

# DIRECTOR'S REPORT

The Directors of Audio Pixels Holdings Limited submit herewith the financial report of the company for the financial year ended 31 December 2017. In order to comply with the provisions of the Corporations Act 2001, the directors report as follows:

The names and particulars of the directors of the company during or since the end of the financial year are:

Name	Particulars
Fred Bart	Chairman and Chief Executive Officer. A director since 5 September 2000. He has been Chairman and Managing Director of numerous private companies since 1980, specialising in manufacturing, property and marketable securities. Mr Bart is also Chairman of Immunovative Therapies Limited, an Israeli company involved in the manufacture of cancer vaccines for the treatment of most forms of cancer. He is a member of the Audit Committee and a member of the Nomination and Remuneration Committee.
Ian Dennis	Non-executive director and Company Secretary. Ian is a chartered accountant with experience as director and secretary in various public listed and unlisted technology companies. He has been involved in the investment banking industry and stockbroking industry for the past thirty years. Prior to that, Ian was with KPMG, Chartered Accountants in Sydney. Appointed to the Board on 5 September 2000. He is a member of the Audit Committee and Nomination and Remuneration Committee.
Cheryl Bart AO	Non-executive director. Appointed to the Board on 26 November 2001. Cheryl Bart is a lawyer and company director. She is non-executive director of SG Fleet Australia Limited, ME Bank, Invictus Games Sydney 2018, Prince's Trust Australia, Football Federation of Australia (FFA), Ted X Sydney and the Australian Himalayan Foundation. She is immediate past director of ABC (Australian Broadcasting Corporation), SA Power Networks (formerly ETSA Utilities), Spark Infrastructure Limited, and the Local Organising Committee of the 2015 Australian Asian Cup. She is a fellow of the Australian Institute of Company Directors, Patron of SportsConnect and a member of Chief Executive Women. She is a member of the Audit Committee and a member of the Nominations and Remuneration Committee.

## Directorships of Other Listed Companies

Directorships of other listed companies held by directors in the 3 years immediately before the end of the financial year are as follows:

Name	Company	Period of directorship
Fred Bart	Electro Optic Systems Holdings Limited	Since May 2000
Ian Dennis	Electro Optic Systems Holdings Limited	Since May 2000
Cheryl Bart	Spark Infrastructure Group Limited	November 2005 to May 2015
	SG Fleet Australia Limited	Since February 2014

## Principal Activities

The principal activity of the Company is an investment in Audio Pixels Limited of Israel. Audio Pixels Limited is engaged in the development of digital speakers.

## Results

The net loss for the financial year ended to 31 December 2017 was \$5,914,957 (31 December 2016 - \$5,054,771).

## Dividends

The directors recommend that no dividend be paid and no amount has been paid or declared by way of dividend since the end of the previous financial year and up to the date of this report.

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## Review of Operations

During the reporting period there were no significant changes in the nature of the company's principal activities which were predominately focused on the refinement of the fabrication processes required to mass produce a commercial version of the Company's proven groundbreaking Micro Electro Mechanical Structures ("MEMS") based digital loudspeaker.

Audio Pixels is a world leader in the digital transformation of sound reproduction; combining the emergence of a multibillion-dollar MEMS device industry together with the multibillion-dollar loudspeaker market that has over the course of a century become an indispensable fixture of daily life throughout a myriad of industries and applications.

The Company's primary efforts remained focused on commercialising its ground breaking MEMS based digital sound wave transducer platform into an industry compliant microchip that will propel audio loudspeakers, systems and ultrasonic sensors from their century old analog origins into the advanced digital era of today.

During this reporting period the Company received MEMS wafers that had already undergone a previous announced refinement of the device's "dissipation layers". The refinements implemented to layers that come into contact with each other during normal operation, were based on results attained from a comprehensive research program aimed at delivering practical solutions for the rather unique operational requirements of our MEMS devices.

As was announced (6 December 2017) these wafers failed to meet a very basic electrical specification, which was ultimately traced to faulty manufacturing processes used to fabricate the internal electrical interconnects of the device. The interconnects (often referred to as "through-silicon via" or TSV's), provide the electrical interconnections between different layers of the chip. The faulty process introduced an imperfection in the interconnect that degraded the device's internal current flow which adversely increased the time it takes for the device to react to the input signals.

Upon discovery the vendor immediately identified and rectified the defective process which they then definitively proved through a number of rapid trial runs. At the same time the vendor launched and fast tracked a new fabrication run of wafers that meet the required specifications. Reflective of the vendor's resolute commitment to ensure the successful completion of the

fabrication development processes, the vendor instituted an unprecedented number of additional verification points throughout the fabrication process. At each such check point wafers are randomly selected and removed and exhaustively tested for compliance by the vendor, the Company, and in some cases third parties' experts. So far all testing conducted including the recently delivered wafers containing "half structures" have all validated and verified that the current fabrication run measurements adhere to our precise specifications. These include specifications pertaining to the newly optimised dissipation layers and electrical interconnects. This was announced to ASX on 26 February 2018.

