



t:slim X2™ Insulin Pump Refresher Guide



t:slim X2™
Insulin Pump

WITH BASAL-IQ™ TECHNOLOGY



TANDEM®
DIABETES CARE

Your Choice. Your Life. Your Freedom.®



This book belongs to

My trainer is.....

Pump serial number.....

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Your Choice. Your Life. Your Freedom.®

We're devoted to helping people living with diabetes. For over 20 years we've given thousands of people the tools and support they need to improve their quality of life.



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Maintenance tips for your t:slim X2™ Insulin Pump

Charging Tips



Your t:slim X2™ insulin pump contains a rechargeable lithium-polymer battery. Lithium-polymer batteries are not harmed by partial charging.

- Charge 10-15 mins each day, most easily done when you disconnect for a bath or shower
- Avoid frequent full discharges
- As the battery discharges it will count down in 5% increments
- Do not charge while sleeping
- If charging in the car please use a car power adapter
- You do not need to disconnect from the pump while charging but if you are connected it is important to only use the Tandem charging cable

Keeping Vents Clean



There are 6 vents on the back of your pump which keep the pump ventilated and adjust for pressure changes. These 6 vents need to be kept clear and clean at all times.

If you notice any dirt, moisture or debris on these vents, we recommend that you use a lint-free cloth to gently clean the back of the pump. We recommend using the cleaning kit that is provided to clean the pump. DO NOT poke anything into the vents as you may damage the pump.

Tips for avoiding blocked vents



When possible, always wear your t:slim X2™ insulin pump in its protective case – this protects the pump from damage and also keeps the vents clear, clean and dry.

If you are not wearing your pump in a case, make sure that the vents can breathe – i.e. face the back of the pump outwards.

Avoid placing the back of the pump directly against your skin as this limits air circulation around the pump and you may get an alarm.

Radiology Procedures

Procedure	Patient is Pumper	Healthcare Professional is Pumper
Dental X-rays	Disconnect and leave outside the room.	Disconnect and leave outside the room.
UltraSound	<ol style="list-style-type: none"> 1. No need to disconnect. 2. The transducer should not be pointed directly at the pump or site. If the site is directly in the range of the transducer, site should be removed. 	<ol style="list-style-type: none"> 1. No need to disconnect. 2. The transducer should not be pointed directly at the pump or site.
Mammogram and Bone Density test	DO NOT expose the pump to the test. <ol style="list-style-type: none"> 1. Disconnect the pump before the test and leave the pump in a locked dressing room. 2. Infusion set can remain in place during the test. 	<ol style="list-style-type: none"> 1. No need to disconnect. 2. Follow normal x-ray safety practices and proceed to the designated safe area while each test is being performed.
Body x-rays, Fluoroscopy (chest, neck, abdomen)	DO NOT expose the pump to the x-ray beam. <ol style="list-style-type: none"> 1. Disconnect the pump before treatment and leave the pump in a locked dressing room. 2. If the infusion set doesn't interfere with the area being treated, the set can remain in place during radiation. 	<ol style="list-style-type: none"> 1. No need to disconnect. 2. Follow normal x-ray safety practices and proceed to the designated safe area when each x-ray is taken.
Therapeutic Radiation/ Onc. (cancer treatment by radiation)	DO NOT expose the pump to radiation treatment. <ol style="list-style-type: none"> 1. Disconnect the pump before treatment and leave the pump in locked dressing room. 2. If the infusion set doesn't interfere with the area being treated, the set can remain in place during radiation. 	<ol style="list-style-type: none"> 1. No need to disconnect. 2. Follow normal radio-protection practices and proceed to the designated safe area while the patient is undergoing treatment.
CT Scans and MRIs (Magnetic Resonance Imaging)	DO NOT bring the pump into the exam room at any time. <ol style="list-style-type: none"> 1. Disconnect the pump and metal needle infusion set before the exam and leave in a locked dressing room. 2. Soft cannula infusion sets can remain in place. 3. If the pump is accidentally allowed in the exam room, disconnect the pump immediately and contact Tandem Pump Support for instructions. 	MRI: DO NOT bring the pump into the same room as the MRI machine at any time. If the pump is accidentally allowed in the exam room, disconnect the pump immediately and contact Tandem Pump Support for instructions. CT scan: No need to disconnect. Follow normal CT scan safety practices and proceed to the designated safe area when each scan is performed.
Electro-cautery surgery	Disconnect from the pump during surgery. <ol style="list-style-type: none"> 1. Disconnect before surgery and leave in a locked dressing room. 2. If the infusion set doesn't interfere with the area being treated, the set can remain in place during surgery. 	No need to disconnect.

