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Power Supplies



Bluetooth Dynamics Cars

Cost Effective Meters



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Inspire – Our New & Exclusive Range of Physics Equipment

Inspire is a brand new range of apparatus designed by physics teachers specifically to meet the requirements of the latest Physics curriculum. Inspire includes a suite of innovative bluetooth timing devices, a range of robust power supplies, cost effective meters and other equipment.

Pricing valid until the 30th April 2019

Catalogue Offers (valid until 30th Sept 2018)

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Spend Over £250:

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QUOTE: SE20

Offers valid until 30th September 2018 and can not be used in conjunction with any other discounts or promotions. The promotional code must be quoted at the time of ordering. **If multiple codes apply (for spends over £250 or £750, ex-VAT) all applicable codes must be quoted.** *UK mainland schools only. + Excludes ADR chemical surcharge.

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Intelligent Light Gate
£125
See p.12

Prime Power Supply
£85
See p.16





Ammeter & Voltmeter
£15.45
See p.14



Ring Launcher
£169
See p.6

Bluetooth Timing Ball
£64
See p.8

Bluetooth Dynamics Car
£159
See p.10





PY5182



PY5192

Inspire Demonstration Transfomer Set

Inspire have taken the classic demonstration transformer apparatus and added some additional safety features. This apparatus has always had the potential to create lethal voltages if users get the configuration wrong but the addition of moulded 'wings' to some of the coils prevent the accidental large step up voltages of the past. As long as a maximum of 4V AC is supplied to the primary coil in 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.

Demo Transformer & Coils Set (PY5182) contains:
300, 600, 600-0-600, 900, 1800 coils and stand

Mains Coil Substitute 100 turns (PY5188) contains:
100 Turn mains coil substitute for use with PY5192 power supply

Mains Coil Substitute 300 turns (PY5190) contains:
300 Turn mains coil substitute for use with PY5192 power supply

800 Turns Mains Coil (PY5196) contains:
800 turn mains coil – not for use with PY5188 or PY5190

Inspire PowerPro™ Demonstration Transformer Power Supply

A unique power supply designed for use specifically with the Inspire Demonstration Transformer Set.

- Output voltage: Fixed output of 4 & 8V DC @ 5A, 2 & 4V AC @ 5A
- Mains Coil Replacement Output: 4V @ 10A

Code	Pack	Price
PY5192	Each	£99.50

Option 1

Rather than the traditional mains coil Inspire have designed a dedicated Demonstration Transformer Power Supply 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 voltage to these mains coil replacements is 25V AC and so safe. This 25V AC supply is supplied 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'.

Code	Description	Pack	Price
PY5182	Demo Transformer & Coils Set	Each	**£114.50**
PY5184	Induction Accessory Set	Each	**£35.00**
PY5186	Motor Accessory Set	Each	**£18.50**
PY5188	Mains Coil Substitute 100 turns	Each	**£27.50**
PY5190	Mains Coil Substitute 300 turns	Each	**£27.50**

Option 2

This option allows users to use the more traditional 800 turns mains coil instead of the Inspire dedicated power supply. This is a more economical option but users do not benefit from the enhanced safety features of option 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.

Code	Description	Pack	Price
PY5182	Demo Transformer & Coils Set	Each	**£114.50**
PY5184	Induction Accessory Set	Each	**£35.00**
PY5186	Motor Accessory Set	Each	**£18.50**
PY5196	800 Turns Mains Coil	Each	**£35.00**



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Inspire Ring Launcher

A classic demonstration of electromagnetic induction. The Ring Launcher comprises of a long solenoid with an iron core (removable for easy transportation) and is accompanied by a number of accessory rings which fit over the coil. When an AC current is applied to the solenoid it creates EMF in the aluminium ring placed over the solenoid and the resulting magnetic field propels the ring upwards off the solenoid. The solenoid is covered by an adjustable sleeve which allows the user to vary the height to which it is propelled. At full power the ring can reach heights well in excess of 2m.