As was also announced, the Company undertook an exploratory effort to try and develop a method that might repair the electrical properties of the previously received wafers. Utilising highly unconventional techniques the Company managed to rectify individual interconnects, which allowed the combined teams to substantiate that the degradation of the device's internal current flow was directly attributed to (and limited to) the electrical interconnects. The team's attention has since been focused on trying to evolve the intricate techniques used to repair individual interconnects into a workable process that is able to address the many interconnects of a single chip. Despite many associated challenges, the team continues this "rectification effort" at least until such time that the Company receives the newly fabricated wafers from its vendors.

Maturing a reliable manufacturing process for any MEMS device let alone a revolutionary device such as ours, makes it near impossible to accurately predict how long it will take to resolve all the challenges, or even predict if new ones might arise. That being said the progress and unwavering commitment of the Company and its vendor to achieve the Company's mass production requirements are certainly bearing noteworthy results. Among others this is evident by the dramatic reduction in the length of time it now takes to go from start-to-finish of the MEMS fabrication process. The ever-shrinking timeline substantiates the fact that the overwhelming majority of production steps required to fabricate our MEMS chip have been completed and refined into reliable mass manufacturing processes.

The vendor further advises that delivery of the newly fabricated wafers remains on track with their previous advised delivery timelines (as stated in the 6 December 2018 Announcement), whereby they anticipate beginning to deliver the newly fabricated wafers on our about the end of Q1-2018.

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Throughout the period the Company continued to refine the capabilities of its ASIC, electronic controls, software algorithms, the chip assembly and packaging process as well as our proprietary measurement systems. To better cope with the receipt of what are expected to be fully functioning wafers and the ensuing demonstration and introduction phases, management has been actively seeking to expand its engineering workforce. Management continues to maintain very active communications with its ever growing pool of future customers, ranging from industry conglomerates to start-ups wanting to utilise our devices for a wide range of new and fascinating applications.

The Company continues to expand its intellectual property portfolio, now standing at 32 applications with 102 patents granted in various global jurisdictions. Additionally, during the reporting period two additional applications have been drafted for submission to the applicable patent offices.

Further information concerning the operations and financial condition of the entity can be found in the financial report and in releases made to the Australian Stock Exchange (ASX) during the year.

## Changes in State of Affairs

There was no significant change in the state of affairs of the company or the consolidated entity other than that referred to in the financial statements or notes thereto.

## Significant Events After Balance Date

There has not been any matter or circumstance that has arisen since the end of the financial year which is not otherwise dealt with in this report or in the financial statements, that has significantly affected or may significantly affect the operations of the company or the consolidated entity, the results of those operations or the state of affairs of the company or the consolidated entity in subsequent financial years.

## Future Developments

The consolidated entity will continue to focus on the development of its digital speaker technology.

## Environmental Regulations

In the opinion of the directors the company and the consolidated entity is in compliance with all applicable environmental legislation and regulations.

## Indemnification and Insurance of Officers and Auditors

During the financial year, the company paid a premium in respect of a contract insuring the Directors and Officers of the Company and any related body corporate against a liability incurred as such a Director or Officer to the extent permitted by the Corporations Act 2001. The contract of insurance prohibits disclosure of the nature of the coverage provided and the amount of the premium. The Company has agreed to indemnify the current Directors, Company Secretary and Executive Officers against all liabilities to other persons that may arise from their position as Directors or Officers of the Company and its controlled entities, except where to do so would be prohibited by law. The agreement stipulates that the Company will meet the full amount of any such liabilities, including costs and expenses.

The Company has not, during or since the financial year indemnified or agreed to indemnify an auditor of the company or of any related body corporate against any liability incurred as such an auditor.

## Directors' Interests and Benefits

The relevant interest of each director in the share capital of the Company as notified by the directors to the Australian Stock Exchange in accordance with Section 205G(1) of the Corporations Act as at the date of this report are:

Name	Ordinary Shares
Fred Bart	5,592,765
Ian Dennis	320,167
Cheryl Bart	500,000

There has been no movement in Directors' shareholdings during the 2017 year apart from the sale by Ian Dennis of 249,883 as part of a Family Law settlement.

# DIRECTOR'S REPORT

## Remuneration Report (Audited)

Since the end of the previous financial year no director of the Company has received or become entitled to receive any benefit (other than a benefit included in the aggregate amount of remuneration received or due and receivable by directors as shown in the financial statements) because of a contract made by the Company or related corporation with the director or with a firm of which the director is a member, or with a company in which the director has a substantial financial interest. There are no employment contracts for any of the directors.

