

COMPANY REGISTRATION NUMBER: SC267035

**Powerphonic Limited**  
**Group Financial Statements**  
**For the year ended**  
**31 December 2022**

# Powerphotonic Limited

## Group Financial Statements

Year ended 31 December 2022

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<b>Contents</b>	<b>Pages</b>
Officers and professional advisers	1
Directors' report	2 to 3
Independent auditor's report to the members	4 to 6
Consolidated statement of comprehensive income	7
Consolidated statement of financial position	8
Company statement of financial position	9
Consolidated statement of changes in equity	10
Company statement of changes in equity	11
Notes to the group financial statements	12 to 19

# Powerphonic Limited

## Officers and Professional Advisers

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### The Board of Directors

Dr R McBride  
S C Younger  
Dr R Black  
D R Evans  
R J G Clarke

### Company Secretary

R J G Clarke

### Registered Office

Unit 5A  
St David's Business Park  
St David's Drive  
Dalgety Bay  
Fife  
KY11 9PF

### Auditor

CT  
Chartered Accountants & Statutory Auditor  
61 Dublin Street  
Edinburgh  
EH3 6NL

### Bankers

Virgin Money  
64 High Street  
Dunfermline  
Fife  
KY12 7DF

# Powerphotonic Limited

## Directors' Report

Year ended 31 December 2022

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The directors present their report and the Group financial statements of the group for the year ended 31 December 2022 .

### Principal activity

The principal activity of the company continues to be the design, development, manufacture and sale of precision micro-optics for the laser industry. Business Review Revenues grew strongly in 2022, with total group turnover 13% higher than the prior year at £5,002,441 (2021: £4,424,471). Industrial markets recovered strongly following the end of the Covid pandemic and datacoms revenues increased considerably due to products with a key customer entering volume production. Medical revenues remained strong, but defence sales reduced due to delays on a key programme. Gross margins were in line with the prior year, at 65% (2021: 67%), with improved capacity utilization in the U.K. offset by start-up costs in the U.S.A. Administrative expenses were 23% higher than the prior year at £3,896,748 (2021: £3,169,444) due to increases in headcount and rising inflation and other operating income was £176,646 lower at £144,245 (2021: £320,891) as a result of reduced grant revenue. The operating result for the year was a loss of £(520,329), compared with an operating profit in 2021 of £115,593. During the year the group incurred capital expenditure of £1,365,634 (2021: £228,748), the majority of which was in relation to setting up a new manufacturing facility in Sahuarita, Arizona USA. This facility commenced production in the first half of 2023.

### Directors

The directors who served the company during the year were as follows:

Dr R McBride

S C Younger

Dr R Black

D R Evans

R J G Clarke

### Directors' responsibilities statement

The directors are responsible for preparing the directors' report and the Group financial statements in accordance with applicable law and regulations. Company law requires the directors to prepare Group financial statements for each financial year. Under that law the directors have elected to prepare the Group financial statements in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards and applicable law). Under company law the directors must not approve the Group financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the group and the company and the profit or loss of the group for that period. In preparing these Group financial statements, the directors are required to: - select suitable accounting policies and then apply them consistently; - make judgments and accounting estimates that are reasonable and prudent; - prepare the Group financial statements on the going concern basis unless it is inappropriate to presume that the company will continue in business. The directors are responsible for keeping adequate accounting records that are sufficient to show and explain the company's transactions and disclose with reasonable accuracy at any time the financial position of the company and enable them to ensure that the Group financial statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities. Auditor

Each of the persons who is a director at the date of approval of this report confirms that:

- so far as they are aware, there is no relevant audit information of which the group and the company's auditor is unaware; and
- they have taken all steps that they ought to have taken as a director to make themselves aware of any relevant audit information and to establish that the group and the company's auditor is aware of that information.

**Small company provisions**

This report has been prepared in accordance with the provisions applicable to companies entitled to the small companies exemption.

