

# Liberty PDx™ Cyclor Handi-Guide

A Patient's Reference to the Most Commonly Asked Questions about the Liberty PDx Cyclor



**Liberty**  
**PDx™**  
united with stay•safe®

This information is not intended to replace the advice or training from your physician or peritoneal dialysis (PD) nurse. Please refer to the Instructions For Use for detailed information, on device description, instructions, contraindications, warnings and precautions.

# Table of Contents

INTRODUCTION	1
TREATMENT AND CYCLE BASED TREATMENTS	2
CYCLER SET-UP TIPS	3
OPERATION QUESTIONS	7
ALARMS	11
WARNING MESSAGES	12
DRAIN COMPLICATIONS	13
DIFFERENT PEOPLE DRAIN DIFFERENTLY	14
POWER FAILURE	15
BYPASSING	17
OVERFILL	18
DISCONNECTING	19
CLEANING	20
OPTIONS	21
THERAPY SETTINGS	24



# Introduction to Liberty PDx Cyclor

This Handi-Guide is designed to answer many of the questions that you may have when you start using your Liberty PDx cyclor at home or whenever you may need a quick reference guide.

This guide is not intended to take the place of the Liberty PDx Cyclor User's Guide (P/N 480054) where you will find more detailed information about using your cyclor.

Another important and helpful reference is the Liberty Initiating Treatment Procedure Card (P/N 480055). If we haven't addressed your concerns or if you have any other questions, you can always call your PD Nurse or doctor at your dialysis unit or our Technical Support line at 800-227-2572.

This information is not intended to replace the advice or training from your PD Nurse or doctor. Please refer to your Liberty PDx Cyclor User's Guide for detailed information on device description, instructions, contraindications, warnings and precautions.

This document is for software version 1.0.0.



# Treatment Based and Cycle Based Treatments

The Liberty PDx cycler may be programmed to deliver Treatment Based or Cycle Based therapy.

**TREATMENT BASED** means that your total treatment time will be programmed into your cycler. Your cycler will deliver your treatment in the specified amount of time. This method is useful for people that need to finish treatment by a certain time in the mornings in order to meet other obligations such as, going to work.

**CYCLE BASED** means the prescribed dwell time will elapse before solution is automatically drained. This ensures that the time prescribed to filter waste and remove excess fluid is not shortened.

**NOTE:** Depending on your treatment results, your therapy may be changed from Treatment Based to Cycle Based or vice versa.

## How do I insert the cassette?

Make sure that the Liberty PDX cycler is positioned near the front of the table or cart so that all lines can hang freely from the cassette.

Open the cassette door by pressing the latch on top of the door.

With the plastic domes facing outward, insert the top portion of the cassette then snap the lower portion into place.

Close the cassette door securely.

**NOTE:** The cassette cannot be inserted unless your cycler is prompting you to insert cassette. If you attempt to insert it at any other time, the cassette will not snap into place and the door will not close.

 **CAUTION:** The integrity of the cassette and film can be compromised if mishandled or misused. Improper loading of the Liberty cassette into the Liberty PDX cycler could cause damage to the flexible film. Ensure the cassette is seated under both upper guide pins, is flush with the back plate, and is held by the lower catch, before closing the cassette door.

## When and how do I put the stay•safe® patient connector (trigger) on the patient line with blue clamp into the stay•safe organizer?

- After inserting your cassette, insert your stay•safe patient connector (trigger) into the stay•safe organizer clip below the control panel by inserting it into the slot with line pointing upward.  
**NOTE:** See Fig. I showing use with more than one trigger.
- Use care not twist or push in the trigger which could release the PIN prematurely.
- Rotate the tubing so that the line is secured into the Tubing Channel on the right.



Fig. I

## How many solution bags can be placed on the heater tray?

Solution bags should be connected to the lines on a flat surface with the ports facing you to decrease the chance of contamination. Connect the red clamp line to the heater bag, the white clamp lines to the supply bags, and the green clamp line to the last bag, if prescribed.

Once connected, the supply bags must be removed from the heater tray. The heater bag with the red line clamp must then be positioned properly on the heater tray covering the silver bag sensor.

