lcon	lcon name	What it means
	Connection	The connection icon appears green when the Sensor feature is on and your transmitter is successfully communicating with your pump. The connection icon appears gray when the Sensor feature is turned on, but the transmitter is not connected or communication with your pump has been lost. For more information about the Sensor feature, see <i>Understanding Continuous Glucose Monitoring (CGM)</i> , on page 151.
<b>\</b>	Airplane Mode	Appears in place of the Connection icon if Airplane Mode is turned on. When Airplane Mode is turned on, the pump cannot receive wireless communication from other devices. The pump also cannot send wireless communication to other devices. For more information about using Airplane Mode, see <i>Airplane Mode, on page 137</i> .
	Reservoir	Shows the approximate amount of insulin left in your reservoir. The color and the fill level of the icon indicate the status. When your reservoir is full, the icon is solid green. As your insulin is used, the icon becomes emptier, and the color of the icon changes as shown in the following example. For more information about your reservoir, see <i>Reservoir and infusion set</i> on page 93.
	Audio	The audio mode you are using: vibrate only only only or vibrate and audio only for more information about your audio settings, see <i>Audio Options</i> , on page 138.

# **Icon** Icon name What it means Calibration The approximate time left until your next sensor calibration is due. Appears only when the Sensor feature is turned on. The color and the fill level of the icon indicate the status. When your sensor is fully calibrated, the icon is solid green. As the time for your next sensor calibration approaches, the icon becomes emptier, and the color of the icon changes as shown in the following example. For more information about calibrating your sensor, see Calibrating your sensor, on page 183. When your sensor is initializing, the Calibration icon appears with three dots ...... If the time to your next sensor calibration is unavailable, the Calibration icon appears with a question mark Sensor Life The number of days remaining in the life of your 6 sensor. Appears only when the Sensor feature is turned on. The color and the fill level of the icon indicate the status. When you insert a new sensor, the icon is solid green. As your sensor life is used, the icon becomes emptier. The icon turns yellow when less than 24 hours remains in the life of your sensor. It turns red when less than 12 hours remains in the life of your sensor. If the number of days remaining in the life of your sensor is unavailable, the Sensor Life icon appears with a question mark

lcon	Icon name	What it means
P	Block Mode	Indicates that the pump is in Block Mode, and that certain functions are restricted. Caregivers, such as parents of a young child, can use Block Mode to restrict access to critical pump settings. For more information about Block Mode, see <i>Block Mode, on page 139</i> .
	Temporary Network Connection	Appears while you are temporarily connected to a remote upload device.

# **Status screens**

The Status screens provide information about your pump, any notifications you have received, your current settings, and optional sensor. The Status screens are described in the following table:

Status screen	Displays this information
Notifications	A list of alarms, alerts, and reminders that have occurred over the past 24 hours. You can display further details about a particular alarm, alert, or reminder by selecting it from the list. For more information on alarms and alerts, see the <i>Alarms, alerts, and messages</i> chapter.
Quick Status	A summary of status information, including your last bolus, last BG meter reading, current basal rate, reservoir level, and pump battery charge level. If you are using a sensor, this screen also displays the time that your next calibration is due and the SmartGuard™ status.
Pump	Provides a detailed view of your pump status, including whether your pump is in a specific mode, the reservoir status, battery status, the pump serial number, and other details about your pump.
Sensor	The Sensor status screen is available only if your sensor feature is turned on. The Sensor status screen indicates if any alert silence options are turned on. It also shows the status of your calibrations, your sensor life, ISIG, transmitter battery, serial number and version number of your transmitter, and the SmartGuard status.

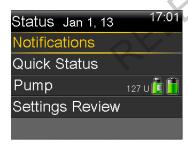
Status screen	Displays this information	
Settings	The Settings Review screen provides a list of all your pump settings.	
Review	The settings are organized by where they appear in the menu for	
your pump. For example, your bolus settings appear under		
	Settings section, and your brightness level setting appears under the	
	Utilities section.	

# Viewing the Status screens

- Go to the Home screen.
- 2. Select the status bar that appears at the top of the Home screen.



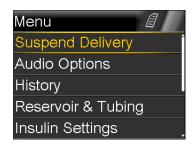
The Status screen appears.



3. Select the status screen that you want to view. Refer to the table at the beginning of this section for a description of the different status screens.

# Using the Menu screen

The Menu screen is where you access the various features and functions of your system. To display the Menu screen, press **a**.



The following options are available from the Menu screen:

Select this	To do this	
Suspend Delivery	Stop your current basal and bolus insulin delivery.	
Audio Options	Set your audio, vibrate, and volume options for the notifications you receive.	
History	Access the Summary, Daily History, and Alarm History screens. If you are using a sensor, you can access the SG Review and ISIG History screens.	
Reservoir & Tubing	Start the process of changing your reservoir and infusion set.	
Insulin Settings	Set up and manage your insulin delivery options, including your Basal and Bolus settings.	
Sensor Settings	Set up your optional continuous glucose monitoring device settings.	
Event Markers	Save information about events, such as exercise, blood glucose readings, carbs you eat, or injections you take. If you are using a sensor, the blood glucose readings may be used for calibration.	
Reminders	Set up reminders to help monitor your system and to help you manage your diabetes. You can also create reminders for personal events.	
Utilities	Set up and manage the features and functions of your system.	

# **Scroll bar**

The scroll bar is located on the right side of the display, as shown in the following example. It appears only when there is more information available to view on the screen. Press  $\wedge$  or  $\vee$  to move up or down the screen.



# **Power modes**

Your pump is designed to conserve battery power when you are not actively using the pump screens.

In this mode	Your pump behaves like this
Awake	Your pump screen is on. Unless you are actively using another screen, your Home screen appears.  To wake up your pump from being in power save or sleep mode, press any button. If your pump has been in sleep mode, the pump is locked. To unlock your pump, see <i>Unlocking your pump</i> , on page 26.
Power save	Your pump is fully functional, but the screen goes dark to save power. You can set how long it takes for your screen to enter power save mode by changing the Backlight setting. For more information, see <i>Display Options</i> , on page 141. If any button is pressed while the pump is in Power save mode, the pump returns to the screen that was last displayed.

# In this mode Your pump behaves like this Your pump automatically enters sleep mode about two minutes after your pump enters power save mode if no buttons are pressed. At this time, your pump automatically locks. If any button is pressed, your pump returns to the Home screen. Note: In some cases, if there is an action you need to take, your pump returns to the screen last displayed. This includes startup settings, loading your reservoir, filling your tubing, filling your cannula, and any screen where you have

To put your pump into sleep mode, press and hold the **Menu** button for about two seconds.

# If you remove your pump

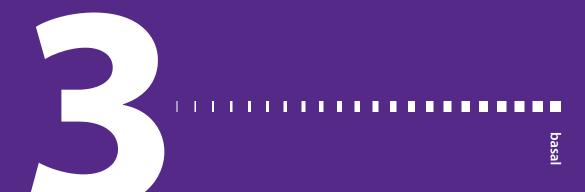
You may have an occasion when you need or want to remove your pump. If you have to remove and store your pump, it is recommended that you do the following:

- Write down a record of your current basal rates and use the Save Settings feature. See *Saving your settings, on page 142* for more information.
- Remove the battery. See Storing your pump, on page 242 for more information.

# Remember, your body still needs insulin while your pump is removed.

an action pending.

