GETTING STARTED WITH MINIMED™ 670G SYSTEM WITH SMARTGUARD™ AUTO MODE





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## SmartGuard Auto Mode

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## **Training handouts**

## Appendix

MiniMed 670G pump modes and insulin delivery
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## Welcome to SmartGuard Auto Mode

In this *GETTING STARTED WITH MINIMED*<sup>™</sup> 670G SYSTEM WITH SMARTGUARD<sup>™</sup> AUTO MODE guide, you will learn about SmartGuard technology that automatically adjusts your basal insulin delivery based on your sensor glucose (SG) values. To use this technology, your pump will need to be in SmartGuard Auto Mode. In this section, you will learn about Auto Mode and how it works.

For complete information about Auto Mode and the MiniMed 670G system, see the *MiniMed*<sup>™</sup> 670G System User Guide.



**Note:** Any time your pump is not in Auto Mode, it is referred to as Manual Mode. Manual Mode is not a mode that you turn on or off in a menu, but is simply the mode the pump is in when it is not in Auto Mode.

#### In Auto Mode:

- Basal insulin is delivered based on your SG values and recent insulin delivery needs. This basal insulin delivery is referred to as Auto Basal.
- Auto Mode uses a target of 6.7 mmol/L.
- You can temporarily change the target to 8.3 mmol/L for exercise, or other times you would like the target raised.
- You are still required to enter carbs when you eat, and BGs to calibrate the sensor.
- When you enter a BG over 8.3 mmol/L, Auto Mode may recommend a correction bolus, depending on its calculations for your insulin needs.
- You will receive a BG required notification or alert if your pump needs a BG to enter or stay in Auto Mode.



**Note:** There are times in Auto Mode when basal insulin is being delivered according to your recent insulin needs, but is not being adjusted based on an SG reading. This is called Safe Basal. You will learn about Safe Basal after you learn about Auto Mode basics.

# **Section 1:** Reviews and reminders before starting SmartGuard Auto Mode

It is important that you read and follow these general reminders before you begin.

#### **BG** testing

The BG readings you enter into your pump may be used to:

- Calibrate your sensor
- Enter Auto Mode
- Remain in Auto Mode when notified by your pump
- Recommend a correction bolus when a BG of 8.3 mmol/L or higher is entered

If you believe any BG reading result is inaccurate, wash your hands and re-check your BG. When the pump prompts you to enter a new BG, it is important to perform a fingerstick, and enter a new BG.

#### Calibrating

After the first day of sensor use, the minimum number of calibrations required is one every 12 hours. You may receive an additional **Calibrate now** alert if the system detects that a calibration is required for accuracy of SG readings. Calibrating 4 times a day is optimal. It is best to calibrate when your glucose is not changing very rapidly. Calibrating when there are  $\uparrow\uparrow$ ,  $\downarrow\downarrow\downarrow$  or  $\uparrow\uparrow\uparrow$ ,  $\downarrow\downarrow\downarrow\downarrow$  arrows may decrease sensor accuracy. Many find that a good time to calibrate is before meals. Review the calibration guidelines in the *Calibration* section of *GETTING STARTED WITH MINIMED*<sup>™</sup> 670G SYSTEM WITH CONTINUOUS GLUCOSE MONITORING for more information.

#### Carb entry

While you are in Auto Mode, it is important that you enter your carbs and confirm insulin delivery for you to receive your food boluses.

## Section 2: Using SmartGuard Auto Mode for the first time

There are several steps that you need to complete before using SmartGuard Auto Mode for the first time. Some steps take longer than others to process, and some need to be completed before others. Below are the instructions for how to put your pump into Auto Mode for the first time.

**IMPORTANT:** Work with your healthcare professional to determine when you should turn the Auto Mode feature on, and to determine your individual settings.

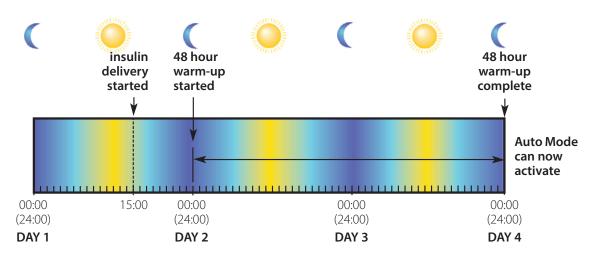


#### To get your pump ready for Auto Mode

Note: When the Auto Mode setting is turned On, other steps must be completed for it to activate, or start working. If you are using SmartGuard Suspend before low or SmartGuard Suspend on low, they are automatically turned off when Auto Mode becomes active.

 Use your pump to deliver your insulin for at least 48 hours. This is called the Auto Mode warm up. The warm up helps the pump learn your personalized insulin needs for Auto Mode. Auto Mode warm up begins the first midnight after your pump starts delivering insulin, and takes 48 hours to complete. Your pump does not require the Auto Mode setting to be turned on for the Auto Mode warm up to occur. We will turn Auto Mode on later.

For example, if your pump starts delivering insulin at 15:00 on Day 1, the warm up starts at 00:00 (24:00) on Day 2, and completes at 00:00 (24:00) on Day 4. Some alarms or alerts that occur during warm up, including a Suspend before low alert or a Suspend on low alarm, will turn off Auto Mode.



2) Turn on the Sensor option and start a sensor, if you are not currently using one. For Auto Mode to work, you must have a working glucose sensor.

To review instructions on sensor use and continuous glucose monitoring (CGM), see *GETTING STARTED WITH MINIMED*<sup>™</sup> 670G SYSTEM WITH CONTINUOUS GLUCOSE MONITORING. Check with your healthcare professional if you have not received training on using your sensor.

