enter button.
Always	Scroll to highlight Done .
	Press Enter button.

4. Check your work.

Go back to the **THERAPY LOCKOUT** screen and verify that the settings are correct.

To unlock your pump therapy features, go to Step 5.



Do This

7.1 Edit a Basal Program

Steps

5. Unlock pump therapy features.

THERAPY LOCKOUT

Insulin delivery changes are locked out. Unlock Cancel

b. Notice **Cancel** is highlighted.

message displays.

will see a Confirmation screen.

Note: If you select **Cancel**, you will return to the **Home** screen and pump therapy features remain locked out.

Note: If you attempt to access any basal or bolus features when **Lockout** is **On**, you

a. Notice the CONFIRM screen with "Insulin delivery changes are locked out."

THERAPY LOCKOUT

Insulin delivery changes are locked out. Unlock Cancel c. Scroll to highlight Unlock.

d. Press **Enter** button.

e. Administer your basal or bolus insulin delivery as recommended by your healthcare professional.

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Section 7: Creating and Editing Specialized Basal Programs to Meet Your Needs

7.1 Edit a Basal Program

7 Creating and Editing Specialized Basal Programs to Meet Your Needs

7.1 Edit a Basal Program

Purpose	To edit an existing basal program in your pump using your Aviator Companion .
When	Do this procedure:
	 Whenever you need to edit an existing basal program, including adding or deleting basal time blocks and basal rates.
Materials	Your companion with battery charged and basal settings programmed.
	 Your pump with the battery installed and basal settings programmed.
	 Healthcare professional's recommendations for your personalized basal settings for the pump in Section 12 – Appendix A.

Important Note: It is strongly recommended that you and your healthcare professional work on fine tuning your basal rates. Always notify your healthcare professional if you make changes to prescribed plans of care.

Helpful Information

• The **Edit program** is one of the **MODIFY program** options from the **BASAL MENU**. The other **Modify** program options are **Create program**, **Rename program** and **Delete program**.

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• Your currently running active program will have an asterisk (*) to the left of the name.

Procedure:

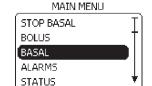
Steps Do This

1. Access BASAL MENU from Home screen.



a. Notice Main is highlighted.

b. Press **Enter** button.



c. Scroll to highlight **BASAL**.

d. Press **Enter** button.







7.1 Edit a Basal Program

Steps

Do This

2. Select MODIFY program.

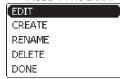
BASAL MENU

STOP BASAL	
SELECT	
VIEW	
MODIFY	
DONE	

a. Scroll to highlight MODIFY.

b. Press **Enter** button.





c. Notice **Edit** is highlighted.

d. Press **Enter** button.

3. Select the existing program to edit.

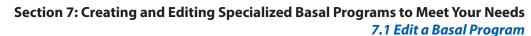
EDIT PROGRAM



Notice ***Daily** is highlighted.

Note: The * represents the active program, and Daily is the default program.

If you want to	Then do this
Edit your Daily program	Press Enter button.
Edit a different program	Scroll to highlight the program you want to edit, for example, Travel. Press Enter button.



Steps

(

Do This

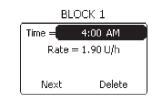
4. Decide what edits you want to make.



If you want to	Then do this
Edit an existing time block and basal rate	Scroll to the desired time block and basal rate to edit.
	2. Press Enter button.
	3. Go to Step 5 .
Add a time block and basal rate	1. Notice Add Block is highlighted.
	2. Press Enter button.
	3. Go to Step 8 .
Delete a time block and basal rate	 Scroll to the desired time block and basal rate to delete.
	2. Press Enter button.
	3. Go to Step 11 .
Return to the Home screen without editing a basal program	Scroll to highlight Done . Press Enter button.

Note: You **MUST** have at least **ONE** block and You **MUST** select **Done** to complete and save all the changes you have made.

5. Edit Time block.



- **a.** Scroll to highlight **Time**.
- **b.** Press **Enter** button.
- **c.** Scroll to select the desired time for the block.
- **d.** Press **Enter** button.





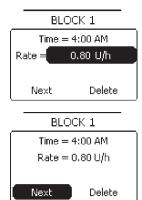


7.2 Create a New Basal Program

Steps

Do This

6. Edit Basal Rate.



- **a.** Notice **Rate** is highlighted.
- **b.** Press **Enter** button.

Note: If you are keeping the same basal rate, leave the basal rate as shown.

- **c.** Scroll to select desired basal rate.
- **d.** Press **Enter** button.
- e. Notice Next is highlighted.
- **f.** Press **Enter** button.

7. Decide what to do next.



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If you want to	Then do this
Edit another time block and basal rate	Scroll to another time block and basal rate that you want to edit.
	2. Press Enter button.
	3. Repeat Steps 5 and 6 to edit additional time blocks and basal rates.
Add a time block and	1. Notice Add Block is highlighted.
basal rate	2. Press Enter button.
	3. Go to Step 8 .
	Note: If the last time block begins at 11:30 pm, the Add block option is removed from the screen and you CANNOT add another block.
Delete a time block	1. Scroll to desired time block and basal rate to delete.
and basal rate	2. Press Enter button.
	3. Go to Step 11 .
Be finished with all	1. Scroll to highlight Done .
your edits and return to the Home screen	2. Press Enter button.
to the notile screen	3. Go to Step 13 to confirm you have completed this task.

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Section 7: Creating and Editing Specialized Basal Programs to Meet Your Needs 7.2 Create a New Basal Program

Steps

Do This

8. Set Time for new block.

BLOCK 2



7:00 AM Rate = -,-- U/h

a. Notice **Time** is highlighted.

b. Press **Enter** button.

c. Scroll to select desired time for the block.

d. Press Enter button.

Note: The starting time for the new block will be ½ hour after the block you just created.

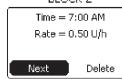
9. Set Rate for new block.

Next

BLOCK 2



Delete



- a. Notice Rate is highlighted.
- **b.** Press **Enter** button.
- **c.** Scroll to select desired basal rate for the block.
- d. Press Enter button.
- e. Notice Next is highlighted.
- **f.** Press **Enter** button.

10. Decide what to do next.

DAILY	2/
Time	U/h
3:00 AM	0.80
7:00 AM	* 0.50
Add Block	Done

If you want to	Then do this
Add another time block and	1. Scroll to highlight Add Block .
basal rate	2. Press Enter button.
	3. Repeat Steps 8 and 9 to add additional time blocks and basal rates.
Delete a time block and basal rate	Scroll to desired time block and basal rate to delete.
	2. Press Enter button.
	3. Go to Step 11.
Be finished with all your edits and return to the Home screen	Scroll to highlight Done . Press Enter button.



7.2 Create a New Basal Program

Steps

Do This

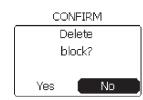
11. Delete block(s).



- a. Notice **Next** is highlighted.
- **b.** Scroll to highlight **Delete**.
- **c.** Press **Enter** button.
- **d.** Notice **CONFIRM** screen and "**Delete block**?" message displays.
- e. Decide what to do.

	C	ONFIRM	4
	[Delete	
		block?	
_		_	
	Yes		No

If you want to	Then do this
Delete the time block and basal rate	 Scroll to highlight Yes. Press Enter button.
Tute	Note: Notice that the time block has been deleted from the list.
	3. Repeat Steps 10 and 11 to delete other blocks and basal rates.
Cancel deleting	1. Notice No is highlighted.
the time block	2. Press Enter button.
	3. Scroll to highlight Next .
	4. Press Enter button.
	Note: You will return to the list of time blocks and basal rates. Check the settings.



12. Decide what to do next.



If you want to	Then do this
Make any additional changes to the basal program	Go back to Step 4.
Be finished with all your edits and return to the Home screen	Scroll to highlight Done . Press Enter button.

13. Check your work.

View the program you have just edited, and verify the settings that you have changed. Refer to Section 3.1.2 View Basal Program for the procedure as needed.

Note: The Daily basal rate is now reflecting the edits made above.

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Section 7: Creating and Editing Specialized Basal Programs to Meet Your Needs 7.2 Create a New Basal Program

7.2 Create a New Basal Program

To create up to **four** basal programs that suit your lifestyle, using the **Aviator Companion**. **Purpose** When Do this procedure: • Whenever you need to create a weekend, exercise, sick day, or custom-named basal pro-

gram, in addition to your daily basal program.

Materials

- Your companion with battery charged and initial basal settings programmed.
- Your pump with the battery installed and initial basal settings programmed.
- Healthcare professional's recommendations for your basal settings for the pump in **Sec**tion 12 - Appendix A.

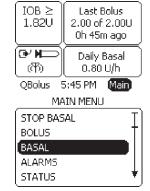
Helpful Information

- The Create program is one of the Modify program options from the BASAL MENU. The other Modify program options are **Edit** program, **Rename** program and **Delete** program.
- You should consult your healthcare professional before creating any new basal programs.

Procedure:

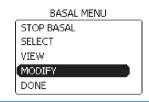
Do This Steps

1. Access BASAL MENU from Home screen.



- a. Notice Main is highlighted.
- **b.** Press **Enter** button.
- c. Scroll to highlight BASAL.
- **d.** Press **Enter** button.

2. Access MODIFY PROGRAM menu.



- a. Scroll to highlight MODIFY.
- **b.** Press **Enter** button.







7.3 Select a Basal Program

Steps

Do This

3. Access CREATE PROGRAM menu.

MODIFY PROGRAM

CREATE RENAME DELETE	EDIT	
	CREATE	
DELETE	RENAME	
	DELETE	
DONE	DONE	

a. Scroll to highlight **CREATE**.

b. Press **Enter** button.

4. Decide the type of program to create.

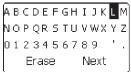
CREATE PROGRAM

Weekend
Exercise
Sick
Custom
Done

CREATE PROGRAM

Weekend Exercise Sick Done

NAME: Trave



NAME: Travel

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ABCDEFGHIJKLM) NOPQR S TU V W X Y Z | 0123456789 Erase Next

If you want to create	Then do this
Weekend basal program	Notice Weekend is highlighted. Press Enter button.
Exercise basal program	Scroll to highlight Exercise . Press Enter button.
Sick day basal program	Scroll to highlight Sick . Press Enter button.
Custom-named basal program	 Scroll to highlight Custom. Press Enter button. Scroll to highlight each letter and press the Enter button each time, as you spell out the name for your customized program, for example, Travel.
	Note: The first letter and a letter following a space is automatically capitalized.
	Note: To clear an entry if you make a mistake, highlight Erase and press the Enter button to erase the last letter entered as needed.
	4. Scroll to highlight Next when you are done.5. Press Enter button.

Note: If you try to create more than 4 programs, the **WARNING** screen and the "**Max** number of programs already exist." message displays. Notice that **OK** is highlighted, press **Enter** button to continue.

Section 7: Creating and Editing Specialized Basal Programs to Meet Your Needs 7.3 Select a Basal Program

Steps

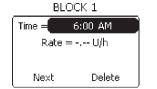
Do This

5. Set Time for BLOCK 1.

TRAVEL Time U/h Add Block Done

- a. Notice **Time** dashed line is highlighted.
- **b.** Press **Enter** button.

c. Notice **Time** is highlighted.



- **d.** Press **Enter** button.
- e. Scroll to select desired start time for the block.
- **f.** Press **Enter** button.

6. Set Rate for BLOCK 1.

Rate =

Next



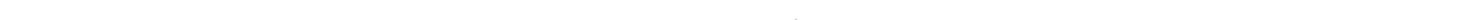
- a. Notice Rate is highlighted.
- **b.** Press **Enter** button.
- **c.** Scroll to select desired rate of insulin per hour.

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d. Press Enter button.

Note: At least **ONE** block must be added. If **NO** additional blocks are added, the first block will prevail for 24 hours.











2/9/09 11:29:49 AM



7.3 Select a Basal Program

Steps

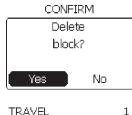
Do Th

7. Decide whether to add or delete new blocks.

BLO	CK 1	
Time = 6:00 AM		
Rate = 0	0.60 U/h	
Next	Delete	
(

TRAVEL		1
Time	U/h	
6:00 AM	* 0.60	
	_	
Add Block	Done	





TRAVEL		1
Time	U/h	
6:00 AM	* 0.60	
Add Block	Done	

Do	This

If you want to	Then do this
Add another	1. Notice Next is highlighted
time block and	2. Press Enter button.
basal rate	3. Notice Add block is highlighted.
	4. Press Enter button.
	5. Repeat Steps 5 and 6 to add additional time blocks and basal rates.
Delete the time	1. Scroll to highlight Delete .
block and basal rate you just created	2. Press Enter button.
	 Notice the CONFIRM screen and "Delete block?" message displays.
	4. Scroll to highlight Yes .
	5. Press Enter button.
Add only ONE	Scroll to highlight Done if not already highlighted.
block and/or be finished with all your edits	Press Enter button and return to the Home screen.

8. Check your work.

Review the program you have just created. Refer to **Section 3.1.2 View Basal Program** for the procedure as needed.

Record your personalized basal rate information for the new basal program(s) in the Table of Settings in **Section 12 - Appendix A**

Section 7: Creating and Editing Specialized Basal Programs to Meet Your Needs

7.4 Rename a Basal Program

7.3 Select a Basal Program

Purpose	To activate the different basal programs by selecting and choosing between them using your Aviator Companion .
When Do this procedure:	
	 Whenever you need to change your active basal program.
Materials	 Your companion and pump fully operating with daily basal already started.
	 Your companion and pump with additional programs created, such as Weekend, Exercise, Sick day, or your custom-named program.
	 Instructions or assistance from your healthcare professional.
	 Your personalized Table of Settings in Section 12 - Appendix A.

Helpful Information

• The system allows you to program multiple basal profiles. The one you select is called the "active" program. When viewing your basal programs, the currently running active program will have an asterisk (*) to the left of the name.

Important Note: It is strongly recommended that you and your healthcare professional work on fine tuning your basal rates. Always notify your healthcare professional if you make changes to prescribed plans of care.





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Section 7: Creating and Editing Specialized Basal Programs to Meet Your Needs

7.4 Rename a Basal Program

Procedure:

Steps

Do This

1. Access BASAL MENU from Home screen.



a. Main is highlighted.

b. Press **Enter** button.



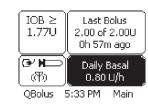
c. Scroll to highlight BASAL.

d. Press **Enter** button.

OR

Note: This is a short cut to get to the **SELECT PROGRAM** screen when basal is delivering.

OR

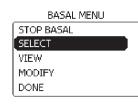


a. Scroll to select the **Basal** panel on the **Home** screen.

b. Press **Enter** button.

c. Go to Step 3

2. Access SELECT PROGRAM menu.



a. Scroll to highlight **SELECT**.

b. Press **Enter** button.

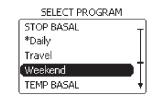
Section 7: Creating and Editing Specialized Basal Programs to Meet Your Needs

7.4 Rename a Basal Program

Steps

Do This

3. Select the program that you want to be active.



Note: In this example, the Daily program is the currently active program running, because it has an * beside "Daily."

a. Scroll to highlight the desired program, for example, Weekend.

b. Press **Enter** button.



CONFIRM

Start

Weekend

Basal?

No

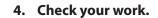
c. Notice the **CONFIRM** screen and "**Start** (your selected) **program?**" message displays.

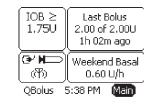
d. Scroll to highlight Yes.

e. Press Enter button.

Note: You will hear four short confirmation beeps from your pump.

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Verify that the Home screen displays the active basal program you have just selected.



7.5 Delete a Basal Program

7.4 Rename a Basal Program

Purpose	To rename an existing basal program of your pump using your Aviator Companion .	
When	Do this procedure:	
	 When you CHOOSE to rename a previously created existing basal program. 	
Materials	 Your companion with battery charged and basal settings programmed. 	
	 Your pump with the battery installed and basal settings programmed. 	
	 Your pump with basal programs that have already been created and named. 	
	 Your personalized Table of Settings in Section 12 - Appendix A. 	

Helpful Information

• The **Rename program** is one of the **Modify** program options in the Basal menu. The other **Modify** program options are **Edit** program, **Create** program and **Delete** program.

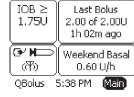
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Procedure:

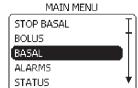
Steps

Do This

1. Access BASAL Menu from Home screen.







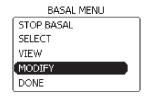
- a. Notice Main is highlighted.
- **b.** Press **Enter** button.
- c. Scroll to highlight BASAL.
- **d.** Press **Enter** button.



Steps

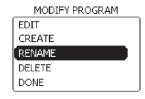
Do This

2. Access MODIFY PROGRAM menu.



- a. Scroll to highlight MODIFY.
- **b.** Press **Enter** button.

3. Access RENAME PROGRAM screen.



- a. Scroll to highlight RENAME.
- **b.** Press **Enter** button.

4. Select program to rename.



- **a.** Scroll to highlight the program you want to rename.
- **b.** Press **Enter** button.

5. Delete existing program name.



- a. Scroll to highlight Erase.
- **b.** Keep pressing the **Enter** button to erase each letter of the old program name.

NAME: Tr ABCDEFGHIJKLM) NOPQRSTUVWXYZ 0123456789 Erase Next







7.5 Delete a Basal Program

Steps

6. Create new program name.

NAME: Trip

A B C D E F G H I J K L M

N O P Q R S T U V W X Y Z

0 1 2 3 4 5 6 7 8 9 '.

Erase Next

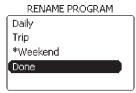
Do This

a. Scroll to highlight each letter and press the **Enter** button each time to spell out the new program name.

Note: To clear an entry if you make a mistake, highlight **Erase** and press the **Enter** button to erase the last letter entered as needed.

- **b.** Scroll to highlight **Next**.
- **c.** Press **Enter** button.

7. Complete the name change.



a. Scroll to highlight **Done**.

b. Press **Enter** button to return to the Home screen.

8. Check your work.

(

Review the program you have just renamed. Go to **Section 3.1.2 View Basal Program** for the procedure.

Record the names and what they mean in your Table of Settings in **Appendix A**.



Section 7: Creating and Editing Specialized Basal Programs to Meet Your Needs 7.6 Set a Temporary Basal Program

7.5 Delete a Basal Program

Purpose	To remove (delete) a basal program already programmed into your pump using your Aviator Companion .
When Do this procedure:	
	Whenever you need to delete an existing basal program.
Materials	 Your companion with battery charged and basal settings programmed.
	 Your pump with the battery installed and basal settings programmed.
	 Instruction or assistance from your healthcare professional.

Helpful Information

- The **Delete program** is one of the **Modify** program options. The other **Modify** program options are **Edit** program, **Create** program, and **Rename** program.
- You **CANNOT** delete a basal program that is active.
- Consult your healthcare professional before deleting any of your basal programs.

Procedure:

ALARMS STATUS

Do This Steps 1. Access BASAL menu from Home screen. a. Notice Main is highlighted. IOB ≥ Last Bolus **b.** Press **Enter** button. 1.72U 2,00 of 2,00U 1h 09m ago (☑ ► M Weekend Basal 0.60 U/h QBolus 5:45 PM Main c. Scroll to highlight BASAL. MAIN MENU STOP BASAL d. Press Enter button. BOLUS: BASAL

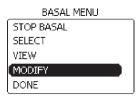


Section 7: Creating and Editing Specialized Basal Programs to Meet Your Needs 7.6 Set a Temporary Basal Program

Steps

Do This

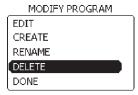
2. Access MODIFY PROGRAM menu.



a. Scroll to highlight MODIFY.

b. Press **Enter** button.

3. Select DELETE program.

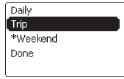


a. Scroll to highlight **Delete**.

b. Press **Enter** button.

4. Select program to delete.

DELETE PROGRAM



a. Scroll to highlight the program you wish to delete. For example, Trip.

Note: You **CANNOT** delete an active program, indicated with an asterisk *.

b. Press **Enter** button.

WARNING
Cannot
delete active
program.
OK

Note: If you get this warning screen with **OK** highlighted, press **Enter** to clear the warning and return to the **Home** screen. Start over at Step 1 to delete a program that is **NOT** active.

Section 7: Creating and Editing Specialized Basal Programs to Meet Your Needs

7.6 Set a Temporary Basal Program

Notice the **CONFIRM** screen with "**Delete program?**" message displays.

