

High voltage wiring schemes with HVZ and HVT4+ :

(download links are shown in blue color)

For **FT12TPz** (internal **HVZ** board and optional **HVT mini**): [download PDF](#)

For standard **FT12TP** (no internal **HVZ**) or **FT16TP**:

U_F negative and U_B (or *HV in*) positive (e.g. for detection of positive ions)

schemes [PDF #1](#) or [PDF #2](#) *

U_F and U_B positive (e.g. for detection of electrons or negative ions)

schemes [PDF #3 a](#), [PDF #3 b](#) or [PDF #4](#)

when U_F and U_B negative (e.g. for detection of heavy positive ions)

schemes [PDF #5](#), [PDF #6 a](#) or [PDF #6 b](#)

*(versions a and b are either with R_{HVT} installed inside **HVT4+** or with separate **HVT(4)** unit)*

For **FT12TP** with **HVT mini** installed but no internal **HVZ**-board:

schemes [PDF #1](#) or [PDF #2](#)

Special **FT12TPz** schemes:

For **FT12TPz** and both U_F and *HV in* negative (heavy positive ion detection)

schemes #6 ([FT12TPz 6 a](#) or [FT12TPz 6 b](#) right figures)

For **FT12TPz** without **HVT mini** and U_f positive (electron/negative ion detection)

schemes #3 ([FT12TPz 3 a](#) or [FT12TPz 3 b](#) left figures)

*(versions a and b are either with R_{HVT} installed inside **HVT4+** or with separate **HVT(4)** unit)*

* **Odd scheme numbers:** Resistance MCP_{front} > Resistance MCP_{rear}

Even scheme numbers: Resistance MCP_{front} < Resistance MCP_{rear}