Centrifuge Diagnostics version 8

Quick Reference

Original Instructions

Agilent Technologies

Notices

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Centrifuge Diagnostics Version 8 Quick Reference

The Centrifuge Diagnostics allows you to create a profile and establish communication with the Centrifuge, set bucket teachpoints, and control the motions of the Centrifuge.

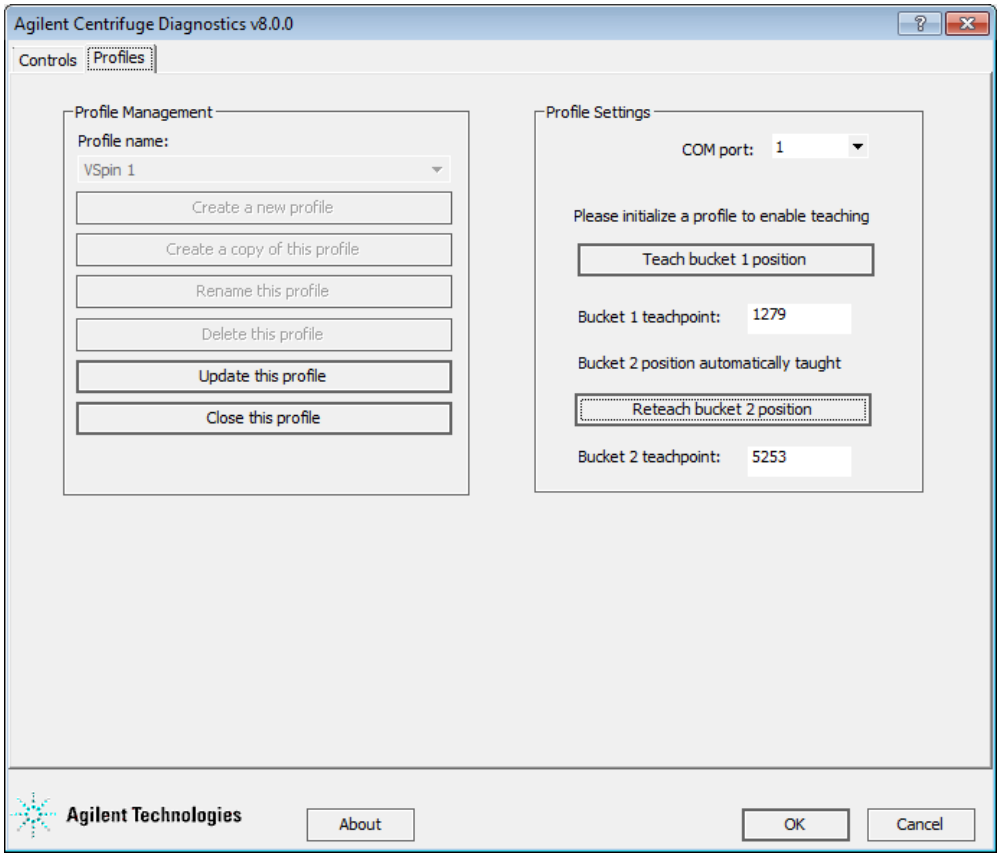
This document provides a quick reference of the commands, selections, and parameters in the Centrifuge Diagnostics dialog box. The topics are:

- "Profiles tab" on page 2
- "Controls tab" on page 4
- "Teach Bucket 1 and Teach Bucket 2 dialog boxes" on page 7

For user information about related products, you can search the product knowledge base or download the latest version of a PDF file from the Agilent Technologies website at:

www.agilent.com/chem/askb.