When in doubt, disconnect and leave the pump in a locked dressing room

Follow usual instructions for bolusing to cover any missed basal insulin if needed when you reconnect.

Medical Procedures, Amusement Parks & Aviation

Medical Procedures

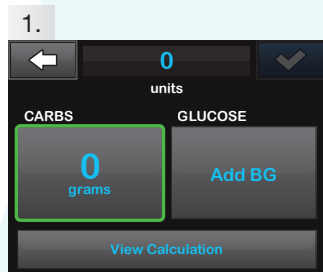
Procedure	Patient is Pumper	Healthcare Professional is Pumper
Pacemaker AICD	1. Disconnect the pump and leave outside the room during the insertion of the device and reprogramming.	Follow normal safety practices and proceed to the designated safe area while each x-ray is taken and during programming.
	2. Infusion set can remain in place.	
ECG	No need to disconnect.	No need to disconnect.
Cardiac Catheter	Disconnect the pump and leave outside the room during the procedure	Follow normal safety practices and proceed to the designated safe area while each x-ray is taken.
Nuclear Stress Test	Disconnect the pump and leave outside the room during the scan. It can remain connected during the injection of the radioisotope.	Follow normal safety practices and proceed to the designated safe area while each x-ray is taken.
Colonoscopy	No need to disconnect.	No need to disconnect.
Laser Surgery	The pump and infusion set can be worn; however, some lasers can create interference and cause the pump to alarm.	The pump and infusion set can be worn; however, some lasers can create interference and cause the pump to alarm.
General Anaesthesia	Determination based on what medical equipment is being used in the procedure.	Determination based on what medical equipment is being used in the procedure.

Amusement Parks & Aviation

“Free-Fall” Rides	Very powerful electromagnets are sometimes used on “free-fall” amusement park rides. Insulin pumps should be removed and not taken on these “free-fall” types of rides.
Roller-Coasters	High gravity forces can be experienced when riding on some roller-coasters. It is recommended that you disconnect (NOT suspend) the pump while on roller-coaster rides.
Aircraft without Cabin Pressurisation	If flying in aircraft without cabin pressurisation or flying in aircraft used for aerobatics or combat simulation pressurised or not), it is recommended that you disconnect (NOT suspend) the pump.
Airport Security	No need to disconnect unless going through a walkthrough x-ray. DO NOT expose to security checkpoint x-rays by putting through conveyor belt x-ray or walk-through x-ray.

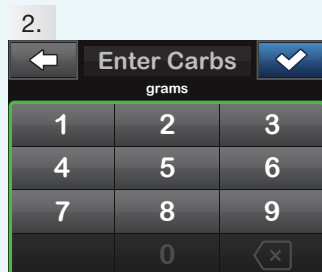
Deliver an Extended Bolus

The instructions below are provided as a reference tool for caregivers who are already familiar with the use of an insulin pump and with insulin therapy in general. Not all screens are shown. For more detailed information on the operation of your Tandem insulin pump, please refer to its user guide.



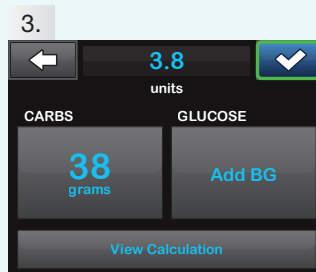
Tap **0 grams** to enter the carbs for your bolus.