This report was approved by the board of directors on 28 September 2023 and signed on behalf of the board by:

R J G Clarke

Director

# Powerphotonic Limited

## Independent Auditor's Report to the Members of Powerphotonic Limited

Year ended 31 December 2022

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### Opinion

We have audited the Group financial statements of Powerphotonic Limited (the 'parent company') and its subsidiaries (the 'group') for the year ended 31 December 2022 which comprise the consolidated statement of comprehensive income, consolidated statement of financial position, company statement of financial position, consolidated statement of changes in equity, company statement of changes in equity and the related notes, including a summary of significant accounting policies. The financial reporting framework that has been applied in their preparation is applicable law and United Kingdom Accounting Standards, including FRS 102 The Financial Reporting Standard applicable in the UK and Republic of Ireland (United Kingdom Generally Accepted Accounting Practice). In our opinion the Group financial statements: - give a true and fair view of the state of the group's and of the parent company's affairs as at 31 December 2022 and of the group's loss for the year then ended; - have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice; - have been prepared in accordance with the requirements of the Companies Act 2006.

### Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the auditor's responsibilities for the audit of the group financial statements section of our report. We are independent of the group in accordance with the ethical requirements that are relevant to our audit of the Group financial statements in the UK, including the FRC's Ethical Standard, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### Conclusions relating to going concern

In auditing the Group financial statements, we have concluded that the directors' use of the going concern basis of accounting in the preparation of the Group financial statements is appropriate.

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the group's or the parent company's ability to continue as a going concern for a period of at least twelve months from when the Group financial statements are authorised for issue.

Our responsibilities and the responsibilities of the directors with respect to going concern are described in the relevant sections of this report.

### Other information

The other information comprises the information included in the annual report, other than the Group financial statements and our auditor's report thereon. The directors are responsible for the other information. Our opinion on the Group financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon. In connection with our audit of the Group financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the Group financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether there is a material misstatement in the Group financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

## **Opinions on other matters prescribed by the Companies Act 2006**

In our opinion, based on the work undertaken in the course of the audit:

- the information given in the directors' report for the financial year for which the Group financial statements are prepared is consistent with the Group financial statements; and
- the directors' report has been prepared in accordance with applicable legal requirements.

### **Matters on which we are required to report by exception**

In the light of the knowledge and understanding of the group and the parent company and its environment obtained in the course of the audit, we have not identified material misstatements in the directors' report. We have nothing to report in respect of the following matters in relation to which the Companies Act 2006 requires us to report to you if, in our opinion: - adequate accounting records have not been kept by the parent company, or returns adequate for our audit have not been received from branches not visited by us; or - the parent company Group financial statements are not in agreement with the accounting records and returns; or - certain disclosures of directors' remuneration specified by law are not made; or - we have not received all the information and explanations we require for our audit; or - the directors were not entitled to prepare the Group financial statements in accordance with the small companies regime and take advantage of the small companies' exemptions in preparing the directors' report and from the requirement to prepare a strategic report.

### **Responsibilities of directors**

As explained more fully in the directors' responsibilities statement, the directors are responsible for the preparation of the Group financial statements and for being satisfied that they give a true and fair view, and for such internal control as the directors determine is necessary to enable the preparation of Group financial statements that are free from material misstatement, whether due to fraud or error. In preparing the Group financial statements, the directors are responsible for assessing the group's and the parent company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the group or the parent company or to cease operations, or have no realistic alternative but to do so.