Consult your healthcare professional to determine an alternate method of receiving insulin. Disconnecting from your pump for less than one hour may not require an insulin adjustment. If you remove your pump for more than one hour, you should take your insulin another way, as prescribed by your healthcare professional.



# Basal

Basal insulin is the "background" insulin that you need throughout the day and night to maintain your target blood glucose values when you are not eating. Your basal insulin accounts for approximately one half of your daily insulin requirements. Your pump mimics a pancreas by delivering insulin continuously over 24 hours.

Your basal insulin is delivered according to a basal pattern. Basal patterns and other basal settings are described in the following sections.

## **Basal rate**

Your basal rate is the specific amount of basal insulin that your pump continuously delivers each hour. While some people use one basal rate all day, others require different rates at different times of the day.

Your basal rates are set in one or more basal patterns. Each basal pattern covers 24 hours. For specific information about basal patterns, see *Basal patterns*, on page 41.

# **Basal insulin settings**

Your basal insulin delivery settings are described in the following table.

Setting	What it is	What it does for you
Basal Pattern	A set of one or more basal rates that cover a 24-hour period.	Determines the amount of insulin you receive per hour throughout the day and night. Allows you to vary your basal rate according to your needs. You can set up to eight basal patterns. For details on setting up basal patterns, see Adding a new basal pattern, on page 42. For details about starting a basal pattern, see Changing from one basal pattern to another, on page 46.
Temp Basal	A basal rate that you use in place of your scheduled basal rate for short-term situations.	Allows you to temporarily change your current basal rate for a duration of time that you specify. For details about starting a temp basal rate, see <i>Starting a Temp Basal rate</i> , on page 48.
Preset Temp	A temporary basal rate that you can define ahead of time.	Allows you to set and save temporary basal rates for known short-term situations, such as when you are sick or have times of increased or decreased activity. For details about setting up a preset temp basal rate, see <i>Preset Temp basal rates</i> , on page 49. For details about starting a preset temp basal rate, see <i>Starting a Preset Temp basal rate</i> , on page 51.
Max Basal Rate	Maximum amount of basal insulin that your pump can deliver per hour.	Provides a safety measure by limiting the total amount of basal insulin your pump can deliver per hour. For details about setting your Max Basal rate, see Max Basal Rate, on page 41.

#### **Max Basal Rate**

Max Basal Rate limits the amount of basal insulin that can be delivered per hour, based on the maximum rate you set. You are unable to set any basal rates, temp basal rates, or preset temp basal rates that exceed the max basal rate amount. You can set your max basal rate from 0 to 35 units per hour. Set your max basal rate as prescribed by your healthcare professional.



**Note:** If you are setting your max basal rate after you have set up your basal patterns or preset temp basal rates, you cannot set your max basal rate lower than any of your existing basal rates. You cannot access this feature during a bolus delivery.

#### To set your Max Basal Rate:

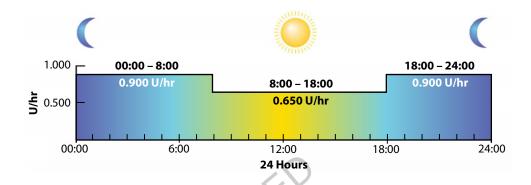
- 1. Go to the Max Basal/Bolus screen.
  - Menu > Insulin Settings > Max Basal/Bolus
- 2. Select **Max Basal** to set the maximum number of basal insulin units that can be delivered each hour.
  - Because the Max Basal Rate setting determines your basal insulin limits, a warning message appears any time you enter the screen to change the value. To continue setting the value, select **Continue**.
- 3. In the Max Basal Rate screen, select **Max Basal** to set the maximum units per hour.
- 4. Select Save.

# **Basal patterns**

Your basal pattern determines the amount of basal insulin you receive throughout the day and night. Because your basal insulin needs can vary, you can set up to eight basal patterns. For example, you might use one basal pattern during the week and a different basal pattern during the weekend.

A basal pattern is made up of one to 48 basal rates that you set up to cover a full 24-hour period. If you only need one basal rate throughout the day, you set only one rate for the 24-hour period. If you need the basal rates to change during the day or night to better match your insulin needs, you can set more than one rate, each with a separate start and end time.

The following example represents one basal pattern with three basal rates set for three different time periods.



Your healthcare professional will determine what rates are right for you.



**Note:** If you have already set up basal patterns and want to switch from using one basal pattern to another, see *Changing from one basal pattern to another, on page 46.* 

# Adding a new basal pattern

This procedure shows you how to add a new basal pattern.

## To add a new basal pattern:

1. Go to the Basal Pattern Setup screen.

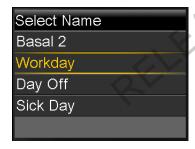
Menu > Insulin Settings > Basal Pattern Setup

The Basal Pattern Setup screen appears. Your active basal pattern appears with a check mark and the 24-hour delivery amount, as shown in the following example.



- 2. If this is your first time setting up a basal pattern, the unit amount will be 0.0. Select **Basal 1** and proceed to step 5.
  - If this is not your first time setting up a basal pattern, proceed to the next step to add a new pattern.
- 3. To add a new basal pattern, select Add New.

The Select Name screen appears.





**Note:** The Workday, Day Off, and Sick Day patterns are available so that you can match a basal pattern name to your insulin needs on those particular days.

4. Select the basal pattern that you want to set up. An edit screen appears for the pattern you selected. The following example shows the Edit Workday screen.



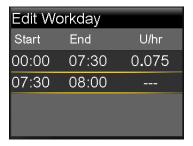


**Caution:** Insulin is delivered in units per hour. If you set a basal rate of 0.025 U/hr for a 30-minute time period, this might result in no insulin delivered for that 30-minute period.

- 5. To create one continuous 24-hour basal rate for your basal pattern, continue with this step. To create more than one basal rate for your new basal pattern, skip to step 6.
  - a. Leave End time at 24:00 to set a 24-hour rate. The Start time of the first time segment is always 00:00.
  - b. Set your rate in units per hour.



- c. Skip to Step 7.
- 6. To create more than one basal rate for your new basal pattern, enter one basal rate at a time, as described in the following steps:
  - a. Set the End time and the Rate for your first basal rate. You set your rates in 30-minute increments.
    - If you set the End time to anything other than 24:00, a second basal rate setting appears.



The Start time for the next rate is always the same as the End time of the previous rate.



**Note:** If you need to make a change, you can press  $\wedge$  to scroll up to the rate you want to change. Adjust the End time or Rate values as desired.

Note that pressing  $\wedge$  or  $\vee$  when a field is selected (flashing) adjusts the value of that field. When there is no field selected, pressing  $\wedge$  or  $\vee$  allows you to scroll up or down the list of basal rates.

b. Continue setting rates for different time periods as needed. The End time for your last rate must be 24:00, as shown in the example below.



- 7. When you finish setting your basal pattern, select **Done**. (The Done option appears only when the last End time in your basal pattern is set to 24:00).

  A screen appears that allows you to review your basal pattern. If you need to make any changes, press 
  to return to the previous screen.
- 8. Select Save.

To activate your basal pattern, see *Changing from one basal pattern to another,* on page 46.

#### Editing, copying, or deleting a basal pattern

#### To edit, copy, or delete a basal pattern:

1. Go to the Basal Pattern Setup screen.

#### Menu > Insulin Settings > Basal Pattern Setup

The Basal Pattern Setup screen displays all of your existing basal patterns.

