BIO KEY INTERNATIONAL INC
Form 10-K/A
April 05, 2019

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K/A

(Amendment No. 1)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year Ended December 31, 2018

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the Transition Period from ___ to ___

Commission file number: 1-13463

BIO-KEY INTERNATIONAL, INC.

(Exact name of registrant as specified in its charter)

DELAWARE	**41-1741861**
(State or other jurisdiction of	(IRS Employer

incorporation or organization) Identification Number)
3349 HIGHWAY 138, BUILDING A, SUITE E, WALL, NJ 07719

(Address of principal executive offices) (Zip Code)

(732) 359-1100

Registrant's telephone number, including area code.

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	**Name of exchange on which registered**
Common Stock, $0.0001 par value per share	Nasdaq Stock Market

Securities registered pursuant to Section 12(g) of the Act: **None**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of “large accelerated filer,” “accelerated filer,” “smaller reporting company,” and “emerging growth company” in Rule 12b-2 of the Exchange Act.

Large accelerated filer	Accelerated filer
Non-accelerated filer	Smaller reporting company
	Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

As of June 29, 2018 (the last business day of the registrant’s most recently completed second fiscal quarter), the aggregate market value of the registrant’s common stock held by non-affiliates was approximately $25.2 million based upon the closing price for shares of the registrant’s common stock of $2.65 as reported by the Nasdaq Stock Market on that date.

As of March 29, 2019, the registrant had 13,991,688 shares of common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE:

Certain sections of the registrant’s Proxy Statement for its 2019 Annual Meeting of Stockholders are incorporated herein by reference in Part III of this Form 10-K. Such Proxy Statement will be filed with the Securities and Exchange Commission within 120 days of the registrant’s fiscal year ended December 31, 2018.

EXPLANATORY NOTE

This Amendment No. 1 on Form 10-K/A (the "Amendment") amends BIO-key International, Inc.'s (the "Company", "we" or "us") Annual Report on Form 10-K for the year ended December 31, 2018, which was originally filed with the Securities and Exchange Commission on April 1, 2019 (the "Original 10-K"). This Amendment is being filed solely to amend Item 8 for the purpose of including a revised report of our Independent Registered Public Accounting Firm and Item 16 for the purpose of including a revised Exhibit 23.1.

Except as described above, this Amendment does not modify or update any disclosures in the Original 10-K. Accordingly, this Amendment No. 1 does not reflect events occurring after the filing date of the Original 10-K. As required by Rule 12b-15 under the Securities Exchange Act of 1934, as amended, new certifications by our principal executive officer and principal financial officer are being filed as exhibits to this Amendment.

ITEM 8—FINANCIAL STATEMENTS

The following financial statements of BIO-key International, Inc. are included herein at the indicated page numbers:

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Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors of

BIO-key International, Inc.

Wall, NJ

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of BIO-key International, Inc. and Subsidiaries (the "Company") as of December 31, 2018 and 2017, and the related consolidated statements of operations, stockholders' equity and cash flows for the years then ended, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Going Concern

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As disclosed in the consolidated financial statements, the Company has suffered substantial net losses in recent years, has an accumulated deficit at December 31, 2018 and is dependent on debt and equity financing to fund its operations, all of which raise substantial doubt about the Company's ability to continue as a going concern. Management's plans regarding these matters are disclosed in Note A. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Change in Accounting Principle

As discussed in Note B to the financial statements, the Company has changed its method of accounting for revenue from contracts with customers as of January 1, 2018 due to the adoption of the new revenue standard. The Company adopted the new revenue standard using the modified retrospective approach.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audit provides a reasonable basis for our opinion.