## Why does the Liberty PDX cycler ask for information about a daytime manual exchange?

If you do an exchange using a manual CAPD system in addition to exchanges automatically delivered by the Liberty PDX cycler, you will need to enter YES for daytime exchange and the fill volume used for manual fill volume before proceeding. This is important because the Liberty PDX cycler must know how much drain volume to expect in order to ensure that Drain 0 drains enough solution.

**Daytime Exchange**

1/22/2014 7:17 PM

My Treatment My Settings My Records

Enter daytime manual exchange information

Did you do a daytime manual exchange?

daytime exchange  
YES

How much did you fill yourself after draining?

manual fill volume  
1000 mL

Next ▶

Press next to continue

## What if the dwell time is shorter than expected?

In Treatment Based mode, your cyclor will adjust the dwell time based on the total time programmed, the number of cycles, as well as the time it takes for each drain and fill. If a drain or fill cycle takes longer than estimated by your cyclor, the dwell time will be shortened to make sure you end treatment on time.

In Cycle Based mode, your dwell time will not be shortened.

## What if the alarm volume is too soft or too loud?

When you receive your Liberty PDX cyclor, the alarm volume is preset to 5, with one (1) being the softest volume and 20 being the loudest. You may change this setting by selecting the My Settings screen then choosing the Hardware tab. On this screen choose the alarm loudness key. It will turn orange when you touch it. You can now adjust the volume. Push the **up** or **down** arrow keys to change the setting. Press **OK** to save your changed settings. Set the alarm loudness number while in a quiet room, similar to when you are sleeping. If you sleep without your hearing aids, be sure to remove them before setting the loudness number.

## How do I use the IQdrive™ for the first time or with a new prescription?

Put in the rectangular metal end of the IQdrive into the slot in the upper left back panel of the Liberty PDX cycler. Turn the Liberty PDX cycler on. The drive is designed to fit one way. Be sure it fits snugly.

**NOTE:** Once you have inserted the IQdrive properly, the screen should display a message asking if you want to program the cycler with the new IQdrive settings. If this message is NOT displayed, call your PD nurse. Be sure in the My Settings/Option tab that the USB enabled option is set to YES.



This is an example of an IQdrive (USB).  
IQdrive models may change.

## How do I use the IQdrive for the first time or with a new prescription?

You may choose to **Accept** or **Reject** the new settings or view **Current Settings**.

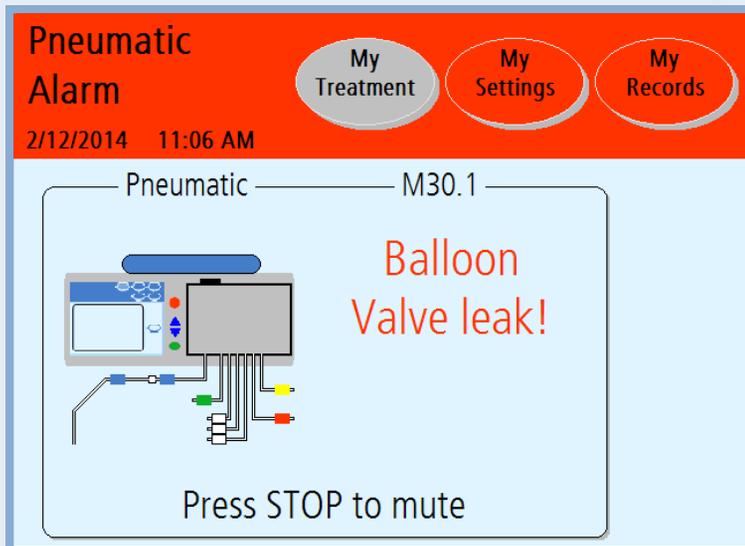
If you choose to view the **Current Settings**, the display will show the patient settings on your cycler. From here you have the option to press the **IQdrive settings** button which will take you back to the previous screen. By pressing the **Accept** button, the settings on the IQdrive will overwrite the current settings on your cycler. By pressing the **Reject** button, the current cycler settings will be retained and the IQdrive settings will be ignored. If you notice a problem with your prescription on the IQdrive, you can choose to reject it. After selecting **Accept** or **Reject**, your cycler will move to the **Ready** screen and you can start treatment.