- 2. Select the basal pattern you want to edit, copy, or delete.
- 3. Select **Options**.
- 4. Do one of the following:
  - Select **Edit** to adjust the End time or rate values for one or more of the basal rates in this basal pattern.
  - Select Copy to copy the basal rate information from the selected basal pattern to a new basal pattern. When the Select Name screen appears, you can select any available name from the list. Use the Edit option to adjust the new basal pattern as desired.
  - Select **Delete** to delete the selected basal pattern. You cannot delete the active basal pattern.

# Changing from one basal pattern to another

When you change to a new basal pattern, your pump delivers your basal insulin according to the basal pattern you selected.

# To change to a different basal pattern:

1. Go to the Basal Patterns screen.

#### Home screen > Basal > Basal Patterns

The Basal Patterns screen shows the basal patterns you have set up. The active basal pattern is indicated with a check mark.

- 2. Select the basal pattern you want to start.
  - The Basal screen displays the details for the selected basal pattern.
- 3. To start this pattern, select **Begin**.

# **Temporary basal rates**

The Temp Basal feature and Preset Temp feature allow you to set temporary basal rates to manage blood glucose levels during short-term activities or conditions that require a basal rate different than your current one, such as an illness or a change in physical activity. You can make an immediate change to your basal insulin for a set period of time (30 minutes to 24 hours), up to your max basal rate.

# **About Temp Basal rates**

A temp basal rate temporarily overrides all other basal programming. Your programmed basal pattern resumes after the temp basal rate delivery is completed or cancelled.

The Temp Basal feature allows you to set and start a temporary basal rate immediately. The Preset Temp feature allows you to set up a temp basal rate ahead of time for known situations. You define temp basal rates and preset temp basal rates using either a percentage of your current basal pattern, or by setting a specific rate, as described in the following table.

This temp basal type:	Works like this:	
Percent	Delivers a percentage of the basal rates programmed in your active basal pattern for the duration of the temp basal rate. The temp basal amount is rounded down to the next 0.025 units if your basal rate is set at less than 1 unit per hour, or to the next 0.05 units if your basal rate is set at more than 1 unit per hour.	
	Temp basal rates can be set to deliver from 0 to 200% of your scheduled basal rate. The percent amount you can use, however, is based on the largest basal rate scheduled during the temp basal duration, and is limited by your max basal rate.	
Rate	Delivers a fixed basal insulin rate in units per hour for the duration of your temporary basal, limited by your max basal rate.	

To use the Temp Basal feature, see *Starting a Temp Basal rate, on page 48*. To use the Preset Temp Basal feature, see *Preset Temp basal rates, on page 49*.

#### Starting a Temp Basal rate

When you start a temp basal rate, your basal delivery changes to the temporary basal rate for the duration you set. When the duration is complete, your basal insulin automatically returns to the active basal pattern.

#### To start a temp basal rate:

1. Go to the Temp Basal screen.

Home screen > Basal > Temp Basal

2. **Duration** is flashing. Set the Duration for this temp basal rate. The Duration can be set from 30 minutes to 24 hours, in 15-minute increments.



- 3. Select **Next**.
- 4. The Type defaults to Percent, You can switch between Percent and Rate by selecting **Type**.



- 5. Depending on the Type you selected, do one of the following:
  - Enter a percentage:



• Enter a basal rate, making sure you do not exceed your max basal rate:



- 6. If desired, select **Review** to review your temp basal setting.
- 7. Select **Begin** to start the temp basal rate.

Your Temp Basal rate continues for the duration you set. The Basal option on the Home screen appears as Basal (T) during your temp basal delivery. Your scheduled basal rate automatically starts again when your Temp Basal rate finishes



**Note:** If you need to cancel your temp basal, select **Basal (T)** from the Home screen, then select **Cancel Temp Basal**.

# **Preset Temp basal rates**

The Preset Temp feature allows you to set up basal rates for recurring short-term situations where you need to temporarily change your basal rate.

There are four names you can use to match your preset temp basal rate to a situation: High Activity, Moderate Activity, Low Activity, and Sick. There are also four additional preset temp rates available to use for other circumstances (Temp 1 through Temp 4).

#### Setting up and managing Preset Temp basal rates

This section describes how to set up, edit, rename, or delete a preset temp basal rate. For information on how to start using a preset temp basal rate, see *Starting a Preset Temp basal rate*, on page 51.

#### To set up a preset temp basal rate:

1. Go to the Preset Temp Setup screen.

Menu > Insulin Settings > Preset Temp Setup

- Select Add New.
- 3. Select a name for the preset temp basal rate you want to set (Temp 1, High Activity, Moderate Activity, Low Activity, or Sick).
- 4. The Type defaults to Percent. You can switch between Percent and Rate by selecting **Type**.
- 5. If you are using Percent, enter the percentage you want to use. If you are using Rate, enter the rate in units per hour. You cannot exceed your max basal rate.
- 6. Set the **Duration** (from 30 minutes to 24 hours in 15 minute increments) that you want this preset temp basal to be active.
- 7. Select **Save**.

## To change, rename, or delete a preset temp basal rate:

1. Go to the Preset Temp Setup screen.

Menu > Insulin Settings > Preset Temp Setup

2. Select the desired preset temp basal.



**Note:** You cannot select a preset temp basal rate that is currently in use.

3. Select **Options**, and then do one of the following:

- Select **Edit** to adjust the Type (Percent or Rate), the Percentage or Rate amount, and the Duration for this preset temp basal rate.
- Select Rename to assign a different name to this preset temp basal rate.
   When the Select Name screen appears, you can select any available name from the list.
- Select **Delete** to delete this preset temp basal rate.

#### Starting a Preset Temp basal rate

You must set up preset temp basal rates before you can use the Preset Temp feature. For more information, see *Preset Temp basal rates*, on page 49.

#### To start a preset temp basal rate:

1. Go to the Preset Temp screen. The Preset Temp option only appears if you have set up preset temp basal rates.

#### Home screen > Basal > Preset Temp

The Preset Temp screen displays the preset temp basal rates you have set up, along with their percentage or rate amounts.





**Note:** Depending on your active basal pattern, it is possible for a percentage preset temp basal rate to exceed your max basal limit. Because you cannot use a preset temp basal rate that exceeds your max basal limit, these rates appear in the list, but are not available for use.

2. Select the preset temp basal rate that you want to use, and then select **Begin**.



Your preset temp basal rate continues for the duration you set. The Basal option on the Home screen appears as Basal (T) during your preset temp basal delivery. Your scheduled basal rate automatically starts again when your preset temp basal rate finishes.

# Canceling a Temp Basal or Preset Temp basal rate

You can cancel a temp basal or preset temp basal rate at any time. When you do so, your scheduled basal pattern automatically starts again.

#### To cancel a temp basal rate:

1. Go to the Basal screen.

Home screen > Basal (T)

The Temp Basal screen displays the name (Preset Temp only), current basal rate, the set duration, and the remaining time.

2. Select Cancel Temp Basal.

# Viewing your basal information

The following table describes how you can view your basal rates and patterns.