/s/ Rotenberg Meril Solomon Bertiger & Guttilla,P.C.
ROTENBERG MERIL SOLOMON BERTIGER &
GUTTILLA, P.C.
We have served as the Company's auditor since 2010.
Saddle Brook, New Jersey
April 1, 2019

BIO-key International, Inc. and Subsidiaries

CONSOLIDATED BALANCE SHEETS

	December 31, 2018	2017
ASSETS		
Cash and cash equivalents	$323,943	$288,721
Accounts receivable, net	1,574,032	2,875,946
Due from factor	56,682	109,865
Inventory	998,829	946,847
Resalable software license rights	1,125,000	2,640,000
Prepaid expenses and other	150,811	152,654
Total current assets	4,229,297	7,014,033
Resalable software license rights, net of current portion	6,790,610	7,933,808
Accounts receivable, net of current portion	-	760,000
Equipment and leasehold improvements, net	148,608	181,165
Capitalized contract costs, net	319,199	-
Deposits and other assets	8,712	8,712
Intangible assets, net	195,906	181,104
Total non-current assets	7,463,035	9,064,789
TOTAL ASSETS	$11,692,332	$16,078,822
LIABILITIES		
Accounts payable	$481,269	$499,230
Accrued liabilities	548,232	688,023
Dividends payable on preferred stock	-	630,408
Deferred revenue	196,609	507,866
Total current liabilities	1,226,110	2,325,527
TOTAL LIABILITIES	1,226,110	2,325,527
Commitments and Contingencies		
STOCKHOLDERS' EQUITY		
Series A-1 convertible preferred stock: authorized, 100,000 (liquidation preference of $100 per share); issued and outstanding 0 and 62,596 of $.0001 par value at December 31, 2018 and December 31, 2017, respectively	-	6
Series B-1 convertible preferred stock: authorized, 105,000 (liquidation preference of $100 per share); issued and outstanding 0 and 105,000 of $.0001 par value at December 31, 2018 and December 31, 2017, respectively	-	11
Common stock — authorized, 170,000,000 shares; issued and outstanding; 13,977,868 and 7,691,324 of $.0001 par value at December 31, 2018 and December 31, 2017, respectively	1,398	769
Additional paid-in capital	85,599,140	80,829,001
Accumulated deficit	(75,134,316)	(67,076,492)

TOTAL STOCKHOLDERS' EQUITY	10,466,222	13,753,295
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	$11,692,332	$16,078,822

The accompanying notes are an integral part of these statements.

BIO-key International, Inc. and Subsidiaries

CONSOLIDATED STATEMENTS OF OPERATIONS

	Years ended December 31,	
	2018	**2017**
Revenues		
Services	$1,012,576	$1,193,190
License fees and other	1,739,897	3,220,371
Hardware	1,292,069	1,889,423
Total revenues	4,044,542	6,302,984
Costs and other expenses		
Cost of services	443,210	439,291
Cost of license fees, hardware and other	3,720,980	2,802,860
Total costs and other expenses	4,164,190	3,242,151
Gross Profit (Loss)	(119,648)	3,060,833
Operating expenses		
Selling, general and administrative	5,333,906	5,676,323
Research, development and engineering	1,415,401	1,659,875
Total operating expenses	6,749,307	7,336,198
Operating loss	(6,868,955)	(4,275,365)
Other income		
Interest income	80	27
Total other income	80	27
Net loss	(6,868,875)	(4,275,338)
Deemed dividend from trigger of anti-dilution provision feature	(1,428,966)	-
Convertible preferred stock dividends	(198,033)	(769,158)
Net loss available to common stockholders	(8,495,874)	(5,044,496)
Basic and Diluted Loss per Common Share	$(0.73)	$(0.76)
Weighted Average Shares Outstanding:		
Basic and Diluted	11,607,933	6,638,382

The accompanying notes are an integral part of these statements.

BIO-key International, Inc. and Subsidiaries

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

	Series A-1 Preferred Stock		Series B-1 Preferred Stock		Common Stock		Additional Paid-in	Accumulated	
	Shares	Amount	Shares	Amount	Shares	Amount	Capital	Deficit	Total
Balance as of December 31, 2016	**90,000**	**$9**	**105,000**	**$11**	**6,093,843**	**$609**	**$78,253,413**	**$(62,801,154)**	**$15,452,888**
Issuance of common stock for directors' fees					11,244	1	32,029		32,030
Issuance of common stock pursuant to securities purchase agreement					555,556	56	1,999,944		2,000,000
Dividends declared on preferred stock							(769,158)		(769,158)
Conversion of dividends payable on A-1 preferred stock					150,000	15	539,985		540,000
Conversion of A-1 preferred stock to common stock	(27,404)	(3)			761,222	76	(73)		-
Issuance of stock for consultants					117,849	12	354,573		354,585
Stock issuance costs							(80,366)		(80,366)
Exercise of stock options					1,610	-	-		-
Share-based compensation							498,654		498,654
Net loss								(4,275,338)	(4,275,338)