## **Auditor's responsibilities for the audit of the group financial statements**

Our objectives are to obtain reasonable assurance about whether the Group financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these Group financial statements. Irregularities, including fraud, are instances of non-compliance with laws and regulations. We design procedures in line with our responsibilities, outlined above, to detect material misstatements in respect of irregularities, including fraud. The extent to which our procedures are capable of detecting irregularities, including fraud is detailed below: We gained an understanding of the legal and regulatory framework applicable to the company and the industry in which it operates and considered the risk of acts by the company which were contrary to applicable laws and regulations, including fraud. These included but were not limited to the Companies Act 2006 and general Health and Safety Regulations. Our audit procedures were designed to respond to risks of material misstatement in the financial statements, recognising that the risk of not detecting a material misstatement due to fraud is higher than the risk of not detecting one resulting from error, as fraud may involve deliberate concealment by, for example, forgery, misrepresentations or through collusion. We focused on laws and regulations that could give rise to a material misstatement in the company's financial statements. Our tests included, but were not limited to: - agreement of the financial statement disclosures to underlying supporting documentation; - enquiries of the finance director, the directors and shareholders; - review of minutes of board meetings throughout the period, and - obtaining an understanding of the control environment in monitoring compliance with laws and regulations. There are inherent limitations in an audit of financial statements and the further removed non-compliance with laws and regulations is from the events and transactions reflected in the financial statements, the less likely we would become aware of it. We also addressed the risk of management override of internal controls, including testing journals and evaluating whether there was evidence of bias by the directors that represented a risk of material misstatement due to fraud. A further description of our responsibilities for the audit of the Group financial statements is located on the Financial Reporting Council's website at [www.frc.org.uk/auditorsresponsibilities](http://www.frc.org.uk/auditorsresponsibilities). This description forms part of our auditor's report.

### **Use of our report**

This report is made solely to the company's members, as a body, in accordance with chapter 3 of part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the company's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the company and the company's members as a body, for our audit work, for this report, or for the opinions we have formed.

Malcolm Beveridge CA  
(Senior Statutory Auditor)

For and on behalf of

CT

Chartered Accountants & Statutory Auditor

61 Dublin Street

Edinburgh

EH3 6NL

28 September 2023

# Powerphonic Limited

## Consolidated Statement of Comprehensive Income

Year ended 31 December 2022

	Note	2022 £	2021 £
<b>Turnover</b>		<b>5,002,441</b>	4,424,471
Cost of sales		1,770,267	1,460,325
		-----	-----
<b>Gross profit</b>		<b>3,232,174</b>	2,964,146
Administrative expenses		3,896,748	3,169,444
Other operating income		144,245	320,891
		-----	-----
<b>Operating (loss)/profit</b>		<b>( 520,329)</b>	115,593
Interest payable and similar expenses		54,372	41,455
		-----	-----
<b>(Loss)/profit before taxation</b>	<b>6</b>	<b>( 574,701)</b>	74,138
Tax on (loss)/profit		( 181,631)	( 89,963)
		-----	-----
<b>(Loss)/profit for the financial year</b>		<b>( 393,070)</b>	164,101
		-----	-----
Foreign currency retranslation		3,634	383
		-----	-----
<b>Total comprehensive income for the year</b>		<b>( 389,436)</b>	164,484
		-----	-----

All the activities of the group are from continuing operations.

# Powerphotonic Limited

## Consolidated Statement of Financial Position

31 December 2022

		2022	2021
	Note	£	£
<b>Fixed assets</b>			
Tangible assets	9	2,208,834	1,226,557
<b>Current assets</b>			
Stocks		560,796	515,668
Debtors	10	1,412,407	1,176,278
Cash at bank and in hand		1,476,019	977,113
		-----	-----
		3,449,222	2,669,059
<b>Creditors: amounts falling due within one year</b>	11	(1,618,929)	(1,164,856)
		-----	-----
<b>Net current assets</b>		1,830,293	1,504,203
		-----	-----
<b>Total assets less current liabilities</b>		4,039,127	2,730,760
<b>Creditors: amounts falling due after more than one year</b>	12	(1,660,816)	-
		-----	-----
<b>Net assets</b>		2,378,311	2,730,760
		-----	-----
<b>Capital and reserves</b>			
Called up share capital		15,563	15,563
Share premium account		4,846,357	4,846,357
Translation reserve		6,544	2,910
Profit and loss account		(2,490,153)	(2,134,070)
		-----	-----
<b>Shareholders funds</b>		2,378,311	2,730,760
		-----	-----

These Group financial statements have been prepared in accordance with the provisions applicable to companies subject to the small companies' regime and in accordance with Section 1A of FRS 102 'The Financial Reporting Standard applicable in the UK and Republic of Ireland'.