When bringing your IQdrive to your PD Nurse, keep it clean and dry. Put it in a plastic bag. Do not leave it in your car with extreme heat, do not leave it in the bottom of your purse, and keep it away from magnets. Handle with care.

## What do I do when I get an alarm?

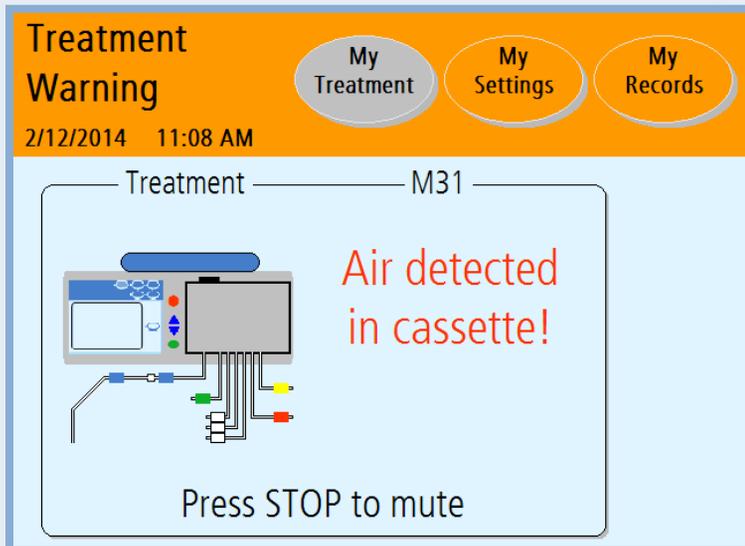
Red status bar alarms indicate a problem that must be reported to the Technical Support representative at 800-227-2572. Alarms cannot be reset and require you to turn off your cyclor. Press the **STOP** key to silence your cyclor, then write down the error message and alarm code located on top of the main screen underneath the red status bar before you turn off your cyclor. You will also be asked for your Liberty PDX cyclor serial number and software version, which is found on the top of your cyclor.

For a complete listing of alarms refer to the Warnings & Alarms section in the Liberty PDX Cyclor User's Guide.



## What do I do when I get a warning?

Orange status bar warnings alert you to conditions that need your attention. During a warning your cyclor beeps to notify you of the warning and the status bar turns to orange. Press the **STOP** key to mute the beeping. Follow the instructions on the screen to troubleshoot the warning. The screen will indicate Press **OK** to retry. If you cannot clear the warning, call Technical Support at 800-227-2572 for assistance.



## What should I do if I have a Drain Complication?

If the Liberty PDX cycler displays a warning for Drain Complication the following are suggestions for troubleshooting:

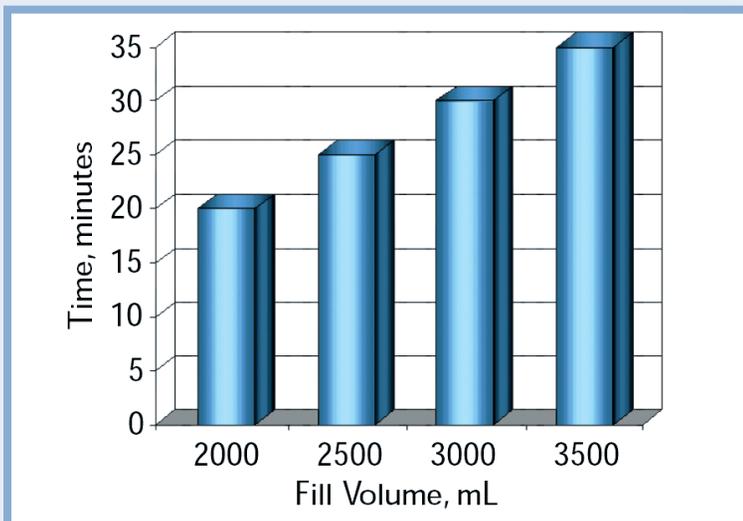
- Check that your catheter is not kinked and the clamp is open.
- Check for fibrin or clots in the drain line. If so, contact your PD Nurse for instructions.
- Change body position during drain:
  - Roll side to side (to move fluid)
  - Sit up (to increase intra-peritoneal pressure)
- Are you constipated? If so, contact your PD Nurse for instructions.
- Check that your catheter/extension set is adequately secured.
- If you are unable to clear Drain Complication, contact your PD Nurse for instructions.