If your Bolus Wizard feature is already set up with settings from your healthcare professional, skip to step 4.

Next, you will enter your Carb Ratio and Active Insulin Time in the Bolus Estimate Setup screen. These settings can be entered as individual Bolus Estimate settings, or as part of the Bolus Wizard setup. If you choose to enter the settings within the Bolus Wizard feature, all of the Bolus Wizard settings must be completed: Carb Ratio, Insulin Sensitivity Factor, BG Target, and Active Insulin Time.



**Note:** If you have entered practice settings into your Bolus Wizard feature, be sure to check with your healthcare professional and enter your personalized settings. If you have practice settings in your Bolus Wizard feature, and will not use the Bolus Wizard feature in Manual Mode, make sure your Carb Ratio and Active Insulin Time are your personalized settings, and turn Bolus Wizard feature off.

3) Enter your Carb Ratio and Active Insulin Time using one of the following methods:

#### **Individual Bolus Estimate Settings**

To enter your Carb Ratio and Active Insulin Time as individual settings:

- a) Press O.
- b) Select **Options**.
- c) Select **Delivery Settings**.
- d) Select Bolus Estimate Setup.
- e) Select Carb Ratio or Active Insulin Time.
- f) Enter your settings.

#### **Bolus Wizard Settings**

To use the Bolus Wizard feature to enter your Carb Ratio, Active Insulin, and other Bolus Wizard settings, see *GETTING STARTED WITH MINIMED™ 670G INSULIN PUMP*.

- 4) Check the Home screen for the following:
  - An active temp basal
  - A current bolus delivery, including a Square Wave bolus or Dual Wave bolus
  - Delivery suspended

SmartGuard Auto Mode cannot activate, or start working, during any of these conditions.

If any of these conditions exist, you must wait until it is completed, or cancel it, before Auto Mode will work.

5) Read the following warning. Then follow the steps to turn the Auto Mode setting on.



WARNING: Do not put your pump into Auto Mode if you have used the pump in the last 3 days to practice button pressing, or if basal insulin that was programmed into your pump was not your actual basal delivery. Doing so may result in the delivery of too little or too much insulin, which can cause hyperglycemia or hypoglycemia. Auto Mode uses the recent delivery history on your pump to determine the Auto Basal delivery amount you receive.

- a) Press O.
- b) Select **Options**.
- c) Select **SmartGuard**.

d) Select Auto Mode.

Enter BG	0
Basal	<b>Ğ</b> -
Audio Options	б
Status	Ë
Suspend Delivery	
Options	<u>نې</u>

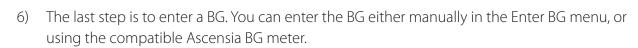
Options SmartGuard History Reservoir & Tubing Delivery Settings Event Markers

SmartGuard
Auto Mode
High Setup
Low Setup
Snooze

selecting **Save**, you will receive an alert instructing you

to check the Auto Mode Readiness screen.

e) Select **Auto Mode** again to turn Auto Mode on. Auto Mode On Auto Mode Auto Mode BG alert 🛛 🚨 Save Check the screen to make sure that Auto Mode is set to f) Auto Mode On. Select **Save**. Auto Mode Auto Mode BG alert On Notice that the Auto Mode BG alert is set to **On**. You will learn about this alert in "Information about Safe Basal" on page 21. Save **Note:** If SmartGuard Auto Mode is not yet ready, after



If you have entered a BG within the past 12 minutes, your pump may be in Auto Mode. Your pump will indicate when it is time to enter a BG. Look at your pump screen, and follow the instructions.

**Note:** If you are using a new sensor and it is still warming up, or if the first calibration for a new sensor was just entered, the pump will not be ready for you to enter a BG.

**Note:** If you enter a BG over 8.3 mmol/L, your pump may recommend a correction bolus as it enters Auto Mode, see *"Using your pump in Auto Mode" on page 12.* 

If you see the	Do this	
Auto Mode Shield	This shield on the Home screen means that your pump is in Auto Mode.	
7.5	<ul> <li>a) Go to Viewing the sensor graph in Auto Mode on page 10 to continue learning about Auto Mode features.</li> </ul>	
0.7 U Act. Insulin	b) You may need to review <i>What to do if your pump is not in Auto Mode on page 8</i> at a later time.	

## Getting started | Using SmartGuard Auto Mode for the first time

If you see the	Do this		
Auto Mode not ready message with or without a flashing	This means that your pump is not in SmartGuard Auto Mode.		
notification light on your pump	a)	Read the message on the first screen.	
Auto Mode	b)	Press $\bigotimes$ to finish reading the message.	
not ready	C)	Select <b>OK</b> .	
Check Auto Mode	d)	To learn about the Auto Mode Readiness	
Readiness screen for		status screen, go to <i>pages 8-10, What</i>	
details.		to do if your pump is not in Auto Mode, and	
Auto Mode		complete any actions required.	
not ready Katalis. A	Check th flashing:	ne Home screen if the notification light is	
	a)	Press 🔦 to return to the Home screen.	
ОК	b)	Follow the instructions on the screen and complete the required action.	



**Note:** Entering a BG before your pump is ready to receive it will not help you enter Auto Mode more rapidly.

## Section 3: Checking SmartGuard Auto Mode Readiness

#### How to tell when your pump is in SmartGuard Auto Mode

After SmartGuard Auto Mode has been turned on and each of the Auto Mode Readiness steps have been completed, Auto Mode becomes *active*. When Auto Mode is *active*, a large shield outlined in blue, with a SG value, appears on the center of your Home screen.