These Group financial statements were approved by the board of directors and authorised for issue on 28 September 2023, and are signed on behalf of the board by:

R J G Clarke

Director

Company registration number: SC267035

# Powerphonic Limited

## Company Statement of Financial Position

31 December 2022

		2022	2021
	Note	£	£
<b>Fixed assets</b>			
Tangible assets	9	1,405,982	1,226,557
<b>Current assets</b>			
Stocks		560,796	515,668
Debtors	10	2,177,362	1,298,515
Cash at bank and in hand		1,457,053	964,512
		<u>4,195,211</u>	<u>2,778,695</u>
<b>Creditors: amounts falling due within one year</b>	11	<u>(1,087,256)</u>	<u>(1,164,819)</u>
<b>Net current assets</b>		<u>3,107,955</u>	<u>1,613,876</u>
<b>Total assets less current liabilities</b>		<u>4,513,937</u>	<u>2,840,433</u>
<b>Creditors: amounts falling due after more than one year</b>	12	<u>(1,247,229)</u>	<u>–</u>
<b>Net assets</b>		<u>3,266,708</u>	<u>2,840,433</u>
<b>Capital and reserves</b>			
Called up share capital		15,563	15,563
Share premium account		4,846,357	4,846,357
Profit and loss account		<u>(1,595,212)</u>	<u>(2,021,487)</u>
<b>Shareholders funds</b>		<u>3,266,708</u>	<u>2,840,433</u>

The profit for the financial year of the parent company was £ 389,288 (2021: £ 274,037 ).

These Group financial statements have been prepared in accordance with the provisions applicable to companies subject to the small companies' regime and in accordance with Section 1A of FRS 102 'The Financial Reporting Standard applicable in the UK and Republic of Ireland'.

These Group financial statements were approved by the board of directors and authorised for issue on 28 September 2023 , and are signed on behalf of the board by:

R J G Clarke

Director

Company registration number: SC267035

# Powerphonic Limited

## Consolidated Statement of Changes in Equity

Year ended 31 December 2022

	Called up share capital	Share premium account	Translation reserve	Profit and loss account	<b>Total</b>
	£	£	£	£	£
<b>At 1 January 2021</b>	15,563	4,846,357	2,527	(2,352,224)	2,512,223
Profit for the year				164,101	164,101
Other comprehensive income for the year:					
Foreign currency retranslation	—	—	383	—	383
<b>Total comprehensive income for the year</b>	—	—	383	164,101	164,484
Equity-settled share-based payments	—	—	—	54,053	54,053
<b>Total investments by and distributions to owners</b>	—	—	—	54,053	54,053
<b>At 31 December 2021</b>	15,563	4,846,357	2,910	(2,134,070)	<b>2,730,760</b>
Loss for the year				(393,070)	<b>(393,070)</b>
Other comprehensive income for the year:					
Foreign currency retranslation	—	—	3,634	—	3,634
<b>Total comprehensive income for the year</b>	—	—	3,634	(393,070)	<b>(389,436)</b>
Equity-settled share-based payments	—	—	—	36,987	<b>36,987</b>
<b>Total investments by and distributions to owners</b>	—	—	—	36,987	<b>36,987</b>
<b>At 31 December 2022</b>	15,563	4,846,357	6,544	(2,490,153)	<b>2,378,311</b>

# Powerphonic Limited

## Company Statement of Changes in Equity

Year ended 31 December 2022

	Called up share capital	Share premium account	Profit and loss account	Total
	£	£	£	£
<b>At 1 January 2021</b>	15,563	4,846,357	(2,349,577)	2,512,343
Profit for the year			274,037	274,037
<b>Total comprehensive income for the year</b>	–	–	274,037	274,037
Equity-settled share-based payments	–	–	54,053	54,053
<b>Total investments by and distributions to owners</b>	–	–	54,053	54,053
<b>At 31 December 2021</b>	15,563	4,846,357	(2,021,487)	<b>2,840,433</b>
Profit for the year			389,288	<b>389,288</b>
<b>Total comprehensive income for the year</b>	–	–	389,288	<b>389,288</b>
Equity-settled share-based payments	–	–	36,987	<b>36,987</b>
<b>Total investments by and distributions to owners</b>	–	–	36,987	<b>36,987</b>
<b>At 31 December 2022</b>	15,563	4,846,357	(1,595,212)	<b>3,266,708</b>