To do this:	Do this:
View your current basal	Go to the Basal screen:
rate	Home screen > Basal
	The active basal pattern and current basal rate appear at the top of the Basal screen.
	Basal 08:03  Basal 1  Current Rate: 0.025 U/hr  Temp Basal  Basal Patterns  Insulin Settings
	You can also view your current basal rate by selecting the Status Bar at the top of the Home screen, and then selecting <b>Quick Status</b> .
View your basal patterns	Go to the Basal Patterns screen:
R	Home screen > Basal > Basal Patterns  The Basal Patterns screen shows the basal patterns you have set up, and the 24-hour insulin total for each basal pattern. A check mark appears next to the active basal pattern.
	Basal Patterns 08:04  Basal 1 0.6 ∪ ✓
	To see the individual basal rates, select the desired basal pattern.

# Stopping and resuming your insulin delivery

Use Suspend Delivery if you need to stop all active basal and bolus insulin deliveries. When you suspend your insulin delivery, your pump beeps and vibrates periodically to remind you that insulin is not being delivered.

When you are ready to continue your basal insulin delivery, use the Resume feature. When you use the Resume feature, your pump starts your programmed basal pattern, but does not start any previously programmed bolus deliveries.



**Note:** If you want to stop a bolus delivery only, without stopping your basal delivery, see *Stopping a bolus delivery, on page 88*.



WARNING: A bolus delivery or fill cannula that was suspended does not restart when you resume. To avoid a high BG and ketoacidosis, always check the pump's Daily History after you resume insulin delivery to determine the amount that was delivered. If needed, program a new bolus or fill cannula delivery.



**Caution:** When using Audio or Vibrate, it is possible that an Audio or Vibration notification may not occur as expected if the speaker or vibrator in your pump malfunctions. This is most important when using the Easy Bolus feature or when your pump is in Manual Suspend where a missed notification may cause an over or under delivery of insulin.

Contact the 24 Hour HelpLine or your local representative with any concerns.

# To suspend all insulin delivery:

1. Go to the Suspend Delivery screen.

# Menu > Suspend Delivery

2. A confirmation message appears. To suspend your pump and stop all insulin delivery, select **Yes**.

The Home screen indicates that your insulin is suspended. Your pump functions are limited until you resume your insulin delivery.

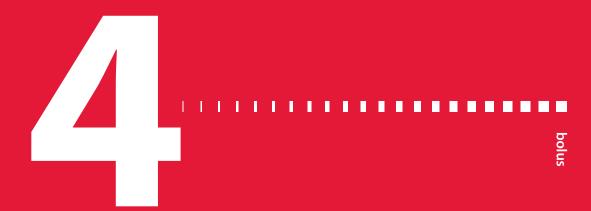
## To resume basal insulin delivery:

- 1. While insulin is suspended, go to the **Home** screen.
- 2. Select **Resume**.
  - A confirmation message appears.
- 3. To resume your basal insulin delivery, select **Yes**. If a Temp Basal was active when you suspended your pump, it resumes if the time is still within the duration that you set.



**Note:** If you still need a bolus delivery that was in progress before you suspended your delivery, check the Daily History screen for the actual bolus units delivered and the intended bolus amount. Then you can set up a new bolus amount as needed. See *Daily History, on page 121* for details about using the Daily History screen.





# **Bolus**

A bolus is the amount of insulin taken to cover an expected rise in blood glucose, typically when you eat a meal or snack. You can also use a bolus to correct a high blood glucose reading.

# **About bolus deliveries**

There are different types of bolus deliveries you can use, depending on your insulin needs at the time. There are also different ways you can deliver a bolus. Discuss these options with your healthcare professional to determine what is best for you.

# **Bolus types**

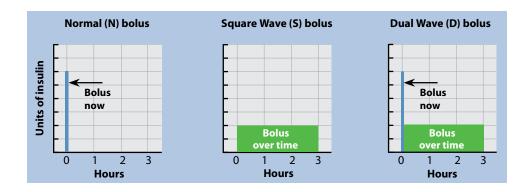
The following table provides general information about the available bolus types.

Type	How it works	When to use it
Normal	Provides a single immediate dose of insulin.	This is the typical bolus type you use to cover your food intake, or to correct a high BG meter reading.
		For details about using the Normal bolus feature, see <i>Normal bolus, on page 73</i> .

Туре	How it works	When to use it
Square Wave <sup>™</sup>	Delivers a single bolus evenly over an extended period of time (30 minutes to 8 hours).	<ul> <li>You might use a Square Wave bolus:</li> <li>If you have delayed food digestion due to gastroparesis or meals high in fat.</li> <li>When snacking over an extended period of time.</li> <li>If a Normal bolus drops your blood glucose too rapidly.</li> </ul>
		For details about using the Square Wave bolus feature, see Square Wave bolus, on page 76.
Dual Wave <sup>™</sup>	Delivers a combination of an immediate Normal bolus followed by a Square Wave bolus.	<ul> <li>You might use a Dual Wave bolus:</li> <li>When you eat meals that are both high in carbs and fat which may delay digestion.</li> <li>When your meal bolus is combined with a correction bolus for an elevated blood glucose.</li> </ul>
	EA	For details about using a Dual Wave bolus, see <i>Dual Wave bolus, on page 79</i> .

# **Bolus type example**

The following example shows how the different bolus types work.



# **Bolus delivery options**

The following table describes the different ways you can deliver a bolus.

Delivery method	Type of bolus available	How it works
Bolus Wizard	Normal bolus, Square Wave bolus, Dual Wave bolus	You enter your BG meter reading and your carbs you plan to eat, and then the Bolus Wizard calculates an estimated bolus amount based on your individual settings.
		For details about using the Bolus Wizard feature, see <i>Bolus Wizard</i> , on page 65.
		To deliver a:
		• Normal bolus using Bolus Wizard, see page 73.
	S	• Square Wave bolus using Bolus Wizard, see <i>page 77</i> .
	EAS	• Dual Wave bolus using Bolus Wizard, see <i>page 79</i> .
Manual	Normal bolus, Square Wave bolus, Dual Wave	You do your own calculation and manually enter your bolus amount.
	bolus	To deliver a:
		• Normal bolus, see <i>page 75</i>
		• Square Wave bolus, see <i>page 78</i>
		• Dual Wave bolus, see page 81
Preset Bolus	Normal bolus, Square Wave bolus, Dual Wave bolus	You select from specific bolus settings that you define ahead of time for recurring situations.
		For details about using the Preset Bolus feature, see <i>Preset Bolus, on page 85</i> .

Delivery method	Type of bolus available	How it works
Easy Bolus™	Normal bolus	After the Easy Bolus feature is set up, you can deliver a Normal bolus by using the \( \simes \) button when the pump is in sleep mode.
		For details about using the Easy Bolus feature, see <i>Easy Bolus, on page 82</i> .
Remote Bolus from your compatible Bayer meter	Normal bolus or any Preset Bolus set up on your pump.	For information on using the Remote Bolus feature on your compatible Bayer meter, see the user guide that came with your compatible Bayer meter.
		For information on turning on the Remote Bolus feature on your pump, see Setting up Remote Bolus , on page 112.

# **Bolus settings**

The following table describes some bolus settings that may need to be changed before you use your bolus options. Consult with your healthcare professional for the settings that are right for you.



**Note:** There are additional settings required if you want to use the Bolus Wizard. These are described in the section, *Bolus Wizard, on page 65*.

Setting	What it is	What it does for you
Max Bolus	Maximum amount of bolus insulin (in units) your pump can deliver in a single bolus.	Provides a safety measure by limiting the total amount of bolus insulin you can program for a single bolus delivery.
		For details about setting the max bolus amount, see <i>Max Bolus, on page 63</i> .