Balance as of December 31, 2017	**62,596**	**$6**	**105,000**	**$11**	**7,691,324**	**$769**	**$80,829,001**	**$(67,076,492)**	**$13,753,295**
Adoption of ASC 606								240,017	240,017
Issuance of common stock for directors' fees					20,976	2	37,530		37,532
Issuance of common stock pursuant to securities purchase agreement					1,380,000	138	2,069,862		2,070,000
Dividends declared on preferred stock							(198,033)		(198,033)
Conversion of A-1 preferred stock to common stock	(62,596)	(6)			1,738,778	174	(168)		-
Conversion of B-1 preferred stock to common stock			(105,000)	(11)	2,916,668	292	(281)		-
Conversion of dividends payable on A-1 preferred stock					98,893	10	356,005		356,015
Conversion of dividends payable on B-1 preferred stock					131,229	13	472,411		472,424
Deemed dividend related to down-round features							1,428,966	(1,428,966)	-
Stock issuance costs							(338,845)		(338,845)
Share-based compensation							942,692		942,692
Net loss								(6,868,875)	(6,868,875)
Balance as of December 31, 2018	**-**	**$-**	**-**	**$-**	**13,977,868**	**$1,398**	**$85,599,140**	**$(75,134,316)**	**$10,466,222**

The accompanying notes are an integral part of these statements.

BIO-key International, Inc. and Subsidiaries

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years ended December 31,	
	2018	**2017**
CASH FLOW FROM OPERATING ACTIVITIES:		
Net loss	$(6,868,875)	$(4,275,338)
Adjustments to reconcile net loss to cash used for operating activities:		
Allowance for doubtful accounts	720,000	500,000
Depreciation	84,617	52,709
Amortization of intangible assets	15,596	13,726
Amortization of resaleable software license rights	1,513,237	1,510,051
Amortization of capitalized contract costs	123,171	-
Share and warrant-based compensation for employees and consultants	942,692	940,734
Stock based fees to directors	37,532	32,030
Change in assets and liabilities:		
Accounts receivable	1,341,914	(1,002,700)
Due from factor	53,183	(56,227)
Capitalized contract costs	(202,353)	-
Inventory	(51,982)	(481,419)
Resaleable software license rights	1,144,961	74,552
Prepaid expenses and other	1,843	(33,472)
Accounts payable	(17,961)	32,388
Accrued liabilities	(139,793)	352,700
Deferred revenue	(311,257)	(125,196)
Net cash used for operating activities	(1,613,475)	(2,465,462)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Patents	(30,398)	(60,698)
Capital expenditures	(52,060)	(166,060)
Net cash used for investing activities	(82,458)	(226,758)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Issuance of common stock	1,875,100	2,000,000
Costs to issue common stock	(143,945)	(80,366)
Net cash provided by financing activities	1,731,155	1,919,634
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	35,222	(772,586)
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR	288,721	1,061,307
CASH AND CASH EQUIVALENTS, END OF YEAR	$323,943	$288,721

The accompanying notes are an integral part of these statements.

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SUPPLEMENTARY DISCLOSURES OF CASH FLOW INFORMATION

	Years ended December 31,	
	2018	**2017**
Cash paid for:		
Interest	$-	$-
Income taxes	$-	$-
Noncash investing and financing activities:		
Accrual of unpaid preferred dividends	$198,033	$630,408
Conversion of A-1 preferred dividends payable to common stock	$356,015	$540,000
Conversion of A-1 preferred stock to common stock	$6,259,600	$2,740,400
Conversion of B-1 preferred dividends payable to common stock	$472,426	$-
Conversion of B-1 preferred stock to common stock	$10,500,000	$-
Deemed dividend from trigger of anti-dilution provision feature	$1,428,966	$-
Issuance of common stock as a commitment fee for the Equity facility	$-	$198,000
Issuance of common stock as consulting services for the Equity facility	$-	$244,084

The accompanying notes are an integral part of these statements.