# Powerphotonic Limited

## Notes to the Group Financial Statements

Year ended 31 December 2022

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### 1. General information

The company is a private company limited by shares, registered in Scotland. The address of the registered office is Unit 5A, St David's Business Park, Dalgety Bay, Fife, KY11 9PF.

### 2. Statement of compliance

These Group financial statements have been prepared in compliance with Section 1A of FRS 102, 'The Financial Reporting Standard applicable in the UK and the Republic of Ireland'.

### 3. Accounting policies

#### Basis of preparation

The Group financial statements have been prepared on the historical cost basis, as modified by the revaluation of certain financial assets and liabilities and investment properties measured at fair value through profit or loss.

The Group financial statements are prepared in sterling, which is the functional currency of the entity.

#### Going concern

Turnover increased in 2022 but the group made a loss before taxation for the year of £574,701, compared with a profit in 2021 of £74,138, and ended the year with cash balances of £1,476,019 (2021: £977,113). During the year the group renewed its facilities with its bankers and obtained local funding in the U.S., resulting in a net increase in borrowings of £1,622,499, the majority of which was in US\$ to fund the investment in the US manufacturing facility. Subsequent to the year end, sales have remained strong, but EBIT has been negative and capital expenditure has remained high, resulting in significant cash outflow. As a result, the group created £1,000,000 in unsecured convertible loan notes on 31 May 2023, £500,000 of which were issued on the same date to provide working capital and fund continued growth (see Note 14 to the financial statements). The directors have prepared financial forecasts which indicate that the group, subject to considered revenue assumptions and available facilities, can meet its financial obligations as they fall due for a period of not less than 12 months from the date of approval of these financial statements. The directors, therefore, consider it appropriate to prepare the financial statements on a going concern basis.

#### Disclosure exemptions

The parent company satisfies the criteria of being a qualifying entity as defined in FRS 102. As such, advantage has been taken of the following reduced disclosures available under FRS 102:

- (a) Disclosures in respect of each class of share capital have not been presented.
- (b) No cash flow statement has been presented for the company.
- (c) Disclosures in respect of financial instruments have not been presented.
- (d) No disclosure has been given for the aggregate remuneration of key management personnel.

#### Consolidation

The Group financial statements consolidate the Group financial statements of Powerphotonic Limited and all of its subsidiary undertakings.

The results of subsidiaries acquired or disposed of during the year are included from or to the date that control passes.

The parent company has applied the exemption contained in section 408 of the Companies Act 2006 and has not presented its individual profit and loss account.

#### Revenue recognition

Turnover is measured at the fair value of the consideration received or receivable for goods supplied and services rendered, net of discounts and Value Added Tax. Revenue from the sale of goods is recognised when the significant risks and rewards of ownership have transferred to the buyer (usually on despatch of the goods); the amount of revenue can be measured reliably; it is probable that the associated economic benefits will flow to the entity; and the costs incurred or to be incurred in respect of the transactions can be measured reliably.

## **Taxation**

Current tax is recognised on taxable profit for the current and past periods. Current tax is measured at the amounts of tax expected to pay or recover using the tax rates and laws that have been enacted or substantively enacted at the reporting date. Deferred tax is recognised in respect of all timing differences at the reporting date. Unrelieved tax losses and other deferred tax assets are recognised to the extent that it is probable that they will be recovered against the reversal of deferred tax liabilities or other future taxable profits. Deferred tax is measured using the tax rates and laws that have been enacted or substantively enacted by the reporting date that are expected to apply to the reversal of the timing difference. Deferred tax is provided on the liability method to take account of timing between the treatment of certain items for financial statements purposes and the treatment for tax purposes. Tax deferred is accounted for in respect of all material timing differences. Deferred tax assets are only recognised to the extent that they are regarded as recoverable.