Profiles tab



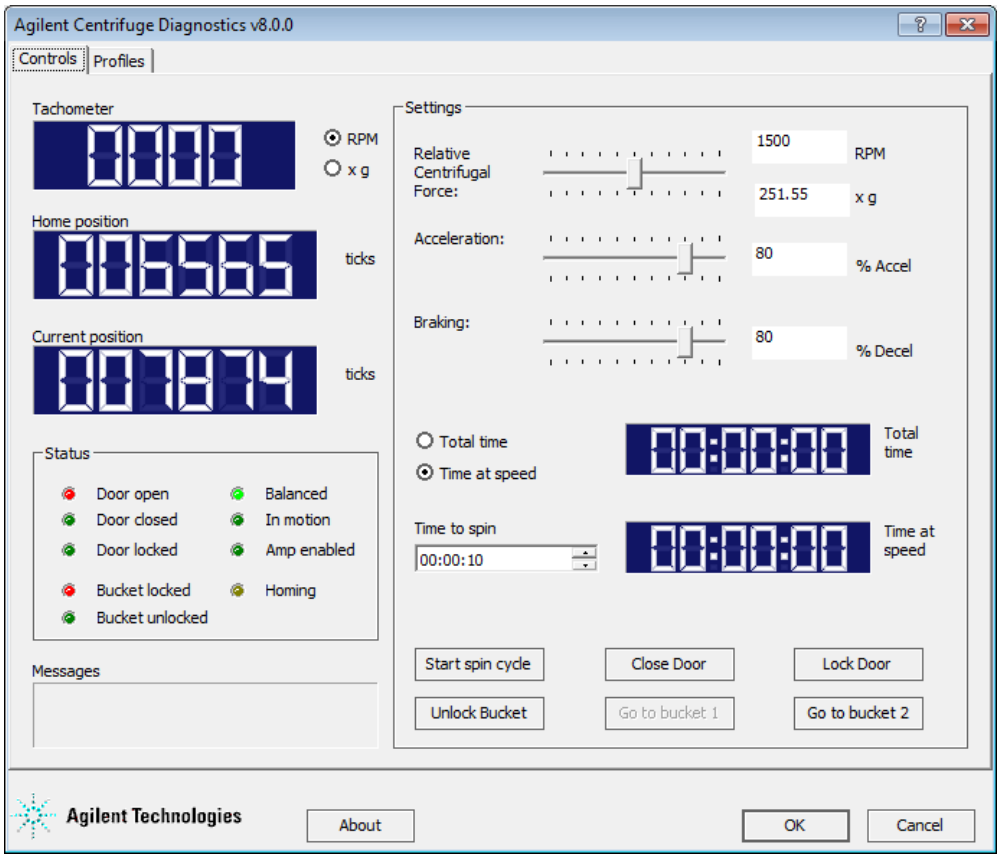
Profile Management area

Command	Description
Profile name	Displays the selected profile. Also allows you to select from the list of available profiles.
Create a new profile	Creates a new profile.
Create a copy of this profile	Creates a duplicate copy of the selected profile.
Rename this profile	Renames the selected profile.
Delete this profile	Deletes the selected profile.
Update this profile	Saves changes to the selected profile.
Initialize this profile	Initiates communication with the Centrifuge using the selected profile.

Profile Settings area

Selection or command	Description
COM port	The controlling computer COM port that is connected to the Centrifuge.
Teach bucket 1 position	The command that opens the Teach Bucket 1 dialog box to allow you to set the bucket-1 teachpoint. See "Teach Bucket 1 and Teach Bucket 2 dialog boxes" on page 7. **IMPORTANT** Make sure you initialize the desired profile before setting the teachpoint. **IMPORTANT** Make sure you unlock the bucket before you set the teachpoint. When the bucket is unlocked, you can move the bucket to the desired position before setting the teachpoint. *Note:* When you set the bucket-1 teachpoint, the software automatically sets the bucket-2 teachpoint. If a bucket-2 teachpoint already exists, you have the option of keeping the existing teachpoint or use the new auto-set bucket-2 teachpoint.
Bucket 1 teachpoint	The bucket-1 teachpoint position. When you set the bucket 1 teachpoint, a value displays to indicate the teachpoint position.
Reteach bucket 2 position	The command that opens the Teach Bucket 2 dialog box to allow you to set the bucket-2 teachpoint. See "Teach Bucket 1 and Teach Bucket 2 dialog boxes" on page 7. **IMPORTANT** Make sure you initialize the desired profile before setting the teachpoint. **IMPORTANT** Make sure you unlock the bucket before you set the teachpoint. When the bucket is unlocked, you can move the bucket to the desired position before setting the teachpoint. You typically do not have to set the bucket-2 teachpoint, because it is set automatically when you set the bucket-1 teachpoint. Use this command only if you want to fine-tune the bucket-2 teachpoint.
Bucket 2 teachpoint	The bucket-2 teachpoint position. When you set the bucket-2 teachpoint (or when it is set automatically), a value displays to indicate the teachpoint position.

Controls tab



Display area

Display title	Description
Tachometer	The current spin speed. You can select the desired spin speed unit to display: **RPM** (revolutions per minute), or **x g** (a multiple of gravity).
Home position	The home position value. The home position is also the bucket-1 teachpoint.
Current position	The current position of bucket 1.