NOTE: If this area reads “units,” the carb feature is turned off in the active profile.



Enter desired value. Be sure “grams” is displayed above keypad for food boluses.

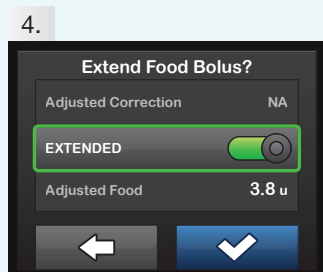
Tap to continue.



Tap to continue, then tap to confirm.

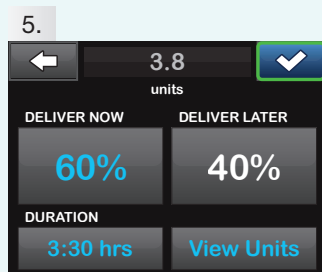
NOTE: If an above-target blood glucose (BG) is entered, the correction bolus will not be extended.

NOTE: If you have a CGM session active, and if there is both a CGM value and a CGM trend arrow available on the CGM Home Screen, your glucose value is autopopulated in the GLUCOSE field.

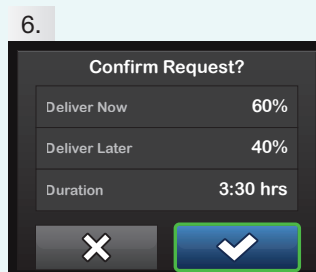


Tap the toggler to the on position to extend the bolus.

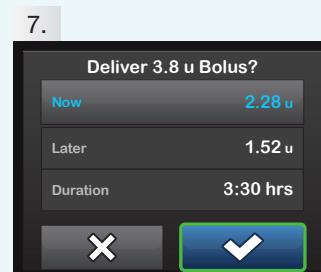
Tap to continue.



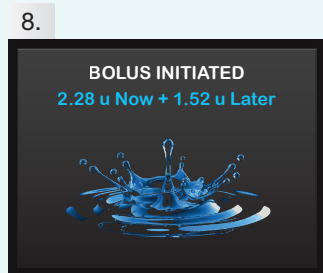
Tap to use default settings or tap **DELIVER NOW** and **DURATION** and set your desired values, then tap to continue.



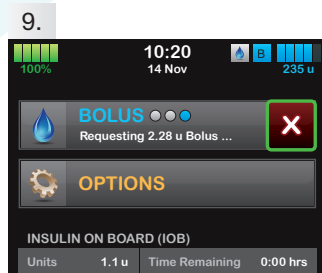
Tap to confirm.



The delivery screen will confirm how much insulin will be delivered up front for carbs (and any correction bolus), how much will be delivered over time, and the delivery duration. Tap to start the bolus.



The BOLUS INITIATED screen will appear to confirm delivery has started.

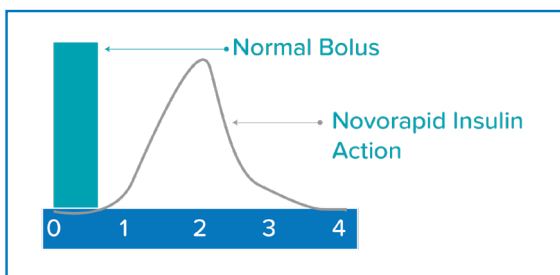


To cancel the undelivered portion of the bolus, tap next to BOLUS on the Home Screen, then tap to confirm canceled bolus.

Bolus Options on Insulin Pumps

Normal Bolus (whole bolus given at once)

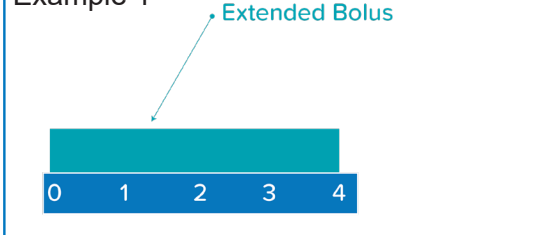
This will be used for the majority of meals.