Steps

Do This

5. Decide what to do next.



If you want to	Then do this
Delete the	1. Scroll to highlight Yes .
program	2. Press Enter button.
	Note: The program is deleted from the pump's memory and you will return to the Home screen.
	3. Go to Step 6 to check your work.
Cancel deleting	1. Notice No is highlighted.
the program	2. Press Enter button.
	3. Scroll to Highlight Done .
	4. Press Enter button.
	Note: You will return to the Home screen. Your deletion is cancelled and the program is still an option

CONFIRM

Delete
program?

Yes

No

6. Check your work.

Verify that you have deleted the program.

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The program you deleted should **NOT** be listed when you review basal programs.

Refer to **Section 3.1.2 View Basal Program** for the procedure as needed.



8.1 Deliver an Extended Bolus

7.6 Set a Temporary Basal Program

Purpose	To program a temporary basal rate and the length of time you want the temporary basal rate to last, using your Aviator Companion .
When	Do this procedure:
	 When you want to make a one time, temporary change to the currently delivered basal rate, for example, when you exercise or when you are sick.
Materials	 Your companion and pump fully operating and delivering basal insulin.
	 Healthcare professional's instructions for your temporary basal pump settings.
	 Your personalized Table of Settings in Section 12 - Appendix A.

Helpful Information

A temporary basal rate is in effect from 30 minutes to 72 hours in increments of 30 minutes. This temporary rate is limited by the set up of your pump's maximum basal rate setting (Refer to **Section 6**).

If you have **NOT** modified your maximum basal delivery rate, you will be allowed to increase your basal rate to a value up to 30 units per hour (default). If you set up a different maximum basal delivery rate, you can only set the temporary rate to that number of units/hour maximum limit.

Example A:

- 1. You set your basal rate increment to 0.1 units/hour.
- 2. You modified your maximum basal rate to 5.0 units/hour.
- 3. Your regular daily basal rate is set at 0.5 units/hour.

Setting a temporary basal rate of 10% for a duration of 3 hours would result in a temporary basal rate of 0.05 units/hour.

If the desired temporary basal delivery rate is higher than the maximum basal rate of your pump settings, your pump will **NOT** deliver the requested temporary rate.

Example B:

- 1. You set your basal rate increment to 3.0 units/hour.
- 2. You modified your maximum basal rate to 5.0 units/hour, telling the pump that you never want to have a basal rate to exceed 5.0 units/hour.

If you set a 200% temporary basal, this will result in a basal rate of 6.0 units/hour. This is more than the basal maximum, so it would **NOT** be allowed by the pump. Your pump will beep and display a "Warning: invalid % Maximum rate exceeded" screen. You will have to increase the basal maximum and reset a temporary basal rate within the range for it to take effect.

- You may choose either specific units/hour OR a percentage of your current active basal rate.
- The active basal program will resume when the temporary basal delivery is either manually stopped or reaches completion of duration.

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• Refer to **Section 11** for more information on how to set temporary basal to manage exercise or illness.

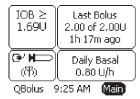
Section 8: Creating and Editing Specialized Bolus Programs to Meet Your Needs 8.1 Deliver an Extended Bolus

Procedure:

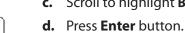
Steps

Do This

1. Access BASAL MENU from Home screen.



- a. Notice Main is highlighted.
- **b.** Press **Enter** button.

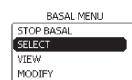


- MAIN MENU STOP BASAL BOLUS BASAL ALARMS STATUS
- c. Scroll to highlight BASAL.

2. Choose SELECT

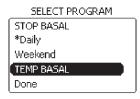
program.

DONE



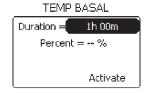
- a. Scroll to highlight **SELECT**.
- **b.** Press **Enter** button.

3. Select TEMP BASAL.



- a. Scroll to highlight TEMP BASAL.
- **b.** Press **Enter** button.

4. Set Duration.



- a. Notice **Duration** is highlighted.
- **b.** Press **Enter** button.
- **c.** Scroll to select the amount of time you want your temporary basal to be in effect.

Note: The range is 30 minutes to 72 hours.

d. Press Enter button.



8.1 Deliver an Extended Bolus

Steps

Do This

5. Decide to set Percent or Rate.

TEMP BASAL

Duration = 1h 00m50 % Percent: Activate **Caution:** When setting a temporary basal percent, make sure that you are setting the percentage of your basal that will be delivered, and NOT the percentage reduction in your basal rate.

Example: If your active basal rate is 0.35 U/h, then selecting 75% will set the temporary basal at 0.26 U/h, which is 75% of the current basal.

If you want to set the temporary basal	Then do this
At a percentage of the current rate	 Notice Percent is highlighted. Press Enter button. Scroll to select the desired percentage of the active basal rate.
	4. Press Enter button.
As a set rate	 Notice Percent is highlighted. Press Enter button. Scroll to highlight Rate.
	4. Press Enter button.5. Scroll to select the desired units per hour for the temporary basal delivery.
	6. Press Enter button.

6. Confirm and activate Temp Basal.

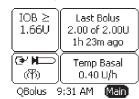
TEMP BASAL

Duration = 1h 00mPercent = 50 % Activate **a.** Verify the duration and percentage/rate is correct.

b. Scroll up to make any changes as needed.

- c. Notice **Activate** is highlighted.
- **d.** Press **Enter** button.

7. Check your work.



Notice that the **Temp Basal** is activated and displayed in the **Basal** panel on the Home screen.

Note: When the duration for the temporary basal is over, it will automatically revert back to your **Daily** basal program.

Record your personalized temporary basal values in the Table of Settings in Section 12 - Appendix A.

Section 8: Creating and Editing Specialized Bolus Programs to Meet Your Needs 8.1 Deliver an Extended Bolus

8 Creating and Editing Specialized Bolus Programs to Meet Your **Needs**

8.1 Deliver an Extended Bolus

Purpose	To administer an extended bolus from your pump using your Aviator Companion .
When Do this procedure:	
	 Whenever you need to deliver an extended bolus over a period of time.
Materials	 Your companion set up with basal delivery started.
	 Your pump set up with basal delivery started.
	 Bolus recommendations from your healthcare professional.
	 Your personalized Table of Settings in Section 12 - Appendix A.

Helpful Information

- You will perform this task using the companion. To administer an extended bolus using your pump, refer to Section 12.
- Bolus insulin is the insulin you program whenever you need insulin other than your basal needs. For example you would bolus for a meal or bolus to correct for blood glucose levels that are higher than your target glucose range. You can record your personalized bolus recommendations in the Table of Settings in Section 12 - Appendix A.

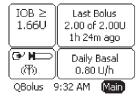
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• You should have set up your bolus options using the **SETUP WIZARD** in **Section 6.1**.

Procedure:

Do This Steps

1. Access Bolus Menu from Home screen.



STOP BASAL

BOLUS

BASAL

ALARMS

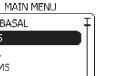
STATUS

a. Notice Main is highlighted.









c. Scroll to highlight BOLUS.

d. Press Enter button.

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DOC15736 Rev-A-Man.indd 187-188 2/9/09 11:29:50 AM

8.1 Deliver an Extended Bolus

Steps

Do This

2. Select MANUAL Bolus.

BOLUS MENU

FOOD & CORRECTION

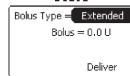


a. Scroll to highlight MANUAL.

b. Press **Enter** button.

3. Set Extended Bolus Type.

BOLUS



a. Notice **Bolus Type** is highlighted.

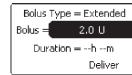
b. Press **Enter** button.

c. Scroll to display Extended.

d. Press **Enter** button.

4. Set Extended Bolus amount.

BOLUS



a. Notice **Bolus** is highlighted.

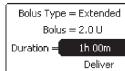
b. Press **Enter** button.

c. Scroll to select the extended bolus amount you want to deliver.

d. Press **Enter** button.

5. Set Duration for the **Extended Bolus.**

BOLUS



a. Notice **Duration** is highlighted.

b. Press **Enter** button.

c. Scroll to select the duration for extended bolus delivery.

Note: The range depends on the amount of the bolus. When divided across the full duration, the rate is **NOT** less than 0.05 U/h.

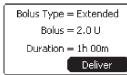
d. Press Enter button.

Section 8: Creating and Editing Specialized Bolus Programs to Meet Your Needs 8.2 Deliver a Dual Bolus

Steps

6. Check that Extended **Bolus Type, Bolus** amount and Duration time is correct.

BOLUS



Do This

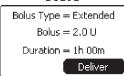
a. View Bolus Type, Bolus amount, and Duration settings on the BOLUS screen.

b. Decide if you need to change a setting.

ov Decide in your need to entain go a setting.		
If you want to	Then do this	
Change a setting	 Scroll up to highlight the setting you want to change. Press Enter button. Scroll to desired setting. Press Enter button. 	
Keep the settings	Go to the next step.	

7. Deliver Extended bolus.

BOLUS



a. Notice **Deliver** is highlighted.

b. Press **Enter** button.

c. Notice that the extended bolus is delivering.

d. Allow the extended bolus to deliver the amount that was set for the specified time duration.

e. Go to Step 10 to check your extended bolus delivery.

You have completed delivering an Extended Bolus.

Note: Go to Step 8 only if you want to **STOP** the Extended Bolus.







8.2 Deliver a Dual Bolus

Steps

Do This

8. Decide whether to STOP extended bolus.

IOB ≥ 1.71U	Ext. Bolus 0.10 of 2.00U 0h 02m
(学) 	Daily Basal 0.80 U/h
OBolus 9	9:42 AM Main

MAIN MENU

BOLUS BASAL

ALARMS

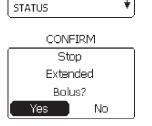
a. Go to the **MAIN MENU**.

b. Press **Enter** button.

c. Notice **STOP** is highlighted.

d. Press **Enter** button.

e. Decide what to do next.



CONFIRM Stop Extended

Bolus?

No

If you want to	Then do this
STOP the	1. Scroll to highlight Yes .
extended bolus delivery	2. Press Enter button.
immediately	3. Continue to Step 9.
-	
Allow extended	1. Notice No is highlighted.
bolus to finish	2. Press Enter button to return to the Home screen.
delivering	3. Go to Step 10 to check your extended bolus delivery.

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Section 8: Creating and Editing Specialized Bolus Programs to Meet Your Needs

8.2 Deliver a Dual Bolus

Steps

Do This

9. Decide whether to STOP basal delivery.

CONFIRM

Note: Unless you had to change the battery, you will normally **NOT** stop basal delivery even though the **CONFIRM** screen and "**Stop (your active basal program)?**" message displays.

a. Notice the **CONFIRM** screen and "**Stop** (your active basal program)?" message displays.

b. Decide what to do next.

Stop	b. Decide what t	o do next.
Daily	If you want to	Then do this
Basal?	STOP the basal	1. Scroll to highlight Yes .
Yes No	delivery now	2. Press Enter button.
	(e.g. to change batteries)	3. Notice that the basal program has stopped on the Home screen.
CONFIRM		You have STOPPED the Extended bolus and also the Basal delivery. Check with your healthcare professional for recommendations.
Stop	Continue the	1. Notice No is highlighted.
Daily Basal?	basal delivery	2. Press Enter button.
Yes No		
IOB ≥ Last Bolus		3. Review the Last Bolus (Ext.) that was administered and

10. Check your work.

QBolus 9:47 AM Main

0.20U/0h 06m

Oh 02m ago

Daily Basal

0.80 U/h

1.79U

Check that the extended bolus amount, and time duration is displayed in the **Bolus** box on **Home** screen.

program is still delivering insulin.

basal is still delivering on the **Home** screen.

You have STOPPED the Extended bolus but your basal

Review the extended bolus amount and time that is being administered.

If you want to **STOP** the Extended Bolus, go to Step 8.

Section 8: Creating and Editing Specialized Bolus Programs to Meet Your Needs

8.2 Deliver a Dual Bolus

8.2 Deliver a Dual Bolus

Purpose	To administer a dual bolus using your Aviator Companion so that you can deliver a bolus immediately and also trickle out insulin as the food you eat is converted into glucose over time. The pump has the option to deliver two waves of insulin over a period of time. This option is helpful if there are foods in your meal plan that have a long duration and require longer periods of digestion. These foods will affect your glucose both immediately and over a number of hours later.
When	Do this procedure:
	 Whenever you need to deliver a dual bolus, which includes a normal bolus and an extended bolus.
Materials	Your companion set up with basal delivery started.
	 Your pump set up with basal delivery started.
	 Bolus recommendations from your healthcare professional.
	Refer to your personalized Table of Settings in Section 12 - Appendix A as

Helpful Information

(

needed.

- You should have already set up your bolus options via the **SETUP WIZARD**. You should record your personalized list of your bolus options in the Table of Settings in **Appendix A**. These options can be changed via the **SETUP WIZARD**.
- Discuss with your healthcare professional what types of foods would require a dual bolus. For example, you may want to consider a dual bolus for eating: pizza (due to the carbohydrate content of the dough plus the high fat content of the cheese, sausage, pepperoni, etc.); appetizers at a party (such as nibbling chips or other carbohydrate foods for an extended period of time); Mexican food (the carbohydrates from chips, beans and rice plus the protein and fat from the meat and cheese).

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Section 8: Creating and Editing Specialized Bolus Programs to Meet Your Needs 8.2 Deliver a Dual Bolus

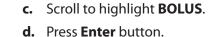
Procedure:

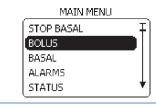
Steps Do This 1. Access BOLUS MENU

from Home screen.

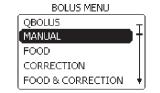


- **a.** Notice **Main** is highlighted.
- **b.** Press **Enter** button.



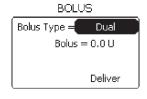


2. Select MANUAL bolus.



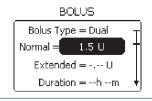
- a. Scroll to highlight MANUAL.
- **b.** Press **Enter** button.

3. Set Dual Bolus Type.



- a. Notice Bolus Type is highlighted.
- **b.** Press **Enter** button.
- c. Scroll to display **Dual**.
- d. Press Enter button.

4. Set Normal Bolus amount.



- **a.** Notice **Normal** is highlighted.
- **b.** Press **Enter** button.
- **c.** Scroll to select the normal bolus amount you want to deliver.

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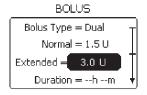
d. Press **Enter** button.



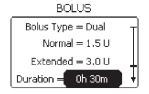
8.2 Deliver a Dual Bolus

Steps

5. Set Extended Bolus amount.



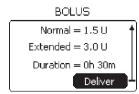
6. Set Duration for the Extended Bolus.



Do This

- a. Notice **Extended** is highlighted.
- **b.** Press **Enter** button.
- **c.** Scroll to select the extended bolus amount you want to deliver.
- **d.** Press **Enter** button.
- a. Notice **Duration** is highlighted.
- **b.** Press **Enter** button.
- **c.** Scroll to select the duration for the extended bolus delivery.
- **d.** Press **Enter** button.
- Check that the Normal bolus, Extended bolus, and duration settings are correct.

(



- **a.** View **Bolus Type**, **Bolus** amount, and **Duration** settings on the **BOLUS** screen.
- **b.** Decide if you need to change a setting.

If you want to	Then do this
Change a setting	 Scroll up to highlight the setting you want to change.
	2. Press Enter button.
	3. Scroll to desired setting.
	4. Press Enter button.
Keep the settings	Go to the next step.

Section 8: Creating and Editing Specialized Bolus Programs to Meet Your Needs

8.3 Calculate and Deliver a Food Bolus

Steps

8. Deliver the Dual bolus.



Do This

Note: If you changed only the **Normal** or **Extended Bolus** settings in Step 7, and did **NOT** change the **Duration**, scroll to highlight **Deliver**. The **Dual** bolus is now set to deliver.

- a. Notice **Deliver** is highlighted.
- **b.** Press **Enter** button.
- **c.** Notice that the normal bolus is delivering.
- Decide whether to stop the **Dual** bolus.

DELIVERING



STOPPED ALERT



If you want to	Then do this	
Finish	Allow the normal bolus to deliver the amount that was set.	
delivering the normal bolus	Note: Once the bolus has finished delivering, you will hear 2 more quick beeps or feel 2 more short vibrations on your pump and you will return to the Home screen.	
	Go to Step 10.	
STOP the	1. Notice Stop is highlighted.	
dual bolus	2. Press Enter button.	
immediately	 Notice the STOPPED ALERT screen and "Dual bolus stopped." message displays. 	
	4. Notice Clear is highlighted (to confirm that the bolus is stopped).	
	5. Press Enter button to return to the Home screen.	

You have STOPPED the dual bolus.

8.3 Calculate and Deliver a Food Bolus

Steps

10. Decide whether to finish delivering the **Extended** Bolus.



MAIN MENU	
STOP	DT)
BOLUS	_
BASAL	
ALARMS	
STATUS	. *

Do This

If you want to	Then do this	
Finish delivering the extended	Allow the extended bolus to deliver the amount that was set for the specified time duration.	
bolus	Note: Once the Normal bolus is completely delivered, you will automatically return to the Home screen where you will see the extended bolus, bolus amount, and time duration displayed in the Bolus panel. You will also see the IOB value, which reflects the Normal bolus that was delivered. Another possible reason to stop basal here is when you realize there is too much IOB and need some time to recover.	
	Go to Step 13 to check your extended bolus delivery.	
STOP the	1. Go to the MAIN MENU .	
extended bolus	2. Notice STOP is highlighted.	
	3. Press Enter button.	
	4. Continue to Step 11.	

11. Decide whether to **STOP the extended** bolus.

(



CONFIRM
Stop
Extended
Bolus?
Yes No

- a. Notice the **CONFIRM** screen and "**Stop Extended Bolus?**" message displays.
- **b.** Decide what to do next.

If you want to	Then do this	
STOP the	1. Scroll to highlight Yes .	
extended	2. Press Enter button.	
bolus delivery immediately	3. Continue to Step 12.	
Allow extended	1. Notice No is highlighted.	
bolus to finish	2. Press Enter button to return to the Home screen.	
delivering	3. Go to Step 13 to check your extended bolus delivery.	

Section 8: Creating and Editing Specialized Bolus Programs to Meet Your Needs 8.3 Calculate and Deliver a Food Bolus

Steps

Do This

12. Decide whether to STOP basal delivery.

CONFIRM

Stop Daily Basal?

CONFIRM Stop Daily

Basal?

No

No

Last Bolus

3.00U/0h 30m Oh 11m ago

Daily Basal

0.80 U/h

Note: Unless you wanted to change the battery you will normally **NOT** stop basal delivery even though the **CONFIRM** screen and "**Stop** (your active basal **program)?**" message displays. Another possible reason to stop basal here is when you realize there is too much IOB and need some time to recover

- **a.** Notice the CONFIRM screen and "Stop (your active basal program)?" message displays.
- Decide what to do next.

If you want to	Then do this
STOP the basal delivery now (e.g. to change batteries)	 Scroll to highlight Yes. Press Enter button.
	 Notice that the basal program has STOPPED on the Home screen. You have STOPPED the Extended bolus and also STOPPED the Basal delivery.
Continue the basal delivery	 Notice No is highlighted. Press Enter button.
	Note: You will automatically return to the Home screen. 3. Review the Last Bolus that was administered. You have STOPPED the Extended bolus but your basal program is still delivering insulin.

13. Check your work.

IOB ≥

10.10

[⊕/ **H**□][



QBolus 10:35 AM Main

Check that the extended bolus amount, and time duration is displayed in the **Bolus** panel on **Home** screen.

Review the extended bolus amount and the time that it is being administered.

Review the IOB value, which reflects the normal bolus that was delivered.





8.3 Calculate and Deliver a Food Bolus

8.3 Calculate and Deliver a Food Bolus

Purpose	To calculate and deliver a food bolus using your Aviator Companion .
When	 Do this procedure: Whenever you want to calculate carbohydrates and administer a bolus to cover a meal or snack.
Materials	 Your companion set up with basal delivery started. Your pump set up with basal delivery started. Bolus recommendations from your healthcare professional and assistance from Diabetes Educator as needed. Your personalized Table of Settings in Section 12 - Appendix A.

Helpful Information

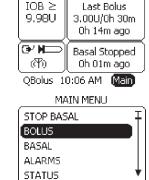
- To be able to use this option, you must first have an understanding of carbohydrate counting, and have references for the carbohydrate content of foods. Consult your Diabetes Educator and/or Registered Dietitian before using this feature.
- You can set up bolus calculator options and bolus limits in Section 6.1 before performing this task. It would be easier to program a food bolus and use the bolus calculator if you have established settings.

Procedure:

(

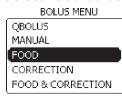
Steps Do This

1. Access BOLUS MENU from Home screen.



- a. Notice Main is highlighted.
- **b.** Press **Enter** button.
- **c.** Scroll to highlight **BOLUS**.
- **d.** Press **Enter** button.