BIO-key International, Inc. and Subsidiaries

NOTES TO THE FINANCIAL STATEMENTS

December 31, 2018 and 2017

NOTE A —THE COMPANY AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Nature of Business

The Company, founded in 1993, develops and markets proprietary fingerprint identification biometric technology and software solutions. The Company was a pioneer in developing automated, finger identification technology that supplements or compliments other methods of identification and verification, such as personal inspection identification, passwords, tokens, smart cards, ID cards, PKI, credit card, passports, driver's licenses, OTP or other form of possession or knowledge-based credentialing. Additionally, advanced BIO-key® technology has been, and is, used to improve both the accuracy and speed of competing finger-based biometrics.

Basis of Presentation

The Company has incurred significant losses to date, and at December 31, 2018, it had an accumulated deficit of approximately $75.1 million. In addition, broad commercial acceptance of the Company's technology is critical to the Company's success and ability to generate future revenues. At December 31, 2018, total cash and cash equivalents were approximately $324,000, as compared to approximately $289,000 at December 31, 2017.

As discussed below, the Company has financed itself in the past through access to the capital markets by issuing secured and convertible debt securities, convertible preferred stock, common stock, and through factoring receivables. The Company currently requires approximately $537,000 per month to conduct operations, a monthly amount that it has been unable to consistently achieve through revenue generation.

If the Company is unable to generate sufficient revenue to meet its goals, it will need to obtain additional third-party financing to (i) conduct the sales, marketing and technical support necessary to execute its plan to substantially grow

operations, increase revenue and serve a significant customer base; and (ii) provide working capital. No assurance can be given that any form of additional financing will be available on terms acceptable to the Company, that adequate financing will be obtained by the Company in order to meet its needs, or that such financing would not be dilutive to existing shareholders.

The accompanying financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America ("GAAP"), which contemplate continuation of the Company as a going concern, and assumes continuity of operations, realization of assets and the satisfaction of liabilities and commitments in the normal course of business. The matters described in the preceding paragraphs raise substantial doubt about the Company's ability to continue as a going concern. Recoverability of a major portion of the recorded asset amounts shown in the accompanying balance sheet is dependent upon the Company's ability to meet its financing requirements on a continuing basis, and become profitable in its future operations. The accompanying consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded assets or the amounts and classification of liabilities that might be necessary should the Company be unable to continue in existence.

Summary of Significant Accounting Policies

A summary of the significant accounting policies consistently applied in the preparation of the accompanying consolidated financial statements follows:

1. *Basis of Consolidation*

The accompanying consolidated financial statements include the accounts of BIO-key International, Inc. and its wholly-owned subsidiaries (collectively, the "Company"). Intercompany accounts and transactions have been eliminated in consolidation.

2. *Use of Estimates*

Our consolidated financial statements are prepared in accordance with GAAP as set forth in the Financial Accounting Standards Board's (FASB) Accounting Standards Codification (ASC) and consider the various staff accounting bulletins and other applicable guidance issued by the U.S. Securities and Exchange Commission (SEC). These accounting principles require us to make certain estimates, judgments and assumptions. The Company believes that the estimates, judgments and assumptions upon which it relies are reasonable based upon information available to us at the time that these estimates, judgments and assumptions are made. These estimates, judgments and assumptions can affect the reported amounts of assets and liabilities as of the date of the financial statements as well as the reported amounts of revenues and expenses during the periods presented. To the extent there are material differences between

these estimates, judgments or assumptions and actual results, its consolidated financial statements will be affected. In many cases, the accounting treatment of a particular transaction is specifically dictated by GAAP and does not require management's judgment in its application. There are also areas in which management's judgment in selecting among available alternatives would not produce a materially different result.

3. *Revenue Recognition*

The Company adopted ASC 606, *Revenue from Contracts with Customers* (ASC 606) on January 1, 2018 using the modified retrospective method for all contracts not completed as of the date of adoption. The reported results for 2018 reflect the application of ASC 606 guidance while the reported results for 2017 were prepared under the guidance of ASC 605, *Revenue Recognition* (ASC 605), which is also referred to herein as "legacy GAAP" or the "previous guidance". The adoption of ASC 606 represents a change in accounting principle that will more closely align revenue recognition with the delivery of the Company's services and will provide financial statement readers with enhanced disclosures.