Setting	What it is	What it does for you
Bolus Increment	The amount of insulin (in units) that is increased or decreased with each button press when adjusting your bolus amount. The Bolus Wizard will also use the increment to display the bolus total and adjustment amounts. This setting does not apply to Easy Bolus.	Allows you to set your increment value according to your typical bolus amounts.  For details about setting the bolus increment, see <i>Bolus Increment, on page 64</i> .
Bolus Speed	The speed that your pump delivers your bolus insulin.	Allows you to set your bolus insulin delivery speed to Standard or Quick.  For details about setting your bolus speed, see <i>Bolus Speed, on page 64</i> .

## **Max Bolus**

Max Bolus limits the amount of insulin that can be delivered in a single bolus. Your pump prevents single bolus insulin deliveries that exceed the max bolus you set. You can set your max bolus from 0 to 75 units. Set your max bolus as prescribed by your healthcare professional.

If you are setting your max bolus after you have set up your Preset Bolus deliveries, you cannot set your max bolus lower than any of your Preset Bolus amounts.

## To set your max bolus:

- 1. Go to the Max Basal/Bolus screen.
  - Menu > Insulin Settings > Max Basal/Bolus
- Select Max Bolus.
- 3. Because the Max Bolus setting determines your bolus insulin limit, a warning message appears any time you go to the screen to change the value. To continue to the Max Bolus screen, select **Continue**.

- 4. Select **Max Bolus**, and then set the maximum number of insulin units your pump can deliver in one bolus.
- Select Save.

#### **Bolus Increment**

The Bolus Increment setting determines the number of units that are increased or decreased with each button press when you adjust your bolus delivery amount in the Bolus Wizard, Manual Bolus, and Preset Bolus screens. Depending on your typical bolus amount, you can set your increment to 0.1 units, 0.05 units, or 0.025 units.



**Note:** Easy Bolus uses a setting called Step Size to determine the number of insulin units for each button press. See *Setting up Easy Bolus, on page 83* for more information.

#### To set your Bolus Increment:

- Go to the Bolus Increment screen.
   Menu > Insulin Settings > Bolus Increment
- 2. Select **Increment** to set your desired increment value.
- 3. Select Save.

# **Bolus Speed**

Bolus Speed sets the rate at which your pump delivers bolus insulin. You can set a Standard rate (1.5 units per minute), or a Quick rate (15 units per minute).

# To set your Bolus Speed:

- 1. Go to the Bolus Speed screen.
  - Menu > Insulin Settings > Bolus Speed
- 2. Select Standard or Ouick.
- 3. Select Save.

#### **Bolus Wizard**

The Bolus Wizard is a feature that uses your individual Bolus Wizard settings to calculate an estimated bolus amount based on the BG values and carbs that you enter. Work with your healthcare professional to define your personal settings, which include your carb or exchange ratio, insulin sensitivity, BG target range, and active insulin time.



**Note:** If you do not know how to count carbs, consult with your healthcare professional before using the Bolus Wizard.

After you set up the Bolus Wizard, you can use it to calculate and deliver a food bolus, a correction bolus, or a food plus correction bolus using a Normal bolus (see *page 73*), Square Wave bolus (see *page 77*), or Dual Wave bolus (see *page 79*).

The following sections describe how to set up the Bolus Wizard. Bolus delivery instructions are provided in the individual sections for each bolus type.

## **Understanding your Bolus Wizard settings**

Your pump guides you through entering the following settings when you first turn on the Bolus Wizard feature. Get your prescribed settings from your healthcare professional, and always consult your healthcare professional before changing your settings. The setup procedure begins on *page 66*.

Setting	What it does
Carb Ratio	Used for food bolus calculations.
Exchange Ratio	• If you count carbs: the number of carb grams that are covered by 1 unit of insulin.
	• If you count exchanges: the number of insulin units that are needed to cover 1 carb exchange.
Insulin Sensitivity	Used to calculate correction bolus amounts.
Factor	Your insulin sensitivity factor is the amount that blood glucose is reduced by one unit of insulin.

Setting	What it does	
BG Target	The Bolus Wizard calculates your estimated bolus based on your BG target range. The high and low values you set are the values to which your blood glucose is corrected.  To use a single target value rather than a range, set the same value for High and Low.	
	If your BG value is above the high target value, a correction dose is calculated. If your BG value is below the low target value, a negative correction is calculated and subtracted from your food bolus.	
Active Insulin Time	Active insulin is the bolus insulin that has been delivered by the pump and is still working to lower your blood glucose levels. Active insulin time is the length of time that bolus insulin is tracked as active insulin.	
	Work with your healthcare professional to get the active insulin time that best represents the insulin type you use and your physiological insulin absorption rate.	
	For more information about how the Bolus Wizard uses your active insulin amount, see <i>About active insulin, on page 71</i> .	

# Setting up the Bolus Wizard feature

Before you can use the Bolus Wizard to calculate a bolus, you must turn on this feature and enter your Bolus Wizard settings.

## To set up the Bolus Wizard feature:

1. Go to the Bolus Wizard Setup screen.

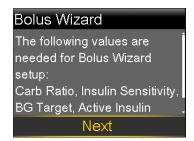
# Menu > Insulin Settings > Bolus Wizard Setup

The Bolus Wizard Setup screen appears with the Bolus Wizard turned off.



2. Select **Bolus Wizard** to turn on the feature.

If this is the first time you have turned on the Bolus Wizard feature, your pump displays information about the settings you need to enter.



Make sure you have the values you need, and then select **Next** to continue.



**Note:** As you enter your personal settings, your pump displays information about each setting. Click **Next** to continue when you have read each explanation.

3. When the Edit Carb Ratio screen appears, enter your carb ratio. If you are setting a carb ratio, set the grams per unit (g/U). If you are setting an exchange ratio, set the units per exchange (U/exch). You can set up to eight carb ratios using different time segments. The time segments must cover a 24-hour period.

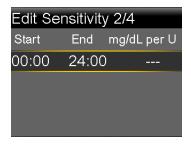




**Note:** Your pump uses grams as the default carb unit. If you would like to change your carb unit to exchanges, see *Carb Unit*, on page 140.

If your ratio value is outside the range of 5 to 50 grams per unit or 0.3 to 3 units per exchange, a message appears asking you to confirm your setting.

4. When the Edit Sensitivity screen appears, enter your insulin sensitivity factor. You can set up to eight different sensitivity factors using different time segments. The time segments must cover a 24-hour period.



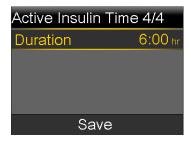
If the value you enter is outside the range of 20 to 100 mg/dL, a message appears asking you to confirm your setting.

5. When the Edit BG Target screen appears, enter your Bolus Wizard BG target range. You can set up to eight different BG target ranges using different time segments. The time segments must cover a 24-hour period.



If your BG target is outside the range of 90 to 140 mg/dL, a message appears asking you to confirm your setting.

6. When the Active Insulin Time screen appears, enter your active insulin time value.



#### 7. Select Save.

A message appears letting you know the Bolus Wizard setup is complete. You can now use the Bolus Wizard to calculate a bolus.

## **Changing your Bolus Wizard settings**

This section shows you how to make changes to your personal settings after you initially set up the Bolus Wizard. These settings are available only if the Bolus Wizard is turned on.

