### Liberty® Cycler Handi-Guide



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#### Introduction to Liberty



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

This guide is not intended to take the place of the Liberty Cycler User's Guide (P/N 480038) where you will find more detailed information about using your cycler.

Another important and helpful reference is the Liberty Initiating Treatment Procedure Card (P/N 480039). 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 physician or PD Nurse. Please refer to your Liberty Cycler User's Guide for detailed information on device description, instructions, contraindications, warnings and precautions.

This document is for software version 2.8.2.



## Treatment Based and Cycle Based Treatments



The Liberty 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 doctor or PD Nurse may switch you from Treatment Based to Cycle Based or vice versa.

### Cycler Set-Up Tips



#### How do I load the cassette?

Make sure that the Liberty 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 "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 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.

#### Cycler Set-Up Tips



# 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. However, no more than two 5,000 mL (<15 kg or 33 lbs) can be placed at one time on top of the heater tray. 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.

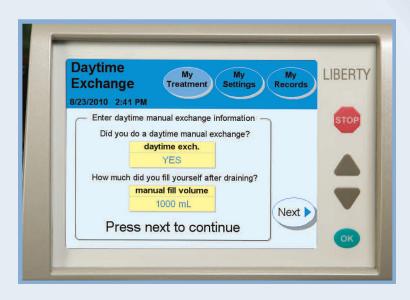
Make sure the cones are broken completely. It is okay if the cones float up into the bag. The cones cannot go through the tubing or get into your body.

#### Cycler Set-Up Tips



# Why does the Liberty ask for information about a daytime manual exchange when a prime is complete?

If your doctor has told you to do an exchange using a manual CAPD system in addition to exchanges automatically delivered by the Liberty cycler, you will need to enter the fill volume used for this manual exchange into the Liberty before initiating drain '0'. This is important because the Liberty must know how much drain volume to expect in order to ensure that Drain '0' drains enough solution. Making sure that drain volumes are sufficient is essential to preventing an overfill situation.





# What if the dwell time is shorter than expected?

In Treatment Based mode, your cycler 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 cycler, 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 cycler, the alarm volume is preset to 5, with I being the lowest 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/DOWN** arrow keys to change the setting. Press **OK** to save your changed settings. A good way to determine the best volume for you is to set your cycler in a quiet room, as it is when you sleep. If you wear hearing aides, remove them before setting the volume.



# 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. Turn the Liberty on. A small light will appear on the IQdrive letting you know that it is correctly inserted. 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. You may be asked to access "My Settings/Option" tab and select USB enabled to "YES".





# 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 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.

#### stay • safe Organizer



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

• After inserting your cassette, you should place the trigger at the end of the tubing set patient connector into the organizer clip.

**NOTE:** See Fig. I showing use with more than one trigger.

• Roll the connector to the right side to fully position it in the clip. Press the tubing into the "Flush" channel of the organizer.

**NOTE:** If you need to clean your stay safe organizer, it can be washed with warm soapy water or can be placed in the top rack of your dishwasher.



Fig. I

#### Alarms



### 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 cycler. Press the **STOP** key to silence your cycler, then write down the error message and sub-code located on top of the main screen underneath the red status bar before you turn off your cycler. You will also be asked for your Liberty cycler serial number and software version, which is found on the top of your cycler.

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



#### Warning Messages



### 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 cycler 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 after a few attempts, call Technical Support for assistance.



#### **Drain Complications**



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

If the Liberty 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 on what to do.
- Change positions to move fluids within your abdomen
- Are you constipated? If so, contact your PD Nurse for instructions on what to do.
- Check that your catheter/extension set is adequately secured
- If you are unable to clear "Drain Complication", contact your PD Nurse for instructions on what to do.