In accordance with ASC 606, revenue is recognized when a customer obtains control of promised services. The amount of revenue recognized reflects the consideration to which the Company expects to be entitled to receive in exchange for these services. To achieve this core principle, the Company applies the following five steps:

Identify the contract with a customer

Identify the performance obligations in the contract

Determine the transaction price

Allocate the transaction price to performance obligations in the contract

Recognize revenue when or as the Company satisfies a performance obligation

All of the Company's performance obligations, and associated revenue, are generally transferred to customers at a point in time, with the exception of support and maintenance, and professional services, which are generally transferred to the customer over time.

Software licenses

Software license revenue consist of fees for perpetual software licenses for one or more of the Company’s biometric fingerprint solutions. Revenue is recognized at a point in time once the software is available to the customer for download. Software license contracts are generally invoiced in full on execution of the arrangement.

Hardware

Hardware revenue consists of fees for associated equipment sold with or without a software license arrangement, such as servers, locks and fingerprint readers. Customers are not obligated to buy third party hardware from the Company, and may procure these items from a number of suppliers. Revenue is recognized at a point in time once the hardware is shipped to the customer. Hardware items are generally invoiced in full on execution of the arrangement.

Support and Maintenance

Support and Maintenance revenue consists of fees for unspecified upgrades, telephone assistance and bug fixes. The Company satisfies its Support and Maintenance performance obligation by providing “stand-ready” assistance as required over the contract period. The Company records deferred revenue (contract liability) at time of prepayment until the contracts term occurs. Revenue is recognized over time on a ratable basis over the contract term. Support and Maintenance contracts are up to one year in length and are generally invoiced either annually or quarterly in advance.

Professional Services

Professional services revenues consist primarily of fees for deployment and optimization services, as well as training. The majority of the Company’s consulting contracts are billed on a time and materials basis, and revenue is recognized based on the amount billable to the customer in accordance with practical expedient ASC 606-10-55-18. For other professional services contracts, the Company utilizes an input method and recognizes revenue based on labor hours expended to date relative to the total labor hours expected to be required to satisfy its performance obligation.

Contracts with Multiple Performance Obligations

Some contracts with customers contain multiple performance obligations. For these contracts, the Company accounts for individual performance obligations separately if they are distinct. The transaction price is allocated to the separate performance obligations on a relative standalone selling price basis. The standalone selling prices are determined based on overall pricing objectives, taking into consideration market conditions and other factors, including the value of the contracts, the cloud applications sold, customer demographics, geographic locations, and the number and types of users within the contracts.

The Company considered several factors in determining that control transfers to the customer upon shipment of hardware and availability of download of software. These factors include that legal title transfers to the customer, the Company has a present right to payment, and the customer has assumed the risks and rewards of ownership.

Accounts receivable from customers are typically due within 30 days of invoicing. The Company does not record a reserve for product returns or warranties as amounts are deemed immaterial based on historical experience.

Costs to Obtain and Fulfill a Contract

Costs to obtain and fulfill a contract are predominantly sales commissions earned by the sales force and are considered incremental and recoverable costs of obtaining a contract with a customer. These costs are deferred and then amortized over a period of benefit determined to be four years. These costs are included as capitalized contract costs on the balance sheet. The period of benefit was determined by taking into consideration customer contracts, technology, and other factors based on historical evidence. Amortization expense is included in selling, general and administrative expenses in the accompanying condensed consolidated statements of operations.

4. *Cash Equivalents*

Cash equivalents consist of liquid investments with original maturities of three months or less. At December 31, 2018 and 2017, cash equivalents consisted of a money market account.

5. *Accounts Receivable*

Accounts receivable are carried at original amount less an estimate made for doubtful receivables based on a review of all outstanding amounts on a monthly basis. Management determines the allowance for doubtful receivables by regularly evaluating individual customer receivables and considering a customer's financial condition, credit history, and current economic conditions. Accounts receivable are written off when deemed uncollectible. As a result of the payment delays for a large customer, the Company has reserved $1,720,000 and $1,000,000 at December 31, 2018 and 2017, respectively, which represents 100% and 58% of the remaining balance owed under the contract, respectively. Recoveries of accounts receivable previously written off are recorded when received. Accounts receivable at December 31, 2018 and 2017 consisted of the following:

	December 31,	
	2018	**2017**

Accounts receivable - current	$1,587,817	$2,889,731
Accounts receivable - non current	1,720,000	1,760,000
	3,307,817	4,649,731
Allowance for doubtful accounts - current	(13,785)	(13,785)
Allowance for doubtful accounts - non current	(1,720,000)	(1,000,000)
	(1,733,785)	(1,013,785)
Accounts receivable, net of allowances for doubtful accounts	$1,574,032	$3,635,946

The allowance for doubtful accounts for the years ended December 31, 2018 and 2017 is as follows:

	Balance at Beginning of Year	Charged to Costs and Expenses	Deductions From Reserves	Balance at End of Year
Year Ended December 31, 2018				
Allowance for Doubtful Accounts	$1,013,785	$720,000	$ -	$1,733,785
Year Ended December 31, 2017				
Allowance for Doubtful Accounts	$513,785	$500,000	$ -	$1,013,785

The bad debt expense is recorded in selling, general, and administrative expense.

6. *Software License Rights*

Software license rights acquired for re-sale to end users are recorded as assets when purchased and are stated at the lower of cost or estimated net realizable value.

The cost of the software license rights has been initially allocated pro-rata to the maximum number of resalable end-user licenses in the rights contract. Through 2018, licenses were amortized to cost of sales over the greater of the following: 1) an estimate of the economic use of such license rights over a 10 year period with weighting towards the beginning of the term, 2) straight line method over ten years or 3) ratably at cost basis as each end user license is resold to a customer. Management re-evaluates the total sub-licenses it expects to sell during the proceeding twelve months and will adjust the allocation of the current portion vs. non-current portion of software rights.

Amortization began in the first quarter of 2017, with the economic life assumptions that had driven the expense recognition of the license rights over the first few years, and noted the estimates of use were front-end focused as the majority of the expected up-take of the FingerQ technology was predicted to occur during the first 4-5 years of the 10-year life cycle of the product. Based on current sales trends, the company now believes future transactions will be more evenly dispersed over the remaining life cycle of the product, indicating that the straight-line methodology, or greater of actual sales, will more closely align the expense with the remaining useful life of the product. The change in amortization will be effective beginning on January 1, 2019 based on the net remaining software license rights balance.

The rights are also evaluated by management on a periodic basis to determine if estimated future net revenues, on a per sub-license basis, support the recorded basis of each license. If the estimated net revenues are less than the current carrying value of the capitalized software license rights, the Company will reduce the rights to their net realizable value.

7. *Equipment and Leasehold Improvements, Intangible Assets and Depreciation and Amortization*

Equipment and leasehold improvements are stated at cost. Depreciation is provided for in amounts sufficient to relate the cost of depreciable assets to operations over the estimated service lives, principally using straight-line methods. Leasehold improvements are amortized over the shorter of the life of the improvement or the lease term, using the straight-line method.

The estimated useful lives used to compute depreciation and amortization for financial reporting purposes are as follows:

	Years
Equipment and leasehold improvements	
Equipment (years)	3 - 5
Furniture and fixtures (years)	3 - 5
Software (years)	3

Leasehold improvements	life or lease term

Intangible assets consist of patents. Patent costs are capitalized until patents are awarded. Upon award, such costs are amortized using the straight-line method over their respective economic lives. If a patent is denied, all costs are charged to operations in that year.

8. *Impairment or Disposal of Long Lived Assets, including Intangible Assets*

The Company reviews long-lived assets, including intangible assets subject to amortization, whenever events or changes in circumstances indicate that the carrying amount of such an asset may not be recoverable. Recoverability of these assets is measured by comparison of their carrying amount to the future undiscounted cash flows the assets are expected to generate. If such assets are considered impaired, the impairment to be recognized is equal to the amount by which the carrying value of the assets exceeds their fair value determined by either a quoted market price, if any, or a value determined by utilizing a discounted cash flow technique. In assessing recoverability, the Company must make assumptions regarding estimated future cash flows and discount factors. If these estimates or related assumptions change in the future, the Company may be required to record impairment charges. Intangible assets with determinable lives are amortized over their estimated useful lives, based upon the pattern in which the expected benefits will be realized, or on a straight-line basis, whichever is greater. The Company did not record any impairment charges in any of the years presented.