2. Select FOOD bolus.



- **a.** Scroll to highlight **FOOD**.
- **b.** Press Enter button.

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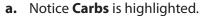
Section 8: Creating and Editing Specialized Bolus Programs to Meet Your Needs 8.4 Calculate and Deliver a Correction Bolus

Steps

Do This

3. Set Carbs.

Next



b. Press **Enter** button.

c. Scroll to select the number of grams of carbohydrates you are planning to eat.

Note: The range is 0-200 g.

d. Press Enter button.

4. Decide what to do next.

FOOD

150 g

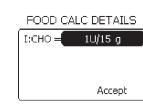
Details

Note: The **I:CHO** ratio is established when setting up your pump using the **SETUP WIZARD in Section 6.1**.

Unless instructed otherwise by your healthcare professional, do NOT change this value.







tnis value.		
If you want to	Then do this	
Continue to select bolus type	Notice Next is highlighted. Press Enter button.	
View Food Calculation Details	1. Scroll to highlight Details .	
	2. Press Enter button.	
	3. Review the insulin-to-carbohydrate ratio.	
	4. Notice Accept is highlighted.	
	5. Press Enter button.	
Change I:CHO ratio	1. Scroll to highlight I:CHO .	
	2. Press Enter button.	
	3. Scroll to change I:CHO as needed.	
	Note: The range is 1U/1g to 1U/150g.	
	4. Press Enter button.	
	5. Notice Accept is highlighted.	

6. Press **Enter** button.





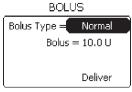


8.4 Calculate and Deliver a Correction Bolus

Steps

Do This

5. Set Bolus Type.



a. Notice **Bolus Type** is highlighted. **Normal** is the default.

b. Press **Enter** button.

Note: The recommended calculated bolus amount is displayed. Pay careful consideration before changing the recommended amount, depending on situations such as exercise, stress, sickness, etc. that may influence more or less insulin delivery at this time.

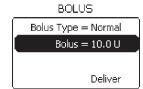
c. Scroll to select the bolus type you want to deliver.

Note: Remember to also set the duration for **Extended** or **Dual** bolus types if you are delivering either type of bolus. Refer to **Section 8.1** or **8.2** as needed.

d. Press Enter button.

6. Review Bolus amount.

Decide what to do next.



If you want to	Then do this
Accept the calculated bolus amount and continue to bolus	 Notice Bolus is highlighted. Scroll to highlight Deliver.
Change the bolus amount	 Notice Bolus is highlighted. Press Enter button. Scroll to select the bolus amount to deliver. Press Enter button.

7. Confirm that bolus type, bolus amount (and duration) are correct.

BOLUS

Bolus Type = Normal Bolus = 10.0 U Deliver Check your **Bolus Type** and **Bolus** settings on the **BOLUS** screen.

Note: The value displayed is from the bolus calculator.

Scroll up to select and make edits as needed.

Section 8: Creating and Editing Specialized Bolus Programs to Meet Your Needs

8.4 Calculate and Deliver a Correction Bolus

Steps

Do This

8. Deliver Food bolus.

BOLUS

Bolus Type = Normal

Deliver

Bolus = 10.0 U

iver

DELIVERING

Bolus 0.7 of 10.0U Stop

STOPPED ALERT

Normal bolus stopped.



9. Check your work.



a. Notice **Deliver** is highlighted.

b. Press **Enter** button.

Note: You will hear 2 quick beeps from your pump.

c. Notice that the bolus is delivering.

d. Decide what to do next.

If you want to	Then do this
Finish delivering food bolus	Allow the food bolus to deliver the amount that was set.
	Note: Once the bolus has finished delivering, you will hear 2 more quick beeps and then return to the Home screen.
	Go to Step 9 to check your bolus delivery.
STOP the food bolus delivery immediately	1. Notice Stop is highlighted.
	2. Press Enter button.
	 Notice the STOPPED ALERT screen and "Normal bolus stopped." message displays.
	4. Notice Clear is highlighted.
	5. Press Enter button to return to the Home screen.
	You have STOPPED the food bolus and it is reflected in the Bolus panel.

Review the **Last Bolus** amount and time displayed in the **Bolus** panel on the **Home** screen.



8.4 Calculate and Deliver a Correction Bolus

8.4 Calculate and Deliver a Correction Bolus

Purpose	To calculate and deliver a correction bolus using your Aviator Companion.
When	Do this procedure:
	 Whenever you want to calculate and administer a correction bolus because your blood glucose levels are higher than your target glucose.
Materials	 Your companion set up with basal delivery started. Your pump and pump set up with basal delivery started.
	 Bolus recommendations from your healthcare professional and assistance from your Diabetes Educator as needed.
	 Your personalized Table of Settings in Section 12 - Appendix A

Helpful Information

- Establish setting for programming a correction bolus and use of the bolus calculator with the instructions listed in **Section 6.1** before performing this task.
- Using this feature requires that you have a working understanding and knowledge of your insulin sensitivity, or correction factor, and know your BG targets obtained from your healthcare team. Refer to **Section 12 –Appendix A** for calculation sheet.
- While the pump will provide a suggested dose based on the settings you have established, there may be other factors that may affect the dosage decision (such as anticipated increased physical activity), so be sure to discuss this feature with your healthcare team.

Procedure:

TC	cedure:		
St	teps Do This		
1.	Access BOLUS MENU from Home screen.	a. Notice Main is highlighted.	
	IOB ≥ Last Bolus 3,00U/0h 30m Oh 11m ago	b. Press Enter button.	
	MAIN MENU STOP BASAL BOLUS BASAL ALARMS STATUS	c. Scroll to highlight BOLUS.d. Press Enter button.	

Section 8: Creating and Editing Specialized Bolus Programs to Meet Your Needs

8.5 Calculate and Deliver a Food & Correction Bolus

Steps

2. Select CORRECTION bolus.

BOLUS MENU QBOLUS MANUAL FOOD CORRECTION FOOD & CORRECTION

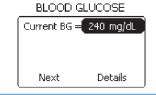
Do This

- a. Scroll to highlight CORRECTION.
- **b.** Press **Enter** button.

Note: You may get a **WARNING** screen and message "**Less than 2 hours since last bolus**." with **OK** highlighted. Consider the possible safety issues if another bolus is delivered at this time, prior to pressing the **Enter** button.

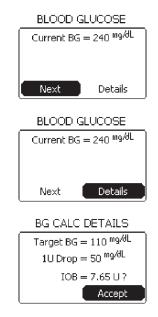
Note: If there is **NO** bolus history, and the pump has **NOT** been powered on for the duration of the action time, you may get a **CONFIRMATION** screen and message "**Last bolus time unknown. Continue?**" displayed. Press **Enter** to continue.

3. Set Current BG.



- a. Scroll to highlight Current Bg.
- **b.** Press **Enter** button.
- **c.** Scroll to select your current blood glucose level.
- **d.** Press **Enter** button.

Determine what to do next.



If you want to	Then do this
Continue to select bolus type	Notice Next is highlighted. Press Enter button.
View BG Calculation	1. Scroll to highlight Details .
Details	2. Press Enter button.
	3. Review the Target BG , 1U Drop and, IOB.
	4. Notice Accept is highlighted.
	5. Press Enter button.
	6. Scroll to highlight Next .
	7. Press Enter button.





8.5 Calculate and Deliver a Food & Correction Bolus

Steps

Do This

5. Set Bolus Type.

BOLUS Bolus Type = Normal Bolus = 4.0 U Deliver

a. Notice **Bolus Type** is highlighted.

b. Press **Enter** button.

Note: The recommended calculated bolus amount is displayed. Pay careful consideration before changing the recommended amount, depending on situations such as exercise, stress, sickness, etc. that may influence more or less insulin delivery at this time.

c. Scroll to select the bolus type you want to deliver.

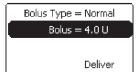
Note: Remember to also set the duration for **Extended** or **Dual** bolus types if you are delivering either type of bolus. Refer to **Section 8.1** or **8.2** as needed.

d. Press **Enter** button.

6. Review Bolus amount.

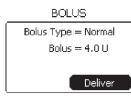
Decide what to do next.

BOLUS



If you want to	Then do this
Accept the calculated	1. Notice Bolus is highlighted.
bolus amount and continue to bolus	2. Scroll to highlight Deliver .
Change the bolus	1. Notice Bolus is highlighted.
amount	2. Press Enter button.
	3. Scroll to select the bolus amount to deliver.
	4. Press Enter button.

7. Confirm that bolus type, bolus amount (and duration) is correct.



Check your **Bolus Type** and **Bolus** amount settings on the **BOLUS** screen.

Scroll up to select and make edits as needed.

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Section 8: Creating and Editing Specialized Bolus Programs to Meet Your Needs 8.5 Calculate and Deliver a Food & Correction Bolus

Steps

8. Deliver Correction bolus.

BOLUS Bolus Type = Normal Bolus = 4.0 UDeliver

DELIVERING

Bolus 0.90 of 4.00U

> STOPPED ALERT Normal bolus stopped.

Stop

Clear

Do This

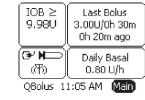
- a. Notice **Deliver** is highlighted.
- **b.** Press **Enter** button.

Note: You will hear 2 quick beeps from your pump.

- **c.** Notice that the bolus is delivering on the screen.
- d. Decide what to do next.

If you want to	Then do this
Finish delivering	Allow the correction bolus to deliver the calculated amount
correction bolus	Note: Once the bolus has finished delivering, you will hear 2 more quick beeps and return to the Home screen.
	Go to Step 9 to check your bolus delivery.
STOP the	1. Notice Stop is highlighted.
correction	2. Press Enter button.
bolus delivery immediately	 Notice the STOPPED ALERT screen and "Normal bolus stopped." message displays.
	4. Notice Clear is highlighted.
	5. Press Enter button to return to the Home screen.
	You have STOPPED the correction bolus and it is reflected in the Bolus panel.

9. Check your work.



Review the **Last Bolus** amount and time displayed in the **Bolus** panel on the Home screen.





8.5 Calculate and Deliver a Food & Correction Bolus

8.5 Calculate and Deliver a Food & Correction Bolus

Purpose	To calculate and deliver a bolus when you are about to eat and your blood glucose levels are above or below your pre-meal target goals.
When	Do this procedure:
	 Whenever you want to administer a bolus because you are about to eat a meal, and your blood glucose is above or below your target range.
Materials	 Your companion with basal delivery started. Your pump set up with basal delivery started.
	 Bolus recommendations from your healthcare professional and assistance from your Diabetes Educator as needed.
	 Your personalized Table of Settings in Section 12 - Appendix A.

Helpful Information

• To administer a **food and correction bolus**, you must first have an understanding and knowledge of your insulin sensitivity, or correction factor and your I:CHO ratio, which you will have obtained from your healthcare team (see **Section 6.1** for additional settings).

Procedure:

Steps Do This

1. Access BOLUS MENU from Home screen.



BASAL ALARMS STATUS

DOC15736 Rev-A-Man.indd 207-208

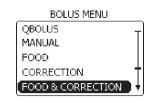
- **a.** Notice **Main** is highlighted.
- **b.** Press **Enter** button.
- c. Scroll to highlight **BOLUS**.
- **d.** Press **Enter** button.

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Section 8: Creating and Editing Specialized Bolus Programs to Meet Your Needs
8.5 Calculate and Deliver a Food & Correction Bolus

Steps

2. Select FOOD & CORRECTION Bolus.



Do This

- **a.** Scroll to highlight **FOOD & CORRECT**.
- **b.** Press **Enter** button.

3. Set Carbs.



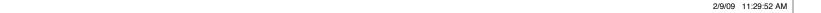
- a. Notice Carbs is highlighted.
- **b.** Press **Enter** button.
- **c.** Scroll to select the number of grams of carbohydrates you are planning to eat.

Note: The range is 1-200 grams.

d. Press **Enter** button.

Note: The **I:CHO** ratio is established when setting up your pump using the **SETUP WIZARD** in **Section 6.1**.

Unless instructed otherwise by your healthcare professional, do NOT change this value.





8.5 Calculate and Deliver a Food & Correction Bolus

Steps

Do This

4. Decide what to do about I:CHO ratio.



FOOD

Carbs = 100 g

Next

Details







DOC15736 Rev-A-Man.indd 209-210

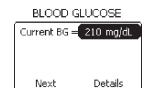
If you want to	Then do this
Continue to select	Notice Next is highlighted.
bolus type	Press Enter button.
View Food Calculation	Scroll to highlight Details .
Details	2. Press Enter button.
	3. Review the insulin-to-carbohydrate ratio.
	4. Notice Accept is highlighted.
	5. Press Enter button.
Change I:CHO ratio	1. Scroll to highlight I:CHO .
	2. Press Enter button.
	3. Scroll to change I:CHO as needed.
	Note: The range is 1U/1g to 1U/150g.
	4. Press Enter button.
	5. Notice Accept is highlighted.
	6. Press Enter button.
	7. Notice Next is highlighted.
	8. Press Enter button.

Section 8: Creating and Editing Specialized Bolus Programs to Meet Your Needs
8.6 Deliver a Quick Bolus from QBolus Menu

Steps

Do This

5. Set CURRENT BG.



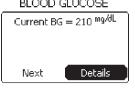
- a. Notice Current Bg is highlighted.
- **b.** Press **Enter** button.
- **c.** Scroll to select your current blood glucose level.

Note: The default value is whatever your current Target BG is. When Target BG is **NOT** defined in WIZARD, both Current BG and Target BG defaults to 110 mg/dL (6.1 mmol/L).

d. Press **Enter** button.

6. Decide what to do next.





BG CALC DETAILS

Target BG = 110 mg/dL

1U Drop = 50 mg/dL

IOB = 9.77 U ?

Accept

•	If you want to	Then do this
	Continue to select bolus type	Notice Next is highlighted. Press Enter button.
	View BG Calculation Details	 Scroll to highlight Details. Press Enter button.
		 Review the IOB on the BG CALC DETAILS screen, and make changes as needed.

Note: You **CANNOT** change the IOB on this screen. When IOB is questionable, a question mark appears next to it on the **BG CALC DETAILS** screen. For example, IOB may be questionable when you initially turn on the pump within the first insulin action time, based on initial setup.

- 4. Notice **Accept** is highlighted.
- 5. Press **Enter** button.
- 6. Notice **Details** is highlighted.
- 7. Scroll to highlight **Next**.
- 8. Press **Enter** button.

Note: The recommended calculated bolus amount is displayed. You should change this only if you purposely want to give a different amount than what is recommended by the pump.

2/9/09 11:29:52 AM



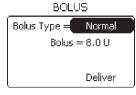


8.6 Deliver a Quick Bolus from QBolus Menu

Steps

Do This

7. Set Bolus Type.



a. Notice **Bolus Type** is highlighted on the **BOLUS** screen.

b. Press **Enter** button.

Note: The recommended calculated bolus amount is displayed. You should change this only if you purposely want to give a different amount than what is recommended by the pump.

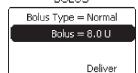
c. Scroll to select the bolus type you want to deliver.

Note: Remember to also set the duration for **Extended** and **Dual** bolus types if you are delivering either type of bolus.

d. Press Enter button.

8. Set Bolus.

BOLUS



Decide what to do next.

If you want to	Then do this
Accept the calculated bolus amount and continue to bolus	 Notice Bolus is highlighted. Scroll to highlight Deliver.
Change the bolus	1. Notice Bolus is highlighted.
amount	2. Press Enter button.
	Scroll to adjust the amount that was calculated.
	4. Press Enter button.

9. Check that bolus type and bolus amount is correct.

BOLUS

Bolus Type = Normal Bolus = $8.0 \, \text{U}$ Deliver Check your **Bolus Type** and **Bolus** amount settings on the screen.

Scroll up to select and make edits as needed.

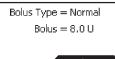
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Section 8: Creating and Editing Specialized Bolus Programs to Meet Your Needs 8.7 Deliver a Quick Bolus from QBolus Soft Key

Steps

10. Deliver Food & **Correction bolus.**

BOLUS



Deliver

DELIVERING

Bolus 1.50 of 8.00U Stop

STOPPED ALERT Normal bolus

> stopped. Clear

Do This

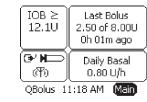
- a. Notice **Deliver** is highlighted.
- **b.** Press **Enter** button.

Note: You will hear 2 quick beeps from your pump.

- **c.** Notice that the bolus is delivering on the screen.
- **d.** Decide what to do next.

If you want to	Then do this	
Finish delivering food and	Allow the food and correction bolus to deliver the amount that was set.	
correction bolus	Note: Once the bolus has finished delivering, you will hear 2 more quick beeps and then you will return to the Home screen.	
	Go to Step 11 to check your bolus delivery.	
STOP the food	1. Notice Stop is highlighted.	
and correction bolus delivery	2. Press Enter button.	
immediately	 Notice the STOPPED ALERT screen and "Normal bolus stopped." message displays. 	
	4. Notice Clear is highlighted.	
	5. Press Enter button to clear message and return to the Home screen.	
	You have STOPPED the food and correction bolus, and it is reflected on the Bolus panel.	

11. Check your work.



Review the **Last Bolus** amount and time displayed in the **Bolus** panel on the Home screen.



8.7 Deliver a Quick Bolus from QBolus Soft Key

8.6 Deliver a Quick Bolus from QBolus Menu

Purpose	To administer a normal bolus using the QBOLUS menu of your Aviator Companion .
When	Do this procedure:
	• Whenever you need to deliver a normal bolus from the Qbolus menu.
	Note: The increments are either 0.5 or 1.0 Units.
Materials	Your companion set up with basal delivery started.
	 Your pump set up with basal delivery started.
	Bolus recommendations from your healthcare professional.

Procedure:

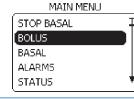
Steps

1. Access BOLUS MENU from Home screen.



b.

QD0103 11:10 H



Do This

- a. Notice Main is highlighted.
- **b.** Press **Enter** button.
- **c.** Scroll to highlight **BOLUS**.
- **d.** Press **Enter** button.

2. Set QBOLUS.

BOLUS MENU

QBOLUS

MANUAL

FOOD

CORRECTION

FOOD & CORRECTION

- a. Notice QBOLUS is highlighted.
- **b.** Press **Enter** button.
- c. Scroll to select the desired quick bolus amount to administer.

Note: The increments are either 0.5 or 1.0 Units.

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d. Press **Enter** button.

Section 8: Creating and Editing Specialized Bolus Programs to Meet Your Needs
8.7 Deliver a Quick Bolus from QBolus Soft Key

Steps

3. Deliver Quick bolus.

DELIVERING



QUICK BOLUS

5.0 U

STOPPED ALERT



Do This

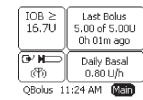
a. Notice that the bolus is delivering on the screen.

Note: You will hear 2 quick beeps from your pump.

b. Decide what to do next.

If you want to	Then do this
Finish delivering the quick bolus	Allow the quick bolus to deliver the amount that you set.
	Note: Once the bolus has finished delivering, you will hear 2 more quick beeps from your pump and return to the Home screen.
	Go to Step 4 to check your bolus delivery.
STOP the quick	1. Notice Stop is highlighted.
bolus delivery	2. Press Enter button.
immediately	 Notice the STOPPED ALERT screen and "Normal bolus stopped." message displays.
	4. Notice Clear is highlighted.
	5. Press Enter button to clear message and return to the Home screen.
	You have STOPPED the quick bolus and it is reflected on the Bolus panel.

4. Check your work.



Review the **Last Bolus** amount and time displayed in the **Bolus** panel on the **Home** screen.







8.7 Deliver a Quick Bolus from QBolus Soft Key

Purpose	To administer a normal bolus using the QBolus soft key from your companion's Home screen.
When	Do this procedure:
	 Whenever you need to administer a normal bolus quickly, conveniently, and discreetly, using the fewest steps possible.
Materials	 Your companion and pump set up with basal delivery started.
	 Bolus recommendations from your healthcare professional.

Helpful Information

• A **Normal** bolus may be delivered using the **QBolus** soft key from your companion's **Home** screen. You should have already set up the bolus increments using the procedure in **Section 6.1**.

Procedure:

Steps Do This

1. Locate the QBolus soft key on your companion.

Locate the **QBolus** soft key (also called the **Backlight** soft key) on the bottom left of your companion.



Steps

2. Initiate the number of bolus increments to deliver.

1 button push displays:

ONE-BUTTON BOLUS

0.5υ

2 button pushes displays:

ONE-BUTTON BOLUS

1.0 u

Do This

a. Press the **QBolus** soft key the same number of times as the number of increments to deliver, companion sounds a beep with each press.