The Ring Launcher accessories include: an aluminium ring, a split aluminium ring, a plastic ring and a 3 turn copper wire coil and MES bulb.

For maximum safety the Ring Launcher incorporates a 2 part launching procedure (including a remote control to fire the rings) to ensure users do accidentally launch the ring with students in close proximity. The mains transformer is protected by a resettable thermal fuse. Supplied with full instructions and fully CE compliant to BS EN 61010-2010.

- Eye catching demonstration of EMF induction in AC fields
- Launch rings to over 2 metres high
- Remote two part launching for improved safety
- Supplied with full accessories and instructions

Code	Pack	Price
PY5140	Each	**£169.00**

Inspire Magnetic Field Density Meter

A highly accurate unit which measures magnetic field strengths directly up to 2000mT. Using the pre-calibrated probe users can investigate different magnetic fields and specifically cover the practical required by the current A-Level syllabus. A separate magnetic field investigation coil is also available and highly recommended for those users covering A-Level physics.

- Direct measurement of field strength
- Supplied with high accuracy probe
- Ranges: 0 – 20, 0 – 200 and 0 – 2000mT options
- Tare/zero adjustment for background magnetic field

Code	Pack	Price
PY5021	Each	£230.00

Field Investigation Apparatus

Designed for use with either Search Coils or the Inspire Magnetic Field Strength Meter probe this apparatus consists of a multi turn coil mounted on a rotatable base. The probe can be mounted in the centre of the coil and with a constant field applied the user can directly read off the effects of angle on the measured field.

- Multi turn coil for use in core A-level practical
- Rotatable base with inbuilt angle measurer

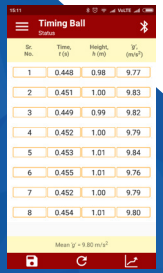
Code	Pack	Price
PY5022	Each	£42.00

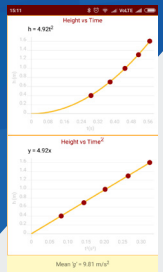












Inspire TimingPro™ Bluetooth Timing Ball

A must have addition to any physics laboratory. The new TimingPro™ Bluetooth Timing Ball uses a simple accelerometer to accurately sense start and end of flight. The most obvious use for the timing ball is to calculate g which can be done very easily and accurately by dropping the ball over a known distance. Timing Ball can also be used to investigate trajectories and to demonstrate that perpendicular vectors are independent.

The Timing Ball connects to TimingPro™ software on PCs or tablets and enables users to display displacement, velocity, acceleration, force, energy and momentum. TimingPro™ software (supplied for PC and available for free from the Play Store or iTunes) has user selectable 'Basic' and 'Advanced' modes along with templates for popular experiments so that only the functionality that is required for the experiment is shown.

A handy ruler pointer adapter slides over any standard 1m ruler and lets users perform g by freefall by accurately showing the point of release (ruler and pointer PY5052 must be purchased separately).

- Inbuilt accelerometer records time of flight
- Reliable Bluetooth connection to PC
- Robust, simple to use and economical to purchase
- Investigate g by freefall and SUVAT equations
- Easy data collection by PC, iOS and Android tablets/phones

Code	Description	Pack	Price
PY5050	TimingPro™ Bluetooth Timing Ball	Each	**£64.00**
PY5052	TimingPro™ Timing Ball Pointer Accessory	Each	**£7.50**

Inspire TimingPro™ G by Freefall

This TimingPro™ range apparatus from Inspire is designed to specifically work with TimingPro™ Intelligent Light Gates to fulfil the requirements of the current A-level prescribed practical for calculating 'g'. The Solenoid (PY5118) has to be used with the TimingPro™ Light Gate (see page 12) which supplies power to the solenoid to hold either the ball bearing or pellet (both options supplied) in place until the user starts the experiment via the TimingPro g by Freefall software.