# Changing your carb or exchange ratio

You can change either your carb ratio or exchange ratio setting, depending on whether you use grams or exchanges as your carb unit. The carb ratio and exchange ratio settings are available only if the Bolus Wizard is turned on.



**Note:** Your pump uses grams as the default carb unit. If you would like to change your carb unit to exchanges, see *Carb Unit*, on page 140.

## To change your carb or exchange ratio:

1. Go to the Carb Ratio screen or the Exchange Ratio screen, depending on the carb units you use.

Menu > Insulin Settings > Bolus Wizard Setup > Carb Ratio or

Menu > Insulin Settings > Bolus Wizard Setup > Exchange Ratio

Select Edit.

- 3. Select the carb or exchange ratio to adjust the Start time, the End time, and the ratio. You can set up to eight different carb or exchange ratios using different time segments. The time segments must cover a 24-hour period.

  If you set a value outside the typical range of 5 to 50 grams per unit or 0.3 to 3 units per exchange, a message appears asking you to confirm your setting.
- 4. When you have made your changes, select **Save**.

#### Changing your insulin sensitivity factor

The Insulin Sensitivity Factor option is only available if the Bolus Wizard feature is turned on.

#### To change your insulin sensitivity factor:

- 1. Go to the Sensitivity screen.
  - Menu > Insulin Settings > Bolus Wizard Setup > Insulin Sensitivity Factor
- 2. Select **Edit**.
- 3. Select the sensitivity factor to adjust the Start time, the End time, and the Sensitivity amount. You can set up to eight different sensitivity amounts using different time segments. The time segments must cover a 24-hour period.

  If you set a value that is outside the typical range of 20 to 100 mg/dL per unit, a message appears asking you to confirm your setting.
- 4. When you have made your changes, select Save.

# **Changing your Bolus Wizard BG target**

Your target range can be from 60 to 250 mg/dL. The Bolus Wizard BG Target option is only available if the Bolus Wizard feature is turned on.

# To change your Bolus Wizard BG target range:

- 1. Go to the BG Target screen.
  - Menu > Insulin Settings > Bolus Wizard Setup > BG Target
- 2. Select **Edit**.
- 3. Select the BG target to adjust the Start time, the End time, and the Lo (low) and Hi (high) BG Target values. Your high value cannot be less than your low value. You can set up to eight different values using different time segments. The time segments must cover a 24-hour period.

If your BG target is outside the typical range of 90 to 140 mg/dL, a message appears asking you to confirm your setting.

4. When you have made your changes, select **Save**.

#### **Changing your Active Insulin Time**

The active insulin time setting lets the pump know which active insulin time to use in calculating the amount of active insulin to subtract before estimating a bolus. Your healthcare professional will prescribe the active insulin time that is best for you.

#### To change your active insulin time:

- 1. Go to the Active Insulin Time screen.
  - Menu > Insulin Settings > Bolus Wizard Setup > Active Insulin Time
- Select **Duration**, then adjust your active insulin time (in hours), using 15minute increments.
- 3. Select Save.

## **Turning off the Bolus Wizard feature**

You can turn off the Bolus Wizard feature at any time. Your Bolus Wizard settings remain in your pump. When the Bolus Wizard is turned off, the Bolus Wizard option does not appear in the Bolus Menu, and you cannot edit your Carb Ratio, Insulin Sensitivity Factor, or BG Target settings from the Bolus Wizard Setup screen.

#### To turn off the Bolus Wizard feature:

- 1. Go to the Bolus Wizard Setup screen.
  - Menu > Insulin Settings > Bolus Wizard Setup
- 2. Select **Bolus Wizard** to turn the feature off.

#### About active insulin

Active insulin is the bolus insulin that has already been delivered to your body, and is still working to lower your blood glucose levels. The pump considers your active insulin time setting in determining if any active insulin is still in your body from prior boluses. This may help prevent hypoglycemia caused by over-correcting for high blood glucose.

Your current active insulin amount displays on the Home screen, and includes only the bolus insulin you have already received.

When you are using the Bolus Wizard, the Bolus Wizard calculator uses your current active insulin value to determine if there is an active insulin adjustment needed. The active insulin adjustment calculation considers both the bolus insulin that has already been delivered (the amount shown on the Home screen), as well as any insulin that is going to be delivered by an active Square Wave bolus.



WARNING: Do not use the Bolus Wizard to calculate a bolus for a period of time after giving a manual injection of insulin by syringe or pen. Manual injections are not accounted for in the active insulin amount. Therefore, the Bolus Wizard could prompt you to deliver more insulin than needed. Too much insulin may cause hypoglycemia. Consult with your healthcare professional for how long you need to wait after a manual injection of insulin before you can rely on the active insulin calculation of your Bolus Wizard.

#### **Bolus Wizard warnings**

When you use the Bolus Wizard, there may be times when you see one of the following:

Warning:	What it means:	What to do:
High BG	Your BG meter reading is above 250 mg/dL.	<ul><li>Check for an occlusion.</li><li>Check ketones.</li></ul>
		<ul><li>Consider an insulin injection.</li><li>Monitor your BG.</li></ul>
Low BG	Your BG meter reading is below 70 mg/dL.	Treat your low BG. Do not give yourself a bolus until your BG returns to normal.

Warning:	What it means:	What to do:
Max Bolus	The bolus amount entered	Check the bolus amount. Select
Exceeded	exceeds your Max Bolus setting.	No to cancel, or Yes to
		continue. If you select Yes, the
		bolus amount that you entered
		is reduced to your max bolus
		limit.

#### **Normal bolus**

A Normal bolus provides a single immediate dose of insulin. You use a Normal bolus to cover your food intake or to correct a high BG meter reading.

You cannot access the Reservoir & Tubing, Insulin Settings, or Sensor Settings menu options during a Normal bolus delivery.



**Note:** Your pump allows you to deliver a Normal bolus while a Square Wave bolus or the Square portion of a Dual Wave bolus is being delivered.

# Delivering a Normal bolus with the Bolus Wizard

## To deliver a Normal bolus using the Bolus Wizard:

- 1. For a correction bolus or a food bolus with a correction, use your BG meter to check your blood glucose. For a food bolus only, skip this step.
- Go to the Bolus Wizard screen.

#### Home screen > Bolus > Bolus Wizard

The Bolus Wizard screen shows your current BG meter reading (if applicable) and any insulin that is still active from previous boluses. For more information about active insulin, see *About active insulin, on page 71*. For more information, see *About your compatible Bayer meter, on page 111*.



**Note:** Be aware that if you already have the Bolus Wizard open prior to wirelessly sending your BG meter reading to your pump, you must close the Bolus Wizard and open it again, in order for that reading to appear.



3. If you are not using a wirelessly connected compatible Bayer meter, you can select **BG** to manually enter your BG meter reading.



**Note:** If you choose not to enter a BG value, three dashes appear on the screen in place of the BG value.

- 4. For a food bolus, select **Carbs** to enter the carb count of your meal. For a correction bolus where no food was eaten, leave the Carbs value at 0.
- 5. Your calculated bolus appears in the Bolus field.



If you want to change the bolus amount, select **Bolus** and make any desired adjustment. If you change your bolus amount, the word "Modified" appears next to the new bolus amount.

6. Select **Next** to review your bolus information.

Your bolus amount appears.