If you see this Home screen, your pump is in Auto Mode, and is delivering Auto Basal.



### What to do if your pump is not in SmartGuard Auto Mode

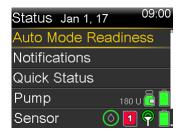
If Auto Mode is turned on but not active, or working, check the Auto Mode Readiness status screen. This screen helps you determine why Auto Mode is not active. There may be actions that you can take to make Auto Mode active.



#### To check Auto Mode Readiness

- 1) From the Home screen, press O.
- 2) Select Status.

Bolus	Õ
Enter BG	0
Basal	Ē.
Audio Options	б
Status	Ë
Suspend Delivery	

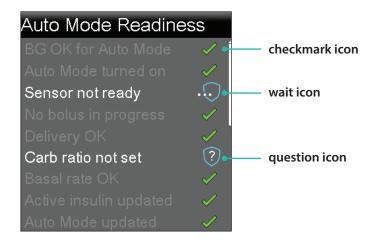


3) Select Auto Mode Readiness.

The Auto Mode Readiness status screen appears showing you what is ready for Auto Mode, and what is not ready for Auto Mode.

The following Auto Mode Readiness status screen shows items that are ready, items that require you to take an action, and items that require you to wait.

- A checkmark icon 🖌 means the item is ready. The item appears grayed out.
- A question icon 😨 by the item means that there is an action that you need to take to get your pump into Auto Mode.
- A wait icon by the item means that the pump is updating and there is no action for you to take at this time.





**Note:** For help with question items **?** and wait items **.**, see the *"Quick Reference Guide for SmartGuard Auto Mode Readiness status screen" on page 33.* 

When your pump is in SmartGuard Auto Mode, the Auto Mode Readiness status screen shows all items grayed out and checked. This means that all the steps required for Auto Mode are complete, and Auto Mode is working or active.

Auto Mode Readiness		
BG OK for Auto Mode	<ul> <li>Image: A second s</li></ul>	
Auto Mode turned on	$\checkmark$	
Sensor OK	$\checkmark$	
No bolus in progress	$\checkmark$	
Delivery OK	$\checkmark$	
Carb ratio OK	$\checkmark$	
Basal rate OK	$\checkmark$	
Active insulin updated	$\checkmark$	
Auto Mode updated	$\checkmark$	

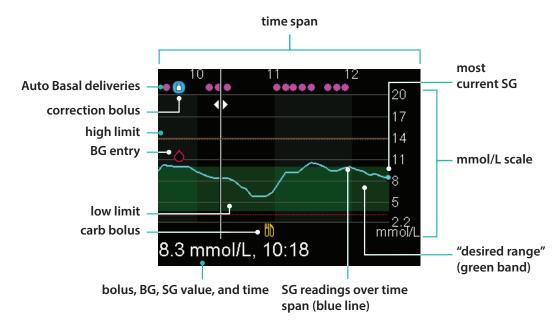
If all items **are not** grayed out and checked, see "Quick Reference Guide for SmartGuard Auto Mode Readiness status screen" on page 33.

#### Viewing the sensor graph in SmartGuard Auto Mode

The sensor graph in Auto Mode displays information about your SG values and trends, BG entries, Auto Basal deliveries, and bolus entries.

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#### To use the sensor graph



From the Home screen, press 🖾 to view the sensor graph.

## Getting started | Checking SmartGuard Auto Mode Readiness

The graph shows a range of SG values from 2.2 mmol/L to 20 mmol/L. The green band across the screen represents an SG range from 3.9 mmol/L to 10 mmol/L. The blue line shows your actual SG values over the time span. At the right end of the blue line is a blue dot representing the most current SG value.

Details about correction bolus, BG entry, and meal (carb) bolus are shown on the graph. To locate details for an icon, look for the icon on the graph, and press  $\bigcirc$  or  $\bigcirc$  to scroll to that icon. The details for that icon are located along the bottom of the screen. Icons shown on the graph are:

- indicates Auto Basal or Safe Basal delivery (micro boluses)
- 1 indicates a bolus for correction only
- indicates a BG entered either manually or using a meter
- indicates a bolus that includes a carb entry; it displays for a carb only or a carb plus correction bolus

Press  $\bigcirc$  or  $\bigcirc$  to cycle through the time span. The SG values and times, BG readings and times, and Bolus amounts display along the bottom of the screen.

A bolus amount followed by an (N) indicates a normal bolus delivered through the bolus feature. Each Auto Basal delivery is displayed as a micro bolus, for example, 0.025 (M). A BG entry is labeled BG, for example BG, 6.7 mmol/L, and an SG is displayed with the value only for example, 6.7 mmol/L.

Press  $\bigcirc$  or  $\bigcirc$  to change the time span shown on the graph. The choices are 3 hours, 6 hours, 12 hours, and 24 hours.

To access these graphs:

- 1) From the Home screen, press 🖾.
- 2) Press 🔇 to scroll back over the graph. Sensor values will be shown at the bottom of the graph.
- 3) Press 🔿 to see the 6-hour, 12-hour and 24-hour graphs.
- 4) Press 🔿 to return to the Home screen.

## Section 4: Using your pump in SmartGuard Auto Mode

Now you will learn how to use your pump when it is in SmartGuard Auto Mode. Auto Mode screens are similar to, but not exactly the same as, Manual Mode screens. To use Auto Mode, you will follow the instructions on the screens, and apply what you already know about using your pump. First, we will start with some of the basic functions, such as entering a BG and carbs, delivering a bolus, calibrating your sensor, and entering and canceling your temp target.