## **Foreign currencies**

Foreign currency transactions are initially recorded in the functional currency, by applying the spot exchange rate as at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are translated at the exchange rate ruling at the reporting date, with any gains or losses being taken to the profit and loss account.

## **Operating leases**

Lease payments are recognised as an expense over the lease term on a straight-line basis. The aggregate benefit of lease incentives is recognised as a reduction to expense over the lease term, on a straight-line basis.

## **Intangible assets**

Intangible assets are initially recorded at cost, and are subsequently stated at cost less any accumulated amortisation and impairment losses. Any intangible assets carried at revalued amounts, are recorded at the fair value at the date of revaluation, as determined by reference to an active market, less any subsequent accumulated amortisation and subsequent accumulated impairment losses. Intangible assets acquired as part of a business combination are recorded at the fair value at the acquisition date.

## **Amortisation**

Amortisation is calculated so as to write off the cost of an asset, less its estimated residual value, over the useful life of that asset as follows:

Intellectual Property - 33% straight line

If there is an indication that there has been a significant change in amortisation rate, useful life or residual value of an intangible asset, the amortisation is revised prospectively to reflect the new estimates.

## **Research and development**

Research and development expenditure is written off in the year in which it is incurred, except where expenditure is made on a clearly defined project with reasonable certainty as to its technical feasibility and ultimate commercial viability. Where this is the case, these costs will be capitalised and amortised over a defined period.

## **Tangible assets**

All fixed assets are initially recorded at cost. Certain internally constructed assets are recorded at the cost of the materials used to construct the assets however internal labour resources used in the construction are not capitalised as part of the cost of the asset.

## **Depreciation**

Depreciation is calculated so as to write off the cost or valuation of an asset, less its residual value, over the useful economic life of that asset as follows:

Equipment	-	25% - 33% Straight Line
Leasehold improvements	-	Over the term of the lease

During the year the company has been constructing assets for use internally. As at 31 December 2022, the construction is not complete and the assets are not in use by the company. The assets have been recognised at cost but will not be depreciated until they are brought into use and transferred to Equipment costs.

## **Impairment of fixed assets**

A review for indicators of impairment is carried out at each reporting date, with the recoverable amount being estimated where such indicators exist. Where the carrying value exceeds the recoverable amount, the asset is impaired accordingly. Prior impairments are also reviewed for possible reversal at each reporting date.

## **Stocks**

Stocks are measured at the lower of cost and estimated selling price less costs to complete and sell. Cost includes all costs of purchase, costs of conversion and other costs incurred in bringing the stock to its present location and condition.

## **Government grants**

Government grants in respect of capital expenditure are deferred and are then amortised as income to the profit and loss account in line with the depreciation of the asset purchased. Government grants received in respect of revenue expenditure are included in turnover in the profit and loss account in the same period as the costs to which the grants relate were incurred.

## **Defined contribution plans**

Contributions to defined contribution plans are recognised as an expense in the period in which the related service is provided. Prepaid contributions are recognised as an asset to the extent that the prepayment will lead to a reduction in future payments or a cash refund.

## Share-based payments

Equity-settled share-based payment transactions are measured at fair value at the date of grant. The fair value is expensed on a straight-line basis over the vesting period, with a corresponding increase in equity. This is based upon the company's estimate of the shares or share options that will eventually vest which takes into account all vesting conditions and non-market performance conditions, with adjustments being made where new information indicates the number of shares or share options expected to vest differs from previous estimates. Fair value is determined using an appropriate pricing model. All market conditions and non-vesting conditions are taken into account when estimating the fair value of the shares or share options. As long as all other vesting conditions are satisfied, no adjustment is made irrespective of whether market or non-vesting conditions are met. Where the terms of an equity-settled transaction are modified, an expense is recognised as if the terms had not been modified. In addition, an expense is recognised for any increase in the fair value of the transaction, as measured at the date of modification. Where an equity-settled transaction is cancelled or settled, it is treated as if it had vested on the date of cancellation or settlement, and any expense not yet recognised in profit or loss is expensed immediately. Cash-settled share-based payment transactions are measured at the fair value of the liability. Until the liability is settled, the fair value of the liability is re-measured at each reporting date and at the date of settlement, with any changes in fair value recognised in profit or loss for the period.