Notes

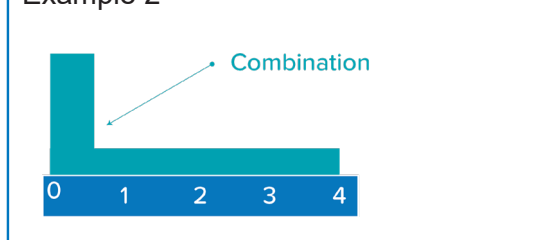
Extended Bolus (bolus given over longer duration) is a slow infusion of insulin spread out over time. Using this delivery method, the bolus avoids a high initial dose of insulin that may enter the blood and cause low blood glucose before digestion can facilitate sugar entering the blood. An extended bolus is appropriate for high-fat meals such as pizza, deep-fried foods and low GI foods such as pasta (especially with heavy cream sauce).

Example 1



Notes

Example 2

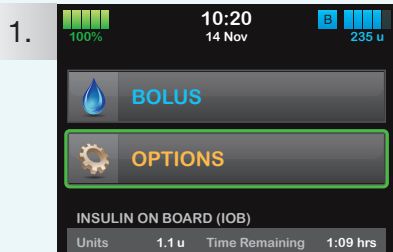


Notes

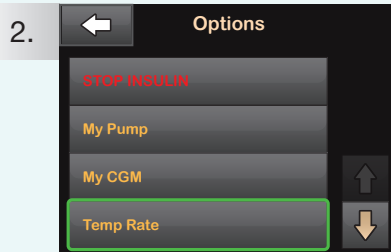
Type of Bolus	Indications for use	Recommended starting point
Normal Bolus	Most meals and snacks	
Extended Bolus	Slow eating (e.g. movies) Low GI foods (i.e. pasta and high-fat foods)	30 mins - 2 hours 50/50 split over 2 hours (50% of the bolus is given straight away and the remaining 50% is extended over 2 hours)

Set a Temp Basal Rate

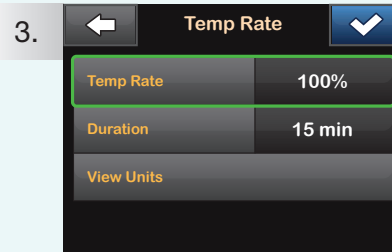
The instructions below are provided as a reference tool for caregivers who are already familiar with the use of an insulin pump and with insulin therapy in general. Not all screens are shown. For more detailed information on the operation of your Tandem insulin pump, please refer to its user guide.



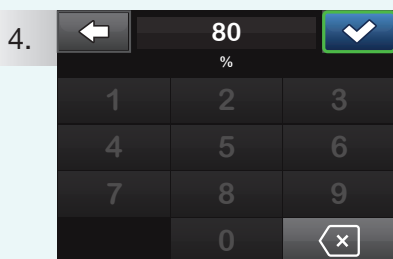
Tap **OPTIONS**.



Tap **Temp Rate**.

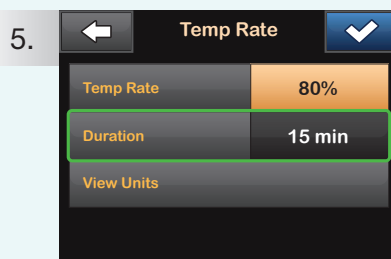


Tap **Temp Rate**.

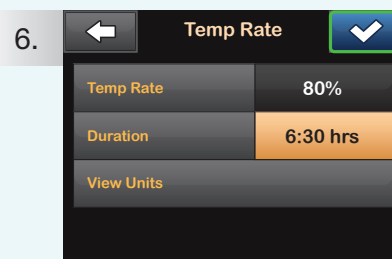


Using the onscreen keypad enter desired percentage. Tap **✓**.

NOTE: Current rate is 100%. An increase is greater than 100% and a decrease is less than 100%.



Tap **Duration**. Using the onscreen keypad enter desired length of time for Temp Rate. Tap **✓**.