#### Entering a BG in SmartGuard Auto Mode

You will need to enter a BG into the pump:

- To calibrate the sensor
- To continue in Auto Mode when the pump alerts you

There are two ways to enter a BG when you are in Auto Mode. You can manually enter a BG or enter a BG using the compatible meter, compatible Ascensia BG meter.



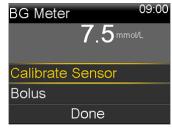
# Using the compatible Ascensia BG meter to enter a BG with or without carbs for food, deliver a bolus, and calibrate your sensor

- Check your BG. You may need to make a selection on your meter to send the BG reading to the pump, depending on your meter setting for sending over BG results.
- 2) Select **Yes** to confirm the BG meter reading.

If you do not believe the meter result is accurate, do not confirm now. Select **No**, wash your hands, and recheck your BG.

3) Bolus will be highlighted. If you want to calibrate with this BG, select **Calibrate Sensor**.





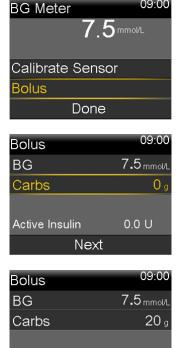
- 4) If you want to give a bolus, select **Bolus**. If you do not want to give a bolus, press  $\bigcirc$ , and select **Done**.
- 5) Select **Carbs** to enter carbs for food. If you are not eating carbs, go to the next step.
- 6) Select **Next** to review the calculated bolus amount.

Select **Deliver Bolus** to deliver the bolus. 7)

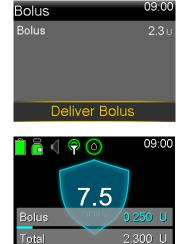
The Bolus Started message briefly appears, then the Home screen appears, with a banner showing the bolus being delivered.

**Note:** If you entered a BG over 8.3 mmol/L, Auto Mode may recommend a correction bolus. Proceed through the bolus menu and enter carbs if necessary, and select **Deliver Bolus**.

**Note:** Just like in Manual Mode, you can easily stop a bolus at any time. Press (O) and select Stop Bolus. Then, select Yes to stop the bolus. View the amount of bolus delivered, and then select **Done**.



09:00



Next

0.0 U

Active Insulin





To manually enter a BG and carbs for food, deliver a bolus, and calibrate your sensor

- 1) Press (O).
- 2) Select **Bolus**.
- 3) Select **BG**.

4) Press  $\bigcirc$  or  $\bigcirc$  to enter your BG reading, and press  $\bigcirc$ .

5) Select **Carbs**.

6) Press  $\bigcirc$  or  $\bigcirc$  to enter carbs for your food, and press  $\bigcirc$ .

7) Select Next.

Bolus	00
Enter BG	
Temp Target	Ś
Audio Options	б
Status	Ë
Suspend Delivery	



Bolus	09:00
BG	7.5 mmol/L
Carbs	<b>O</b> g
Active Insulin	0.0 U
Next	

Bolus	09:00
BG	7.5 mmol/L
Carbs	<b>O</b> g
Active Insulin	0.0 U
Next	

Bolus	09:00
BG	7.5 mmol/L
Carbs	<b>20</b> g
Active Insulin	0.0 U
Next	

Bolus	09:00
BG	7.5 mmol/L
Carbs	20 g
Active Insulin	0.0 U
Next	

- 8) Review the calculated bolus amount.
- 9) Select **Deliver Bolus** to deliver the bolus.Press (•) if you do not wish to deliver the bolus.

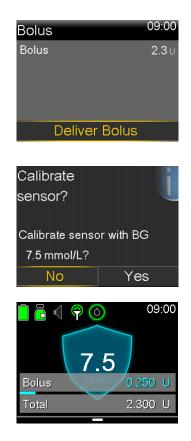
The message Bolus Started briefly appears.

A message appears asking if you want to calibrate using the entered BG.

10) Select Yes if you want to calibrate.

Select **No** if you do not want to calibrate.

The Home screen appears showing the bolus being delivered.



**Note:** If you entered a BG over 8.3 mmol/L, Auto Mode may recommend a correction bolus. Proceed through the bolus menu and enter carbs if necessary, and select **Deliver Bolus**.

**Note:** Just like in Manual Mode, you can easily stop a bolus at any time. Press O and select **Stop Bolus**. Then, select **Yes** to stop the bolus. View the amount of bolus delivered, and then select **Done**.



To manually enter your BG only

- 1) Press (O).
- 2) Select Enter BG.

Bolus	00
Enter BG	Ó
Temp Target	ĸ
Audio Options	б
Status	Ë
Suspend Delivery	

3) Select **Enter BG** to adjust the BG value.

- 4) Press  $\bigcirc$  or  $\bigcirc$  to enter your BG reading. and press  $\bigcirc$ .
- 5) Select Save.

A message appears asking if you want to calibrate using the entered BG.

6) Select **Yes** if you want to calibrate.

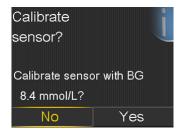
Select **No** if you do not want to calibrate.

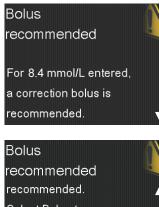
If your BG reading is over 8.3 mmol/L, your pump may recommend a correction bolus.