A separate 1.2 metre extruded stainless steel stand is available (PY5116) and strongly recommended for use with the Solenoid and Light Gates as it perfectly aligns the TimingPro™ Light Gates and the Solenoid to ensure the ball bearing drops perfectly through the light gate(s). The software for Windows is supplied with the Solenoid with iOS and Android tablet version available free of charge through iStore/PlayStore.

- Simple and very reliable apparatus
- Accurate and repeatable results
- Calculate 'g' with either 1 or 2 light gates (purchase separately)
- Designed for use with TimingPro™ Light Gates (must be purchased separately)
- Supplied with one ball bearing and one pellet

Code	Description	Pack	Price
PY5118	TimingPro™ g by Freefall Solenoid	Each	**£32.50**
PY5116	TimingPro™ g by Freefall Stand	Each	**£29.50**







PY5306

Inspire TimingPro™ Bluetooth Dynamics Car

This new and innovative system has been designed by physics teachers specifically for the requirements of the GCSE and A Level physics curriculum. The system is based around a 'primary' bluetooth timing car which provides a live feed of data to a paired PC indicating the displacement of the car. Resolution on the data is an impressive 50 samples per second and approximately 1.8mm. For schools looking for a modern alternative to the Linear Airtrack a second 'secondary' timing car can be supplied which connects to the primary car via an IR line of sight beam for collisions experiments. The primary car connects seamlessly to TimingPro™ software on PCs or tablets and enables users to display displacement, velocity, acceleration, force, energy and momentum. TimingPro™ software has user selectable 'Basic' and 'Advanced' modes along with templates for popular experiments so that only the functionality that is required for the experiment is shown.

The majority of experiments for the TimingCar are performed on our high quality 1.5m stainless steel track – this can also be elevated for use as an incline plane. There is also the option of a separate curved track to allow users to investigate circular dynamics which is specifically required by the current A Level syllabus. Using the circular track users can also graph damped simple harmonic motion and use the results to calculate a value for 'g' as an alternative to traditional g by freefall setups. The accessory kit includes a range of detachable bumpers, pulleys and masses to investigate: Elastic, inelastic and coalescing collisions, Newton's II Law of Motion using a pulley and conservation of momentum/energy.

N.B. Secondary Car, Straight Track, Curved Track and Accessories all need to be purchased separately as required. There is even a crumple zone attachment on which students can experiment with aluminium foil structures and analyse energy lost during a crash.

- The ultimate wireless dynamics system
- Bluetooth cars records displacement, velocity
- Curved track option for studying circular dynamics
- 1.5m Stainless Steel dynamics track
- Complete range of accessories for the study of Collisions and Newton's 2nd Law
- Less setup hassle and more functionality than Linear Air Tracks
- Free TimingPro software for Windows allows the display of displacement, velocity, acceleration, force, energy and momentum
- Accessory set supplied in a Gratnells tray compatible insert for easy storage (Gratnells tray is not included).

Code	Description	Pack	Price
PY5300	Bluetooth Primary Dynamics Car & Software	Each	**£159.00**
PY5306	Secondary Dynamics Car	Each	**£90.00**
PY5312	1.5m Straight Dynamics Track	Each	**£78.50**
PY5315	TimingPro™ Curved Track	Each	**£53.50**
PY5318	Bluetooth Car Accessory Set	Each	**£60.00**

PY5318





PY5315



PY5100

PY5112

Inspire TimingPro™ Intelligent Light Gate

A standalone light gate system that requires no separate timer or complex wiring setup. The primary light gate connects via Bluetooth to any tablet or PC running TimingPro™ software and the inbuilt rechargeable battery can provide power for an unlimited number of secondary light gates (which connect by a single lead) or for the separately available g by freefall release mechanism. Ideal for use linear air tracks and dynamics ramps/cart. Determination of g by freefall can be performed in a number of ways using 1 light gate or 2 light gates in conjunction with the TimingPro™ g by freefall stand and solenoid.