**NOTE:** Your cycler will check midway through the drain cycle to determine if approximately 35% of the previous fill has drained. If not, it will beep to alert you of low drain rate. At the end of drain, your cycler will again alert you if 70% of the previous fill has not drained.

## How long will I take to drain?

Drain time can be affected by your catheter, your position, and several other factors. If drain takes longer than expected or programmed, the screen will display a drain complication.

If your cycler is programmed to deliver Cycle Based therapy, you or your PD Nurse should program drain time to correspond to your fill volume. The graph below provides a guideline for drain time based on fill volumes. The Liberty PDX cycler will not allow a drain time to be programmed that is less than the programmed fill volume divided by 100 mL. For example, if your fill volume is 2500 mL, the Liberty PDX cycler will not allow a drain time of less than 25 minutes to be programmed. If you drain faster than the programmed drain time, the remaining time will be added to your dwell. The default time is 20 minutes.



## What happens when there is a power failure?

- All lines will automatically close.
- The pump will stop.
- The touch screen will go blank.

If the power failure occurs after you have started your treatment, the treatment settings will be stored and your treatment will restart where you left off if the power comes back on within 8 hours. An **F** will show up in your records indicating a power failure occurred during that treatment.

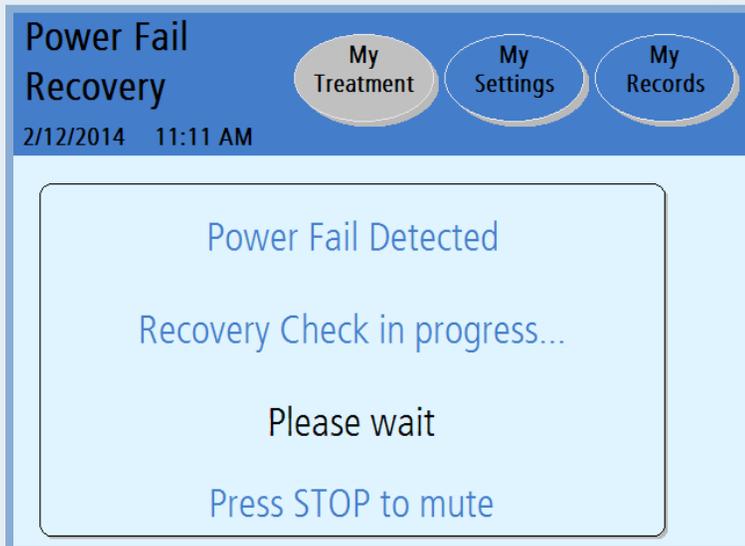
**NOTE:** Your Liberty PDX cycler must be plugged into a 120V power outlet.



**Warning:** If you are unable to insert the plug into an outlet, contact Technical Support at 800-227-2572. Do not alter the power cord. Your machine must be plugged directly into the electrical outlet; do not use extension cords or power strips (surge protectors).

## What happens when power is restored?

- Your cyler will go through a power fail recovery process if power fail happened during drain, fill, dwell or pause.
- An audible beep will be heard. Press **STOP** to mute the warning.
- Your cyler will perform a safety check. The status bar will state Power Fail Recovery and the screen will read Power Fail Detected Recovery Check in progress.
- If your cyler passes the safety check it will beep again. Press **STOP** to mute and then you may select Resume Treatment.
- If your cyler does not pass the safety check, select Cancel Treatment and follow the prompts on the screen to end this treatment. Use new supplies for a new treatment.



**NOTE:** If the power has been off for more than 8 hours do NOT resume treatment. Discuss with your PD Nurse any special instructions in case of a power failure.

## Why can't I bypass during my treatment?

If you attempt to bypass when it is unsafe to do so, a message will be displayed on the screen reading bypass not allowed. Bypass is not allowed during:

- Drain: if the patient has not drained enough that overflow can occur after the next fill
- Dwell: if the heater bag has not been refilled with enough solution for next fill
- Pause: if the heater bag has not been refilled with enough solution for next fill

**NOTE:** You can bypass Fill at anytime



**Warning:** You must discuss the risks associated with bypassing, or skipping, any phase of treatment with your PD Nurse or doctor. Bypassing may decrease the amount of treatment you receive. You should not bypass Drain 0 unless you have a dry day.