This report outlines the remuneration arrangements in place for Directors and key management personnel of the Company. The Directors are responsible for remuneration policies and packages applicable to the Board members of the Company. The entire Board makes up the Nomination and Remuneration Committee. The Board remuneration policy is to ensure the remuneration package properly reflects the person's duties and responsibilities.

There are currently no performance based incentives to directors or executives based on the performance of the Company. There are no employment contracts in place with any Director of the Company. There are standard employment contracts for the executives of including at will employment and a notice period of three months for termination.

The key management personnel of Audio Pixels Holdings Limited during the year were:

Fred Bart	Chairman and Chief Executive Officer
Cheryl Bart	Non executive director
Ian Dennis	Non executive director and company secretary
Danny Lewin	CEO and director of Audio Pixels Limited
Yuval Cohen	Chief Technical Officer of Audio Pixels Holdings Limited
Shay Kaplan	Chief Scientist of Audio Pixels Limited

The Directors fees are not dependent on the earnings of the Company and the consequences of the Company's performance on shareholder wealth. On 24 September 2010, the maximum total directors fees were increased to a total of \$250,000 per annum in line with the increased activities of the company. The actual directors fees paid were within the approved limit of \$250,000 per annum approved by shareholders at the Annual General Meeting held on 24 September 2010.

The table below sets out summary information about the Company's earnings and movements in shareholder wealth for the last 5 financial years.

	Year ended 31 December 2017 \$	Year ended 31 December 2016 \$	Year ended 31 December 2015 \$	Year ended 31 December 2014 \$	Year ended 31 December 2013 \$
Revenue	65,624	103,630	25,073	181,583	304,536
Net (loss) before tax	(5,914,957)	(5,054,771)	(1,840,940)	(2,796,787)	(2,147,576)
Net (loss) after tax	(5,914,957)	(5,054,771)	(1,840,940)	(2,796,787)	(2,147,576)

	Year ended 31 December 2017 \$	Year ended 31 December 2016 \$	Year ended 31 December 2015 \$	Year ended 31 December 2014 \$	Year ended 31 December 2013 \$
Share price at start of year/period	14.15	8.45	9.86	3.80	5.60
Share price at end of year/period	16.82	14.15	8.45	9.86	3.80
Dividend Paid	0.00	0.00	0.00	0.00	0.00

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## Remuneration Report (Cont.)

The aggregate compensation of the key management personnel of the company is set out below:

	31 December 2017 \$	31 December 2016 \$
Short-term employee benefits	775,262	737,818
Post employment benefits	169,339	163,284
	<u>944,601</u>	<u>901,102</u>

The following table sets out each key management personnel's equity holdings (represented by holdings of fully paid ordinary shares in Audio Pixels Holdings Limited).

	Balance at 1/1/17 No.	Granted as remuneration No.	Received on exercise of options No.	Net other change No.	Balance at 31/12/17 No.
Mr Fred Bart	5,592,765	-	-	-	5,592,765
Mrs Cheryl Bart	500,000	-	-	-	500,000
Mr Ian Dennis	570,050	-	-	(249,883)	320,167
Mr Danny Lewin	1,709,092	-	-	-	1,709,092
Mr Yuval Cohen	1,928,971	-	-	-	1,928,971
Mr Shay Kaplan	881,604	-	-	-	881,604

## Convertible Note Issued to Key Management Personnel

On 22 June 2015, shareholders approved the issue of a convertible note of \$1.5m to 4F Investments Pty Limited, company controlled by Mr Fred Bart. On 31 May 2016 shareholders approved the extension of the note to 31 December 2016. On 28 December 2016, the Company announced that the convertible notes would be extended for a further term of 12 months to 31 December 2017 which received shareholder approval on 31 May 2017. On 29 December 2017, the Company announced that the convertible notes would be extended for a further term of 12 months to 31 December 2018 subject to shareholder approval. The terms of the issue were as follows:

Face Value:	\$1,500,000
Date of issue:	26 June 2015
Interest rate:	8% payable quarterly
Term:	12 months to 31 December 2018 (following extension)
Listing status:	Unlisted
Security:	Unsecured
Conversion terms:	Convertible to ordinary shares based on the lower of the five day volume weighted average share price of Audio Pixels Holdings Limited on the date of the agreement (\$9.68) or the five day volume weighted average share price of Audio Pixels Holdings Limited immediately prior to conversion.

## Transactions with Related Entities

During the year ended 31 December 2017, the Company paid a total of \$107,857 (year ended 31 December 2016 - \$107,857) to 4F Investments Pty Limited, a company associated with Mr Fred Bart in respect of directors fees and superannuation for Mr Fred Bart and Mrs Cheryl Bart.