The primary light gate connects to TimingPro™ software on PCs or tablets and enables users to display results quickly and easily in real time. The software (supplied for PC and available for free from the Play Store or iTunes) has user selectable 'Basic' and 'Advanced' modes along with templates for popular experiments so that only the functionality that is required for the experiment is shown.

- Wireless Light Gates for PC and Tablet
- Inbuilt battery and ability to plug in unlimited number of secondary gates
- Ideal for use with air tracks and dynamics cars
- Highly accurate and reliable
- Separate g by freefall accessory available
- Pendulum experiment software template
- Easy data collection by PC, iOS and Android tablets

Code	Description	Pack	Price
PY5100	TimingPro™ Intelligent Light Gate & Software	Each	**£125.00**
PY5112	TimingPro™ Secondary Light Gate	Each	**£29.00**

Accessories

PY5109	TimingPro™ Picket Fence	Each	**£9.50**
PY5115	TimingPro™ Light Gate Mounting Rod	Each	**£3.50**

Inspire Simple Law of Motion Kit

A self-contained kit centred around a 1.2m stainless steel track and 2 robust metal dynamics trolleys. The kit includes a full range of accessories for investigating the different laws of motion.

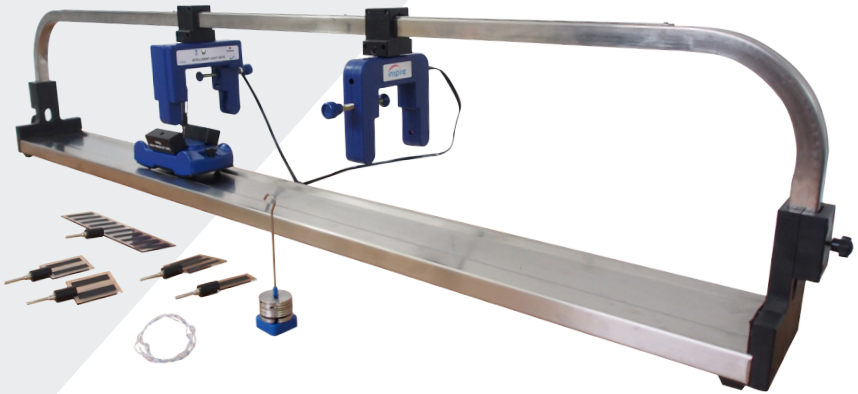
Contents:

- 1.2m stainless steel dynamics track
- 2 robust low friction metal dynamics trollies with removable weights
- A range of light gate masks
- Slotted mass set for constant acceleration experiment
- Clamps to accommodate Inspire PY5100 Light Gates

NB. Inspire light gates (PY5100) must be purchased separately.

Code	Pack	Price
PY5130	Each	**£175.00**







Inspire Digital Meters

A new range of well-priced robust and reliable school meters from Inspire. The range includes a 0-19.99V voltmeter, a 0 – 9.99A ammeter and a dual purpose ammeter and voltmeter combined which incorporates a toggle switch for users to select between ammeter and voltmeter mode.

All meters are housed in a robust ABS casing with a sloping front to allow easy viewing of the display. The sockets are located on the front panel so the meter can be set back from the experiment thus reducing the tangling of wires that is a common issue in many electricity experiments. Includes a replaceable internal PP3 battery.