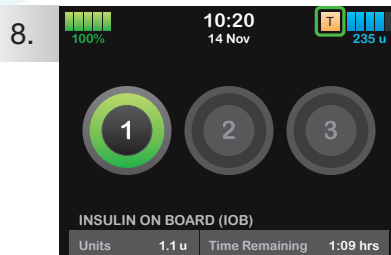


Verify settings and tap **✓**.

NOTE: To see the actual units to be delivered, tap View Units.

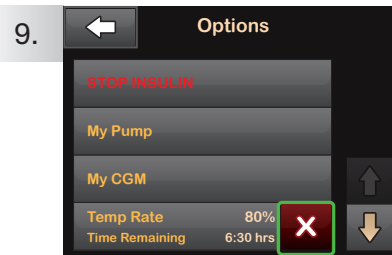


The **TEMP RATE STARTED** screen will appear to confirm the Temp Rate has started.



The Screen Lock screen will appear with the orange T icon indicating a Temp Rate is active.

NOTE: If a Temp Rate of 0% is currently active, the orange T icon will be replaced with a red T icon.



To stop Temp Rate at any time, tap **OPTIONS**, then tap **X**. A confirmation screen will appear. Tap **X**.

Temporary Basal

Where else can I use my Temporary Basal?

Examples of how a temporary basal rate affects your pump’s basal delivery are listed below.

A basal rate of 100% is as programmed in your personal profile.

A temp basal rate >100% is an increase in basal rate whereas a temp basal rate <100% is a reduction in basal rate.

Basal rate	Temp basal change	Adjusted basal rate
0.455u/hr	120%	0.546u/hr
	100%	0.455u/hr
	80%	0.364u/hr

I should activate a temporary basal at least ____ hour before an event

S

S

S

S

S

Correction Bolus in the Presence of Ketones

You will need to check your ketone level every time that you have an unexpected blood glucose > _____ mmol/L.

If you use a meter to measure your blood ketones then the interpretation guidelines are as follows:

<0.6mmol/L	Readings below 0.6mmol/L are within the normal range. (i.e. considered negative)
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0.6-1.5mmol/L	When your blood ketone reading is between 0.6 and 1.5mmol/L you are positive for ketones. This may indicate the development of a problem that may require medical assistance but is generally manageable at home
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>1.5mmol/L	When your blood ketone reading is >1.5mmol/L you are positive for ketones and you may be at risk of developing diabetic ketoacidosis. Contact your healthcare professional immediately for advice.
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The presence of ketones will make you more resistant to insulin so often a larger dose of insulin is required to bring you back down to your target blood glucose. We do this by adding an extra 50% to the correction dose if ketones are present.