Note: You may have to press the soft key once to wake companion up.

Note: The increments for the one-button bolus are either 0.5 or 1.0 Units.

- **b.** Notice that after a few seconds, the companion will **beep the same number of times** that you pressed the **QBolus** soft key to verify your instructions.
- **c.** After the beeps, press the **QBolus** soft key **ONE MORE TIME** within **2 seconds** to **CONFIRM** the correct number of increments for bolus delivery.

Note: You **MUST** press the Bolus button after the complete feedback beeps **within 2 seconds**, or the bolus is cancelled.

Note: The bolus will also be cancelled if you press the Bolus button **before the feedback** completes.

3 button pushes displays:

ONE-BUTTON BOLUS

1.5 u



Steps

Do This

3. Deliver the bolus.

a. Notice that the bolus is delivering on the screen.

DELIVERING

Bolus 0.00 of 1.50U Stop

b. Decide what to do next.

If you want to Then do this

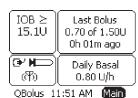
STOPPED ALERT Normal bolus stopped.

Clear



Finish delivering	Allow the bolus to deliver the amount that you set.
the quick bolus	Note: Once the bolus has finished delivering, you will hear 2 more quick beeps and then you will return to the Home screen.
	Go to Step 4 to check your bolus delivery.
STOP the quick	1. Notice Stop is highlighted.
bolus immediately	2. Press Enter button.
	 Notice the STOPPED ALERT screen and "Normal bolus stopped." message displays.
	4. Notice Clear is highlighted.
	5. Press Enter button to clear message and return to the Home screen.
	You have STOPPED the quick bolus and it is reflected in the Bolus panel.

4. Check your work.



Look at the **Bolus** box on the **Home** screen to review the amount and time of the last bolus.

9 Respond to Alarms, Alerts, Errors, and Other Problems

Purpose	To resolve alarm and alert messages, error codes, or problems related to your Aviator Companion and Aviator Pump .
When	Do this procedure:When you receive an alarm, alert, or error code on your companion or pump.
	 Your companion or pump is NOT turning on, you CANNOT start basal delivery, dropping your companion or pump, or other problems, etc.
Materials	Your companion and pump may either be operating normally or in an alarm failsafe battery state (non-rechargeable).
	Your personalized Table of Settings in Section 12- Appendix A .

Helpful Information

- This section offers suggestions for addressing problems or difficulties that you may experience with your companion and pump.
- Call your healthcare professional for questions about your blood glucose control or diabetes management.
- Call Customer Care, 24 hours a day, 7 days a week, for questions involving the mechanics of your companion or pump, or regarding any alarms and errors not covered in this section.
- You may also check the **Table of Contents** and **Index** for sections that may be helpful.
- Refer to the Glossary for the definitions of different Alarms and Alerts.

WARNING:

- While an **ALARM** is active, insulin delivery **IS** stopped. Therefore, it is important for you to respond to an alarm as soon as possible to prevent medically adverse events or serious injury.
- Insulin delivery does **NOT** stop with an **ALERT**. However, delivery is **NOT** occurring when you get a pump idle alert, because you have **NOT** begun insulin delivery yet.
- All alarms and alerts appear as text on the screen of your companion or pump. For example,



LOW BATTERY ALERT Replace the battery. Sleep Time = 0h 15m Clear

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• You are also alerted to an insulin delivery (pump) alarm or alert either by sound or vibration (on the pump).

If your pump is in AUDIO mode	A beep will sound. This beep will gradually change to continuous tones of increasing frequency and higher pitch until the alarm/alert is addressed or, in the case of alerts, if the SLEEP mode is activated.
If your pump is in VIBRATE mode	Your pump will vibrate initially, but eventually the vibrations will change to beeps, which will gradually change to continuous tones of increasing frequency unless the alarm/alert is addressed or, in the case of alerts, if the SLEEP mode is activated.

• Sleep mode is like hitting a snooze button on an alarm clock. Sleep mode gives you the option of postponing your response to an **ALERT** or reminder for a specific, limited amount of time.

You **CANNOT** use sleep mode with alarms.

• Sleep mode can be used to quiet an alert for as little as 15 minutes or as long as 12 hours. An exception is the Pump Idle Alert which is 15 minutes to a maximum of 1 hour.

WARNING: If you receive an occlusion alarm, you **MUST** disconnect from the pump using the quick disconnect feature of the Infusion Set before investigating the cause of the occlusion. Bolus delivery may occur when the cause of the occlusion is removed.

- Discuss the occlusion alarm setting with your healthcare professional to help you determine which setting is best for you.
- All Companion related alerts appear as text on the screen of your Companion. For example, a low battery alert on your Companion battery.

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- You are also alerted to a companion alert either by sound or vibration on the Companion.
- Companion related alerts will not gradually escalate in the way a pump alarm or alert does.

Procedure:

Steps

Do This

1. Determine what you need to resolve.

If you are resolving	Then do this
An alarm or alert	Go to Step 2.
A companion alert	Go to Step 3.
System errors	Go to Step 4 .
Other problems or difficulties with your pump.	Go to Step 5 .

Steps

2. Identify the type of pump alarm or alert and respond as appropriate.

BAD BATTERY ALARM
Delivery

Clear

has stopped.

STOPPED ALERT

Normal bolus stopped. Clear

INACTIVITY ALERT

Press enter to reset. Clear

INACTIVITY ALARM

Delivery
has stopped.

Clear

Do This

Look at the screen of your pump.

If the alarm/ alert is a	Then do this
Bad battery alarm	 Notice Clear is highlighted. Press Enter button to clear the alarm. Change the battery within 15 minutes to avoid losing information (see Section 1.4) and resume basal delivery. Confirm or reset Time and Date. RESTART basal delivery (see Section 3.1.1). Note: Refer to your Table of Settings in Section 12 Appendix A to determine the method of insulin replacement as recommended by your healthcare professional, if NOT able to replace battery right away until the issue is resolved.
Stopped bolus alert	 Notice Clear is highlighted. Press Enter button to clear the alert. Review the amount of the last bolus that was delivered and accommodate for undelivered insulin, if you accidentally stopped your bolus.
Inactivity alert OR Inactivity alarm	 Notice Clear is highlighted. Press Enter button to clear the alert, reactivate your pump and return to the Home screen. RESTART basal delivery if delivery has stopped.
	Note: Refer to your Table of Settings in Section 12 -Appendix A to determine the method of insulin replacement as recommended by your healthcare professional until the issue is resolved. Change the length of the inactivity time as needed.

Continued on next page.



Steps

Do This

Identify the type of pump alarm or alert and respond as appropriate (continued).

OCCLUSION ALARM

Delivery has stopped.

Clear

Occlusion alarm	WARNING: If you receive an occlusion alarm, you MUST disconnect from the pump using the quick disconnect feature of the Infusion Set before investigating the cause of the occlusion. Bolus delivery may occur when the cause of the occlusion is removed.
	 Notice Clear is highlighted. Press Enter button to clear the alarm and return to the Home screen. Check your blood glucose level. Disconnect the pump. Administer an insulin injection if necessary as it is possible that your pump has NOT been delivering insuli for some time. Change your infusion set and reservoir immediately. Note: Refer to your Table of Settings in Section 12 -Appendix A to determine the method of insulin replacement as recommended by your healthcare professional until the issue is resolved.
	 7. Prime the pump (see Section 2.4) to see if insulin is being pumped. If insulin IS being pumped, finish priming, reconnect pump and start basal delivery again. If insulin is NOT being pumped, change infusion site and tubing, then change the reservoir, before calling Customer Care or your healthcare professional for further assistance.
	Note: If you get frequent occlusion alarms, talk to your healthcare professional about setting high or low sensitivity for alarm, as well as best sites for infusion set and tubing.

Continued on next page.

Steps

Identify the type of pump alarm or alert and respond as appropriate (continued).

NO INSULIN ALARM

Delivery has stopped.

Clear

Do This

If the alarm/alert is a	Then do this		
No insulin alarm	1. Notice Clear is highlighted.		
	2. Press Enter button to clear the alarm and return to the Home screen.		
	3. Disconnect tubing from cannula and remove cannula from infusion site.		
	4. Replace reservoir with a new reservoir filled with insulin (see Section 2.3).		
	5. Prime pump (see Section 2.4).		
	6. Insert new infusion set.		
	7. Prime cannula.		
	8. RESTART basal delivery.		
	Note: Refer to your Table of Settings in Section 12 -Appendix A to determine the method of insulin replacement as recommended by your healthcare professional until the issue is resolved.		
Reservoir alarm	 Notice Clear is highlighted. Press Enter button to clear the alarm and return to the 		

RESERVOIR ALARM

Delivery has stopped.

Clear

Home screen.

3. Disconnect tubing from cannula and remove cannula from infusion site.

4. Remove reservoir and replace it (see **Section 2.3**).

5. Prime Pump (see **Section 2.4**). 6. Insert new infusion set.

7. Prime cannula.

8. **RESTART** basal delivery. 9. Contact Customer Care if problem persists.

Note: Refer to your Table of Settings in **Section 12** -Appendix A to determine the method of insulin replacement as recommended by your healthcare professional until the issue is resolved.

Continued on next page.

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Section 9: Respond to Alarms, Alerts, Errors, and Other Problem

Steps

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Identify the type of pump alarm or alert and respond as appropriate (continued).

LOW BATTERY ALERT

Replace the battery.

Sleep Time = 0h 15m

Sleep Clear



CANCELLATION ALERT

Change or action was cancelled.

Clear

LOW INSULIN ALERT

Refill the
reservoir.
Sleep Time = 0h 15m
Sleep Clear



Do This

If the alarm/alert is a	Then do this	
Low battery alert	Note: The Aviator Pump will notify the user when the battery is nearing depletion NOT less than 24 hours before the pump stops delivery due to a depleted battery.	
	1. Notice Sleep is highlighted.	
	2. Scroll to highlight Clear .	
	Press Enter button to clear the alert and return to Home screen.	
	 Replace the battery as soon as possible (see Section 1.4). 	
Cancellation alert	1. Notice Clear is highlighted.	
	2. Press Enter button to clear the alert.	
	3. Reenter your changes/edits ONLY if necessary so that they are saved.	
	Note: Change the idle screen time to a longer period if this occurs frequently.	
Low insulin alert	1. Notice Sleep is highlighted.	
	2. Scroll to highlight Clear .	
	Press Enter button to clear the alert and return to Home screen.	
	4. Replace and refill the reservoir as soon as possible (see Section 2.3).	

Continued on next page.

Steps

Identify the type of pump alarm or alert and respond as appropriate (continued).

PUMP IDLE ALERT

Pump not started. Sleep Time = 0h 15m Sleep Clear

Do This

If the alarm/alert is a	Then do this		
Pump idle alert/	1. Notice Sleep is highlighted.		
pump NOT started	2. Decide what to do next.		
started	If you want to	Then	
	Clear the alert	Scroll to highlight Clear and press Enter button to return to Home screen.	
	Put pump back to sleep again	Press Enter button to put pump back to sleep again.	
	Put pump back to sleep for a longer time	Scroll to highlight Sleep Time . Press Enter button. Scroll to change the sleep time. Press Enter button.	
	Note: Change the	e length of Sleep Time as needed.	
	3. START basal of	delivery (see Section 3.1.1) per healthcare	

3. Identify the type of Companion alert and respond as appropriate.

WARNING

Low battery, Recharge companion. OK

If the alarm/alert is a	Then do this	
Low battery	1. Notice OK is highlighted.	
alert	Press Enter button to clear the alert and return to Home screen.	
	3. Recharge the battery as soon as possible. The alert indicates that you have 30% of battery charge remaining. (see Section 1.3).	

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professional recommendations.

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Section 9: Respond to Alarms, Alerts, Errors, and Other Problem

Steps

Do This

WARNING

Very low battery, Recharge companion immediately, OK

WARNING

Dead battery.

WARNING

BG check not available. Remove cable before checking. Change or action cancelled.

Very Low battery alert

- 1. Notice **OK** is highlighted.
- 2. Press **Enter** button to clear the alert and return to **Home** screen.
- 3. Recharge the battery as soon as possible. The alert indicates that you have 15% of battery charge remaining. (see **Section 1.3**).

Depleted battery alert

- 1. Notice **OK** is highlighted.
- 2. Press **Enter** button to clear the alert and return to **Home** screen.
- 3. The companion may shut down at any time. Recharge the battery immediately to continue using the Companion (see **Section 1.3**).

BG check not available alert

- 1. Remove the test strip from the strip port.
- 2. Remove the USB cable from the USB port on the Companion.
- 3. Insert a **FreeStyle Lite Test Strip** into the strip port to perform a blood glucose test (see **Section 5.2**).

WARNING: Use **ONLY** the USB cable provided. Use of an unapproved cable may lead to loss of electromagnetic compatibility, and make the system more susceptible to electronic interference.

Steps

Do This

- 4. Resolve System Errors.
- a. Contact Customer Care.
- **b. NOT** all system errors will indicate a failure in the pump system. However, if the pump fails, you **MUST DISCONTINUE** use of the pump. Refer to your Table of Settings in **Section 12 -Appendix A** to determine the method of insulin replacement as recommended by your healthcare professional until the issue is resolved.
- 5. Troubleshoot pump problems or issues.

Identify what the problem may be.

If	Then	
Your pump won't	1.	Remove and reinsert battery. (see Section 1.4)
turn on	2.	Insert a new AAA alkaline battery (Energizer and Duracell brands are recommended) if the issue is NOT resolved.
	3.	Contact Customer Care or your healthcare professional if the issue is still NOT resolved.
Your pump's	1.	Use ONLY Energizer or Duracell alkaline batteries.
batteries are	2.	Set your pump to audio instead of vibrate.
NOT lasting very long (occurs when	3.	Reduce the use of the backlight if possible.
backlight is used frequently or pump is allowed to alarm for	4.	Respond to alarms as quickly as possible, as batteries will run down quicker if the pump is allowed to alarm for long periods of time.
long periods of time)	5.	Contact Customer Care if the issue is still NOT resolved.
Your pump's screen	1.	Turn on the backlight if you are in a dark room.
is hard to read or is	2.	Remove your sunglasses if applicable.
distorted	3.	Move indoors or into the shade if applicable.
	4.	Keep your pump out of direct heat (e.g., away from heaters) or cold (e.g., by placing under your clothing on a cold day).
	5.	Contact Customer Care if the issue is still NOT resolved.

Continued on next page.



Section 10: System Maintenance

Steps

Troubleshoot pump problems or issues (continued).

ALARM SETUP



WARNING

Error in remote bolus delivery. OK

Do This

If	Then do this
Basal delivery	1. Check that the devices are paired properly.
won't start	 Check that you are delivering a large enough volume of insulin for priming to be completed in both the tubing and cannula. If a tiny amount of insulin has NOT come out of the end of the tubing, you may need to increase the amount of the prime to at least 4 – 6 units (see Section 2.4).
	Note: If you attempt to start basal delivery and the pump needs to be primed, the pump will display a warning to prime pump first.
	 Check that the insulin reservoir is filled. If empty, fill the reservoir.
	Note: The pump will display a NO INSULIN ALARM . Refer to Step 2 for more information.
	4. Contact Customer Care or your health care professional if you are still unable to start basal delivery.
Your pump got	1. Towel dry the outside of the pump.
wet	Inspect the reservoir and battery compartments and dry any water you find.
	Caution: Do NOT use a hair dryer to dry your pump.
	 If your pump was submerged in salt water, thoroughly clean with a damp cloth before drying with towel.
	4. Refer to Section 4.1 for additional details on what to do.
	5. Contact Customer Care or your healthcare professional if you are unable to use your pump.



Steps

Do This

Troubleshoot pump problems or issues (continued).

Do This	Do This				
If	Then do this				
You dropped your pump	Examine the screen and buttons for chips, cracks, or other damage.				
	Caution: If your pump is cracked or a button is torn, switch to insulin injections immediately AND contact your healthcare professional and/or Customer Care.				
	 Carefully examine the pump, making sure the battery cap and reservoir cap are secure. Examine the infusion set for damage, making sure the tubing, tubing connector, and soft cannula are intact. 				
	Caution : If your pump has been dropped, the waterproof capability of your pump may be compromised.				
	4. If you suspect that your pump has been damaged, and are concerned that its waterproof capability has been compromised, please contact Customer Care.				
You suspect	1. Stop basal delivery.				
pump alarm(s	2. Set it aside for 5 minutes without starting basal delivery.				
may not be functioning correctly	3. Let the alarm escalate and check that it cycles through both audio and vibratory annunciation.				
(check for operational safety).	4. Check that the pump's audio speakers sound as part of the transition from idle mode to basal delivery mode, or following insertion of a battery.				

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Caution: If your pump audio or vibratory annunciators are not functioning, switch to insulin injections immediately AND contact your healthcare professional and/ or Customer Care.

6. Check your work.

Make sure your pump is operating fully and normally again after responding to the alarm, alert, system error, or other problem(s).







System Maintenance

Section 10: System Maintenance

Purpose	To keep your companion and pump in good working order. To assist you with battery-related issues, cleaning, storage and what to do if companion or pump is damaged or gets wet.
When	Do this procedure when:
	 You need to replace your pump battery.
	 You need to clean your companion and pump.
	 You need to transport or store your companion and pump.
	 Your companion or pump is damaged or gets wet.
Materials	 One Duracell MN2400 or Energizer E92 AAA alkaline primary battery (non-rechargeable).
	One cloth dampened with mild soapy water.

WARNING: Do NOT use lithium, nickel cadmium (NiCad), nickel metal hydride (NiHM), carbon zinc (heavy duty), or rechargeable batteries. These types of batteries will **NOT** power **Aviator Pump** properly, and/or the battery level indicator may not display accurately.

Basal delivery **MUST** be stopped before removing the battery (**Section 3.1.3**).

10.1. **Replace Pump Battery**

One damp cloth.

• One dry cloth.

Helpful Information

- Stop **ALL** delivery prior to removing the battery.
- Always carry a spare battery with your pump supplies.
- Do **NOT** use a cold battery (e.g., one that has just been in your refrigerator or in cold weather). If the battery is cold, the pump may display a battery-related alarm: the pump may **NOT** be receiving full power. The battery level display may be inaccurate.
- Your battery is expected to last at least 30 days. Battery life may be shortened if you select the vibrate mode, or use the backlight frequently. The battery life will also vary based on the number of alarms or alerts you receive.
- Do NOT remove the battery unless you are installing a new battery or are storing your pump for a long period of time.

- If you do **NOT** install a new battery within 15 minutes of taking out the old one, you will need to reset the time and date, you will lose your bolus history and Insulin-on-Board (IOB) calculation. You will **NOT** be able to receive IOB information until the next bolus is delivered and a calculation can be established.
- Batteries should be disposed of in accordance with local regulations.
- For detailed instructions on battery insertion, see **Section 1.4**.
- RESTART basal delivery as recommended by your healthcare professional.

Note: The **Aviator Pump** will notify the user with a low battery alert when the battery is nearing depletion **NOT** less than 24 hours before the pump stops delivery due to a depleted battery.

Note: The **Aviator Companion** contains lithium batteries. At the end of their useful life, dispose system components and accessories according to local environment and other rules and regulations that may apply. Contact Customer Care for replacements.

10.2. **Clean Your Companion and Pump**

Helpful Information

- Do **NOT** use organic solvents (e.g., lighter fluid, paint thinner, nail polish remover) and be sure that your hands are free of these products before touching the companion or pump.
- Do **NOT** use household cleaners (e.g., petroleum-based products, bleach, and jewelry cleaner) or products containing high levels of N, N-diethyl-m-toluamide (DEET) near the companion or pump and be sure that your hands are free of these products before touching the companion or pump.
- Do **NOT** use abrasive cleaners, scouring pads, or sharp instruments.
- Do **NOT** use lubricants with your companion or pump.
- Do **NOT** steam or sterilize your companion or pump.
- Do **NOT** put your companion or pump in the dishwasher or microwave.

Procedure:

Steps		Do This		
1.	Wipe your companion or	Caution: Do NOT place Aviator Companion or Aviator Pump under water.		
	pump.	Wipe the outside with a cloth dampened with mild soapy water.		
2.	Dry your companion or pump.	Wipe clean with a damp cloth, then wipe dry with a dry cloth.		







10.3. Store Your Aviator Companion and Aviator Pump Helpful Information

- Stop all delivery prior to removing the pump battery.
- Remove the battery before storing your pump.
- Store your pump with the battery cap and dust cap in place to protect the inside of your pump.
- Store your Aviator Companion and pump in a clean, dry place where there are **NOT** extreme temperatures, high humidity, or extreme atmospheric pressures.