9. *Advertising Expense*

The Company expenses the costs of advertising as incurred. Advertising expenses for 2018 and 2017 were approximately $309,000 and $386,000, respectively.

10. *Deferred Revenue*

Deferred revenue includes customer advances and amounts that have been paid by customer for which the contractual maintenance terms have not yet occurred. The majority of these amounts are related to maintenance contracts for which the revenue is recognized ratably over the applicable term, which generally is 12 months from the date the customer is delivered the products.

11. *Research and Development Expenditures*

Research and development expenses include costs directly attributable to the conduct of research and development programs primarily related to the development of our software products and improving the efficiency and capabilities of our existing software. Such costs include salaries, payroll taxes, employee benefit costs, materials, supplies, depreciation on research equipment, services provided by outside contractors, and the allocable portions of facility costs, such as rent, utilities, insurance, repairs and maintenance, depreciation and general support services. All costs associated with research and development are expensed as incurred.

12. *Earnings Per Share of Common Stock ("EPS")*

The Company's EPS is calculated by dividing net income (loss) applicable to common stockholders by the weighted-average number of common shares outstanding during the reporting period. Diluted EPS includes the effect from potential issuances of common stock, such as stock issuable pursuant to the conversion of preferred stock, exercise of stock options and warrants, when the effect of their inclusion is dilutive. See Note R - Earnings Per Share "EPS" for additional information.

13. *Accounting for Stock-Based Compensation*

The Company accounts for share based compensation in accordance with the provisions of ASC 718-10, "Compensation — Stock Compensation," which requires measurement of compensation cost for all stock awards at fair value on date of grant and recognition of compensation over the service period for awards expected to vest. The majority of its share-based compensation arrangements vest over either a three or four year vesting schedule. The Company expenses its share-based compensation under the ratable method, which treats each vesting tranche as if it were an individual grant. The fair value of stock options is determined using the Black-Scholes valuation model, and requires the input of highly subjective assumptions. These assumptions include estimating the length of time employees will retain their vested stock options before exercising them (the "expected option term"), the estimated volatility of its common stock price over the option's expected term, the risk-free interest rate over the option's expected term, and the Company's expected annual dividend yield. Changes in these subjective assumptions can materially affect the estimate of fair value of stock-based compensation and consequently, the related amount recognized as an expense in the consolidated statements of operations. As required under the accounting rules, the Company reviews its valuation assumptions at each grant date and, as a result, the Company is likely to change its valuation assumptions used to value employee stock-based awards granted in future periods. The values derived from using the Black-Scholes model are recognized as expense over the service period, net of estimated forfeitures (the number of individuals that will ultimately not complete their vesting requirements). The estimation of stock awards that will ultimately vest requires significant judgment. The Company considers many factors when estimating expected forfeitures, including types of awards, employee class, and historical experience. Actual results, and future changes in estimates, may differ substantially from current estimates.

The following table presents share-based compensation expenses included in the Company's consolidated statements of operations:

	Year ended December 31,	
	2018	2017
Selling, general and administrative	$855,125	$864,036
Research, development and engineering	125,099	108,728
	$980,224	$972,764

Valuation Assumptions for Stock Options

For 2018 and 2017, 351,918 and 1,234,167 stock options were granted, respectively. The fair value of each option was estimated on the date of grant using the Black-Scholes option-pricing model with the following assumptions:

	Year ended December 31,	
	2018	2017
Weighted average Risk free interest rate	2.70%	1.92%
Expected life of options (in years)	4.50	4.51
Expected dividends	0 %	0 %
Weighted average Volatility of stock price	143 %	138 %

The stock volatility for each grant is determined based on the review of the experience of the weighted average of historical daily price changes of the Company's common stock over the expected option term. The expected term was determined using the simplified method for estimating expected option life, which qualify as "plain-vanilla" options; and the risk-free rate is based on the U.S. Treasury yield curve in effect at the time of grant for periods corresponding with the expected life of the option.