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## Remuneration Report (cont.)

During the year ended 31 December 2017, the Company paid interest of \$119,407 (year ended 31 December 2016 - \$119,671) on a convertible note to 4F Investments Pty Limited, a company associated with Mr Fred Bart. The convertible note of \$1.5m was issued on 26 June 2015 following shareholder approval at an Extraordinary General Meeting. The convertible note was extended twice during the year ended 31 December 2016, the most recent of which being on 28 December 2016, which was approved by shareholders. On 29 December 2017, The Company announced a further extension to 31 December 2018, subject to shareholder approval.

During the year ended 31 December 2017, the Company paid a total of \$41,063 (year ended 31 December 2016 - \$41,063) to Dennis Corporate Services Pty Limited, a company associated with Mr Ian Dennis in respect of directors fees and superannuation.

During the year, the Company paid \$30,000 (31 December 2016 - \$30,000) to Dennis Corporate Services Pty Limited, a company associated with Mr Ian Dennis in respect of consulting fees for company secretarial and accounting services.

On 8 May 2014, the company entered into a lease in respect of office premises at Level 12, 75 Elizabeth Street Sydney for a period of forty eight months to 30 March 2018. The Company recharged \$22,954 of the rent and other tenancy charges to Electro Optic Systems Holdings Limited, a company of which Fred Bart and Ian Dennis are directors and \$24,762 to 4F Investments Pty Limited, a company controlled by Fred Bart.

The following table sets out the remuneration of each key management personnel of the Company:

	Short Term		Post Employment		Total \$
	Directors fees/ Salary \$	Non-monetary \$	Superannuation \$	Social Security \$	
<b>December 2017</b>					
Fred Bart	61,000	-	5,794	-	66,794
Cheryl Bart	37,500	-	3,563	-	41,063
Ian Dennis	67,500*	-	3,563	-	71,063
Danny Lewin	157,122	37,846	-	51,581	246,549
Yuval Cohen	179,775	39,988	-	55,429	275,192
Shay Kaplan	150,353	44,178	-	49,409	243,940
	653,250	122,012	12,920	156,419	944,601
<b>December 2016</b>					
Fred Bart	61,000	-	5,794	-	66,794
Cheryl Bart	37,500	-	3,563	-	41,063
Ian Dennis	67,500*	-	3,563	-	71,063
Danny Lewin	152,420	36,606	-	49,034	238,060
Yuval Cohen	168,369	30,782	-	53,967	253,118
Shay Kaplan	145,771	37,870	-	47,363	231,004
	632,560	105,258	12,920	150,364	901,102

\* The amounts disclosed for Ian Dennis include directors fees of \$37,500 and consulting fees of \$30,000.

## Audit Committee

The Audit Committee was formally constituted on 29 August 2014 with all three directors appointed to the Audit Committee. Ian Dennis was appointed chair of the Audit Committee.

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## Directors' Meetings

During the year the Company held three meetings of directors, two meetings of the Audit Committee and no meetings of the Nomination and Remuneration Committee. The attendances of the directors at meetings of the Board were:

Directors	Board of directors		Audit committee		Nomination and Remuneration committee	
	Held	Attended	Held	Attended	Held	Attended
Mr Fred Bart	3	3	2	2	-	-
Mrs Cheryl Bart	3	3	2	2	-	-
Mr Ian Dennis	3	3	2	2	-	-

All current board members are on the Audit Committee and the Nomination and Remuneration Committee.

## Non-audit Services

Details of amounts paid or payable to the auditor for non-audit services provided during the year by the auditor are outlined in Note 4 to the financial statements.

The directors are satisfied that the provision of non-audit services, during the year, by the auditor (or by another person or firm on the auditor's behalf) is compatible with the general standard of independence for auditors imposed by the Corporations Act 2001.

The directors are of the opinion that the services disclosed in Note 4 to the financial statements do not compromise the external auditors' independence for the following reasons:

- All non-audit services have been reviewed and approved to ensure that they do not impact the integrity and objectivity of the auditor, and
- None of the services undermine the general principles relating to auditor independence as set out in Code of Conduct APES 110 Code of Ethics for Professional Accountants issued by the Accounting Professional & Ethical Standards Board, including reviewing or auditing the auditor's own work, acting in a management or decision-making capacity for the company, acting as advocate for the company or jointly sharing economic risks and rewards.

## Auditor's Independence Declaration

The auditor's independence declaration is included on page 9.

Signed in accordance with a resolution of directors made pursuant to s.298(2) of the Corporations Act 2001.

On behalf of the Directors



**I A Dennis**

Director

Dated at Sydney this 28 day of February 2018