### 4. Auditor's remuneration

	<b>2022</b>	2021
	<b>£</b>	£
Fees payable for the audit of the group financial statements	<b>11,750</b>	6,100
	.....	.....

### 5. Employee numbers

The average number of persons employed by the company during the year amounted to 48 (2021: 40 ).

### 6. Profit before taxation

Profit before taxation is stated after charging:

	<b>2022</b>	2021
	<b>£</b>	£
Depreciation of tangible assets	<b>382,113</b>	366,996
	.....	.....

### 7. Investments

The company holds 100% of the share capital of Powerphotonic Inc., a company incorporated in the United States of America. Powerphotonic Inc. was dormant in the prior year but started trading again in the current year. The results of Powerphotonic Inc. are fully consolidated within these financial statements.

**8. Intangible assets**  
**Group and company**

	<b>Intellectual Property £</b>
<b>Cost</b>	
At 1 January 2022 and 31 December 2022	70,413
	-----
<b>Amortisation</b>	
At 1 January 2022 and 31 December 2022	70,413
	-----
<b>Carrying amount</b>	
At 1 January 2022 and 31 December 2022	-
	-----
At 31 December 2021	-
	-----

**9. Tangible assets**

<b>Group</b>	Assets under construction	Equipment	Leasehold improvements	<b>Total</b>
	£	£	£	£
<b>Cost</b>				
At 1 January 2022	159,507	2,827,009	195,810	3,182,326
Additions	974,531	369,145	21,958	1,365,634
Disposals	-	(3,404)	-	(3,404)
	-----	-----	-----	-----
<b>At 31 December 2022</b>	1,134,038	3,192,750	217,768	4,544,556
	-----	-----	-----	-----
<b>Depreciation</b>				
At 1 January 2022	-	1,915,517	40,252	1,955,769
Charge for the year	-	366,525	15,588	382,113
Disposals	-	(2,160)	-	(2,160)
	-----	-----	-----	-----
<b>At 31 December 2022</b>	-	2,279,882	55,840	2,335,722
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<b>Carrying amount</b>				
<b>At 31 December 2022</b>	1,134,038	912,868	161,928	2,208,834
	-----	-----	-----	-----
At 31 December 2021	159,507	911,492	155,558	1,226,557
	-----	-----	-----	-----
<b>Company</b>	Assets under construction	Equipment	Leasehold improvements	<b>Total</b>
	£	£	£	£
<b>Cost</b>				
At 1 January 2022	159,507	2,827,009	195,810	3,182,326
Additions	394,302	158,506	5,855	558,663
Disposals	-	(3,404)	-	(3,404)
Transfers	-	(134,497)	-	(134,497)
	-----	-----	-----	-----
<b>At 31 December 2022</b>	553,809	2,847,614	201,665	3,603,088
	-----	-----	-----	-----
<b>Depreciation</b>				
At 1 January 2022	-	1,915,517	40,252	1,955,769
Charge for the year	-	362,407	15,588	377,995
Disposals	-	(2,161)	-	(2,161)
Transfers	-	(134,497)	-	(134,497)
	-----	-----	-----	-----
<b>At 31 December 2022</b>	-	2,141,266	55,840	2,197,106
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<b>Carrying amount</b>	-----	-----	-----	-----
<b>At 31 December 2022</b>	553,809	706,348	145,825	<b>1,405,982</b>
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At 31 December 2021	159,507	911,492	155,558	1,226,557
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## 10. Debtors

	Group		Company	
	2022	2021	2022	2021
	£	£	£	£
Trade debtors	939,713	877,745	933,172	877,745
Amounts owed by group undertakings	–	–	843,739	122,844
Other debtors	472,694	298,533	400,451	297,926
	<u>1,412,407</u>	<u>1,176,278</u>	<u>2,177,362</u>	<u>1,298,515</u>