- Voltmeter: 0 -19.99V DC
- Ammeter: 0 - 9.99A DC
- Dual Meter: Both 0 - 19.99V and 0 - 9.99A in one meter
- Robust ABS enclose with reinforced LCD screen

Code	Description	Pack	Price
PY5102	DC Voltmeter 0 - 19.99V	Each	**£15.45**
PY5104	DC Ammeter 0 - 9.99A	Each	**£15.45**
PY5000	Dual DC Voltmeter & Ammeter	Each	**£25.00**

Inspire Laser Ray Kit with Accessories

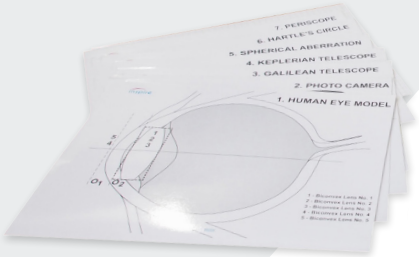
A standalone laser demonstration kit that is supplied with a range of printed magnetic template sheets that allow easy demonstration of a range of optical scenarios. Thin magnets in the laser housing and on all of the lens accessories allow easy positioning on the template sheets on a classroom board for easy, visible demonstrations. Template sheets include demonstration of long and short sightedness and refracting telescopes.

- 5 beam class II red laser
- Includes 8 magnetic experiment templates
- Full range lens accessories
- Supplied in a high quality carry case

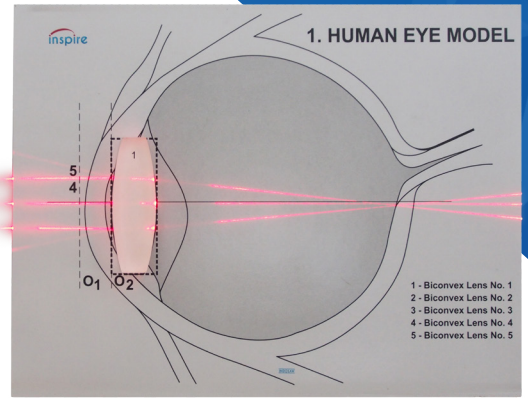


N.B. Magnetic attachment to vertical display board must be ordered separately if you do not already have a suitable one

Code	Description	Pack	Price
PY5200	Laser Ray Kit & Accessories	Each	**£159.00**
PY5203	Magnetic White Board, 60 x 46cm	Each	**£16.00**







PowerPro™ Prime



Introducing PowerPro™ Power Supplies

A new range from Inspire of well specified, robust and reliable power supplies designed specifically for the needs of the latest curriculum.

Common features across the range:

- Robust metal housing
- ABS endcaps with integrated carry handles
- Stackable with detachable mains leads
- Shrouded sockets for extra protection but standard 4mm leads can still be used
- PowerPro™ Voltage Limiter (selected models)
- 18 month manufacturers warranty
- 12-hour soak test on full load by manufacturer
- Double or Triple protection from overload
- Fully compliant and independently tested to EN61010-2010
- Approved for CE & CSA

PowerPro™ Regulated



PowerPro™ Variable



PowerPro™ Electromagnetic



Robust Voltage Lock
(selected models only)



Integrated Carry Handles



Detachable Mains Lead



Code	Name	Voltage	Stepped/ Variable	Current	Voltage	Features
PY5010	Prime	2-14V DC/AC	Stepped	6A	Yes	Unregulated DC
PY5013	Regulated	2-14V DC/AC	Stepped	6A	Yes	Regulated DC
PY5016	Variable	1-15V DC/AC	Variable	6A	Yes	Unregulated DC
PY5027	Electromagnetic	1-0-1V AC, 2V DC	Fixed outputs	10A	No	Short circuit tolerant
PY5024	EHT	0-6kV DC	Variable	2mA	No	Secondary Output 6.3V @2A AC

PowerPro™ EHT



PowerPro™ Signal Generator







Inspire PowerPro™ Prime Power Supply

The PowerPro™ Prime power supply is the entry level model in this new range of highly robust power supplies from Inspire. Offering 2-14V output of both AC and full wave rectified DC the PowerPro™ Prime is ideal for general laboratory use where a smoothed or regulated output is not required. The voltage limiter can be set simply by the technician or teacher, whilst also having dual overload protection in the form of a resettable thermal cut out and internal fuse this unit has the protection needed for use in an education environment.