**Note:** If you modified your bolus amount in the previous step, **Bolus Calculated** displays your original bolus amount, **Modification** displays the amount you added or subtracted from your bolus, and **Bolus** displays the actual bolus amount.



7. Select **Deliver Bolus** to start your bolus.

Your pump beeps or vibrates and displays a message when your bolus starts. The Home screen shows your bolus amount as it is being delivered. Your pump beeps or vibrates when your bolus is complete.

## **Delivering a Normal bolus using Manual Bolus**

The following section describes how to deliver a Normal bolus using the Manual Bolus feature.

#### To deliver a Normal bolus using Manual Bolus:

1. Go to the **Manual Bolus** screen.

Home screen > Bolus > Manual Bolus



**Note:** If the Bolus Wizard is turned off, the Manual Bolus screen appears when you select Bolus.



The Manual Bolus screen shows your current BG value (if applicable) and any insulin that is still active from previous boluses. For more information about active insulin, see *About active insulin*, on page 71.

- 2. Select **Bolus** to set your bolus delivery amount (in units).
- 3. Select **Deliver Bolus** to start your bolus.

Your pump beeps or vibrates and displays a message when your bolus starts. The Home screen shows your bolus amount as it is being delivered. Your pump beeps or vibrates when your bolus is complete.

# **Square Wave bolus**

A Square Wave bolus delivers a bolus evenly over a period of time (30 minutes to 8 hours).

When using the Bolus Wizard, a Square Wave bolus is available only when giving a food bolus without a correction for an elevated BG. A Square Wave bolus is not available for a correction bolus alone, or a correction bolus with food bolus.

A Square Wave bolus can be useful in these situations:

- If you have delayed food digestion due to gastroparesis or meals high in fat.
- When you are snacking over an extended period of time.
- If a Normal bolus drops your blood glucose too rapidly.

Since the Square Wave bolus extends delivery over a period of time, the insulin is more likely to be available as you need it.



**Note:** You cannot perform these functions during a Square Wave bolus delivery:

- Change the Max Bolus or the Active Insulin Time settings.
- Turn off or deliver Dual Wave or Square Wave boluses.
- Turn the Bolus Wizard feature on or off.
- Fill the cannula.
- Rewind your pump.
- Run a self-test.
- Access the Manage Settings menu.

All other functions are available during the Square Wave bolus.

## **Turning on or off Square Wave bolus**

The Square Wave bolus delivery option is available only after you turn on the Square Wave feature.

#### To turn on or turn off the Square Wave feature:

1. Go to the Dual/Square screen.

Menu > Insulin Settings > Dual/Square Wave

- 2. Select **Square Wave** to turn the feature on or off.
- 3. Select **Save**.

## Delivering a Square Wave bolus with the Bolus Wizard

The Square Wave option is available in the Bolus Wizard only after you turn on the Square Wave feature. Also, you must have entered a Carbs value.

#### To deliver a Square Wave bolus with the Bolus Wizard:

1. Go to the Bolus Wizard screen.

#### Home screen > Bolus > Bolus Wizard

The Bolus Wizard screen shows your current BG meter reading (if applicable) and any insulin that is still active from previous boluses. For more information about active insulin, see *About active insulin*, on page 71. For more information, see *About your compatible Bayer meter*, on page 111.



**Note:** Be aware that if you already have the Bolus Wizard open prior to wirelessly sending your BG meter reading to your pump, you must close the Bolus Wizard and open it again, in order for that reading to appear.

2. If you are not using a wirelessly connected compatible Bayer meter, you can select **BG** to manually enter your BG meter reading.



**Note:** If you choose not to enter a BG meter reading, three dashes appear on the screen instead.

3. Select **Carbs** to enter the amount of carbs in your food.

4. Review your calculated bolus amount in the Bolus field. If you want to change the bolus amount, select **Bolus** and make your desired change.

Remember, if there is a correction bolus amount calculated, you are not able to give a Square Wave bolus.



**Note:** If you change your bolus amount, the word "Modified" appears next to the new bolus amount.

- 5. Select **Next** to review your bolus information.
- 6. Select **Square**.

The Bolus Wizard screen appears with your bolus amounts.

- 7. To change the time period over which your bolus is delivered, select **Duration** to adjust the time. The duration can be from 30 minutes to 8 hours, in 15 minute increments.
- 8. Select **Deliver Bolus** to start your bolus.

During a Square Wave bolus delivery, the **Bolus** button on your Home screen appears as Bolus (S). You can select **Bolus** (S) to stop the bolus, to see details on the insulin that has been delivered, or to access the Bolus menu. The Bolus menu provides access to the Bolus Wizard, Manual Bolus, Preset Bolus, and Insulin Settings options.

## **Delivering a Square Wave bolus using Manual Bolus**

The Square Wave option is available in the Manual Bolus screen only after you turn on the Square Wave feature.

## To deliver a Square Wave bolus manually:

1. Go to the Manual Bolus screen.

Home screen > Bolus > Manual Bolus

- 2. Set your bolus delivery amount (in units), and then select **Next**.
- 3. Select **Square**.
- 4. Select **Duration** and set the amount of time over which you want your Square Wave bolus to be delivered. The duration can be from 30 minutes to 8 hours, and is set in 15-minute increments.

5. Select **Deliver Bolus** to start your bolus.

During a Square Wave delivery, the **Bolus** button on your Home screen appears as Bolus (S). You can select **Bolus** (S) to stop the bolus, to see details on the insulin that has been delivered, or to access the Bolus menu. The Bolus menu provides access to the Bolus Wizard, Manual Bolus, Preset Bolus, and Insulin Settings options.

#### **Dual Wave bolus**

The Dual Wave bolus feature meets both immediate and extended insulin needs by delivering a combination of an immediate Normal bolus followed by a Square Wave bolus.

A Dual Wave bolus can be useful in these situations:

- When you need to correct elevated blood glucose before a meal, and you also need a delayed bolus for food that is absorbed slowly.
- When you eat meals with mixed nutrients, such as carbs, fats and proteins, that are absorbed at different rates.

## Turning on or off Dual Wave bolus

The Dual Wave bolus delivery option is available only after you turn on the Dual Wave feature.

#### To turn on or turn off the Dual Wave feature:

- 1. Go to the Dual/Square screen.
  - Menu > Insulin Settings > Dual/Square Wave
- Select Dual Wave to turn the feature on or off.
- Select Save.

## Delivering a Dual Wave bolus with the Bolus Wizard

The Dual Wave option is available in the Bolus Wizard only after you turn on the Dual Wave feature.

#### To deliver a Dual Wave bolus with the Bolus Wizard:

1. For a correction bolus or a food bolus with a correction, use your BG meter to check your blood glucose. For a food bolus only, skip this step.

2. Go to the Bolus Wizard screen.

#### Home screen > Bolus > Bolus Wizard

The Bolus Wizard screen shows your current BG meter reading (if applicable) and any insulin that is still active from previous boluses. For more information about active insulin, see *About active insulin, on page 71*. For more information, see *About your compatible Bayer meter, on page 111*.



**Note:** Be aware that if you already have the Bolus Wizard open prior to wirelessly sending your BG meter reading to your pump, you must close the Bolus Wizard and open it again, in order for that reading to appear.

3. If you are not using a wirelessly connected compatible Bayer meter, you can select **BG** to manually enter your BG meter reading.



