Instructions for Using the Trans-Blot Turbo System

1. Assemble the Blotting Sandwich: After gel electrophoresis, open the transfer pack and assemble the components on the cassette in the order shown below. For best results, use the roller to remove any air trapped between the layers.

   ![Blotting Sandwich Diagram](image)

   If using a single mini- or midi-format sandwich, it should be placed in the center of the cassette bottom. If using two mini format gels, they should be placed on a midi stack with the foot of each gel toward the center.

2. Insert Cassette into Instrument: Place the lid on the cassette and lock by turning the knob clockwise, using the symbols on the lid as a guide. Slide the cassette into either bay. The upper bay is designated as bay A and the lower bay is designated as bay B. If running two cassettes simultaneously, refer to the table below for acceptable transfer pack combinations.

3. Start the Transfer: With the cassette inserted into the instrument, press TURBO and select your gel type. Press A:RUN or B:RUN to begin the transfer. LIST will allow you to select from Bio-Rad’s optimized protocols (see table below) or a user-defined protocol. NEW will allow you to create and run a new protocol.

4. Downstream Processing: At the end of the transfer, RUN COMPLETE will be displayed for the cassette slot.

   - Pull cassette straight out of slot (Caution: May be warm!) and unlock lid
   - Disassemble blotting sandwich
   - Extract membrane, which is ready for downstream processing or storage
   - Discard remaining transfer pack materials

### Protocol Table

<table>
<thead>
<tr>
<th>Protocol Name</th>
<th>MW, kD</th>
<th>Time, min</th>
<th>2 Mini Gels or 1 Midi Gel</th>
<th>1 Mini Gel</th>
</tr>
</thead>
<tbody>
<tr>
<td>STANDARD SD</td>
<td>Any</td>
<td>30</td>
<td>Up to 1.0 A; 25 V constant</td>
<td></td>
</tr>
<tr>
<td>1.5 MM GEL</td>
<td>Any</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIGH MW</td>
<td>&gt;150</td>
<td>10</td>
<td>2.5 A constant; up to 25 V</td>
<td>1.3 A constant; up to 25 V</td>
</tr>
<tr>
<td>LOW MW</td>
<td>&lt;30</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MIXED MW*</td>
<td>5–150</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Mini TGX***</td>
<td>5–150</td>
<td>3</td>
<td>N/A</td>
<td>2.5 A constant; up to 25 V</td>
</tr>
</tbody>
</table>

* Also accessed via the TURBO navigation button.

* *Conditions hold if trays are swapped.*
Refer to the Trans-Blot Turbo system instruction manual for a complete listing of menu screens.

Screen Features

**RUN Screen**

- Protocol name
- Program settings
- Star indicates an active run
- Transfer conditions during run (real time)

**EDIT Screen**

- Selection buttons for voltage, current, and time
- Toggle between constant amps and constant volts

**Key Menu Screens**

- EDIT:Untitled
  - 25 LIMIT V
  - 10 TIME (MIN)
  - MENU CONST V RUN

- PROTOCOLS
  - HOME
  - TURBO

- USER PROTOCOL LIST
  - NMC BLT
  - SOC BLT
  - EZR BLT
  - PEL BLT
  - HOME EDIT RUN

- EDIT:Untitled
  - 35 LIMIT V
  - 2.5 CONST A
  - 10 TIME (MIN)
  - MENU CONST V RUN

- GDP.RAD PROTOCOL LIST
  - STANDARD
  - 1.0 MV GEL
  - HIGH MV
  - LOW MV
  - MIXED MV
  - TURBO:Mini TGX
  - HOME EDIT RUN

- GELS PER CASSETTE:
  - 1 MINI GEL
  - 1 MINI TGX
  - 2 MINI OR 1 MIDI GEL