- Output voltage: 2-14V AC/DC in 2V steps
- Current output: 6A maximum (combined AC/DC)
- Robust ProLock™ voltage limiter allows the setting of the upper voltage ceiling
- Full wave rectified DC output (unsmoothed and unregulated)
- Resettable short circuit protection
- Additional internal resettable fuse protection for transformer
- Stackable with integrated handles and a detachable IEC mains cable
- Manufacturer's warranty: 18 months
- Fully CE and CSA certified to BSEN61010
- Dimensions: 25 x 26 x 13cm, 5.5kg

Code	Pack	Price
PY5010	Each	**£85.00**

Inspire PowerPro™ Regulated Power Supply

The PowerPro™ Regulated power supply from Inspire is an advanced stepped unit offering 2-14V AC and fully regulated DC output and is ideal for use with equipment that requires a more refined output than provided by the PowerPro™ Prime. A robust ProLock™ Voltage limiter allows the setting of a technician/teacher defined upper voltage limit whilst the unit has dual overload protection in the form of resettable thermal cut out and an internal thermal fuse.

- Output voltage: 2-14V AC and regulated DC in 2V steps
- Current output: 6A maximum (combined AC/DC)
- Stackable with integrated handles and a detachable IEC mains cable
- Robust ProLock™ Voltage limiter allows the setting of the upper voltage ceiling
- Additional internal resettable fuse protection for transformer
- Regulated DC output with <500mV drop on full load
- Resettable short circuit protection
- Manufacturer's warranty: 18 months
- Fully CE and CSA certified to BSEN61010
- Dimensions: 33 x 26 x 13cm , 6.4kg

Code	Pack	Price
PY5013	Each	£135.00







Inspire PowerPro™ Variable 0-15V Power Supply

The PowerPro™ Variable power supply from Inspire is ideal for general laboratory use where a variable output is required. Offering 1-15V output of both AC and full wave rectified DC the PowerPro™ Variable includes the Inspire ProLock™ Voltage limiter which enables the setting of a technician/ teacher defined upper voltage limit. The unit also features dual overload protection in the form of resettable thermal cut out and an internal thermal fuse.

- Output voltage: 1-15V variable AC/DC
- Current output: 6A maximum (combined AC/DC)
- Robust ProLock™ Voltage limiter allows the setting of the upper voltage ceiling
- Full wave rectified DC output (unsmoothed & unregulated)
- Resettable short circuit protection
- Additional internal resettable fuse protection for transformer
- Stackable with integrated ABS handles and a detachable IEC mains cable
- Manufacturer's warranty: 18 months
- Fully CE and CSA certified to BSEN61010
- Dimensions: 37 x 26 x 13cm , 7.2kg

Code	Pack	Price
PY5016	Each	**£119.95**

Inspire PowerPro™ Electromagnetic Power Supply

The PowerPro™ Electro Magnetic power supply is designed for experiments that require low voltage and high current including electromagnet experiments and investigating magnetic fields associated with electric current. A separate accessory is available allowing the easy demonstration of the force on a conductor experiment.

- Output voltage: 1-0-1 AC, 2V DC
- Current output: 10A maximum (combined AC/DC)
- Designed to tolerate high current and short circuiting
- Additional internal resettable fuse protection for transformer
- Manufacturer's warranty: 18 months
- Fully CE and CSA certified to BSEN61010
- Dimensions: 25 x 26 x 13cm, 4.2g

Code	Pack	Price
PY5027	Each	**£79.00**

Force on a Conductor Accessory

A simple piece of apparatus which plugs directly into the PowerPro™ Electro Mag power supply to demonstrate the force of a conductor. This apparatus is designed to fit directly into the output on the power supply with no need for any other setup or supporting apparatus.