## What is overfill and how do I prevent it?

Increased Intraperitoneal Volume (IIPV), commonly known as Overfill, is when you have too much fluid in your abdomen. IIPV/overfill may result in serious injury or death from conditions such as: abdominal wall and/or diaphragmatic hernias, hydrothorax, heart problems including chest pain and heart failure, high blood pressure, pulmonary edema, decreased pulmonary function and pericardial effusion.

Patients and caregivers should watch for the potential signs of IIPV. These include:

- Difficulty breathing
- Feeling full, bloated, or overfilled after treatment
- Expanded or tense abdomen
- Increased blood pressure
- Leakage of fluid from the PD catheter exit site
- Vomiting or spitting up
- Abdominal pain or discomfort
- Chest pain
- Change in mental status

If you experience any of these symptoms, you may perform an immediate 'STAT' drain anytime during fill, pause or dwell, if you feel uncomfortable or suspect an overfill situation.

- Press the **STOP** key.
- Press **STAT drain** button on right side of screen. The next screen displays 'Are you sure you want to do a STAT drain?'
- Confirm that you want to initiate an immediate drain by pressing **STAT drain**.
- Always let your PD Nurse or doctor know that you performed a STAT drain during your treatment.

## How do I disconnect from my Liberty PDX cyclor?

- Mask and wash or sanitize hands as instructed by your PD nurse.
- Twist the blue trigger on the patient connector 1/4 turn and then push it in to release PIN into the extension set.
- Close patient line blue clamp.
- Close catheter extension set clamp.
- Carefully disconnect the patient line from your extension set and cap off with a new sterile stay•safe cap.
- Check that your catheter/extension set is firmly anchored in place.

## How do I clean my Liberty PDX cycler?

Keep your Liberty PDX cycler clean and dry at all times. Clean the exterior surface of your machine as needed using a damp cloth and a dilute (1:100) bleach solution. After wiping your machine with the damp bleach cloth, re-wipe with a water-dampened cloth.

 **CAUTION:** Do not allow any fluid to drip into your cycler or onto the pump module. Your cycler must be OFF when you are cleaning it to prevent fluid from entering the pump module. If any fluid gets inside your cycler, you must contact Technical Support immediately. Clean fluid spills immediately to prevent moisture from possibly damaging your machine. Your machine should be placed on a water-tolerant surface, and spills should be cleaned up immediately.

 **CAUTION:** Do not touch the white pressure sensors in the pump module. Pressing on the pressure sensors may damage them.

 **CAUTION:** Do not use foaming type cleansers and certain types of disinfectants\*. Do not use spray bottles.

Periodically check your Liberty PDX cycler for:

- Damage to the cabinet
- Loose or missing pieces

There is no other preventive maintenance for your cycler. Any service must be performed by a Fresenius Medical Care service technician. If your cycler needs service, call Technical Support at 800-227-2572.

\*Refer to User's Guide for information regarding disinfectants.

## What are my optional settings on the Liberty PDx cycler?

The following settings are programmed under the Options tab on the My Settings screen.

- **Add Diurnal UF** – Your PD Nurse will tell you whether or not to select YES for this option
- **Language** – Choose from English, Spanish or French
- **Last Bag Option** – If you choose YES for this option your cycler will save the fluid in the bag attached to the green line for the last fill. During the last dwell your cycler will empty the heater bag, fill it from the last bag, warm the fluid and deliver this specific solution for the last fill. Medications may be added to this bag since it will not mix with the other bags and become diluted. If you need more than 24,000 mL total fill volume and do not require a Last Bag Option, this green line may be used for additional solution.

## What are my optional settings on the Liberty PDx cycler?

- **SI units** – You choose YES or NO

If you choose YES:

Weight - Kg

Blood Glucose - mmol/L

Temperature - °C

If you choose NO:

Weight - lb

Blood Glucose - mg/dL

Temperature - °F

- **Personal data** – If you choose YES your cycler will display your personal health data at the end of the treatment. Be sure to include your dextrose concentrations.
- **USB enabled** – If you select YES for this option, your cycler will automatically look for the USB drive when your cycler is turned on. If the USB drive is not inserted into your cycler when you turn the machine on, it will display a message letting you know it is not in place. You can then insert it and your cycler will detect that the USB is active. Your treatment information will be saved on the USB drive.