Status area

Display title	Description
Door open	Indicates that the Centrifuge door is open.
Door closed	Indicates that the Centrifuge door is closed.
Door locked	Indicates that the door is locked.
Bucket locked	Indicates that the bucket at the door is locked in position to prevent the rotor from moving.
Bucket unlocked	Indicates that the front bucket is unlocked and the rotor can move.
Balanced	Indicates that the buckets are out of balance during spinning, because one of the buckets has more mass than the other bucket.
In motion	Indicates that the buckets are spinning.
Homing	Indicates that the Centrifuge is in the homing process.

Messages area

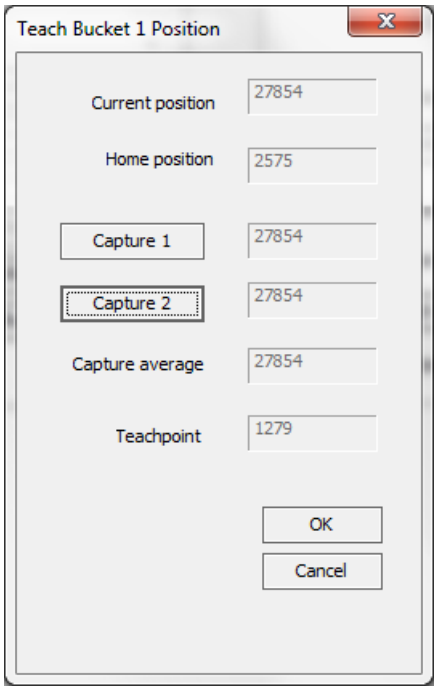
Displays error or status messages.

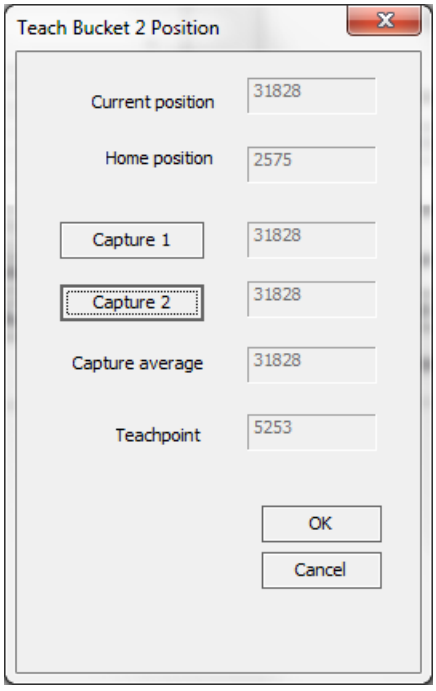
Settings area

Setting or command	Description
Relative Centrifugal Force	The rotor speed, in RPM (revolutions per minute) and as a multiple of gravity.
Acceleration	The rate of centrifugation, as a percent of maximum acceleration.
Braking	The deceleration of the centrifuge, as a percent of maximum deceleration.
Total time	The specified spin time, including acceleration and braking.
Time at speed	The specified spin time, not including acceleration and braking.
Time to spin	The length of time to spin the microplates in the desired mode.
Start Spin Cycle	The command to start the spin.
Open Door	The command to open the Centrifuge door.
Lock Door	The command to lock the Centrifuge door.

Setting or command	Description
Lock/Unlock Bucket	The command to lock or unlock the front bucket. Locking the front bucket prevents the rotor from moving. Unlocking the front bucket allows the rotor to move. Unlock the bucket when you want to set a teachpoint. Lock the bucket after you finish setting the teachpoints.
Go to Bucket 1	The command to move bucket 1 to the door.
Go to Bucket 2	The command to move bucket 2 to the door.

Teach Bucket 1 and Teach Bucket 2 dialog boxes





Display or command	Description
Current position	The current position value of the bucket.
Home position	The home position value.
Capture 1	The command that records the current position of the bucket. **IMPORTANT** Move bucket 1 to the door before capturing its position. Move bucket 2 to the door before capturing its position.
Capture 2	The command that records the current position of the bucket a second time. If you do not move the buckets, the second capture value should be the same as or close to the first capture value. *Note:* The final bucket teachpoint is the average of the two captured position values. The software will not allow you to exit this dialog box until you click **Capture 2**.
Capture average	The average of the two captured position values.
Teachpoint	The position value of the bucket teachpoint, based on the calculated Capture average.

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