- a) Read the message on the first screen.
- b) Press  $\bigcirc$  to finish reading the message.
- c) Select **Bolus**.
- d) Start with step 5 in the previous instructions, *To manually enter a BG and carbs for food, deliver a bolus, and calibrate your sensor on page 14.*









recommended recommended. Select Bolus to program a bolus. Bolus Cancel

### **Entering and Canceling Temp Target**



#### To enter your Temp Target

The standard Auto Mode target is 6.7 mmol/L. You can temporarily change your Auto Mode target to 8.3 mmol/L for exercise, or other times you would like the Auto Mode target raised. Check with your healthcare professional for recommendations regarding your temp target use.

- 1) Press (O).
- 2) Select Temp Target.
- Press or or or to set the Temp Target duration you want to use, and then press o. The duration can be set in 30 minute increments. The default is 2 hours.
- 4) Select **Start**.

The message Temp Target Started briefly appears, then the Home screen appears, where a banner shows the remaining Temp Target time.

Bolus	٥U
Enter BG	0
Temp Target	ĥ
Audio Options	б
Status	Ë
Suspend Delivery	







#### To cancel your Temp Target

If you need to return to your standard Auto Mode target of 6.7 mmol/L before your Temp Target duration expires, you can cancel the Temp Target.

- 1) Press (O).
- 2) Select Cancel Temp Target.

The Temp Target screen appears and shows the details of the temp target.

3) Select **Cancel Temp Target** to cancel the temp target.

If you do not want to cancel the Temp Target after reviewing the details, press (S).

The Temp Target Ended message and duration of the Temp Target briefly appear. Then the Home screen appears.

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# **Section 5:** Suspending and Resuming Delivery in SmartGuard Auto Mode

When your pump is in SmartGuard Auto Mode, you can suspend insulin delivery any time you need to.



#### To suspend delivery

When you bathe, shower or temporarily disconnect your pump for any reason, suspend insulin delivery so that Auto Mode tracks the correct amount of insulin that you received.

1)	Press O.	Bolus	<u> </u>
	<u> </u>	Enter BG	0
2)	Select Suspend Delivery.	Temp Target	ŝ
		Audio Options	б
		Status	Ë
		Suspend Delivery	
3)	Select <b>Yes</b> to confirm.		
		Suspend Delivery?	6
SCre	e message Delivery Suspended briefly appears. Then the Home een appears with a red shield and a red Delivery Suspended nner.	Ac Delivery Suspended	10:00 0.5 U t. Insulin d

**Note:** To avoid a Lost sensor signal alert, keep your pump nearby if you disconnect for 30 minutes or longer.

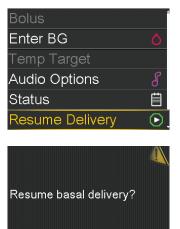


**Note:** You do not need to suspend your pump when you do an infusion set change. The pump will automatically suspend during a set change process.



To resume delivery

- 1) Press (O).
- 2) Select **Resume Delivery**.
- 3) Select **Yes** to resume delivery.



Yes

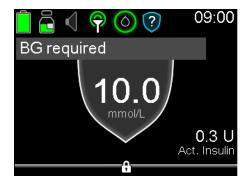
No

The message Delivery Resumed Successfully briefly appears, then the Home screen appears.

## Section 6: Information about Safe Basal

When your pump is in SmartGuard Auto Mode, but is not adjusting the basal based on SG readings, it is in Safe Basal. Similar to Auto Basal, Safe Basal automatically delivers insulin to cover your basal needs based on your recent insulin needs. However, Safe Basal does not adjust delivery amounts based on your SG values.

When your pump is in Safe Basal, the outline of the Auto Mode shield is white, as shown below. Depending on the situation, there may or may not be an SG reading displayed.



Safe Basal activates when:

- An SG reading is not available because your transmitter and pump are not communicating, or the sensor calibration has expired.
- Your sensor might be reading lower than your actual glucose values.
- Your BG value is different from your SG value by 35% or more.
- After you change your sensor, during the sensor warm up.
- Auto Mode has been at your personal minimum Auto Mode basal delivery rate for 2 1/2 hours.
- Auto Mode has been at your personal maximum Auto Mode basal delivery rate for 4 hours.

The maximum time your pump will stay in Safe Basal is 90 minutes. However, it may be shorter than that, and resolve itself before you are aware of it. For example, the pump will go into Safe Basal temporarily if it misses an SG value from the transmitter, but then receives the next one.

At other times, when the pump is in Safe Basal and there is an action you can take to help resolve the issue, you will receive an alert that indicates the action to take. Examples of these actions are entering a calibration, entering a new BG, or responding to a Lost Sensor alert.

There is an optional setting called Auto Mode BG alert that is designed to help limit the time spent in Safe Basal. When this alert is turned on, the pump will alert when a BG entry is recommended. Your pump will arrive with this setting turned on. The following alerts are triggered when the Auto Mode BG alert setting is on:

- Auto Mode max delivery
- Auto Mode min delivery
- BG required
- Cal required for Auto Mode



**Note:** Make sure that the Auto Mode BG alert is turned on, and follow the instructions on the pump alert screens to help limit the time that your pump is in Safe Basal delivery.



**Note:** The MiniMed 670G insulin pump modes and insulin delivery table in the *Appendix, on page 35* show information on Manual Mode, Auto Mode with Auto Basal delivery, and Auto Mode with Safe Basal delivery.



#### To edit the Auto Mode BG alert setting

- 1) Press (O).
- 2) Select **Options**.
- 3) Select **SmartGuard**.

4) Select Auto Mode.

