

1. Inspire Demonstration Transformer Set

Inspire have taken the classic demonstration transformer apparatus and added some additional safety features. This apparatus has the potential to create lethal voltages if users get the configuration wrong, but the addition of moulded 'wings' to the mains coils prevents the accidental large step up voltages. As long as a maximum of 4V AC is supplied to the primary coil in which whatever combination of primary/secondary coils the user chooses, the maximum secondary voltage will be below 25V AC and therefore safe.

In addition to this, customers now have a choice of two configurations.

- Unique safety features
- New power supply alternatives to the mains coil
- Winged mains coil cases prevent dangerous secondary voltages
- Standard induction & motor accessory sets are available

Configuration 1

Rather than the traditional mains coil Inspire have designed a dedicated demonstration transformer power supply (PY5192) with fixed voltage, high current outputs to which 100-turn or 300-turn mains coil substitutes (PY5188), connect. The advantage is that no lethal mains voltage is involved, instead the voltages to these mains coil replacements is 25V AC and so safe. This 25V AC supply is connected to the mains coil replacements by non-standard connector, and so cannot be supplied to standard primary/secondary coil experiments. Additional AC and DC outputs are provided up to 4V for standard transformer experiments, and other experiments described in the 'Notes for Use'.

PY5182 contains:

300, 600, 600-0-600, 900, 1800 coils and stand.

PY5188 contains:

100 turn mains coil substitute for use with PY5192 power supply.

PY5190 contains:

300 turn mains coil substitute for use with PY5192 power supply.

Code	Description	Pack	Price
PY5182	Demo transformer & coils set	Each	£130.76
PY5184	Induction accessory set	Each	£39.31
PY5186	Motor accessory set	Each	£19.98
PY5188	Mains coil substitute 100 turns	Each	£29.70
PY5190	Mains coil substitute 300 turns	Each	£29.70

Configuration 2

This option allows users to use the more traditional 800 turns mains coil instead of the dedicated power supply. This is a more economical option but users do not benefit from the enhanced safety features of configuration 1. The mains coil is however supplied with a 'winged' case (as are the 100-turn and 300-turn mains substitute coils) and this obstructs standard coils being placed as a secondary coil, with the resulting lethal voltages prevented.

PY5182 contains:

300, 600, 600-0-600, 900, 1800 coils and stand.

PY5196 contains:

800 turns mains coil – not for use with PY5188 or PY5190.w

Code	Description	Pack	Price
PY5182	Demo transformer & coils set	Each	£130.76
PY5184	Induction accessory set	Each	£39.31
PY5186	Motor accessory set	Each	£19.98
PY5196	800 turns mains coil	Each	£39.30