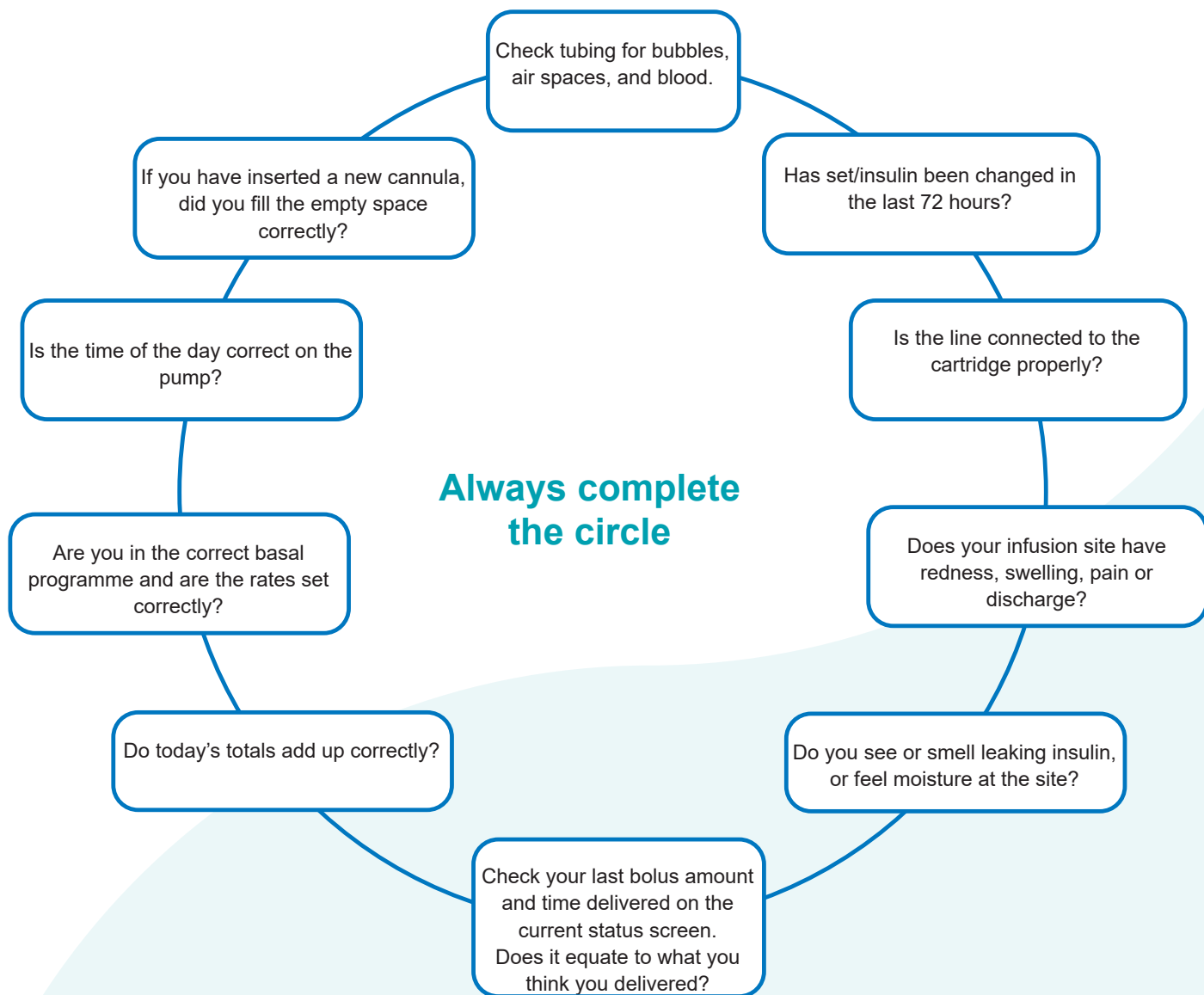
Current BG	-	Target BG	=	Gap	÷	CF	=	SUM	x 1.5	=	Units Needed
12	-	6	=	6	÷	3	=	2	x 1.5	=	3
	-		=		÷		=		x 1.5	=	
	-		=		÷		=		x 1.5	=	

If ketones are present you must assume there is a problem with insulin delivery and inject manually. **DO NOT USE THE PUMP.** Once the pump and infusion set can be ruled out as the cause of the ketones e.g. ketones induced by illness, then the pump can be used for further corrections.

After injection, follow the troubleshooting circle overleaf and seek medical advice if needed or if you are unsure about anything.

Troubleshooting the Pump

When glucose \geq _____ mmol/L



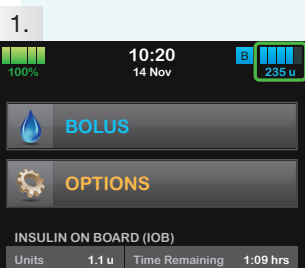
IF KETONES ARE POSITIVE:

GIVE CORRECTION BOLUS USING SYRINGE/PEN

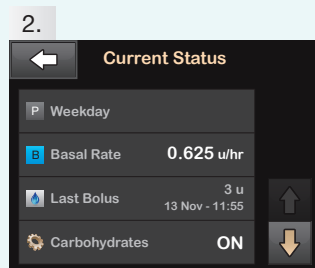
DO NOT TROUBLESHOOT UNTIL MANUAL CORRECTION HAS BEEN GIVEN

View Status

The instructions below are provided as a reference tool for caregivers who are already familiar with the use of an insulin pump and with insulin therapy in general. Not all screens are shown. For more detailed information on the operation of your Tandem insulin pump, please refer to its user guide.