Enter BG	0
Temp Target	ß
Audio Options	б
Status	Ë
Suspend Delivery	
Options	<u>وې</u>

Options
SmartGuard
History
Reservoir & Tubing
Delivery Settings
Event Markers

SmartGuard
Auto Mode
High Setup
Low Setup
Snooze

## Getting started | Information about Safe Basal

The Auto Mode screen appears with the Auto Mode BG alert set to **On** by default.

If you want to turn the Auto Mode BG alert off, select **Auto Mode BG alert** to change the setting to **Off**.

5) Select **Save**.





**Note:** The maximum time the pump can stay in Safe Basal is 90 minutes. After 90 minutes in Safe Basal, if the condition that caused the transition into Safe Basal is not resolved, the pump will exit Auto Mode and enter Manual Mode. When your pump is in Manual Mode, it uses the Basal settings that you have set up. For more information, see *Information about Safe Basal on page 21*.

# Section 7: Information about SmartGuard Auto Mode automatic exits

Under certain conditions, your pump will exit SmartGuard Auto Mode automatically:

- After it has been in Safe basal for 90 minutes, and the condition that caused Safe Basal has not resolved.
- After certain pump alarms that require you to take action with your pump, and monitor your BG readings. Alarms that cause the pump to exit Auto Mode include High SG Auto Mode Exit and Insulin flow blocked.

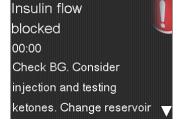
An example of an alarm that will cause your pump to exit Auto Mode is the Insulin flow blocked alarm. To respond to this, or any alarm:

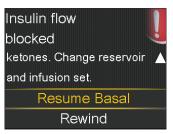
**Note:** The Insulin Flow Blocked alarm will also cause

Auto Mode to turn off. Always check the Auto Mode

Readiness screen to get back into Auto Mode.

- 1) Read the message on the first screen.
- 2) Press  $\bigcirc$  to finish reading the message.
- 3) Follow the instructions in the message.





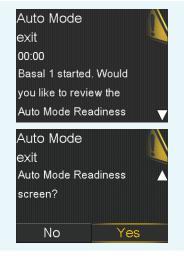


**Note:** An Insulin flow blocked alarm occurs when insulin cannot be pushed through the tubing or cannula. If this alarm occurs, make sure your reservoir is not empty and check the tubing for kinks, knots or other obvious blockages.

- If you detect an issue and are able to resolve it, check BG and select Resume Basal.
   If an Insulin flow blocked alarm occurs again, follow the steps on the screen and select Rewind to change your reservoir and infusion set.
- If you are unable to detect an issue, follow the steps on the screen and select **Rewind** to change your reservoir and infusion set.

## Getting started | Information about SmartGuard Auto Mode automatic exits

Note: If your pump has exited Auto Mode and you want to use the SmartGuard Suspend before low or the SmartGuard Suspend on low feature, you need to go to the SmartGuard Low Setup screen and turn the feature on. For instructions, see Setting up your Low Setup in GETTING STARTED WITH MINIMED<sup>™</sup> 670G SYSTEM WITH CONTINUOUS GLUCOSE MONITORING. If you want to go back into Auto Mode, see "Returning to SmartGuard Auto Mode" on page 27.



## Section 8: Exiting SmartGuard Auto Mode manually

You can manually exit SmartGuard Auto Mode and return to Manual Mode any time.



То	exit	Auto	Mode
----	------	------	------

- 1) Press O.
- 2) Select **Options**.
- 3) Select **SmartGuard**.

4) Select **Auto Mode** to access the Auto Mode screen.

5) Select Auto Mode again to turn Auto Mode off.

6) Select Save.

Enter BG	0
Temp Target	K
Audio Options	б
Status	Ë
Suspend Delivery	
Options	<u></u>

Options
SmartGuard
History
Reservoir & Tubing
Delivery Settings
Event Markers

SmartGuard
Auto Mode
High Setup
Low Setup
Snooze





## Section 9: Returning to SmartGuard Auto Mode

WARNING: Do not use SmartGuard Auto Mode for a period of time after giving a manual injection of insulin by syringe or pen. Manual injections are not accounted for in Auto Mode. Therefore, Auto Mode could deliver too much insulin. 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 resume Auto Mode.

Your pump may transition back into Auto Mode if the condition that caused it to transition out of Auto Mode has been resolved, an alarm has not turned the Auto Mode setting off, and you have entered a BG into your pump. If your setting has been turned off, or you have manually turned the Auto Mode setting off, you will need to turn it back on to use Auto Mode again.



#### To return to Auto Mode

- 1) Press (O).
- 2) Select **Options**.
- 3) Select SmartGuard.

4) Select **Auto Mode** to access the Auto Mode screen.

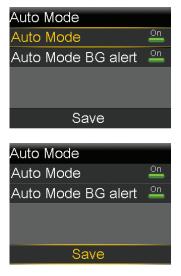
Enter BG	0
Temp Target	ß
Audio Options	Ъ
Status	Ë
Suspend Delivery	
Options	<u>نې</u>



SmartGuard
Auto Mode
High Setup
Low Setup
Snooze

5) Select **Auto Mode** again to turn Auto Mode on.





7) If your pump does not go into Auto Mode, see "Checking SmartGuard Auto Mode Readiness" on page 8.

## Section 10: Alarms and alerts in SmartGuard Auto Mode

In addition to the pump and sensor alarms that were introduced in *GETTING STARTED WITH MINIMED*<sup>™</sup> 670G INSULIN PUMP, you may receive the following alerts and alarms only when the pump is in SmartGuard Auto Mode.

