

Note: Bootloader version 1.13 or greater, firmware version DSCA02.08 or greater, Synergy 1.40 or greater and Explorer Firmware 1.19 or greater is required

- 1. Place all reagents into the 10mL or 35mL vial with a stir bar.
- 2. Seal the vessel using the supplied cap, with the notches positioned downward.



Step 1: Position cap above vessel with the notches pointing down.



 Based on the type vessel being used, install the 10mL or 35mL attenuator in the instrument cavity. Position the large tab toward the back of the instrument and rotate the attenuator clockwise.

Step 2: Place cap on top of

vessel at a slight angle

the top of the vessel.

and roll your finger over

5. With the rack locked into position in the autosampler tray, place the vial(s) into the Explorer rack.





Six 35mL vessels

Step 3: Press down until a

indicating the top is properly positioned.

click is audible,

- 6. Open the Synergy software and log in (refer to the Explorer 48/72/96 Operation Manual for login instructions).
- 7. Select (highlight) the method to be added to the rack.

Twelve 10mL vessels

- Details regarding the method types and method programming are outlined in the Explorer Operation Manual.
- 8. "Double click" the desired rack position in which to add the method.
- 9. Press the PLAY key located at the top of the Synergy screen.
 - The autosampler will automatically load the selected vessel(s) and send the method parameters to the Discover.
 - The pressure device will automatically move into position prior to microwave irradiation.
 - Method parameters can be changed during a reaction by using the hot keys.

Removing the vessel:

- 1. When the reaction is complete, the reaction vessel will cool until the release parameters are achieved. Once these parameters are attained, the pressure device automatically releases and moves to its home position. The sample is returned to the Explorer rack.
 - If the APD does not automatically release the reaction vessel, the pressure (or temperature) is above the release limit. A message will appear indicating the current temperature and pressure value. Cool the reaction vessel completely, and manually release the APD. Once the APD is in its home position, remove the vessel from the microwave cavity, and place it in a fume hood or other well ventilated area.

Caution: To prevent the possibility of severe burns, wear insulate gloves and protective gear as outlined in the user's safety program. Contents of the vial(s) may be under pressure and should be released within a fume hood.

2. After the vial has been returned to the Explorer rack, the cap can be removed and work up can be performed.





Note: Bootloader version 1.13 or greater, firmware version DSCA02.08 or greater, Synergy 1.40 or greater and Explorer Firmware 1.19 or greater is required

- 1. Place all reagents into the 10mL and/or 35mL vial with a stir bar.
- 2. Seal the vessel using the supplied cap, with the notches positioned downward.
- **NOTE:** Refer to the "10mL or 35mL Rack" instructions for procedures to install the cap on the vial.
- 3. Ensure that the cavity is clean and empty.
- 4. Install the 35mL attenuator with the large tab positioned toward the back of the instrument and rotate the attenuator clockwise.
- 5. Open the Synergy software and log in (refer to the Explorer 48/72/96 Operation Manual for instructions).
- 6. Select the appropriate rack in the Synergy software.
 - Select "Explorer" from the Synergy toolbar. A drop down menu will appear.
 - Highlight "Hybrid Rack: 2 (35mL) & 5 (10mL)" or "Hybrid Rack: 3 (35mL) & 3 (10mL)". NOTE: If rack options do not appear, install the 35mL attenuator.



- 7. Place the adapter into the first position (labeled "A") on the Explorer rack.
- 8. With the rack locked into position in the autosampler tray, place the vial(s) into the Explorer rack.

Three 35mL vessels & Three 10mL vessels





Two 35mL vessels & Five 10mL vessels

- 9. Select (highlight) the method to be added to the rack.
 - Details regarding the method types and method programming are outlined in the Discover and Explorer manuals.
- 10. "Double click" the desired rack position in which to add the method.
- 11. Press the PLAY key located at the top of the Synergy screen.
 - The autosampler will automatically load the selected vessel(s) and send the method parameters to the Discover.
 - The pressure device will automatically move into position prior to microwave irradiation.
 - Method parameters can be changed during a reaction by using the hot keys.

Removing the vessel:

- 1. When the reaction is complete, the reaction vessel will cool until the release parameters are achieved. Once these parameters have been attained, the pressure device automatically releases and moves to its home position. The sample is returned to the Explorer rack.
 - If the APD does not automatically release the reaction vessel, the pressure (or temperature) is above the release limit. A message will appear indicating the current temperature and pressure value. Cool the reaction vessel completely, and manually release the APD. Once the APD has moved to its home position, remove the vessel from the microwave cavity, and place it in a fume hood or other well ventilated area.

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2. After the vial has been returned to the Explorer rack, the cap can be removed and work up can be performed.