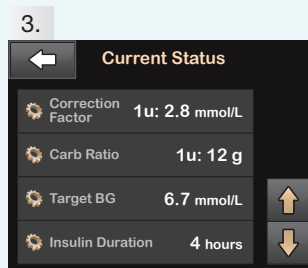


Tap the insulin level icon in the upper right corner of the Home Screen.

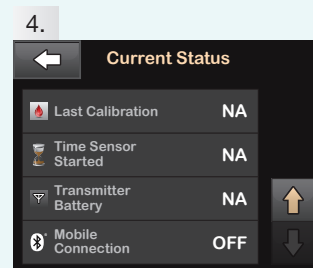


Your t:slim X2 pump will display the name of your active profile, your current basal rate, the time and amount of your last bolus, and whether or not you are entering boluses based on carbohydrates.

If you have an active Extended Bolus, this screen will show how much insulin has been delivered out of the total amount requested.



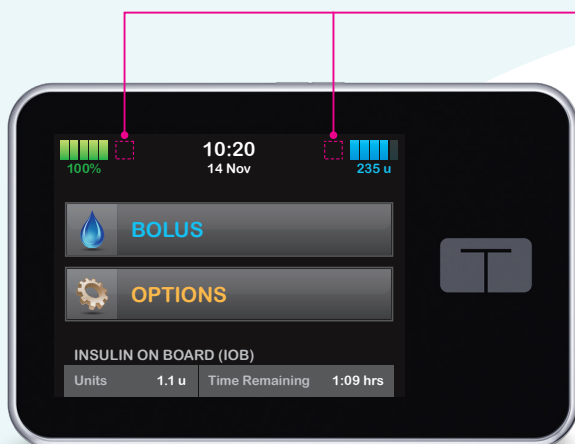
Tap the **Down Arrow** to display your current Correction Factor, Carb Ratio, Target BG, and Insulin Duration.



Tap the **Down Arrow** to display your Last Calibration, Time Sensor Started, Transmitter Battery status, and Mobile Connection status.



Explanation of Icons



The following icons may appear in the areas to the left or right of the time and date on your t:slim X2 pump's Home Screen.



A system reminder, alert, error, or alarm is active. Unlock screen to view.



A bolus is being delivered.



Basal insulin is programmed and being delivered.



A temporary basal rate is active.



All insulin deliveries are stopped.



A basal rate of 0 u/hr is active.



A temporary basal rate of 0 u/hr is active.

Flying with your Tandem Insulin Pump



If you plan to travel by air with your insulin pump, some advance planning may make your security screening go smoother. Your device is safe for use during air travel and complies with FAA wireless transmission standards. It is also designed to withstand common electromagnetic interference and can be safely carried through metal detectors.

However, your Tandem insulin pump should NOT be put through machines that use X-rays, including airline luggage X-ray machines and full-body scanners. We recommend asking the security agent for an alternative screening method and request to go through a standard metal detector wearing your pump.

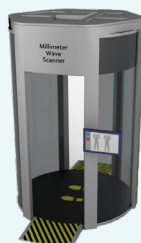
It may be helpful to provide a printout of the information below to the security agent with your pump during screening. If you have any questions about travelling with your pump, please call NZMS Diabetes Customer Care at 0508 634 103. We are here for you 24 hours a day, 7 days a week.

