Power Blotter System with Power Blotter Select Transfer Stacks

Catalog Number See Power Blotter System User Guide Pub. No. MAN0017053

Pub. No. MAN0017051 **Rev.** B.0

Set up after unpacking

Once unpacked and installed, power on the system and follow the touchscreen prompts to set up the instrument.

Note: For detailed information and safety symbols on this instrument, refer to the Power Blotter System User Manual (Pub. No. MAN0017053).

Assemble the transfer stack on the cassette

Note: Perform blotting within 15 minutes of assembling the stacks with the gel.

1. Unseal the Power Blotter Select Transfer Stack(s) and separate into top and bottom halves (top half is on top of the separator). Set the top stack(s) to one side and ensure the membrane is not stuck to the bottom of the separator.

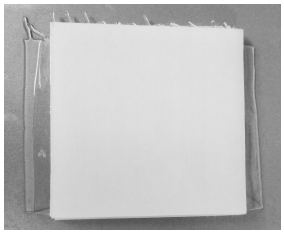
2. Remove the bottom stack(s) from the tray using tweezers and place the bottom stack(s) in the middle of the blotting surface (anode). Wet the pre-run gel(s) in distilled water and place on the bottom stack transfer membrane.

3. Carefully roll the gel(s) with a blotting roller to remove any trapped air bubbles.

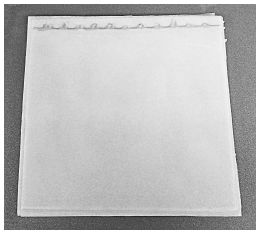
   Note: When transferring more than one gel, allow for 5-10 mm spaces between each Power Blotter Select Transfer Stack.

   Note: Ensure there is no overhang of the gel around the sides of the transfer stack as this can result in inconsistent transfer. Do not trim the sides of the stack but rather trim the gel fingers and sides of the gel.

Incorrect stack

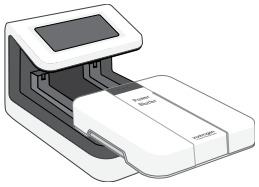


Correct stack

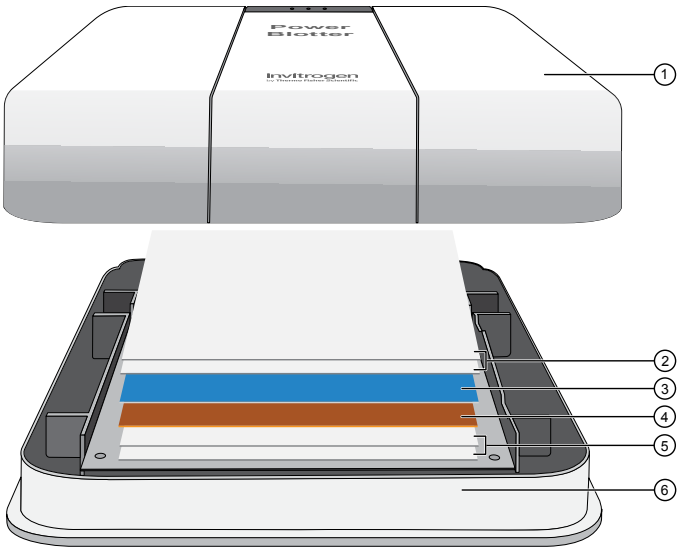


4. Place the top stack(s) without the separator(s) on top of the gel(s) and carefully roll to remove any trapped air.

5. Lock the top of the cassette (cathode) into place and slide the assembled cassette into the Power Blotter Station.



Transfer stack assembly



① Cathode
② Cathode gel matrix with protective sheet underneath
③ Pre-run gel
④ Membrane
⑤ Anode gel matrix with protective sheet underneath
⑥ Anode

Transfer

On the blotter touchscreen:

1. Touch **Begin Blotting**.
2. In the **Blotting Methods** menu, touch **Select Pre-Programmed Methods**.
3. Select the cassette size and number of gels.
   - **Small Blot Cassette** (Power Blotter Cassette) - Choose 1 or 2 gels for transfer
   - **Blot Cassette** (Power Blotter XL Cassette) - Choose 1, 2, 3, or 4 gels for transfer

Options		Electrical Current Setting
A	1 mini-sized gel	1.3 amps
B	2 mini-sized gels or 1 midi-sized gel	2.5 amps
C	3 mini-sized gels	3.8 amps
D	4 mini-sized gels or 2 midi-sized gels	5.0 amps

Note: Programs C and D are not available when transferring with the Small Blot Cassette.

4. Select a **Method** and ensure the parameters are correct.

Options		Protein Weight Range
A	**Low MW**	< 30 kDa
B	**Mixed Range MW**	25-150 kDa
C	**High MW**	> 150 kDa
D	**Std Semi-Dry**	10-250 kDa
E	**1.5 mm thick gels or unknown**	10-250 kDa (Add 1 minute of transfer time for 1.5 mm low, mixed, or high molecular-weight proteins)

Note: For fast blotting programs (A, B, C, and E), use Power Blotter Select Transfer Stacks. Do not use Power Blotter Select Transfer Stacks with the Std Semi-Dry transfer program (D).

5. Touch **Start** to begin the transfer. The elapsed time displays on the screen.

   An audible alarm and touchscreen message will alert for the transfer completion.
6. Disengage cassette from the Power Blotter Station and open the cassette.
7. Carefully remove and discard the top stack(s) and gel(s).
8. Using tweezers, remove the transfer membrane from the bottom stack. Discard the bottom stack.
9. Wash the membrane briefly in water and proceed with the blocking procedure or membrane staining.
10. Clean the cassette. After transfer is complete, thoroughly wash the anode and cathode after each use by rinsing or soaking the unassembled cassette under hot water. Remove any residue with a gloved hand. Rinse with deionized water and stand parts in a rack to dry or proceed with additional transfers. Please allow 5-10 minutes between repeated transfers to prevent excess instrument heating.

    For a more thorough cleaning, immerse the unassembled cassette anode and cathode in hot water.

    Note: Failure to maintain a clean anode and cathode can result in component degradation and lead to poor transfer efficiency.

Manufacturer: Shanghai Life Technologies Biotechnology Co., LTD | No.7 Rong Chang East Street, Long Sheng Industry Park | Building 203 BDA,100176, P.R.China