**Note:** If you choose not to enter a BG value, three dashes appear on the screen in place of the BG value.

- 4. For a food bolus, select **Carbs** to enter the carb count of your meal. For a correction bolus where no food was eaten, leave the Carbs value as 0.
- 5. Review your calculated Bolus amount. If you want to change the amount, select **Bolus** and make your desired change.



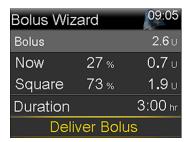
**Note:** If you change your bolus amount, the word "Modified" appears next to the new bolus amount.

- 6. Select **Next** to review your bolus information.
- 7. Select **Dual**.

The Bolus Wizard screen appears, with the food amount split evenly between the Now and Square portions.

8. If you need to change the amounts, select the area of the screen with the Now value and adjust the **Now** amount.

When you adjust the Now amount, the Square amount adjusts automatically.



- 9. Adjust the **Duration** over which you want the Square Wave portion to be delivered. The duration can be from 30 minutes to 8 hours.
- 10. Select **Deliver Bolus** to start your bolus.

During a Dual Wave delivery, the Home screen shows the progress of the Now portion of your delivery. When the Now portion is complete, the **Bolus** button on your Home screen appears as Bolus (D). You can select **Bolus (D)** to stop the bolus, to see details on the amount of bolus insulin delivered, or to access the Bolus menu. The Bolus menu provides access to the Bolus Wizard, Manual Bolus, Preset Bolus, and Insulin Settings options.

# **Delivering a Dual Wave Bolus using Manual Bolus**

The Dual Wave option is available in the Manual Bolus screen only after you turn on the Dual Wave feature.

## To deliver a Dual Wave bolus using Manual Bolus:

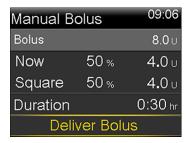
1. Go to the Manual Bolus screen.

#### Home screen > Bolus > Manual Bolus

The Manual Bolus screen appears.

- 2. Set your bolus delivery amount (in units), and then select **Next**.
- 3. Select **Dual**.

The Manual Bolus screen appears, with the Now and Square portions split evenly.



- 4. If you need to change the amounts, select the area of the screen with the Now value and adjust the **Now** amount. When you adjust the Now amount, the Square amount adjusts automatically.
- 5. Adjust the **Duration** over which you want the Square Wave portion to be delivered. The duration can be from 30 minutes to 8 hours.
- 6. Select **Deliver Bolus** to start your bolus.

During a Dual Wave delivery, the Home screen shows the progress of the Now portion of your delivery. When the Now portion is complete, the **Bolus** button on your Home screen appears as Bolus (D). You can select **Bolus (D)** to stop the bolus, to see details on the amount of bolus insulin delivered, or to access the Bolus menu. The Bolus menu provides access to the Bolus Wizard, Manual Bolus, Preset Bolus, and Insulin Settings options.

# **Easy Bolus**

The Easy Bolus feature allows you to quickly deliver a Normal bolus using only the button. Your pump must be in sleep mode to use the Easy Bolus feature.

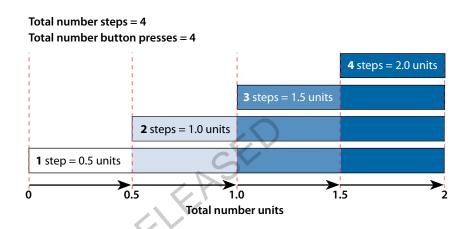
Before using Easy Bolus, you must turn on the feature and set the step size. The step size determines the number of units the bolus amount increases each time you press the \( \sigma \) button. Your Easy Bolus delivery is limited to 20 steps or your max bolus limit, whichever comes first.

To help you count your Easy Bolus steps, each time you press the  $\wedge$  button, your pump makes a different tone. There are five different tones that repeat if you use more than five steps.

## **Understanding Easy Bolus step sizes**

When setting up Easy Bolus, you can set the step size from 0.1 to 2.0 units. Your step size cannot be higher than your max bolus. Set the step size to a number that is convenient to use and easy to multiply.

The following example shows how your bolus amount is increased with each step, or each press of the  $\land$  button when using the Easy Bolus feature to deliver a bolus. In this example, the step size is 0.5 units. For a delivery of 2.0 units, you would need four steps, or press the  $\land$  button four times when using the Easy Bolus feature.



# **Setting up Easy Bolus**

The Easy Bolus option is available only after you turn on the feature.

# To set up Easy Bolus:

1. Go to the Easy Bolus screen.

Menu > Insulin Settings > Easy Bolus

- 2. Select **Easy Bolus** to turn on the feature.
- 3. Set the **Step Size** amount (in units). You can set the step size from 0.1 to 2.0 units. Your step size cannot be higher than your max bolus.
- 4. Select **Save**.

#### **Delivering a bolus using Easy Bolus**

Initially you should use the Easy Bolus feature while looking at the pump screen as you count the tones or vibrations.



**Caution:** Always check your pump if you hear any unanticipated beeps or vibrations.



**Caution:** When using Audio or Vibrate, it is possible that an Audio or Vibration notification may not occur as expected if the speaker or vibrator in your pump malfunctions. This is most important when using the Easy Bolus feature or when your pump is in Manual Suspend where a missed notification may cause an over or under delivery of insulin.

Contact the 24 Hour HelpLine or your local representative with any concerns.

To use the Easy Bolus feature, you need to put your pump into sleep mode by pressing and holding the **Menu** button for about two seconds.

## To deliver a bolus using Easy Bolus:

1. While your pump screen is in sleep mode, press and hold  $\wedge$  for about one second. After your pump beeps or vibrates, release  $\wedge$ . You can now start programming your Easy Bolus.



**Note:** If your pump does not respond when you press  $\wedge$ , it may not be in sleep mode, even if the screen is dark.

2. Press the number of times needed to set your bolus amount.

Each time you press , your pump sounds a tone or vibrates, and your bolus amount increases by the number of units set for the step size.



**Note:** You cannot use  $\checkmark$  to select the Easy Bolus values. Pressing  $\checkmark$  cancels the Easy Bolus.

- 3. When you have reached the desired bolus amount, press and hold ∧ to confirm the amount. You should hear a confirmation tone or feel a vibration for each button press. Count to ensure the amount is correct. If the amount is not correct, press and hold ∨ until you hear a tone, and then start again from step 1.
- 4. When the bolus amount is confirmed, press and hold ∧ for about one second to deliver your bolus. Your pump beeps or vibrates. Your bolus starts immediately after the confirmation.



**Note:** If you do not start your bolus within 10 seconds, your Easy Bolus is cancelled, and you receive a message letting you know that your bolus was not delivered.

# **Preset Bolus**

The Preset Bolus feature allows you to set up in advance bolus deliveries you expect to use frequently. There are four Preset Bolus names that allow you to match a bolus to a meal with a known carb content: Breakfast, Lunch, Dinner and Snack. There are four additional Preset Bolus names that can be set for other circumstances (Bolus 1 through Bolus 4).



**Note:** To set up a Dual Wave bolus or Square Wave bolus, the Dual Wave or Square Wave feature must be turned on.

## Setting up and managing Preset Bolus deliveries

## To set up Preset Bolus amounts:

1. Go to the Preset Bolus Setup screen.

# Menu > Insulin Settings > Preset Bolus Setup

The Preset Bolus Setup screen appears, showing any existing Preset Bolus settings.

Select Add New.

The Select Name screen appears with the available Preset Bolus names.

3. Select the Preset Bolus you want to set.