10.4. Handle a Damaged or Wet Companion or Pump

Caution: If your companion or pump is cracked or a button is torn, discontinue use and switch to an alternate insulin therapy method immediately. Follow your healthcare professional's recommendations for alternate insulin delivery method in **Section 12-Appendix A** and/or call Customer Care. **ONLY** the personnel at Abbott Diabetes Care should take care of a damaged pump.

Helpful Information

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- Be careful **NOT** to drop your companion or pump, or hit it against hard surfaces.
- Check for missing segments and that the screens display correctly and audio / vibration occurs after installing a pump battery. Also verify the audio / vibration test when starting basal delivery.
- Do **NOT** submerge the companion in water. If it is accidentally dropped in water, towel dry the outside of the companion. Do **NOT** use a hair dryer to dry your companion.
- If your pump is accidentally submerged in water and the battery cap and infusion set hub are in place, you can towel dry the outside of the pump. Inspect the reservoir compartment and battery compartment and dry any water you find with a Q-tip. Do **NOT** use a hair dryer to dry your pump. If your pump was submerged in salt water, thoroughly clean with a damp cloth before drying.
- If your pump is accidentally submerged in water and the battery cap or the infusion set is **NOT** properly installed, submersion will likely damage internal pump components. Call Customer Care.
- If your companion is accidentally submerged in water, you can towel dry the outside of the companion. Do **NOT** recharge or reuse the Companion. Contact Customer Care.
- You should remove your pump before every prolonged exposure to water, including bathing, showering, and swimming.
- Because of the **Aviator Pump**'s unique hub connection, use **ONLY Aviator**-compatible sets with the pump.
- If your pump is damaged, it will need to be serviced or replaced. Call Customer Care for information about servicing or replacing your pump.

10.5. Conditions for Transport, Storage, and Use Helpful Information

• Do **NOT** to subject your companion or pump to extreme conditions, which may cause malfunctions and possible adverse events or serious injury.

Try to **AVOID**:

- Exposing your companion or pump to temperatures above 104°F (40°C), as might happen in a sauna or on a very hot day.
- Allowing your companion or pump to absorb radiant heat (e.g., sunlight) that would increase its temperatures to above 104 °F (40°C). This can also damage your insulin in the tubing exposed to the radiant heat.
- Using a dark colored pump case, which would increase the intensity of radiant heat.
- Lowering the temperature of your companion or pump below 41°F (1°C).
- Storing your pump below or above the recommended temperature when you are not using the pump. Note that storage temperature should be between -4°F to 104°F (-20°C to 43°C).
- Exposing your companion or pump to very high humidity (over 100 percent) for prolonged periods of time. Your system may **NOT** operate properly.
- Low atmospheric pressures (Elevation 10,000 feet [3048 meters] and above. Commercial airliners are OK because of the pressurized cabins.) Your system may **NOT** operate properly.
- The **Aviator Companion** contains lithium batteries. At the end of their useful life, dispose system components and accessories according to local environment and other rules and regulations that may apply.
- Avoid getting dirt, dust, blood, control solution, water or any other liquid in the **Aviator Companion**'s test strip and data port.

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• When traveling by air, pack your extra lithium batteries in checked baggage.

Caution: If your pump is exposed to these extreme ranges, there is a possibility the insulin in your pump will be damaged or destroyed. The insulin in the insulin reservoir may need to be replaced (see **Section 2.3**), and the infusion set changed. Please check with your healthcare professional.



11 Manage Your Diabetes Safely

This section provides detailed information related to the safe use of your companion and pump. It describes what the companion and pump are used for and what it must NEVER be used for. Review this section carefully. If you have any questions or concerns after reviewing this section, contact Customer Care or your healthcare professional for assistance.

Indication

The **FreeStyle Aviator Insulin Delivery and Blood Glucose Monitoring System** is intended for continuous delivery of insulin at set and variable rates and as an aid in the management of diabetes mellitus in persons requiring insulin. The **FreeStyle Aviator System** is also intended for the quantitative measurement of glucose in fresh whole capillary blood (in vitro). The system is available by prescription only.

Contraindications

The Aviator System is NOT intended for:

- People who are unwilling to consistently test their blood glucose levels at least 4 times a day.
- People who are unwilling to self-insert an infusion set every 2-3 days.
- People who don't want to work closely with their healthcare professional.
- People whose vision is impaired to the point where they **CANNOT** read the companion or pump's screen.
- People whose hearing is impaired to the point where they **CANNOT** hear the companion or pump's alarms.

Blood Glucose Testing

Your blood glucose levels should stay within the range determined by you and your healthcare professional. It is extremely important that you check your blood glucose levels regularly and often while using your insulin pump. In addition to this ongoing testing, your blood glucose level must also be tested:

• Whenever you stop your pump's operation for any length of time, as the insulin level in your blood will be depleted quickly and blood glucose levels will rise rapidly when the pump is stopped.

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- Within 1-3 hours of replacing the insulin reservoir and/or inserting/attaching a new infusion set.
- More frequently during times of illness, injury or stress.
- When you first start pump therapy and are adjusting your basal rates.
- When changing insulin dosages.

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Refer to **Section 5** for more information about testing your blood glucose using your integrated **Aviator Companion Blood Glucose Meter**.

Two Consecutive High Blood Glucose Readings despite the

Administration of a Correction Bolus

If you get two consecutive unexplainable high blood glucose readings while on pump therapy, do the following:

- 1. If your healthcare professional plan calls for a correction bolus, follow the recommendations for administering the correction bolus.
- 2. Check for ketones, if your healthcare professional instructed you to do so.
- 3. Evaluate your pump and infusion set for loose connections or insulin leakage.
- 4. Check your pump programming to confirm you are receiving your expected basal rate dose.
- 5. Check bolus history to ensure you have received your last several boluses.
- 6. Check your daily total insulin amount to make sure that you are on track with the amount of insulin you have been using.
- 7. Inspect your tubing for air bubbles. Check to see if it is connected to your site correctly and that your site has **NOT** accidentally become dislodged.
- 8. Evaluate other causes of unexpected high blood sugars:
 - Are you sick?
 - Have you had a change in your physical condition (pain, menses, surgery, illness)?
 - Has your insulin been exposed to higher temperatures in the day or hours leading up to these higher levels?
 - Have you recently started taking a medication that could be causing your blood sugar to be high?
 - Have you encountered additional personal or physical stress in the hours leading up to this episode?
- 9. If there is **NO** clear reason for the high blood sugars, then it is recommended that you disconnect your infusion set from your body, throw away the set, tubing, and reservoir of insulin. Fill a new reservoir with fresh insulin, prime your system, and reinsert a new set into a different area of your body. Continue to measure your blood glucose levels every 1 to 3 hours after the new insertion to insure your blood glucose levels return to your normal levels.
- 10. If in doubt with any step, contact your healthcare professional for guidance.

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FreeStyle Aviator Safety Features

A number of advanced safety features are incorporated into the Aviator Pump. Some of the more important features are listed in the table below.

Safety Feature	What It Does	To Set the Safety Feature or for More Information
Maximum Bolus	Limits the size of your bolus, so you don't accidentally give yourself too much insulin in a single bolus (protects from over-infusion).	See Section 6
Maximum Basal Rate	Limits your basal insulin delivery, so you don't accidentally set a basal rate that is too high (protects from over-infusion).	See Section 6
Bolus Calculator	Allows you to easily calculate an insulin bolus. Clearly shows you the data used to determine units to deliver (protects from over- or underinfusion). Also allows you to adjust a bolus.	See Section 6
Speaker Backups	The Aviator Pump has a set of backup speakers to make sure the audio tones are heard.	N/A

Essentials for Safe and Effective Use

In order to use your FreeStyle Aviator System safely and effectively, you will need:

- Support from and close contact with your healthcare professional trained in the use of insulin pumps.
- A commitment to follow-up appointments for continuing care.
- An understanding of the basic principles of diabetes care.
- An understanding of basal and bolus insulin use.
- Dedication to frequent blood glucose testing: 4 or more times per day and appropriate actions based on testing
- A backup plan of insulin administration, in case of interruption of pump usage.

Potential Risks Connected with Pump Therapy

Complications can arise as a result of pump therapy if you are NOT attentive to routine glucose testing and evaluation. These risks include:

- Frequent or severe hypoglycemia.
- Diabetic Ketoacidosis (DKA).
- Infections where you insert your cannula for insulin delivery.

The best way to avoid any risk while using the pump is to be prepared with a written plan from your healthcare professional to deal with each risk. Each risk has specific ways your healthcare professional can instruct you to lessen the risk. Frequent glucose monitoring and taking action with the results will also protect you from undetected high or low blood glucose.

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Infections

Ways to avoid the potential for infection:

- Always clean the intended insertion site with soap and warm water or a solution suggested by your healthcare professional.
- Do **NOT** blow on your site to help it dry after you clean it. You may transfer germs from your mouth and/or lungs onto your skin. These germs then enter your skin when you insert the cannula.
- Be diligent in changing your infusion set at least every 3 days. Do **NOT** use your infusion set for long periods of time. This will increase your chance for infection and may potentially eliminate the site from future use.

Other points about your infusion site:

- Select infusion sites away from scarred or infected areas, and rotate infusion site locations regularly.
- When you remove your infusion set, there may be some clear drainage or a small "bump" under the surface of the skin where the cannula is inserted. The bump should heal and go away over a few days. If it becomes worse, check with your healthcare professional for any infection.
- Your infusion site should never have any type of cloudy, smelly, or colored drainage.
- There may be slight redness around the site from your adhesive tape but there should **NOT** be a ring of reddened skin around the infusion site.
- Your site should **NOT** be tender or hurt. If you notice any drainage, redness, hot to the touch, tenderness or lumps at the infusion site, you need to contact your healthcare professional immediately. They will help you address the problem quickly so you avoid additional problems of infection moving to another area of tissue. Most commonly, a mild antibiotic is prescribed to help cure the infection.
- When inserting a new infusion set, avoid inserting within 2 inches of a site that had been infected. Failure to do so could result in further infection, DKA and/or high blood glucose due to absorption issues. If you have guestions, contact your healthcare professional.

Hypoglycemia

Hypoglycemia, or low blood sugar, occurs when your blood glucose level falls below the lower limit of your established safe blood glucose range. Symptoms of hypoglycemia include:

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- Feeling light-headed, dizzy, confused, sleepy, weak, nervous, and/or hungry.
- Shakiness.
- Excessive perspiration.

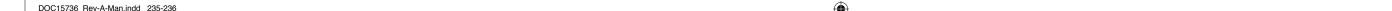
Common causes of hypoglycemia include:

- Too much insulin.
- Skipping a meal (or eating a meal that is smaller than you anticipated).
- Heavy exercise or a higher-than-normal activity level.
- Excessive consumption of alcohol.









If you are experiencing any of the symptoms of hypoglycemia, you should test your blood glucose level. If it is below your lower blood glucose target, follow the "Rule of 15."

- 1. Eat approximately **15 grams** of simple carbohydrate (1/2 cup fruit juice or sweetened soda, 3-4 glucose tablets or glucose gel). **NO** fat should be in the foods used to treat hypoglycemia to make them fast to absorb.
- 2. Wait 15 minutes and then check your blood glucose level again.
- 3. If your blood glucose level is still too low, repeat steps 1 and 2 until your blood glucose level measures within your acceptable range.
- 4. Once your blood glucose level is normalized, resume your usual meal and snack schedule. If you will **NOT** be eating a meal within an hour, you should consider having a snack.

Severe hypoglycemia may require an injection of the hormone glucagon. You should have a Glucagon Emergency Kit as part of your emergency kit. Your *entire* emergency kit should be kept with you at all times. You should let family members, co-workers, and close friends know where it is and how to use it. Ask your healthcare professional how to use glucagon.

Note: You should talk with your healthcare professional if you are experiencing hypoglycemia frequently.

Hyperglycemia

Hyperglycemia, or high blood sugar, occurs when your blood glucose level is higher than the upper limit of the blood glucose range set by you and your healthcare professional.

Possible symptoms of hyperglycemia are:

- An increased hunger or thirst.
- A need to urinate frequently.
- Blurred vision.

Possible reasons for hyperglycemia are:

- 1. Interrupted insulin delivery due to:
 - Occlusion in the tubing or infusion set.
 - The tubing has tangles or kinks.
 - The insulin reservoir is empty.
 - The infusion set or cannula is dislodged.
- 2. Under delivery of insulin.
 - Check to see if you are receiving your expected basal rate dose.
 - Check your bolus history.
 - Check your total daily insulin delivered.
 - Your basal or bolus doses may need to be adjusted.
- 3. Eating more carbohydrates than you anticipated or was aware of.
- 4. Illness, infection, stress, menses, less activity or exercise.

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- 5. Insulin has gone bad (e.g. exposed to high temperature, expired.)
- 6. Taking a medication that raises blood glucose. (Check with your healthcare professional or pharmacist).

Possible interventions:

- Use your pump to administer a correction bolus (see **Section 8**). Test your blood glucose level again after an hour.
- If you think the companion or pump is **NOT** functioning properly, you need to disconnect from the pump and administer insulin using an alternate delivery method. Call Customer Care to report the problem with your pump.
- If you think there is a problem with the tubing or infusion set, remove the old infusion set from the pump and replace with a new infusion set. Follow the instructions for priming and reinsertion (See **Section 2.4** and your infusion set's Instructions for Use).
- If you are unable to determine the reason for your hyperglycemia and are unable to correct it, call your health-care professional.
- If your blood glucose level is very high, you should check your urine or blood for ketones and follow the advice of your healthcare professional.

Diabetic Ketoacidosis

Diabetic Ketoacidosis (DKA) can develop if your blood glucose levels have been too high for a period of time. DKA is different from hyperglycemia in that in addition to an elevated blood glucose level, your body is producing ketones, which change the pH (acidity) of your blood.

DKA is **extremely** serious, and requires immediate treatment by your healthcare professional. Contact your healthcare professional **immediately** if you suspect DKA. DKA can be life threatening.

How long it takes to develop DKA is based on the individual. No matter what your particular situation, once insulin delivery stops (from a clog, dislocation of your infusion set, disconnecting and forgetting to reconnect), within **3-5 hours** (the duration of action of the insulin used in your pump) you will be insulin deficient.

If you do **NOT** restore insulin delivery, you are at risk of even higher blood glucose levels and the development of ketones, which, if left untreated, can lead to the life-threatening consequences of DKA.

It is **VERY IMPORTANT** that any time you discover insulin delivery has been disrupted, you should **immediately** test your urine or blood for ketones.

Follow the plan you and your healthcare provider have designed.

Symptoms of DKA, which can be mistaken for flu-like symptoms, include:

- Headache.
- Stomach ache.
- Fruity odor on breath.
- Very dry mouth.
- Shortness of breath.
- Nausea/vomiting.





Possible causes of DKA include:

- Improper use of insulin.
- Infection or illness.
- Stress.

Your risk of DKA is lessened if you follow these guidelines:

- Work with your healthcare professional to make sure your pump is programmed properly, that you know how to use your pump, and that your selected bolus and basal insulin doses are appropriate.
- Always have insulin and reservoirs available.
- Keep your emergency kit with backup insulin supplies with you at all times.
- Monitor your blood glucose level closely when you are ill or during periods of high activity or stress.

Talk with your healthcare professional if you have any questions about DKA or what you can do to prevent it.

How Illness Affects Blood Glucose Levels

Infection or illness is usually accompanied by higher than normal blood glucose levels (hyperglycemia). Your insulin needs will most likely increase when you are ill. Follow these guidelines:

- Insulin must be taken when you are ill; contact your healthcare professional for specific advice, but do **NOT** stop taking basal insulin, even if you feel too sick to eat.
- Check your blood glucose level every 2-4 hours.
- Check your blood or urine for ketones;

Your insulin pump can be programmed with a basal insulin pattern that can be used when you are ill (see **Section 7**); you may want to talk with your healthcare professional about this option.

Sick Day Management

When you are sick, your body's stress level increases. The body produces hormones to help fight off the sickness. However, there are side effects: blood glucose levels increase and insulin's ability to lower blood glucose levels decrease. In this situation, blood glucose levels are much more difficult to keep in your target range, which could lead to DKA.

You need to plan ahead, work with your healthcare professional, and prepare a sick day plan in advance. The plan should include:

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- When to call your healthcare team.
- How often to test blood glucose.
- When and how often to test for ketones.
- What medicines to take.
- A plan for eating.
- Contact numbers for your healthcare team.



How Exercise Affects Blood Glucose Levels

Exercise can help lower blood glucose levels. The more active you are, the more dramatic this lowering will be. When starting or stopping an exercise program (or increasing or decreasing your level of activity), you may have to adjust your basal rates. Your food intake may also need to be adjusted.

Your insulin pump can be programmed with a basal insulin pattern or a temporary basal rate that can be used on days you are exercising (see **Section 7.6**). You may want to talk with your healthcare professional about this option or any other questions you may have about how exercise affects your blood glucose levels and insulin needs. In addition, there are other resources that may be helpful to understand the impact of exercise on your diabetes. See the **Resources** section of this User Guide for additional resources on exercise and diabetes.

Your Daily Kit

- You must have a backup plan in case something goes wrong with your pump or you have a medical emergency. Keep a daily kit with you at all times. Let family members, co-workers, and close friends know where it is and how to use it. Your kit should include:
- Blood glucose monitoring supplies.
- Ketone monitoring supplies.
- Glucose tablets/gel or liquid or other sources of carbohydrate to treat a low glucose.
- A Glucagon Emergency Kit (Glucagon Emergency Kits have an expiration date; check frequently to make sure your kit has **NOT** expired).
- An extra insulin infusion set.
- An extra unopened pump reservoir.
- An extra AAA alkaline battery.
- Dressings and adhesives.
- Spare battery cap.
- Insulin syringe and short or rapid-acting insulin vial or insulin pen. Remember, insulin is sensitive to temperature extremes. Replace your spare insulin monthly.

Discontinuing Pump Use

If you and your healthcare professional determine that stopping pump therapy makes sense, you must be prepared to switch to an alternate insulin therapy method.

Medical Procedures

You may need to suspend pump use for/during certain medical procedures. Keep these points in mind:

- Do **NOT** expose your companion or pump to MRI, X-ray, CAT scan, or ultrasound equipment. **ALWAYS** disconnect your companion and pump and store it away from the machines. Do **NOT** bring the companion and/or pump into the procedure room at any time.
- Talk with your healthcare professional about whether or **NOT** you should use your pump during outpatient procedures, hospitalizations, surgeries, or ER visits.

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Appendix A: Table of Settings

Frequently Asked Questions

Q. How do I obtain supplies for my pump?

A. Supplies for the **Aviator Pump** can be obtained by calling Customer Care.

Q. When a question or problem arises, should I call Customer Care or my healthcare provider?

A. In general, if you have a question about the programming or operation of your pump, you should call Customer Care. If you have a question about your personal insulin therapy, treatment plan, or diabetes management, you should contact your healthcare professional.

Q. Should I insure my pump?

A. Contact your insurance provider to see if they offer coverage.

Q. Is it okay to take a break from pump therapy?

A. Consult your healthcare professional before changing or stopping pump therapy. If you take a break from pump therapy, you must switch back to injecting insulin. Be sure to administer insulin for meals and to cover basal insulin requirements.

Q. Is a pump support group worthwhile?

A. Many people find a pump support group helpful. It can be a place to go where you can discuss pump therapy with – and be supported by – your peers. If you are interested in a pump support group, ask your healthcare professional.

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12 Appendices

A. Table of Settings

Everyone has different insulin requirements and pump preferences. Before you begin using your pump, you will need to work with your healthcare professional to determine the correct pump settings to meet your individual needs.

It is important to keep your personal settings charts updated. Remember to record any changes recommended by your healthcare professional.

The table below provides the options available as well as the factory default setting.