Title and text	Cause	Steps to take
<ul> <li>Auto Mode started</li> <li>The following</li> <li>SmartGuard settings are now turned off:</li> <li>Suspend before low</li> <li>Suspend on low</li> </ul>	Your pump has started Auto Mode. The SmartGuard Suspend before low and Suspend on low settings are now turned off.	<ul> <li>Select <b>OK</b> to clear the alert.</li> <li>Alert is information only. No action is required at this time.</li> </ul>
Auto Mode Exit Basal Name started. Would you like to review the Auto Mode Readiness screen?	Your pump has exited Auto Mode.	Follow instructions for any alert or alarm you received. Check the Auto Mode Readiness status screen for information to re-enter Auto Mode.
Auto Mode max deliveryAlerts you when your pump has been delivering insulin at your maximum Auto Mode basal delivery rate for 4 hours. Your personal maximum Auto Mode basal delivery rate is automatically determined.Auto Mode has been at maximum delivery for 4 hours. Enter BG to continue in Auto Mode.Alerts you when your pump has been delivering insulin at your maximum Auto Mode basal delivery rate for 4 hours. Your personal maximum Auto Mode basal delivery rate is automatically determined.		Select <b>OK</b> . Enter a BG to continue in Auto Mode.

Title and text	Cause	Steps to take	
Auto Mode max	Auto Mode has been unable to lower your SG value. Your pump is suspended, and your predicted SG is above target.	<ul> <li>Select <b>OK</b> to clear the alert.</li> </ul>	
Auto Mode max delivery Auto Mode has been unable to bring your SG down. Enter BG and resume delivery to continue in Auto Mode.	<ul> <li>Note:</li> <li>The title of this alert appears the same as the previous Auto Mode max delivery alert in the table.</li> <li>If you have suspended your pump, you will have no delivery. However, the alert may still occur.</li> </ul>	<ul> <li>Check your BG and enter it into your pump.</li> <li>Follow instructions from your healthcare professional and continue to monitor your BG.</li> </ul>	
<b>Auto Mode min delivery</b> Auto Mode has been at minimum delivery for 2:30 hr. Enter BG to continue in Auto Mode.	Alerts you when your pump has been delivering insulin at your minimum Auto Mode basal delivery rate for 2 1/2 hours. Your personal minimum Auto Mode basal delivery rate is automatically determined.	Select <b>OK</b> . Enter a BG to continue in Auto Mode.	
	Your pump is suspended, and your predicted SG has been below target for 2 1/2 hours.	<ul> <li>Select <b>OK</b> to clear the alert.</li> </ul>	
Auto Mode min delivery Your SG has been below target for 2:30 hr. Enter BG and resume delivery when ready to continue in Auto Mode.	<ul> <li>Note:</li> <li>The title of this alert appears the same as the previous Auto Mode min delivery alert in the table.</li> <li>If you have suspended your pump, you will have no delivery. However, the alert may still occur.</li> </ul>	<ul> <li>Check your BG and enter it into your pump.</li> <li>Follow instructions from your healthcare professional and continue to monitor your BG.</li> </ul>	
<b>Auto Mode off</b> <i>Basal Name</i> started		Check Auto Mode	

*Basal Name* started. Would you like to review the Auto Mode Readiness screen?

Due to an alarm, the Auto Mode setting in the SmartGuard menu has turned off.

Check Auto Mode Readiness status screen for information to re-enter Auto Mode.

## Getting started | Alarms and alerts in SmartGuard Auto Mode

Title and text	Cause	Steps to take
<b>BG required</b> Enter a new BG for Auto Mode.	A new BG entry is required for Auto Mode.	Perform fingerstick and enter a new BG.
<b>Bolus recommended</b> For XXX mmol/L entered, a correction bolus is recommended. Select Bolus to program a bolus.	Auto Mode recommends a correction bolus based on a BG that you have entered.	Consider delivering the recommended correction bolus.
<b>Cal required for Auto</b> <b>Mode</b> Enter a BG and calibrate sensor for Auto Mode.	A calibration is required to keep your pump in Auto Mode.	Perform a fingerstick. Enter BG and calibrate your sensor.
<b>High BG XX.X mmol/L</b> Check infusion set. Check ketones. Monitor BG. Confirm BG?	A BG that you entered is above 13.9 mmol/L. Note: The instructions for a High BG alert in Auto Mode are different than the instructions for a High BG alert in Manual Mode.	Check infusion set. Check ketones. Monitor BG. Confirm BG.
High SG SG has been high for over 1 hour. Check infusion set. Check ketones. Monitor BG. Followed by Auto Mode exit Monitor BG and treat as necessary. <i>Basal Name</i> started. Enter BG to continue in Auto Mode.	SG has been high for over one hour. This value is based on a set glucose threshold and length of time: 16.7 mmol/L or higher for one hour; 13.9 mmol/L or higher for three hours.	<ul> <li>High SG</li> <li>Check infusion set. Check ketones. Monitor BG.</li> <li>Auto Mode Exit</li> <li>Monitor BG and treat as necessary. Enter BG to continue in Auto Mode.</li> </ul>
<b>Low SG X.X mmol/L</b> SG is under 2.8 mmol/L. Check BG and treat.	SG is under 2.8 mmol/L.	Perform fingerstick and treat as needed. Monitor BG.