**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.

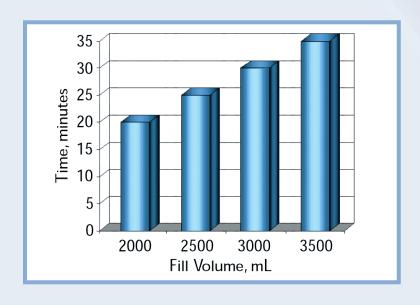
#### Different People Drain Differently



### 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 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 will not allow a drain time of less than 25 minutes to be programmed. The default time is 20 minutes.



#### **Power Failure**



### 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 cycler must be plugged into a 120V three-prong power outlet.

**Warning:** If you are unable to insert the plug into an outlet, contact Technical Support. 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).

#### **Power Failure**



#### What happens when power is restored?

- Your cycler 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 cycler 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 cycler passes the safety check it will beep again.

  Press **STOP** to mute and then you may select "Resume Treatment".
- If your cycler does not pass the safety check, select "Cancel Treatment" and follow the prompts on the screen to start your treatment over.

  Use new supplies for 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.

#### Bypassing



### 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 overfill can occur after the next fill
- Fill: can bypass anytime
- Dwell: for I to 2 minutes at the beginning of Dwell; the heater bag is being emptied or refilled
- Pause: cannot bypass; must wait for the next button to appear in order to continue to next phase

NOTE: You can bypass Fill at anytime

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

#### Overfill



#### 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. Overfill/IIPV may be caused by inadequate drainage, and may result in serious injury or death.

Some of the symptoms you may have if you experience an overfill are:

- Discomfort or pressure in your abdomen
- Shortness of breath
- Chest pain
- Vomiting or spitting up
- Leakage of fluid from your PD catheter exit site

For this reason, 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 doctor or PD Nurse know that you did a STAT drain during your treatment

#### Disconnecting



### How do I disconnect from my Liberty cycler?

- Mask and wash or sanitize hands as instructed by your PD nurse
- Twist the stay-safe trigger 1/4 turn to the right
- Push trigger to insert new PIN into line
- Close the blue clamp on the blue patient line
- Place the stay safe trigger in the organizer
- Close your catheter (extension set) clamp
- Disconnect blue patient line from extension set
- Place a new sterile stay safe cap on the extension set

#### Cleaning



#### How do I clean my Liberty cycler?

Keep your Liberty 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 or disinfectants. Do not use spray bottles.

Periodically check your Liberty 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.

#### **Liberty Cycler Options**



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

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 20,000 mL total fill volume and do not require a Last Bag Option, this green line may be used for additional solution.

#### **Liberty Cycler Options**



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

• SI units – You choose YES or NO

```
If you choose YES:

Weight - Kg

Blood Glucose - mmol/L

Temperature - °C

If you choose NO:

Weight - Ib

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 an alert 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.

#### **Liberty Cycler Options**



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

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 I (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-hr time
- **Time** Your cycler arrives with the date set for the Pacific Standard time zone. Reset the time to your specific time zone by following the directions in your Liberty Cycler User's Guide.
- Screen blanking The purpose of the screen blanking functionality is to darken the touch screen so that there is no added light in the room. If this option is set to "on" your touch screen to will go dark after 10 minutes of inactivity. If you select "off", it will always stay on. When your screen goes into screen blanking mode, it will darken the screen and stay that way until you touch the screen to bring the picture back up. Therefore, if there is an alarm, simply touch the screen and the picture will reappear.
- Screen brightness Can be set between I (very dim) and I0 (brightest)

#### Liberty Cycler Therapy Settings



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

- Total therapy time Programmable up to 47 hours and 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 or 5,000 mL (the heater bag must hold the first fill volume plus 1000 mL)
- Number of exchanges One to 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 25,000 mL
- **Drain Time** Lowest programmable drain time in minutes = fill volume divided by 100; maximum drain time = 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

#### Liberty Cycler Therapy Settings



### How do I change the time on my Liberty cycler?

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.

### Liberty Cycler Therapy Settings



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

- 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





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For all inquiries or questions, please contact Technical Support at 800-227-2572

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