1. Pump Settings

Record your pump settings here for future reference:

SETUP WIZARD: Language, Time/Date, and Insulin Settings

Setting	What it Allows You to Do	Options Available	Factory Default	Your Setting
Language	Set the language your pump will use for its text instructions.	English	English	English
Time/Date Form	at			
Time	Select the time format.	12-hour (e.g., 1 PM will appear as 1:00 PM) or 24-hour (e.g., 1 PM will appear as 13:00).	12 hour	
Date	Select the date format.	Month/day/year or day/month/year	Mmm dd, yyyy	
Current Time	Set the time.	N/A		N/A
Current Date	Set the date.	N/A		N/A
Insulin				
Concentration	The insulin concentration on your pump is fixed at U100.	U100	U100	





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Appendix A: Table of Settings

Setting	What it Allows You to Do	Options Available	Factory Default	Your Setting
Туре	Select the type of insulin you will be using in your pump.	Rapid or short	Rapid	
Action Time	Set the action time of the insulin you will be using in your pump.	2 to 8 hours	5 hours 00 minutes	
SETUP WIZARD:	Bolus and Basal Settings			
Bolus Limits				
Increment	Set the increments (in Units) of insulin that may be programmed for a bolus.	0.05U, 0.1U, 0.5U, or 1.0U	0.1U	
Maximum	Set the maximum programmable amount of insulin for a single bolus.	0.1 - 50.0 when increment =>0.1 units 0.05 - 9.95 when increment = 0.05 units	10.0U	
One-Button Bol	us			
On/Off	Turn the one-button bolus function on or off.	On/Off	Off	
Increment	Set the One-Button bolus increment (how much each button press increases the bolus amount).	0.5U or 1.0U	If One-Button is "off", there is no option. If set to "on", 0.5U	
Bolus Calculator				
Carb Ratios	Select the amount of bolus insulin needed to handle each gram of carbohydrate you plan to eat, for up to 24 different time blocks.	1-150 (1U/1g- 1U/150g)		

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Appendix A: Table of Settings

Setting	What it Allows You to Do	Options Available	Factory Default	Your Setting
1 U Drop	Set how much 1U of	5 - 500 mg/dL		
	insulin will lower your blood glucose level, for up to 24 different time blocks.	(0.28 – 27.8 mmol/L)		
Blood Glucose Ra	ange			
Blood Glucose	Set the values for your	50-300 mg/dL	110 mg/dL	
Targets	blood glucose targets for up to 24 different time blocks.	(2.8 – 16.7 mmol/L)	(6.1 mmol/L)	
Basal Settings				
Increment	Select the increment for changes in basal insulin delivery rates	0.05 U/h, 0.10 U/h, 0.50 U/h, or 1.00 U/h	0.05 U/h	
Maximum	Select the maximum amount of insulin to be used for hourly basal insulin delivery rates.	0.05 U/h to 30.00 U/h	2.00 U/h	
Temporary	Set the format used to program a temporary basal rate in either absolute Units or as a percentage of the programmed basal rate.	Units or Percent	Percent	
SETUP WIZARD:	Feedback and Alerts/Alarm	ns		<u>'</u>
Pump Feedback	Options			
Feedback	Set your pump to give either audio (beeps) or vibratory signals.	Audio or Vibrate	Audio	

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Appendix A: Table of Settings

Set the volume of	Lave Madiena		1
auditory alerts. Note: All vibrations are at the same intensity.	Low, Medium, or High	If audio is selected, "High"	
lback Options			
Set your Companion to give audio (beeps) and/ or vibratory signals and progress tones.	Audio and/or Vibrate	Audio	
Set the volume of auditory alerts.	Low, Medium, or High	If audio is selected, "Low"	
Set the length of vibratory alerts.	Long, Medium, or Short	If audio is selected, "Long"	
Set the volume of progress tones.	Low, Medium, or High	If audio is selected, "Low"	
Set the level of sensitivity of the Occlusion Alarm.	Low or High	High	
	at the same intensity. Iback Options Set your Companion to give audio (beeps) and/ or vibratory signals and progress tones. Set the volume of auditory alerts. Set the length of vibratory alerts. Set the volume of progress tones.	at the same intensity. Set your Companion to give audio (beeps) and/or vibratory signals and progress tones. Set the volume of auditory alerts. Low, Medium, or High	Audio and/or Vibrate give audio (beeps) and/or vibratory signals and progress tones. Set the volume of auditory alerts. Set the length of vibratory alerts. Low, Medium, or High Long, Medium, or Short Selected, "Low" Set the volume of progress tones. Low, Medium, or Short If audio is selected, "Long" Long, Medium, or High Set the volume of progress tones. Low, Medium, or High High

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Appendix A: Table of Settings

Setting	What it Allows You to Do	Options Available	Factory Default	Your Setting
Low Insulin Alei	rt			
Low Alert	Select the insulin level that will trigger the Low Insulin Alert.	5 – 50U	20U	
Inactivity Alarm	1			
Inactivity	Set the time of the Inactivity Alarm.	1 – 24 hr	1 hr	
SETUP WIZARD:	Display and Locked Items S	Settings		
Display Settings	S			
Buttons	Invert the screen to suit your hand preference (right or left handed).	On Right/On Left	Right	
Timeout	Set the amount of time the display may remain idle before reverting to the "idle" screen.	15 - 120 seconds	15 seconds	
Home	Select the Home screen display format.	Information or Activity	Information	
Cursor	Select how highlighted options will appear.	Highlight or Outline	Highlight	
Contrast	Select the contrast of the companion display. (this setting is only available on the Companion)	0 - 2	2	
Magnify	Select whether highlighted options will be magnified in larger font size. (This setting is only available on the pump)	On or Off	On	



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Appendix A: Table of Settings

Setting	What it Allows You to Do	Options Available	Factory Default	Your Setting
Locked Items Note: Locked item	ns can only be accessed thro	ugh the SETUP WIZARD).	
Basal	Lock or unlock basal functions on the pump (select, edit, create, delete, rename program).	Unlocked or Locked	Unlocked	
Bolus	Lock or unlock bolus functions on the pump (One-Button Bolus, Food and Correction Bolus, Correction Bolus, Food Bolus, Manual Bolus).	Unlocked or Locked	Unlocked	
Prime	Lock or unlock prime functions on the pump (tubing, cannula).	Unlocked or Locked	Unlocked	
Therapy Lockou Note: Therapy Lo	t ckout is only available on the	Companion.		
Therapy Lockout	Disable access to start/ stop delivery features on the Companion including Basal and Bolus.	On or Off	Off	
Duration	Set the lockout duration.	Once or Always	If "On" is selected duration is "Once"	

Section 12: Appendices Appendix A: Table of Settings

2. Personal Settings

Record your personal settings here for future reference:

Standard Daily Basal Rates

Basal Rate Start Time	Basal Rate (Units/h)

Basal Rates: Alternate Pattern 1 (for example workout days)

Use these basal rates when

Basal Rate Start Time	Basal Rate (Units/h)	



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Section 12: Appendices

Appendix B: SETUP WIZARD Default Configuration and Settings
Basal Rates: Alternate Pattern 2

Use t	hese	basal	rates	when
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Basal Rate Start Time	Basal Rate (Units/h)

Basal Rates: Alternate Pattern 3

Use these basal rates when _

Basal Rate Start Time	Basal Rate (Units/h)

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Appendix B: SETUP WIZARD Default Configuration and Settings

Temporary Basal Settings

For detailed information about setting a To

For detailed information about setting a Temporary Basal, see Section 7.6.	
When to use Temporary Basal:	
What to set Temporary Basal at (indicate if this is a percentage of your standard basal pattern or a specif	ic Unit rate):
Bolus Settings	
For detailed information about Bolus programming, see Section 8.	
When to use a Normal bolus:	
When to use an Extended bolus:	
When to use a Dual bolus:	
When to use the One-Button Bolus function:	
3. Other Information	
Record any additional instructions from your healthcare professional below.	



Section 12: Appendices Appendix B: SETUP WIZARD Default Configuration and Settings B. SETUP WIZARD Default Configuration and Settings

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Wizard Step	ltem	Screen	Default Config	Valid Values	Increment
1	Language	SELECT LANGUAGE	English	VALUE CANNOT BE CHANGED	N/A
1	Time	TIME/DATE FORMAT	12 Hour	"12 Hour,""24 Hour"	N/A
1	Date	TIME/DATE FORMAT	Mmm dd, уууу	"Mmm dd, yyyy", "dd Mmm yyyy"	N/A
1	Hour	SET TIME		01 – 12 (12hr); 00 – 23 (24hr)	1
1	Minute	SET TIME		00 – 59	1
1	AM/ PM	SET TIME	AM	"AM", " PM"	N/A
1	Month	SET DATE		"Jan", "Feb", "Mar", "Apr", "May", "Jun", "Jul", "Aug", "Sep", "Oct", "Nov", "Dec"	N/A
1	Day	SET DATE		01 – 31	1
1	Year	SET DATE		2007 – 2049	1
1	Туре	INSULIN PROFILE	Rapid	"Rapid", "Short"	N/A
1	Action Time	INSULIN PROFILE	5h 00m	2h 00m – 8h 00m	15 (min)
1	Time	INACTIVITY ALARM	h	1 – 24 (always On)	1
2	Buttons	DISPLAY	on Right	"on Right", "on Left"	N/A
2	Timeout	DISPLAY	15 Sec	15 – 120	15
2	Home	DISPLAY	Information	"Information", "Activity"	N/A
2	Cursor	EDIT MODE	Highlight	"Highlight", "Outline"	N/A
2	Magnify	EDIT MODE	On	"On", "Off"	N/A
3	Time, 1U Drop	1U DROP		24 blocks of time allowed 5 – 500 mg/dL (0.28 – 27.8 mmol/L) Programming starting value: 50 in one unit increments	1 hour 1
3	Time, I:CHO	CARB RATIOS		24 blocks of time allowed 1 – 150 (1U/1g – 1U/150g) Programming starting value: 1U/15g Carbs – 1 – 200 grams	1 hour 1 1
3	Time, mg/dL	BG TARGETS		24 blocks of time allowed 50 – 300 mg/dL (2.8 – 16.7 mmol/L) Default value is 110 mg/dL (6.1 mmol/L)	1 hour 2
4	Increment	BOLUS LIMITS	0.1 U	"0.5 U","1.0 U"	N/A
4	Maximum	BOLUS LIMITS	10.0 U	0.1 –50.0 when increment => 0.1 units 0.05 – 9.95 when increment = 0.05	= Increment



Section 12: Appendices Appendix C: Device Specifications – Companion

Wizard Step	ltem	Screen	Default Config	Valid Values	Increment
4	On/Off	ONE-BUTTON BOLUS	On	"Off", "On"	N/A
4	Increment	ONE-BUTTON BOLUS Enabled	0.5 U	0.5 or 1.0 (0.5 or 1.0)	0.5
4	Increment	BASAL LIMITS	0.05 U/h	"0.05 U/h", "0.10 U/h", "0.50 U/h", "1.00 U/h"	N/A
4	Maximum	BASAL LIMITS	2.00 U/h	0.05 – 30.00	.05
4	Temp	BASAL SETUP	Percent	"Units", "Percent"	N/A
5	Pump	AUDIO/VIBE	Audio	"Audio", "Vibrate"	N/A
5	Audio	AUDIO/VIBE	High	"Medium", "High", "Low"	N/A
5	Sensitivity	OCCLUSION ALARM	High	"High", "Low"	N/A
5	Low Alert	LOW INSULIN ALERT	20 U	5 – 50	5
6	Basal	LOCKED ITEMS	Unlocked	"Unlocked", "Locked"	N/A
6	Bolus	LOCKED ITEMS	Unlocked	"Unlocked", "Locked"	N/A
6	Prime	LOCKED ITEMS	Unlocked	"Unlocked", "Locked"	N/A
7	Time	Add Block 1	12:00 a.m.	12:00 a.m. – 11:30 p.m.	30 (min)
7	Rate	Add Block 1		0.00 – Max Limit (user programmable)	user programmable
7	Time	Add Block n+1		Time of Block n +:30 – 11:30 p.m. (or 23:30 for 24 hour)	30 (min)
7	Rate	Add Block n+1		0.00 – Max Limit (user programmable)	user programmable



Section 12: Appendices Appendix D: Device Specifications - Pump Other Preferences That are Not Part of the Wizard

Menu	ltem	Screen	Default Config	Valid Values	Increment
REMINDERS	Reminders 1 – 6 On/Off		Off	"On,""Off"	N/A
REMINDERS	Reminders 1 – 6 Message		Test	"Test", "Wakeup", "Basal", "Bolus", "Exercise", "Meeting", "Pickup", "Snack", "Meds"	N/A
REMINDERS	Disable All	Care Comments	On	"On", "Off"	N/A
REMINDERS	On/Off	Insulin Temp Care Comments	Off	"Off", "On"	N/A
REMINDERS	On/Off	Site Change Care Comments	Off	"Off", "On"	N/A
REMINDERS	Frequency	Site Change Care Comments	2.0 days	2.0, 2.5, 3.0	N/A
REMINDERS	On/Off	Check BG Care Comment	Off	"Off", "On"	N/A