Code	Pack	Price
PY5028	Each	**£14.00**







Inspire PowerPro™ EHT Power Supply

The PowerPro™ EHT power supply from Inspire is ideal for powering most Teltron tubes, electrostatics investigations and for power to spectrum tubes. The primary output offers 0-6kV variable DC at a restricted current limit of 2mA. There is also a 50uA secondary EHT output along with a fixed 6.3V AC output for use with specific Teltron tubes.

- Primary output: 0-6kV DC @ 2mA max.
- Secondary output: 0-6kV with 50MOhm resistor limited at 50uA
- Auxiliary output: 6.3V AC at 2A for use with Teltron tubes
- Digital LED Display of primary output voltage
- Resettable short circuit protection
- Separate Earth option if floating voltage is not required
- Stackable with integrated ABS handles and a detachable IEC mains cable
- Manufacturer's warranty: 18 months
- Fully CE and CSA certified to BSEN61010
- Dimensions: 37 x 26 x 13cm, 6kg

Code	Pack	Price
PY5024	Each	**£225.00**

Inspire PowerPro™ Advanced Signal Generator

The PowerPro™ Signal Generator is an advanced signal generator and amplifier designed specifically for use in school physics departments. This versatile unit includes both high and low impedance outputs making the unit ideal for driving vibration generators and loudspeakers whilst an internal speaker (which can be turned on or off) can be used to demonstrate the human hearing range.

The unit also includes an auxiliary input for amplifying external signals – this is ideal for amplifying MP3 or iPod music signals for use with the SLS Lab Basics Rubens Tube. A separate headphone socket lead and 4mm adapter is also available to transfer the MP3 signals into the Signal Generator.

- Frequency range: 1 to 110 kHz in 5 decade range
- Waveforms: Sine, square or triangular. Square wave rise time 1µs approx. Sinewave distortion 1% on all ranges
- Output voltage: 10V peak to peak
- Digital LED display
- Low impedance output x watts: Perfect for driving vibration generators or loudspeakers
- High impedance output: Can be attenuated by a factor of 10 or 100
- Built-in loud speaker (can be switched off)
- Internal short circuit protection
- Amplitude and frequency modulation options
- Input signal 2V (peak to peak)
- Frequency response 1Hz to 100kHz, -3dB
- Manufacturer's warranty: 18 months

Code	Description	Pack	Price
PY5018	PowerPro™ Advanced Signal Generator	Each	**£224.00**
PY5019	Audio Input Adapter & Lead	Each	**£9.50**





Inspire Compact Ripple Tank

A compact, easy to setup ripple tank which takes all of the hassle out of setting up this traditional apparatus. The Inspire Ripple Tank includes all of the accessories required to cover the entire of range of ripple tank experiments including: reflection, refraction, diffraction and interference with the accessories being stored in a handy tray on the front of the unit so that all of the parts can be easily accessed and accounted for at the end of the lesson.

Two models of the ripple tank are available; simple and advanced. With both models users can vary the frequency of both the dippers and the LED strobe lighting. The advanced version also allows a great sweep of frequency, control of amplitude and most importantly the inclusion of a 'Camera Mode' which allows the pictures to be viewed through a camera (which otherwise flicker on screen). The frequencies are precisely controlled and displayed digitally. The dipper and strobe frequencies can be synchronized for stationary waves or slightly offset to give moving waves.

Common to both PY5150 & PY5160:

- Frequency range 50–175 Hz 1–250 Hz
- LED strobe control
- Standalone benchtop ripple tank
- Full range of accessories and dedicated accessory storage
- Digital display of frequency
- 12V plug top power supply and full instructions

Additional features of PY5150 (Advanced):

- Wave amplitude control
- Camera projection mode

Code	Description	Pack	Price
PY5160	Simple Ripple Tank	Each	**£99.50**
PY5150	Advanced Ripple Tank	Each	**£135.00**

Inspire Ripple Tank Camera with Stand

A simple USB camera mounted on a flexible gooseneck style stand for use with the Inspire Advanced Ripple Tank. The camera allows the easy projection of the ripple tank to a whiteboard or projector.