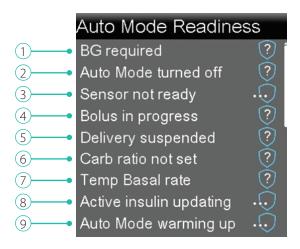
**Note:** You can use the Alert Silence feature in Auto Mode to silence the majority of the alerts, but the following alerts will still sound:

- Auto Mode exit
- High SG
- Auto Mode off
- Low SG XX mmol/L (2.8 mmol/L or below)

# Quick Reference Guide for SmartGuard Auto Mode Readiness status screen

### What to do if SmartGuard Auto Mode is not ready

The **Auto Mode Readiness Table** shows what to do when the wait icon **...** or the question icon **?** appears by items on the Auto Mode Readiness status screen. To open the Auto Mode Readiness status screen, from the main menu, select **Status**, and then select **Auto Mode Readiness**.



#### Auto Mode Readiness Table

Line	If this appears	Do this		
1	Calibration required	Perform a fingerstick and calibrate your sensor.		
	BG required	Perform a fingerstick and enter a new BG. Your BG must be within the 2.2-22.2 mmol/L range or your pump will not enter Auto Mode.		
	Wait to enter BG	Wait until the pump prompts you to enter a BG.		
	Processing BG	Wait until the BG has processed.		
2	Auto Mode turned off  ?	Turn on Auto Mode in the SmartGuard, Auto Mode screen.		
3	Sensor not ready 🕠	a) Check to see if your pump has a transmitter ID entered in Utilities, Device Options. For example, GT6133333F.		
		If your pump does not have a transmitter ID entered, see Connecting your Pump and Transmitter in GETTING STARTED WITH MINIMED™ 670G SYSTEM WITH CONTINUOUS GLUCOSE MONITORING.		

# Quick Reference Guide for SmartGuard Auto Mode Readiness status screen

Line	If this appears	Do this
		b) Check your Home screen. If you see X, move your pump and transmitter closer together. The pump will try to find the transmitter signal.
	Sensor off	If after 30 minutes the pump and transmitter are still not communicating, you will receive a Lost sensor signal alert. Check that the sensor is still inserted in the skin and the transmitter and sensor are still connected. Move your pump closer to your transmitter. Turn on the sensor in the Utilities, Sensor Settings screen.
	Airplane mode on	Turn off the Airplane mode in the Utilities, Airplane Mode screen.
4	Bolus in progress	Wait until the bolus is complete or stop the bolus yourself before Auto Mode can activate.
5	Delivery suspended	If insulin delivery is suspended, Auto Mode cannot activate. Treat low BG if necessary as instructed by your healthcare professional.
6	Carb ratio not set	When you turn on the Bolus Wizard feature for the first time, enter your Carb Ratio in the Edit Carb Ratio screen. You can also enter your Carb Ratio in the Bolus Estimate Setup screen, even if the Bolus Wizard feature is not turned on.
7	Temp Basal rate 📀	If a temp basal is currently active, you must wait until it has completed or cancel the temp basal yourself before Auto Mode can activate.
8	Active insulin updating 🕠	If active insulin is currently updating, it may take up to 5 hours to complete. You must wait until this amount is updated.
9	Auto Mode warming up 🕠	Auto Mode is gathering information on your insulin delivery history in order to personalize its automatic delivery of insulin.

## MiniMed 670G insulin pump modes and insulin delivery

	Manual Mode	SmartGuard Auto Mode Auto Basal delivery	SmartGuard Auto Mode Safe Basal delivery
Home screen display	7 8 20 7 8 20 17 5.6 14 mmol/L 11 8 5 0.1U 2.2 Act. Insulin	09:00 7.5 mmol/L 0.7 U Act. Insulin	BG required 7.5 Mmol/L 0.1U Act. Insulin
Availability	When Auto Mode is not active. May be used with or without CGM.	When Auto Mode is turned on, after a minimum of 48 hour initial Auto Mode warm-up, and a working, calibrated sensor. Requires a BG entry as last step to enter Auto Mode*, and ongoing BG entries and calibrations.	Pump automatically transitions to Safe Basal delivery from Auto Basal delivery when valid SG values are not available, or minimum or maximum Auto Basal delivery limits have been reached.
Basal insulin delivery	Uses the basal settings programmed in Basal menu to deliver the basal rates.	Uses the SG values <i>and</i> the recent insulin delivery needs to automatically adjust and deliver the basal rates.	Uses the recent insulin delivery to automatically deliver a fixed rate. SG values are <i>not</i> used to determine the automatic basal rates. You will receive an alert if you need to take an action to return to Auto Basal.** Maximum time in Safe Basal is 90 minutes. If the cause is not resolved, the pump will exit to Manual Mode.

	Manual Mode	SmartGuard Auto Mode Auto Basal delivery	SmartGuard Auto Mode Safe Basal delivery
Bolus Wizard settings	Uses all of the Bolus Wizard settings to determine the Bolus Wizard recommended dose.	Bolus feature uses Carb ratio and Active insulin time only for bolus recommendations.	Bolus feature uses Carb ratio and Active insulin time only for bolus recommendations.

\*For a complete list of Auto Mode entry requirements, see Auto Mode readiness in the Auto Mode chapter of the *MiniMed*<sup>™</sup> 670G System User Guide.

\*\*The Auto Mode BG Alert in SmartGuard settings must be turned ON to receive an audible BG required alert. Otherwise, a visible banner only will display. The Auto Mode BG Alert is defaulted to ON.

# **Medtronic**

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Medtronic MiniMed 18000 Devonshire Street Northridge, CA 91325 USA 1800 646 4633 +1 818 576 5555

Medtronic Australasia Pty Ltd, 2 Alma Road, Macquarie Park, NSW 2113, Australia. Telephone: 1800 777 808 (Australia Toll Free) www.medtronic-diabetes.com.au

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