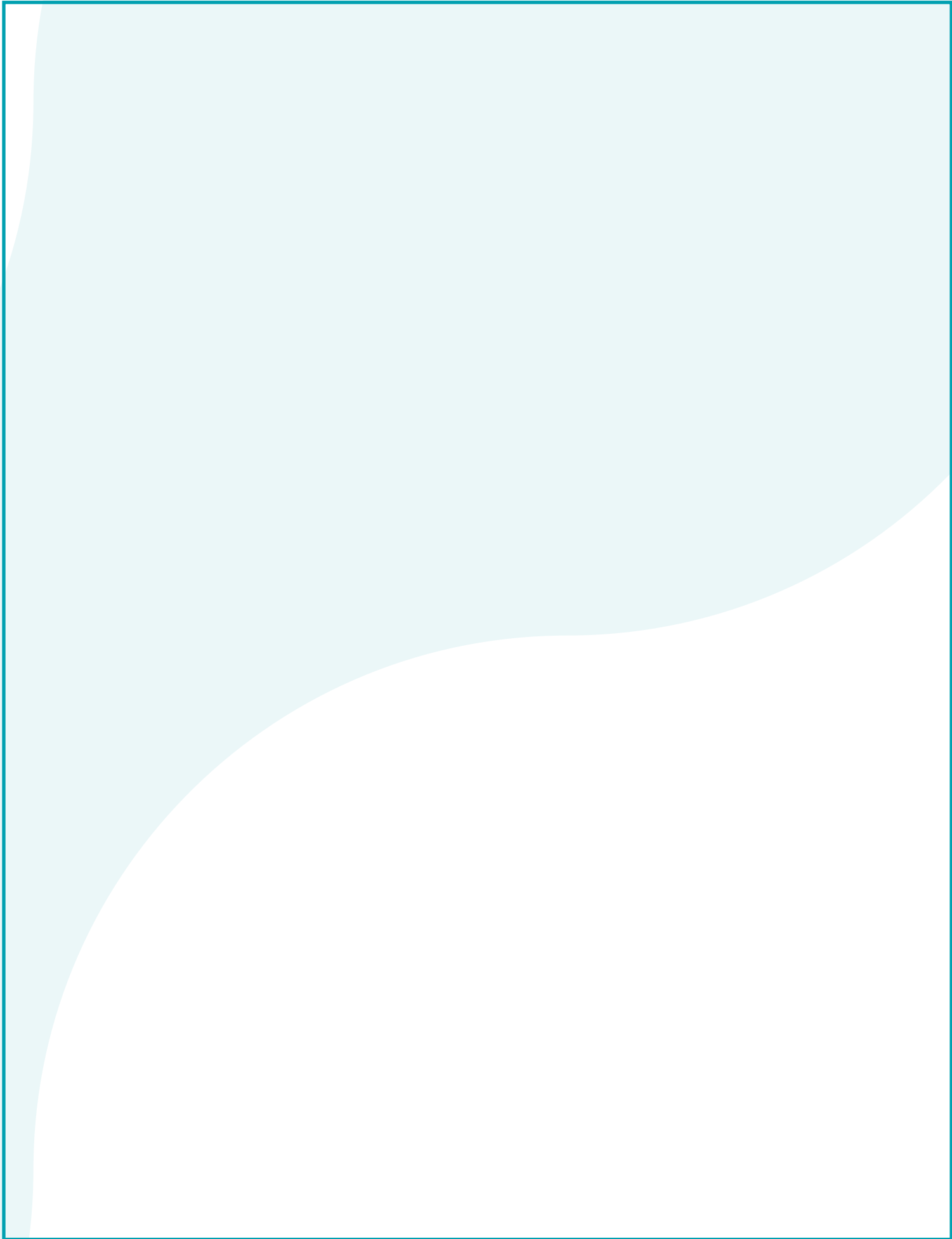


Metal Detectors, hand held body scanners



x-rays, including full body scanners and luggage screening machines

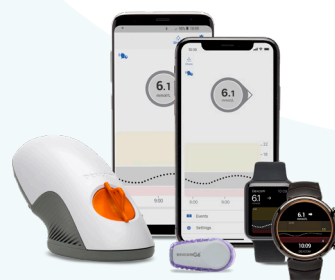




24/7 Technical Support 0508 634 103



t:slim X2™
Insulin Pump



dexcomG6

Your Choice. Your Life. Your Freedom.®



For more information, please contact us on **0800 500 226**
or **diabetes@nzms.co.nz**

nzmsdiabetes.co.nz