## What are my optional hardware settings on the Liberty PDX cycler?

All of the following settings under the Hardware tab of the My Settings page should be entered before you start your first treatment.

- **Alarm loudness** – Can be set between 1 (soft) and 20 (loud)
- **Key loudness** – Can be set between 0 (off) and 20 (loud)
- **Date format** – Can be set as either MM/DD/YYYY or DD/MM/YYYY
- **Date** – Your cycler arrives with the date already set
- **Time format** – Can be set as either 12-hour (AM/PM) or 24-hour time
- **Time** – Your cycler arrives with the time set for the Pacific Standard time zone. Reset the time to your specific time zone by following the directions on page 25.
- **Screen blanking** – This option, when set to YES causes the touch screen to go dark after 10 minutes of inactivity. It stays dark until you touch the screen or a key. If there is an alarm, simply touch the screen to bring up the picture. If this option is set to NO, the screen remains lit at the brightness level you selected.
- **Screen brightness** – Can be set between 1 (very dim) and 10 (brightest)

## What are the therapy ranges for the Liberty PDx cycler?

- **Total therapy time** – Programmable 10 minutes to 47 hours, 59 minutes
- **Fill volume range** – 500 mL to 4000 mL (pause and last fill volumes may be 0)
- **Dwell time** – As much as 9 hours and 59 minutes
- **Bag sizes allowed** – 2,000 mL, 3,000 mL, 5,000 mL or 6,000 mL (the heater bag must hold the first fill volume plus 1000 mL)
- **Number of exchanges** – 1-99
- **Number of pauses** – You may or may not be prescribed pauses. If you are, your PD Nurse will instruct you on the number of pauses to enter.
- **Maximum total volume** – Each treatment can deliver up to 30,000 mL
- **Drain Time** – 20-59 minutes
- **Patient Weight** – The dry weight may be set between 44 lbs (20 kgs) up to 880 lbs (400 kgs)
- **Daytime manual exchange** – 0 to 4,000 mL

## How do I change the time on my Liberty PDx cyclor?

When your machine arrives from the factory, it is pre-set to Pacific time. You need to reset this to your specific time zone.

Once you start your treatment, you cannot change the time. Therefore, you must make the change before you begin or wait until you are finished.

To change the time:

- Touch the **My Settings** button and select the Hardware tab.
- Touch the yellow **time format** box. It will turn orange.
- Use the **Up/Down** arrow keys to set it to AM/PM or 24-hour.
- Press **OK**.
- Now, touch the yellow **time** box. It will turn orange.
- Use the **Up/Down** arrow keys to set the hour. Press **OK**. Press the **Up/Down** arrow keys again to set the minutes. Press **OK**. The box will now turn yellow indicating that you have set the time.

## What personal health data do I enter into the Liberty PDx cyclor?

- **Your Personal Health Data** – When you select YES under your personal data options for this setting you will be required to fill in the following data:
  - How much of each type of solution was set up
  - Last bag type (if different)
  - Blood glucose (sugar)
  - Weight
  - Pulse
  - Blood pressure
  - Temperature

www.fmcna.com



**Indications for Use:** The Liberty PDx Cycler is indicated for acute and chronic peritoneal dialysis.

 **Caution:** Federal (US) law restricts this device to sale by or on the order of a physician.



**FRESENIUS  
MEDICAL CARE**

FRESENIUS RENAL THERAPIES

Manufactured by Fresenius Renal Therapies • 4040 Nelson Ave. • Concord, CA 94520  
For all inquiries or questions, please contact Technical Support at 800-227-2572.

©2008-2014 Fresenius Medical Care North America. All rights reserved. Printed in USA.  
Fresenius Medical Care, Fresenius Renal Therapies, the triangle logo, Liberty PDx, stay•safe and IQdrive are trademarks of  
Fresenius Medical Care Holdings, Inc. or its affiliated companies.

P/N 480056 Rev A 08/2014