Section 12: Appendices
Appendix D: Device Specifications – Pump

C. Device Specifications – Companion

Assay Method (FreeStyle Lite Blood Glucose meter): Coulometric electrochemical sensor memeter): Automatic shutoff: User settable up to two minutes after last user action Calibration (FreeStyle Lite Blood Glucose meter): Plasma equivalent Hematocrit (FreeStyle Lite Blood Glucose meter): 15% to 65% Measurement Units: Either mg/dL or mmol/L Result Range (FreeStyle Lite Blood Glucose meter): Whole blood, capillary Sample size (FreeStyle Lite Blood Glucose meter): Whole blood, capillary Sample size (FreeStyle Lite Blood Glucose meter): Average of 5 seconds Dimensions: 3.89 X 2.44 x 0.63" (99 X 62 X 16 mm) Display Type: • Dot graphic Display Wewable Dimensions: 1.77 x 1.28" (45 X 32.5 mm) Display Universidate Dimensions: 1.77 x 1.28" (45 X 32.5 mm) Display Backlight: Yes Weight: 2.6 oz (75 grams) Companion Battery: Lithium polymer, 3.7V 690mAh Battery Life: 3 days The expected life of the battery is dependant upon the following usage: -5 blood glucose readings per day: -1 but is (10) to 0.5 bluese per day with total daily bolus delivery of 24 Units (Units (Uni		•
Calibration (FreeStyle Lite Blood Glucose meter): Plasma equivalent Hematocrit (FreeStyle Lite Blood Glucose meter): 15% to 65% Measurement Units: Either mg/dL or mmol/L Result Range (FreeStyle Lite Blood Glucose meter): 20 to 500 mg/dL (1.1 to 27.8 mmol/L) Sample (FreeStyle Lite Blood Glucose meter): Whole blood, capillary Sample size (FreeStyle Lite Blood Glucose meter): Average of 5 seconds Dimensions: 3.89 X 2.44 x 0.63" (99 X 62 X 16 mm) Display Type: • Dot graphic Display Viewable Dimensions: 1.77 x 1.28" (45 X 32.5 mm) Display Backlight: Yes Audio/Vibe Alert: Yes Weight: 2.6 oz (75 grams) Companion Battery: Lithium polymer, 3.7V 690mAh Battery Life: 3 days The expected life of the battery is dependant upon the following usage: - 5 boluces per day with total daily bolus delivery of 24 Units (U100) - 8asal delivery of TU/h (U100) 24 hr/day, 7 days/week - Prime of 20 Units (U100) 2ccurs 3 times per week 5 blood glucose readings per day - Enter and log 8 events per day - Data transfer to CoPilot three times per month Memory: 90 days worth of events. All events can be seen if downloaded to a PC. Water Resistance: None Operational Conditions (Temperature, Humidity and Pressu		Coulometric electrochemical sensor
Hematocrit (FreeStyle Lite Blood Glucose meter): 15% to 65%	Automatic shutoff:	User settable up to two minutes after last user action
Measurement Units: Either mg/dL or mmol/L Result Range (FreeStyle Lite Blood Glucose meter): 20 to 500 mg/dL (1.1 to 27.8 mmol/L) Sample (FreeStyle Lite Blood Glucose meter): Whole blood, capillary Sample size (FreeStyle Lite Blood Glucose meter): 0.3 microlitre (300 nanolitres) Test time (FreeStyle Lite Blood Glucose meter): Average of 5 seconds Dimensions: 3.89 X 2.44 x 0.63° (99 X 62 X 16 mm) Display Type: • Dot graphic Display Viewable Dimensions: 1.77 x 1.28" (45 X 32.5 mm) Display Backlight: Yes Weight: 2.6 oz (75 grams) Companion Battery: Lithium polymer, 3.7V 690mAh Battery Life: 3 days The expected life of the battery is dependant upon the following usage:	Calibration (FreeStyle Lite Blood Glucose meter):	Plasma equivalent
Result Range (FreeStyle Lite Blood Glucose meter): Sample (FreeStyle Lite Blood Glucose meter): Sample size (FreeStyle Lite Blood Glucose meter): Test time (FreeStyle Lite Blood Glucose meter): Display Type: Display Type: Display Viewable Dimensions: 1.77 x 1.28" (45 X 32.5 mm) Display Backlight: Ves Audio/Vibe Alert: Weight: Companion Battery: Lithium polymer, 3.7V 690mAh Battery Life: Battery Life: Battery Life: Battery Life: None Operational Conditions (Temperature, Humidity and Pressure): None Operational Conditions (Temperature, Humidity and Pressure): Shipping container for 1 year at -4 - 113"F, average temperature at 72.5"F (-20"C to 45"C, average temperature at 22.5"C) with 10% to 90% relative humidity non-condensing. Data Storage Time: The Companion has the ability to store a minimum of 90 days of	Hematocrit (FreeStyle Lite Blood Glucose meter):	15% to 65%
meter): Sample (FreeStyle Lite Blood Glucose meter): Whole blood, capillary Sample size (FreeStyle Lite Blood Glucose meter): 0.3 microlitre (300 nanolitres) Test time (FreeStyle Lite Blood Glucose meter): Average of 5 seconds Dimensions: 3.89 X 2.44 x 0.63" (99 X 62 X 16 mm) Display Type: • Dot graphic Display Viewable Dimensions: 1.77 x 1.28" (45 X 32.5 mm) Display Backlight: Yes Audio/Vibe Alert: Yes Weight: 2.6 oz (75 grams) Companion Battery: Lithium polymer, 3.7V 690mAh Battery Life: 3 days The expected life of the battery is dependant upon the following usage: 	Measurement Units:	Either mg/dL or mmol/L
Sample size (FreeStyle Lite Blood Glucose meter): Test time (FreeStyle Lite Blood Glucose meter): Average of 5 seconds 3.89 X 2.44 x 0.63" (99 X 62 X 16 mm) Display Type: • Dot graphic Display Viewable Dimensions: 1.77 x 1.28" (45 X 32.5 mm) Display Backlight: Yes Audio/Vibe Alert: Yes Companion Battery: Lithium polymer, 3.7V 690mAh Battery Life: 3 days The expected life of the battery is dependant upon the following usage: - 5 boluses per day with total daily bolus delivery of 24 Units (U100) - 5 basal delivery of 11/h (U100) 24 Hr/day, 7 days/week - Prime of 20 Units (U100) occurs 3 times per week 5 blood glucose readings per day - Enter and log 8 events per day - Data transfer to CoPilot three times per month Memory: Water Resistance: None Operational Conditions (Temperature, Humidity and Pressure): 41°F - 104°F (5°C to 40°C) with 10% to 90% relative humidity 14.7 psia - 10.2 psia (equivalent to an altitude of sea level to 10,000 feet [3048 meters] under standard atmospheric conditions) Storage Range Shipping container for 1 year at -4 - 113°F, average temperature at 72.5°F (-0°C to 45°C, average temperature at 22.5°C) with 10% to 90% relative humidity, non-condensing. Data Storage Time: The Companion has the ability to store a minimum of 90 days of		20 to 500 mg/dL (1.1 to 27.8 mmol/L)
meter): Test time (FreeStyle Lite Blood Glucose meter): Average of 5 seconds Dimensions: 3.89 X 2.44 x 0.63" (99 X 62 X 16 mm) Display Type: • Dot graphic Display Viewable Dimensions: 1.77 x 1.28" (45 X 32.5 mm) Display Backlight: Yes Audio/Vibe Alert: Yes Weight: 2.6 oz (75 grams) Companion Battery: Lithium polymer, 3.7V 690mAh Battery Life: 3 days The expected life of the battery is dependant upon the following usage: - 5 boluses per day with total daily bolus delivery of 24 Units (U100) - Basal delivery of 1U/h (U100) 24 hr/day, 7 days/week - Prime of 20 Units (U100) occurs 3 times per week. - 5 blood glucose readings per day - Enter and log 8 events per day - Data transfer to CoPilot three times per month Memory: 90 days worth of events. All events can be seen if downloaded to a PC. Water Resistance: None Operational Conditions (Temperature, Humidity and Pressure): 41°F - 104°F (5°C to 40°C) with 10% to 90% relative humidity 14.7 psia - 10.2 psia (equivalent to an altitude of sea level to 10,000 feet [3048 meters] under standard atmospheric conditions) Storage Range Shipping container for 1 year at -4 - 113°F, average temperature at 72.5°F (-20°C to 45°C, average temperature at 22.5°C) with 10% to 90% relat	Sample (FreeStyle Lite Blood Glucose meter):	Whole blood, capillary
Dimensions: 3.89 X 2.44 x 0.63" (99 X 62 X 16 mm) Display Type: • Dot graphic 1.77 x 1.28" (45 X 32.5 mm) Display Backlight: Audio/Vibe Alert: Wes Audio/Vibe Alert: Ves Weight: Companion Battery: Lithium polymer, 3.7V 690mAh Battery Life: 3 days The expected life of the battery is dependant upon the following usage: - 5 boluses per day with total daily bolus delivery of 24 Units (U100) - Basal delivery of 1U/h (U100) 24 hr/day, 7 days/week - Prime of 20 Units (U100) occurs 3 times per week 5 blood glucose readings per day - Data transfer to COPilot three times per month Memory: 90 days worth of events. All events can be seen if downloaded to a PC. Water Resistance: None Operational Conditions (Temperature, Humidity and Pressure): Storage Range 41°F - 104°F (5°C to 40°C) with 10% to 90% relative humidity 14.7 psia - 10.2 psia (equivalent to an altitude of sea level to 10,000 feet [3048 meters] under standard atmospheric conditions) Storage Range The Companion has the ability to store a minimum of 90 days of		0.3 microlitre (300 nanolitres)
Display Type: Display Viewable Dimensions: 1.77 x 1.28" (45 X 32.5 mm) Display Backlight: Yes Audio/Vibe Alert: Ves Weight: Companion Battery: Lithium polymer, 3.7V 690mAh Battery Life: 3 days The expected life of the battery is dependant upon the following usage: - 5 boluses per day with total daily bolus delivery of 24 Units (U100) - Basal delivery of 1U/h (U100) 24 hr/day, 7 days/week - Prime of 20 Units (U100) occurs 3 times per week 5 blood glucose readings per day - Enter and log 8 events per day - Data transfer to CoPilot three times per month Memory: 90 days worth of events. All events can be seen if downloaded to a PC. Water Resistance: None Operational Conditions (Temperature, Humidity and Pressure): 41°F - 104°F (5°C to 40°C) with 10% to 90% relative humidity 14.7 psia - 10.2 psia (equivalent to an altitude of sea level to 10,000 feet [3048 meters] under standard atmospheric conditions) Storage Range Shipping container for 1 year at -4 – 113°F, average temperature at 72.5°F (-20°C to 45°C, average temperature at 22.5°C) with 10% to 90% relative humidity, non-condensing. Data Storage Time: The Companion has the ability to store a minimum of 90 days of	Test time (FreeStyle Lite Blood Glucose meter):	Average of 5 seconds
Display Viewable Dimensions: 1.77 x 1.28" (45 X 32.5 mm) Ves Audio/Vibe Alert: Ves Weight: 2.6 oz (75 grams) Companion Battery: Lithium polymer, 3.7V 690mAh 3 days The expected life of the battery is dependant upon the following usage: - 5 boluses per day with total daily bolus delivery of 24 Units (U100) - Basal delivery of 1U/h (U100) 24 hr/day, 7 days/week - Prime of 20 Units (U100) occurs 3 times per week 5 blood glucose readings per day - Enter and log 8 events per day - Data transfer to CoPilot three times per month Memory: 90 days worth of events. All events can be seen if downloaded to a PC. Water Resistance: None Operational Conditions (Temperature, Humidity and Pressure): 41°F - 104°F (5°C to 40°C) with 10% to 90% relative humidity 14.7 psia - 10.2 psia (equivalent to an altitude of sea level to 10,000 feet [3048 meters] under standard atmospheric conditions) Storage Range Shipping container for 1 year at -4 - 113°F, average temperature at 72.5°F (-20°C to 45°C, average temperature at 22.5°C) with 10% to 90% relative humidity, non-condensing. Data Storage Time: The Companion has the ability to store a minimum of 90 days of	Dimensions:	3.89 X 2.44 x 0.63" (99 X 62 X 16 mm)
Display Backlight: Audio/Vibe Alert: Yes Weight: Companion Battery: Lithium polymer, 3.7V 690mAh Battery Life: Battery	Display Type:	Dot graphic
Audio/Vibe Alert: Yes Weight: 2.6 oz (75 grams) Companion Battery: Lithium polymer, 3.7V 690mAh Battery Life: 3 days	Display Viewable Dimensions:	1.77 x 1.28" (45 X 32.5 mm)
Weight: Companion Battery: Lithium polymer, 3.7V 690mAh 3 days The expected life of the battery is dependant upon the following usage: - 5 boluses per day with total daily bolus delivery of 24 Units (U100) - Basal delivery of 1U/h (U100) 24 hr/day, 7 days/week - Prime of 20 Units (U100) occurs 3 times per week 5 blood glucose readings per day - Enter and log 8 events per day - Data transfer to CoPilot three times per month Memory: 90 days worth of events. All events can be seen if downloaded to a PC. Water Resistance: None Operational Conditions (Temperature, Humidity and Pressure): 41°F - 104°F (5°C to 40°C) with 10% to 90% relative humidity 14.7 psia - 10.2 psia (equivalent to an altitude of sea level to 10,000 feet [3048 meters] under standard atmospheric conditions) Storage Range Shipping container for 1 year at -4 - 113°F, average temperature at 72.5°F (-20°C to 45°C, average temperature at 22.5°C) with 10% to 90% relative humidity, non-condensing. Data Storage Time: The Companion has the ability to store a minimum of 90 days of	Display Backlight:	Yes
Companion Battery: Lithium polymer, 3.7V 690mAh 3 days The expected life of the battery is dependant upon the following usage: - 5 boluses per day with total daily bolus delivery of 24 Units (U100) - Basal delivery of 1U/h (U100) 24 hr/day, 7 days/week - Prime of 20 Units (U100) occurs 3 times per week 5 blood glucose readings per day - Enter and log 8 events per day - Data transfer to CoPilot three times per month Memory: 90 days worth of events. All events can be seen if downloaded to a PC. Water Resistance: None Operational Conditions (Temperature, Humidity and Pressure): 41°F - 104°F (5°C to 40°C) with 10% to 90% relative humidity 14.7 psia - 10.2 psia (equivalent to an altitude of sea level to 10,000 feet [3048 meters] under standard atmospheric conditions) Storage Range Shipping container for 1 year at -4 – 113°F, average temperature at 72.5°F (-20°C to 45°C, average temperature at 22.5°C) with 10% to 90% relative humidity, non-condensing. Data Storage Time: The Companion has the ability to store a minimum of 90 days of	Audio/Vibe Alert:	Yes
Battery Life: 3 days The expected life of the battery is dependant upon the following usage: - 5 boluses per day with total daily bolus delivery of 24 Units (U100) - Basal delivery of 1U/h (U100) 24 hr/day, 7 days/week - Prime of 20 Units (U100) occurs 3 times per week 5 blood glucose readings per day - Enter and log 8 events per day - Data transfer to CoPilot three times per month Memory: 90 days worth of events. All events can be seen if downloaded to a PC. Water Resistance: None Operational Conditions (Temperature, Humidity and Pressure): 41°F - 104°F (5°C to 40°C) with 10% to 90% relative humidity 14.7 psia - 10.2 psia (equivalent to an altitude of sea level to 10,000 feet [3048 meters] under standard atmospheric conditions) Storage Range Shipping container for 1 year at -4 - 113°F, average temperature at 72.5°F (-20°C to 45°C, average temperature at 22.5°C) with 10% to 90% relative humidity, non-condensing. Data Storage Time: The Companion has the ability to store a minimum of 90 days of	Weight:	2.6 oz (75 grams)
The expected life of the battery is dependant upon the following usage: - 5 boluses per day with total daily bolus delivery of 24 Units (U100) - Basal delivery of 1U/h (U100) 24 hr/day, 7 days/week - Prime of 20 Units (U100) occurs 3 times per week. - 5 blood glucose readings per day - Enter and log 8 events per day - Data transfer to CoPilot three times per month Memory: 90 days worth of events. All events can be seen if downloaded to a PC. Water Resistance: None Operational Conditions (Temperature, Humidity and Pressure): 41°F – 104°F (5°C to 40°C) with 10% to 90% relative humidity 14.7 psia - 10.2 psia (equivalent to an altitude of sea level to 10,000 feet [3048 meters] under standard atmospheric conditions) Storage Range Shipping container for 1 year at -4 – 113°F, average temperature at 72.5°F (-20°C to 45°C, average temperature at 22.5°C) with 10% to 90% relative humidity, non-condensing. The Companion has the ability to store a minimum of 90 days of	Companion Battery:	Lithium polymer, 3.7V 690mAh
Water Resistance: None Operational Conditions (Temperature, Humidity and Pressure): 41°F – 104°F (5°C to 40°C) with 10% to 90% relative humidity 14.7 psia - 10.2 psia (equivalent to an altitude of sea level to 10,000 feet [3048 meters] under standard atmospheric conditions) Storage Range Shipping container for 1 year at -4 – 113°F, average temperature at 72.5°F (-20°C to 45°C, average temperature at 22.5°C) with 10% to 90% relative humidity, non-condensing. Data Storage Time: The Companion has the ability to store a minimum of 90 days of	Battery Life:	The expected life of the battery is dependant upon the following usage: - 5 boluses per day with total daily bolus delivery of 24 Units (U100) - Basal delivery of 1U/h (U100) 24 hr/day, 7 days/week - Prime of 20 Units (U100) occurs 3 times per week. - 5 blood glucose readings per day - Enter and log 8 events per day
Operational Conditions (Temperature, Humidity and Pressure): 41°F – 104°F (5°C to 40°C) with 10% to 90% relative humidity 14.7 psia - 10.2 psia (equivalent to an altitude of sea level to 10,000 feet [3048 meters] under standard atmospheric conditions) Storage Range Shipping container for 1 year at -4 – 113°F, average temperature at 72.5°F (-20°C to 45°C, average temperature at 22.5°C) with 10% to 90% relative humidity, non-condensing. Data Storage Time: The Companion has the ability to store a minimum of 90 days of	Memory:	90 days worth of events. All events can be seen if downloaded to a PC.
humidity 14.7 psia - 10.2 psia (equivalent to an altitude of sea level to 10,000 feet [3048 meters] under standard atmospheric conditions) Storage Range Shipping container for 1 year at -4 – 113°F, average temperature at 72.5°F (-20°C to 45°C, average temperature at 22.5°C) with 10% to 90% relative humidity, non-condensing. Data Storage Time: The Companion has the ability to store a minimum of 90 days of	Water Resistance:	None
(-20°C to 45°C, average temperature at 22.5°C) with 10% to 90% relative humidity, non-condensing. Data Storage Time: The Companion has the ability to store a minimum of 90 days of		humidity 14.7 psia - 10.2 psia (equivalent to an altitude of sea level to
	Storage Range	(-20°C to 45°C, average temperature at 22.5°C) with 10% to 90% relative
	Data Storage Time:	·

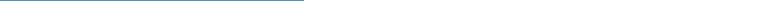


Section 12: Appendices Appendix E: FCC Compliance Information D. Device Specifications – Pump

•	•
Dimensions:	3.3 X 1.8 X 0.75" (84 X 46 X 19 mm)
Display Type:	Dot graphic
Display Viewable Dimensions:	0.97" X 0.76" (24.7 X 19.4 mm)
Display Backlight:	Yes
Audio/Vibe Alert:	Yes
Weight:	Without battery and reservoir/hub, weight is approximately 2.7 oz (76.5 g). Add battery and empty reservoir, weight is approximately 3.3 oz (93.6 g).
Reservoir:	Single use plastic reservoir
Reservoir Connection:	Proprietary secure connector
Basal Increment:	0.05 units
Total Basal Rates:	48/day
Basal Profile Configuration:	Numerical display
Basal Profiles:	4
Basal Interval:	30 minutes
Basal Frequency:	Every 3 minutes
Basal Rate Range:	0.05 to 30U/h
Temporary Basal:	+/- 10% increment between 0-200% for 0.05 to 30U/h* OR +/- 0.05 unit increment, single rate for 0.05 to 30U/h. You may set a temporary basal for up to 72 hours.
	* The minimum allowable percentage is equal to the minimum basal rate (0.05) divided by the lowest basal rate over the specified duration of the temporary basal that is greater than 0. (e.g. if the lowest basal rate greater than 0.0U over the duration is 0.20U, the minimum percentage is $25\% - 0.05/0.2 = 0.25$)
	The maximum allowable percentage is equal to the maximum basal limit (Setup: Basal Limits: Maximum) divided by the highest basal rate over the specified duration of the temporary basal, truncated to the nearest 10%. (e.g. if the highest basal rate over the duration is 1.35 U/h, and the maximum basal limit is 2.00 U/h, the maximum percentage is $140\% - 2.00/1.35 = 1.48$)
Bolus Dose Range:	0.05 to 50U
Bolus Increments:	0.05U, 0.1, 0.5 or 1.0 using One-Button Bolus (audio/vibrate)
Normal Bolus Delivery Rate:	At least 0.1U per second
Prime Deliver Rate:	At least 0.1U per second
Extended Bolus:	Yes
1 U Bolus Duration:	10 seconds typical
Inactivity Alarm:	Always on, 1 – 24 hours.



Maximum Time to Assert Occlusion Alarm:	Occlusion Alarm set to High Sensitivity			
	1 U/hr	Approximately 3 hrs	Approximately 6 hrs	
	0.05U/hr	Approximately 60 hrs	Approximately 120 hrs	
Occlusion Alarm Threshold/Pressure (Maximum Infusion Pressure)	25 psig (pounds per square in	ch gauge)		
Bolus Volume upon Release of an Occlusion	Approximately 2.0 units			
Pump Battery:	One AAA battery (Energizer Esthese companies have not bed		nmended). Other models from	
Battery Life:	30 days (in typical use cases) The expected life of the battery is dependent upon the following usage: Basal: 1 U/h (U100) 24 hr/day, 7 days/week Bolus: 5 boluses per day with a total daily bolus delivery of 24 Units (U100) Prime: 20 Units (U100) occurs three times a week			
Memory:	90 days worth of events; display shows last 30, remainder can be seen if downloaded to a PC			
Water Resistance:	Water resistant to IPX8			
Moisture Protection:	IPX8 (Water resistant to 8 feet [2.4 meters] for 30 minutes and 12 feet [3.6 meters] for 3 minutes)			
IEC Classification:	↑ Internally powered equip	ment, Type BF applied part (protection against electric shock)	
Reservoir Volume:	250U or 2.5 mL			
Operational Conditions (Temperature and Humidity):	41°F – 104°F (5°C to 40°C) with	n 10% to 90% relative humid	ity	
Storage Range:	Shipping container for 1 year at -4°F – 113°F, average temperature at 72.5°F (-20°C to 45°C, average temperature at 22.5°C) with 10% to 90% relative humidity.			
Accuracy:	Bolus Accuracy: $+0.1U$ / $-0.2U$ (or $+0.001$ ml/ -0.002 ml); for doses from 0.05U to 2U inclusive $+5\%$ / -10% ; for doses greater than 2U up to and including 6U $+5\%$ / -5% for doses greater than 6U Basal Accuracy: $+/-5\%$			
Data Storage:	The Pump has the ability to store a minimum of 2700 patient events in non-volatile memorism the expected life of the pump.			





Appendix G: Accuracy of Flow Rate

E. FCC Compliance Information

Model Number: PRT12354-xxx and PRT15751-xxx.

FCC Rules: Tested to comply with FCC Part 15, Class B, Security/Remote control Transmitter.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference.
- 2. This device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or locate the receiving antenna.
- Increase the separation between the equipment and transmitter.
- Consult the dealer or an experienced radio/TV technician for help.

The user is cautioned that changes or modifications not expressly approved by Abbott Diabetes Care may void the user's authority to operate this device.



Section 12: Appendices

Appendix G: Accuracy of Flow Rate

F. Electromagnetic Information

Electromagnetic Interference (EMI) from Radio Wave Sources

Battery powered insulin delivery devices such as the Abbott Diabetes Care Inc. **FreeStyle Aviator System** may be susceptible to electromagnetic interference (EMC) such as Radio and TV station towers, amateur radio (HAM) transmitters, two way radios, cell phones, Electronic Article Surveillance (EAS) systems and Radio Frequency Identification (RFID) systems. The interference from these electromagnetic field sources may cause the insulin pump to STOP delivery of the insulin or degrade the image on the companion and pump screens. It can also permanently damage the control system of the insulin delivery pump and companion.

Immunity Level

The intensity of the EMI can be measured in volts per meter (V/m). The immunity level of the **FreeStyle Aviator System** is 10 V/m as mandated by the standard, IEC 60601-2-24.

Some cellular telephones and similar products transmit signals while they are turned on, even when **NOT** being used.

EMC/EMI Declaration:

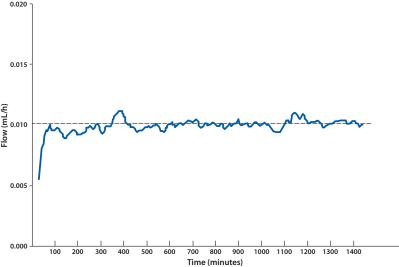
Reference Document Performance	CISPR 11	IEC 61000-4-2	IEC 61000-4-8
Criteria Required Performance	(Radiated Emissions) Group 1 Class B Pass	IEC 60601-2-24	IEC 60601-2-24
Criteria Met	N/A	(Electro Static Discharge) +/-8kV Direct, HCP and VCP Discharges +/-15KV Air Discharges Pass	(Magnetic Immunity) 400 A/m Pass





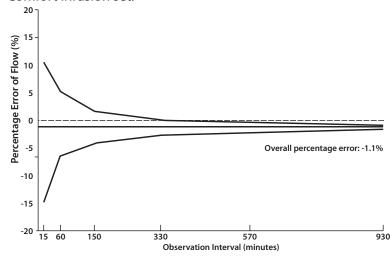
G. Accuracy of Flow Rate

This graph shows the flow rate during the stabilization period. Measurements were made at a basal rate of 1U/h, in accordance to IEC 60601-2-24:1998 using an Aviator Insulin Reservoir and a Unomedical Comfort infusion set.



This graph show the maximum errors observed for specific observation intervals. Measurements were made at a basal rate of 1U/h, in accordance to IEC 60601-2-24:1998 using an Aviator Insulin Reservoir and a Unomedical Comfort infusion set.

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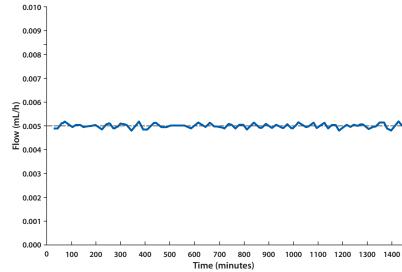


Section 12: Appendices

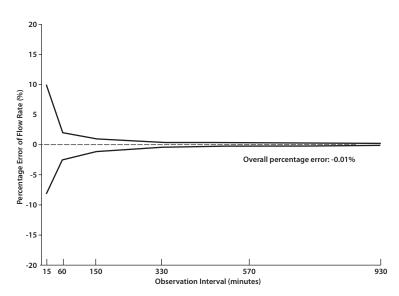
Appendix I: Aviator Menus - Companion

At the minimum rate of 0.05 U/h (0.0005 mL/h), setup errors associated with the IEC 60602-2-24 test are too large to accurately determine the flow rate of the pump. An alternate test method was used which determines delivery accuracy by analyzing the movement of drive motor, as reported by an encoder on the motor shaft. Actual insulin flow rate may be less accurate.

This graph shows the calculated flow rate during the stabilization period. Encoder data was collected at a basal rate of 0.05U/h.



This graph show the maximum errors calculated for specific observation intervals. Encoder data was collected at a basal rate of 0.05U/h.





Section 12: Appendices

Appendix I: Aviator Menus - Companion

H. Alarm Priority

This section documents the Aviator Pumps alarm priorities in accordance with the 60601-1-8:2006 - `Medical electrical equipment - General requirements for basic safety and essential performance - Collateral Standard: General requirements, tests and guidance for alarm systems in medical electrical equipment and medical electrical systems.'

All of the Aviator Pump alarms are classified as MEDIUM PRIORITY per the 60601-1-8:2006 collateral safety standard. Failure to respond to the cause of an Aviator alarm condition may potentially result in adverse medical conditions (including death or irreversible injury) over an extended time period.