## 11. Creditors: amounts falling due within one year

	Group		Company	
	2022	2021	2022	2021
	£	£	£	£
Bank loans	332,595	370,912	332,595	370,912
Trade creditors	776,061	215,560	294,594	215,522
Social security and other taxes	69,452	54,241	69,452	54,241
Other creditors	440,821	524,143	390,615	524,144
	<u>1,618,929</u>	<u>1,164,856</u>	<u>1,087,256</u>	<u>1,164,819</u>

The bank loan is secured by a bond and floating charge over all company property and assets.

## 12. Creditors: amounts falling due after more than one year

	Group		Company	
	2022	2021	2022	2021
	£	£	£	£
Bank loans	1,247,229	–	1,247,229	–
Other creditors	413,587	–	–	–
	<u>1,660,816</u>	<u>–</u>	<u>1,247,229</u>	<u>–</u>

The bank loan is secured as detailed in note 11.

### 13. Share-based payments

Certain employees had been granted options to subscribe for shares in the company under share option schemes as follows: The remaining approved options outstanding, granted on 25 October 2017, 4 June 2019 and 11 June 2021 at an option price of £0.77, £0.99 and £0.22 respectively are shown below:

	Number of shares
Option exercise period October 2017 to October 2027	2,500
Option exercise period June 2019 to June 2029	342,044
Option exercise period June 2021 to June 2031	78,100

The remaining unapproved options outstanding, granted on 4 June 2019 at an option price of £1.29 are shown below:

	Number of shares
Option exercise period June 2019 to June 2029	116,912

The estimated fair value of each share option granted is as follows: Option Number Exercise Price Fair Value Approved 2,500 £0.90 £0.77 Approved 2019 342,044 £1.18 £0.99 Approved 2021 78,100 £1.18 £0.22 Unapproved 116,912 £0.01 £1.29

Details of the number and weighted average exercise prices (WAEP) of share options during the year are as follows:

Group and company	2022		2021	
	No.	WAEP	No.	WAEP
Outstanding at 1 January 2022	604,056	0.95	524,456	0.92
Granted during the year	–	–	79,600	1.18
Exercised during the year	( 64,500)	–	–	–
Expired during the year	–	1.18	–	–
Outstanding at 31 December 2022	539,556	0.92	604,056	0.95

The total expense recognised in profit or loss for the year is as follows:

	Group		Company	
	2022	2021	2022	2021
	£	£	£	£
Equity-settled share-based payments	36,987	54,053	36,987	54,053

The estimated fair values were calculated by applying the Black-Scholes option pricing model. The model inputs were 2022 Share price at grant date £1.30 Exercise price £0.01–£0.90 Expected volatility 71% Expected life 10 years Risk free interest rate 0.90% Dividend yield 0% As there were no new share options granted in the year, the inputs have not been changed.

#### 14. Subsequent events

On 31 May 2023 the group created 1,000,000 unsecured convertible loan notes with a nominal value of £1.00 each, expiring on 31 August 2024. In the event of a fund raising prior to the expiry date, the notes are convertible at a 20% discount to the price per share, and if not redeemed or converted prior to the expiry date, any outstanding notes will be converted at a price of £3.80 per share. A premium is payable on redemption on any issued notes, which accrues daily at a rate of 15% per annum from the date of issue of the notes to the redemption date. On the same date, the group issued 500,000 loan notes, which raised £405,907, net of fees.

#### 15. Operating leases

The total future minimum lease payments under non-cancellable operating leases are as follows:

	<b>Group</b>		<b>Company</b>	
	<b>2022</b>	2021	<b>2022</b>	2021
	<b>£</b>	£	<b>£</b>	£
Not later than 1 year	<b>157,905</b>	67,200	<b>67,200</b>	67,200
Later than 1 year and not later than 5 years	<b>390,861</b>	67,200	–	67,200
Later than 5 years	<b>558,267</b>	–	–	–
	<b>1,107,033</b>	134,400	<b>67,200</b>	134,400

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