N.B. Must be used with the 'Camera Mode' on the Inspire Advanced Ripple Tank (PY5150) – ripple tanks without this mode will give a distorted picture through a projector.

Code	Pack	Price
PY5153	Each	**£59.00**





AQA – Product to Practical Guide

Practical No.	Practical Description	Exam Board	Requires Product	Page No.
1	Stationary waves on a string	AQA	**PY5018** – Power Signal Generator **SEP4379** – Vibration Generator	23 See website
2	Youngs slit	AQA	**PY5200** – Laser Ray Kit and Accessories	15
3	g' by freefall	AQA	**PY5100** – Bluetooth Light Gate **PY5118** – g by Freefall Solenoid **PY5116** – g by Freefall Stand	12 9 9
4	Resistivity of a wire	AQA	**PY5102** – DC Voltmeter **PY5104** – DC Ammeter **PY5013** – Regulated Power Supply	14 14 19
5	EMF and internal resistance	AQA	**PY5102** – DC Voltmeter **PY5104** – DC Ammeter **PY5013** – Regulated Power Supply	14 14 19
6	Simple harmonic motion using a pendulum	AQA	**PY5100** – Bluetooth Light Gate	12
7	Capacitor charge and discharge	AQA	**PY5102** – DC Voltmeter	14
8	Force on a conductor	AQA	**PY5027** – Electromagnetic Power Supply **PY5028** – Force on a Conductor Accessory	21 21
9	Flux density variation through a circular coil	AQA	**PY5021** – Magnetic Flux Density Meter **PY5022** – Field Investigation Apparatus	7 7

N.B. The equipments listed above are not complete lists of equipment to carry out these practicals.
Please contact us if you require advice on the other equipment required to perform these core practicals.

EDEXCEL – Product to Practical Guide

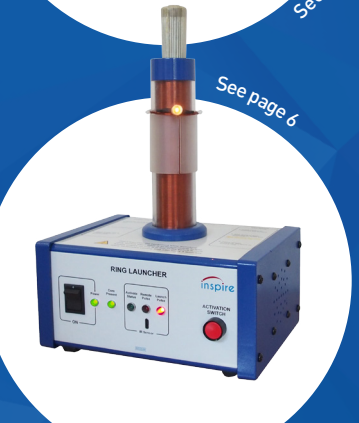
Practical No.	Practical Description	Exam Board	Requires Product	Page No.
1	Determine the acceleration of a freely-falling object	EDEXCEL	**PY5100** – Bluetooth Light Gate **PY5118** – g by freefall Solenoid **PY5116** – g by Freefall Stand	12 9 9
2	Determine the emf and internal resistance of an electrical cell	EDEXCEL	**PY5102** – DC Voltmeter **PY5104** – DC Ammeter	14 14
3	Determine the speed of sound in air using a 2 beam oscilloscope, signal generator, speak and microphone	EDEXCEL	**PY5018** – Power Signal Generator	23
4	Investigate the effects of length, tension and mass per unit length on the frequeency of a vibrating string	EDEXCEL	**PY5018** – Power Signal Generator **SEP4379** – Vibration Generator	23 See website
5	Determine the wavelength of light from a laser	EDEXCEL	**PY5200** – Laser Ray Kit and Accessories	15
6	Momentum and force	EDEXCEL	**PY5100** – Bluetooth Light Gate **PY5112** – Secondary Light Gate **PY5130** – Simple Law of Motion Kit	12 12 13
7	Momentum and force	EDEXCEL	**PY5300** – Bluetooth Dynamics Car **PY5312** – Straight Track **PY5318** – Accessory Set	10 11 11
8	Capacitor Charge & Discharge	EDEXCEL	**PY5102** – DC Voltmeter	14
9	Specific Latent Heat	EDEXCEL	**PY5010** – Prime Power Supply	18



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