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While an alarm is active, insulin delivery is stopped. Therefore, it is important that you to respond to all alarms without delay. Possible Aviator alarms are:

- · Inactivity Alarm
- · Reservoir Alarm
- · No insulin alarm
- · Occlusion alarm



Section 12: Appendices Appendix I: Aviator Menus - Companion

I. FreeStyle Aviator Menus – Companion

```
HOME
     MAIN MENU
             START BASAL/STOP DELIVERY
             BOLUS MENU
                    QBolus
                    Manual
                         Normal
                         Extended
                         Dual
                    Food
                    Correction
                    Food & Correction
                    History
             BASAL MENU
                    Start/Stop Basal
                    Select
                         Daily
                         Temp Basal
                    View
                         Daily
                    Modify
                         Edit
                         Create
                         Rename
                         Delete
             ALARMS
                    Audio/Vibrate
                    Inactivity
                    Occlusion
                    Reminders
                    Care Comments
```

STATUS

Low Insulin System Status (Bolus & Basal)

Pump Levels Controller Levels Pump Version

Controller Version









Section 12: Appendices Appendix J: Aviator Menus - Pump **PRIME MENU Tubing** Cannula **REPORTS MENU Pump Diary Therapy Events Alarms BG History Line Graph BG Statistics** 7 Day Average 14 Day Average 21 Day Average **ADD EVENT** Insulin Food Exercise **State of Health** Generic **SETUP** Time/Date **Basal Limits Basal Setup Bolus Limits** Insulin **Preferences Buttons Timeout** Home Cursor Magnify Contrast

> Therapy Lockout Target Range Wizard

> > Select Language Time/Date

Time/Date Format Insulin Profile Insulin Type Section 12: Appendices

Appendix J: Aviator Menus - Pump

Insulin Action Time Inactivity Alarm Set Display Preferences Timeout Home **Edit Mode Cursor Type** Magnify **Bolus Calculator Options** 1U Drop **Carb Ratios BG Targets Bolus Limits One-Button Bolus Basal Limits Basal Setup (Temp)** Audio/Vibe **Occlusion Alarm Low Insulin Alert Locked items**

Name Values Self Test Pair Pump

Radio

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Section 12: Appendices
Appendix J: Aviator Menus - Pump
J. FreeStyle Aviator Menus – Pump
HOME
    MAIN MENU
            START BASAL/STOP DELIVERY
            BOLUS MENU
                   QBolus
                   Manual
                        Normal
                        Extended
                        Dual
                   Food
                   Correction
                   Food & Correction
                   History
            BASAL MENU
                   Start/Stop Basal
                   Select
                        Daily
                        Temp Basal
                   View
                        Daily
                   Modify
                        Edit
                        Create
                        Rename
                        Delete
            ALARMS
                   Audio/Vibrate
                   Inactivity
                   Occlusion
                   Reminders
                   Care Comments
            STATUS
                   Bolus Status
                   Basal Status
                   Pump Levels
                   Pump Version
            PRIME MENU
                   Tubing
                   Cannula
```

REPORTS MENU Bolus History Pump Diary Therapy **Events Alarms SETUP** Time/Date **Basal Limits Basal Setup Bolus Limits** Insulin **Preferences** Display **Edit Mode** Model Wizard **Select Language** Time/Date **Time/Date Format Insulin Profile Insulin Type Insulin Action Time Inactivity Alarm Set Display Preferences Buttons** Timeout Home **Edit Mode** Cursor Magnify **Bolus Calculator Options** 1U Drop **Carb Ratios BG Targets Bolus Limits One-Button Bolus Basal Limits**

Basal Setup (Temp)

Audio/Vibe

Glossary



Glossary

Occlusion Alarm Low Insulin Alert Locked items

Name Values Pair Device Radio RF Stats

Glossary

(Key terms are in **Blue** the first time it is used in the User Guide Sections)

- Activity Display Menu driven Home screen.
- **Alarm** The way your pump tells you an event has occurred that requires your immediate attention. Delivery of insulin **IS** stopped.
- Alarm Settings Settings that allow you to customize how your pump communicates alarms to you.
- **Alert** The way your pump tells you an event has occurred that requires your attention in the near future. Delivery of insulin is **NOT** stopped.
- Alert Settings Settings that allow you to customize how your pump communicates alerts to you.
- **Audio/Vibe Settings** Settings that allow you to decide whether your pump uses audio (beeps) or vibrations when there is an alarm.
- **Back Button (companion)** The oval shaped lower button on the right side of the companion screen below the jogwheel. It is used to cancel a change made to a value, and to move back to the previous screen.
- **Back Button (pump)** The top button on the right side of the pump screen with an indented triangle pointing to the left when in the right-hand mode. It is used to cancel a change made to a value, and to move back to the previous screen.
- Backlight/QBolus Soft Key (companion) To turn on/off the backlight, press the bottom left soft key on the companion with the light bulb icon for 2 seconds, when you are **NOT** at the **Home** screen. To deliver a quick bolus, press the **QBolus** soft key from the **Home** screen. Using the jogwheel, select amount of bolus to deliver and press Enter button.
- **Backlight/Enter Button (pump)** The bottom button on the right side of the pump screen with an indented triangle pointing to the right. To turn on/off the backlight, press this button for 2 seconds. It is also used to select an item, or to move forward to the next screen.
- Basal The "baseline" or background level of insulin that you need delivered throughout the day.
- Basal Block A programmed basal rate for a period of time during the day.
- Basal Insulin The small, frequent pulses of background insulin that your body continuously needs.
- **Basal Menu** Allows you to get to the basal-related functions to make changes in the basal settings on your pump.
- Basal Panel Displays the status of whether basal has started or stopped, and which active program is delivering the basal. When highlighted and selected, allows you to access basal options.

- **Basal Program** A sequence of up to 48 basal blocks for a 24-hour period.
- **Basal Rates** The rates of insulin delivery you set when you are creating basal programs. Basal rates can vary throughout the day.







- **Basal Settings** Settings that allow you to define the basal amount, basal maximum limit, and the temporary basal format.
- Battery Cap Cap cover for the battery compartment.
- Battery Compartment Where the pump battery is stored.
- **BG Target** -- The blood glucose you wish your pump to correct to. It is used in the correction bolus calculator, and abbreviated as Target BG. This target value is developed with the guidance of your health care professional and varies from person to person Note that it may be different than your desired blood glucose range.
- **Blood Glucose (BG)** The main sugar found in the blood and the body's main source of energy. This is also called blood sugar.
- Blood Glucose Level –The amount of glucose in a sample of blood.
- Blood Glucose Meter Test Strip Port The port where you insert a FreeStyle Lite Test Strip when checking
 your blood glucose.
- **Bolus** An extra burst of insulin taken either to cover the rise in blood glucose that occurs after eating, or to correct high blood glucose.
- **Bolus/Wake Up Button (pump)** The button on the side of the pump. Press it the number of times needed to deliver a quick bolus using the One-Button Bolus function. You can also press it once to stop a normal bolus in progress. The pump will timeout in 15-120 seconds. Press and hold the button to wake up the pump from sleep mode to display the **Home** screen.
- **Bolus Calculator** Settings for calculating a bolus based on food intake, and/or a correction to a desired blood glucose level. It helps you calculate the correct dose of insulin based on carbohydrates, current blood glucose, and how much insulin from earlier boluses remains active in the body. It does **NOT** take other factors into account, such as exercise, illness, and food other than carbohydrate.
- **Bolus History** A list of your last 10 boluses.
- **Bolus Options** –Settings to customize your bolus insulin settings, including bolus increments and maximums, as well as your bolus calculator options.
- Bolus Panel Displays the status of the most recent or last bolus given including bolus volume and time.
- **Cancellation Alert** Occurs when the screen timed out when there are pending changes on a screen, or if you pressed and held the **Back** button to return to the **Home** screen when there are pending changes on a screen, intentionally canceling the change.
- **Cannula** A slender plastic tube that is under the skin that is used to deliver insulin in your body. During the insertion of the infusion set, the center of the cannula contains a fine gauge needle to help the cannula penetrate the skin. The needle is then removed after insertion, leaving the plastic cannula in your skin.
- Cannula Housing The part of the infusion set where the tubing connects to the infusion set on your body.
- Carbohydrates (CHO) The component of food that most directly affects your blood glucose levels. The primary energy source from food.

- **Care Comments** Alerts for specific activities, i.e. such as to remind you to change your infusion set. You can turn these on or off.
- Check BG An alert to remind you to check your blood glucose levels 2 hours following a site change.
- Companion Screen The part of the companion where the information is displayed.
- **Connector Needle** The part of the infusion set that contains a needle to connect to the cannula.
- **Contraindications** Descriptions of what the pump is **NOT** intended for.
- Correction Bolus A bolus given to lower blood glucose level elevated above the target blood glucose level.
- **Correction Factor** Also known as sensitivity factor and **1 U Drop**. This amount is how much blood glucose drops with delivery of 1 units of short or rapid-acting insulin. The number is unique to each user and is programmed into the pump for use in the bolus calculator. When glucose is high or low the calculator will use this information to estimate your insulin dose.
- **Create Program** Allows you to create up to four basal programs and assign each a specific name, i.e., on weekends, during exercise, or when you are ill.
- **Cursor** A setting that allows you to change the appearance of the selection cursor from a dark highlight cursor (reverse video) to an outline cursor.
- **Dawn Phenomenon** A period of time occurring in the middle of the sleep cycle where the body releases extra amounts of glucose into the blood stream, requiring a temporary increase in your basal insulin needs.
- **Delete Program** Function that allows you to delete a basal program.
- **Diabetic Ketoacidosis** (**DKA**) A potentially life threatening emergency condition in which extremely high blood glucose levels from a severe lack of insulin, result in the breakdown of body fat for energy and an accumulation of ketones in the blood and urine.
- **Display Preferences**—Settings that allow you to choose right or left display, timeout, home screen appearance, viewing the cursor in highlight or outline mode, and whether or not you want to magnify the text.
- **Display Right or Left** A setting that allows you to switch the screen orientation such that the buttons are on the right side of the pump or on the left side of the pump.
- **Dual Bolus** A bolus that combines a NORMAL bolus with an EXTENDED bolus. It is sometimes used when food is consumed that may have both an early effect on your glucose as well as a longer effect, such as pizza.
- **Dust Cover** The cover that comes with your pump used to protect the reservoir compartment.
- **Edit Program** Allows you to make changes to an existing basal program, including adding or deleting basal time blocks and basal rates.
- Enter/Backlight Button (pump) The bottom button on the right side of the pump screen with an indented triangle pointing to the right. It is used to select an item, or to move forward to the next screen. To turn on/off the backlight, press this button for 2 seconds.
- Enter Button/Jogwheel (companion) The top jogwheel button on the right side of the companion. The jogwheel scrolls to allow you to move up and down through the companion. You can also depress this button to





- select an item and to move forward to the next screen. You can also stop a normal bolus in progress.
- Extended Bolus A bolus delivered over a determined period of time that is sometimes used to better match a food that is absorbed slowly.
- **Food Bolus** A bolus calculator option that allows administration of a bolus to account for food about to be eaten.
- **Food and Correction Bolus** A Bolus Calculator option that allows administration of a bolus to correct blood glucose levels that are higher than the desired blood glucose level and takes into account food about to be eaten.
- Highlight Setting the Cursor to highlight gives the text a highlighted display as you scroll and select options.
- Home Screen:
- The *Information-based* home screen provides details about current basal and bolus status, including the time and amount of your last bolus and whether basal delivery is running or stopped. When basal delivery is running, the name of the active basal profile and delivery rate is displayed.
- The **Activity-based** home screen provides direct access to the pump options. Information about the basal and last bolus status is accessible through the STATUS option.
- **Home Screen Appearance** The Information-based home screen provides details about current basal and bolus status, including the time and amount of your last bolus, and whether basal delivery is running or stopped. When basal delivery is running, the name of the active basal profile and delivery rate is displayed.
- Hyperglycemia Blood glucose levels that are higher than target level.
- Hypoglycemia Blood glucose levels that are lower than target level.
- I:CHO (or Carb Ratio) Insulin-to-carbohydrate ratio that defines how many grams of carbohydrates 1 unit of insulin covers. CHO is an abbreviation for carbohydrate. This number is programmed into the pump for use by the bolus calculator. When you program in your number of carbohydrates you are about to eat, the bolus calculator helps you decide how much insulin may be needed for that food. It does NOT take into account food other than carbohydrates.
- Inactivity Alarm A safety alarm that sound when you have NOT touched any buttons within the time period selected. If you do NOT respond to an inactivity alert within 15 minutes, the INACTIVITY ALARM will sound and basal insulin delivery is stopped.
- **Inactivity Alert** When the inactivity time has elapsed without any interaction on the pump, the pump first displays the **INACTIVITY ALERT** screen to keep delivery going.
- **Indication** A description of what the pump *should* be used for.
- **Information Display Home** screen configuration that provides important status information concerning basal and bolus delivery. Also offers short cuts to get to lower level menus.
- **Infusion Set** The combination of the reservoir cap, tubing, and cannula that delivers insulin from the pump's reservoir into the body. It is used one time only, and is discarded after each use.

- Infusion Set Tubing Part of the infusion set that carries insulin from the pump to the cannula.
- **Insulin** A hormone that helps the body use glucose for energy. When the body cannot make enough insulin, it is taken in by injection or through use of a pump.
- Insulin On Board (IOB) The amount of insulin units that remain active in your body. The IOB is calculated using the insulin action time setting chosen in your insulin profile (see Section 2.1), along with looking at earlier boluses delivered. In addition, if a correction dose has recently been given, (for information on correction boluses, refer to Section 8.4.) the IOB feature may help you prevent giving too much insulin to correct your high glucose.
- Insulin Reservoir The reservoir holds the insulin that the pump will deliver to your body. The reservoir holds 250 units of insulin. Your healthcare professional will tell you how much insulin to use to fill the reservoir. The reservoir is a single-use only item.
- **Insulin Reservoir Vial Adapter** Attaches to the top of the insulin vial and is used in place of a filling needle to transfer liquid into the insulin reservoir.
- Insulin Temp An alert that lets you know if the temperature of the pump is too hot or too cold.
- **Introducer Needle** The needle that guides the insertion of the cannula in your body. The needle is removed and only the cannula is left in your body.
- IOB Panel Provides an indication of the amount of insulin that is still active in your body from past boluses.
- **Jogwheel/Enter Button (companion)** The top jogwheel button on the right side of the companion. It scrolls to allow you to move up and down through the companion. You can also use this button to select an item and to move forward to the next screen. You can also stop a normal bolus in progress.
- Levels Panel Displays the battery and insulin reservoir levels by icons.
- **Locked Item Setting** Setting that allows change of whether Bolus and Basal Menu options are locked (inaccessible) or unlocked (accessible). This is a safety feature to prevent unwanted changes in insulin, by a child for example.
- Low Insulin Alert An alert, based on programmed settings telling when insulin is getting low.
- **Low Power Sleep State** This means the display is blank when the display timed out or when the user deliberately puts the pump to sleep by pressing and holding the back button on the **Home** screen.
- Magnify Turning the Magnify option to On makes the text larger and easier to view on the screen.
- Main Menu Lists the options to start/stop basal, go to bolus menu, basal menu, Alarm Setup, bolus status, prime menu, reports menu, and setup menu.
- Manual Bolus A bolus that is delivered without using the bolus calculator.
- Modify Program Allows edit, create, rename, or delete basal programs.
- **Normal Bolus** A one time quick dose of insulin that is programmed when you eat or need a dose of insulin to be delivered immediately.
- Occlusion Alarm Alarm that alerts you to an obstruction of fluid. The alarm occurs when pressure is detected





as the pump tries to deliver insulin. It tells you there may be a problem with your infusion site and that **insulin may NOT be delivered**. An Occlusion Alarm **STOPS** insulin delivery. The sensitivity setting of the alarm is adjustable and may be changed.

- One-Button Bolus A function that allows you to deliver a Normal Bolus with fewer steps using the pump, simply by pressing the One-Button Bolus button without looking at the display. The pump makes special sounds or vibration patterns that guide you through the procedure. This same function is performed using the QBolus soft key on the companion.
- 1U Drop Sets how much 1 unit of insulin will lower blood glucose level.
- Outline Setting the Cursor to Outline gives the text an outline around it as you scroll and select options.
- **Prime** A procedure to make sure that air is removed from the entire infusion set before you attach the pump's tubing to your body. This important procedure is done to make sure you receive the correct amount of insulin.
- **Pump Diary** An option that allows you to review your insulin therapy amounts, pump-related events, and alarm history.
- Pump Idle This means the basal delivery is stopped for 5 minutes.
- **Pump Idle Alert** Occurs when the basal has been stopped for 5 minutes. This alert can be put to sleep for up to one hour. A pump idle alert would **NOT** occur until you have completed the **SETUP WIZARD**. After that, if for any reason the basal is stopped for 5 minutes, the pump idle alert will sound.
- Pump Screen The part of the pump where the information is displayed.
- **QBolus** A manual option to deliver a Normal bolus of insulin, using fewer steps than the Normal Bolus option.
- Reminders Alerts reminding you to do certain things, such as eat a snack or test blood glucose levels.
- Rename Program Allows changing the name of a basal program.
- **Reports** The menu that allows you to review bolus history and the pump diary that logs various pump-related events and information.
- **Reservoir Alarm** Occurs when the reservoir is removed while the pump is still delivering insulin.
- **Reservoir Cap** The clear plastic cap and handle that is on the outside of the pump when the reservoir is placed properly in the pump. This connects the Reservoir to the infusion set
- Reservoir Compartment The hollow area in the pump that encloses the insulin reservoir.
- Reservoir Plunger The gray plunger of the insulin reservoir.
- **Reservoir Plunger Handle** The white removable handle attached to the end of the plunger. Used to draw insulin into the reservoir.
- **Scroll Pad** The indented, oval area on the right side of the pump when in right-hand mode. It scrolls to allow you to move up and down through the pump options. It is like the scroll pad on a computer.
- **Select Program** Allows you to choose and start a different basal program.
- SETUP WIZARD An easy way to set up your pump. Individual SETUP WIZARD options are also accessible via

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the **SETUP** Menu. This feature is typically used the first time you set up all the features of your pump.

- **Site Change** A programmable alert that reminds you to change your site 2, 2.5, or 3 days following a cannula prime, after you inserted your infusion set.
- Sleep Mode A way to silence alerts for a specified period of time.
- Start Basal Allows you to start an existing basal program.
- Stop Basal Allows you to stop the actively running basal program.
- Stop Bolus A function that allows you to stop any type of bolus delivery of insulin as it is occurring.
- **System Error** An error that must be addressed immediately by calling Customer Care. It sometimes may indicate a pump failure.
- **Target blood glucose** The blood glucose value to correct to. It is used in the correction bolus calculator, and abbreviated as Target BG. Note that it may be different than desired blood glucose range.
- **Temporary Basal** A way to deliver basal insulin at a different rate for a temporary period of time, such as for exercise or illness. You may choose either specific units/hour or percentage, of your currently active basal rate.
- **Timeout** The time before the pump display goes blank. The timeout can be set from 15 to 120 seconds.
- **USB Port** The USB port to connect to the charger for your companion's battery.
- Vial Adaptor Cap The cap that covers the top of the vial adaptor to store unused insulin.
- **View Program** Allows you to view all existing basal programs.
- Wake Up/Soft Key to MAIN MENU (companion) To wake up the companion, press the bottom right button with the Power icon for 2 seconds to access the MAIN MENU.
- Wake Up/Bolus Button (pump) The button on the side of the pump. Press and hold the button to wake up the pump from sleep mode to display the **Home** screen. Press it the number of times needed to deliver a quick bolus using the One-Button Bolus function. You can also press it once to stop a normal bolus in progress. The pump will timeout in 15-120 seconds.









Resources

Resources

The following books and web sites may be of help as you begin pump therapy:

Books:

- Smart Pumping: A Practical Approach to Insulin Pumping
 - by Howard Wolpert, MD
- Insulin Pump Therapy Demystified: An Essential Guide for Everyone Pumping Insulin by Gabrielle Kaplan-Mayer
- Pumping Insulin: Everything You Need for Success with an Insulin Pump by John Walsh, PA, CDE and Ruth Roberts, MA

Web Sites:

- Abbott Diabetes Care
 - www.AbbottDiabetesCare.com
- American Diabetes Association
 - www.diabetes.org
- Centers for Disease Control Diabetes Public Health Resource
 - www.cdc.gov/diabetes
- Diabetes Exercise and Sports Association
 - www.diabetes-exercise.org
- US Food and Drug Administration Diabetes Information
 - www.fda.gov/diabetes
- Insulin Pump Online Support
 - www.insulin-pumpers.org

Pump Supplies:

- Unique Accessories Inc.
 - www.uniaccs.com
- Diabetes Mall
 - www.Diabetesnet.com/diabetes_technology
- Pump Wear Inc.
 - www.pumpwearinc.com











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