14. *Derivative Liabilities*

In connection with the issuances of equity instruments or debt, the Company may issue options or warrants to purchase common stock. In certain circumstances, these options or warrants may be classified as liabilities, rather than as equity. In addition, the equity instrument or debt may contain embedded derivative instruments, such as conversion options or listing requirements, which in certain circumstances may be required to be bifurcated from the associated host instrument and accounted for separately as a derivative liability instrument. The Company early-adopted the new provisions issued July 2017, for derivative liability instruments under FASB ASU 2017-11, Earnings Per Share (Topic 260), Distinguishing Liabilities from Equity (Topic 480) and Derivatives and Hedging (Topic 815): I. Accounting for Certain Financial Instruments with Down Round Features; II. Replacement of the Indefinite Deferral for Mandatorily Redeemable Financial Instruments of Certain Nonpublic Entities and Certain Mandatorily Redeemable Non-controlling Interests with a Scope Exception. Under ASU 2017-11, down round features do not meet the criteria for derivative accounting and no liability is to be recorded until an actual issuance of securities triggers the down-round feature. Prior to these provisions, the liabilities were recorded without the actual issuance of the securities triggering the down-round feature.

15. *Income Taxes*

The provision for, or benefit from, income taxes includes deferred taxes resulting from the temporary differences in income for financial and tax purposes using the liability method. Such temporary differences result primarily from the differences in the carrying value of assets and liabilities. Future realization of deferred income tax assets requires sufficient taxable income within the carryback, carryforward period available under tax law. The Company evaluates, on a quarterly basis whether, based on all available evidence, if it is probable that the deferred income tax assets are realizable. Valuation allowances are established when it is more likely than not that the tax benefit of the deferred tax asset will not be realized. The evaluation, as prescribed by ASC 740-10, “Income Taxes,” includes the consideration of all available evidence, both positive and negative, regarding historical operating results including recent years with reported losses, the estimated timing of future reversals of existing taxable temporary differences, estimated future taxable income exclusive of reversing temporary differences and carryforwards, and potential tax planning strategies which may be employed to prevent an operating loss or tax credit carryforward from expiring unused. Because of the Company’s historical performance and estimated future taxable income, a full valuation allowance has been established.

The Company accounts for uncertain tax provisions in accordance with ASC 740-10-05, “Accounting for Uncertainty in Income Taxes.” The ASC clarifies the accounting for uncertainty in income taxes recognized in an enterprise’s financial statements. The ASC prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. The ASC provides guidance on de-recognition, classification, interest and penalties, accounting in interim periods, disclosure and transition.

16. *Recent Accounting Pronouncements*

In May 2014, ASU No. 2014-09, “Revenue from Contracts with Customers” was issued. The Company adopted ASU 2014-09 and its related amendments (collectively known as ASC 606) effective on January 1, 2018 using the modified retrospective method. Please see Note B "Revenue from Contracts with Customers" for the required disclosures related to the impact of adopting this standard and a discussion of the Company's updated policies related to revenue recognition and accounting for costs to obtain and fulfill a customer contract.

In February 2016, the FASB issued ASU 2016-02, “Leases”. The new standard establishes a right-of-use (ROU) model that requires a lessee to record a ROU asset and a lease liability on the balance sheet for all leases with terms longer than 12 months. Leases will be classified as either finance or operating, with classification affecting the pattern of expense recognition in the income statement. The Company will adopt the new standard as of January 1, 2019 and will recognize a cumulative-effect adjustment to the opening balance of accumulated deficit as of the adoption date. The Company will elect the optional transition approach to not apply ASU 2016-02 in the comparative periods presented and the package of practical expedients. The Company will also elect the practical expedient to not account for lease and non-lease components separately for office space, data center and equipment operating leases. The Company is currently evaluating the impact of its pending adoption of the new standard on its consolidated financial statements, but expects that it will increase its assets and liabilities for amounts yet to be determined, but does not expect ASU 2016-02 to have an impact on its results of operations or cash flows. The Company does not expect the cumulative effect adjustment to the opening balance of retained earnings at January 1, 2019 to be material.

In July 2017, the FASB issued ASU 2017-11, Earnings Per Share (Topic 260), Distinguishing Liabilities from Equity (Topic 480) and Derivatives and Hedging (Topic 815): I. Accounting for Certain Financial Instruments with Down Round Features; II. Replacement of the Indefinite Deferral for Mandatorily Redeemable Financial Instruments of Certain Nonpublic Entities and Certain Mandatorily Redeemable Non-controlling Interests with a Scope Exception. Part I of this update addresses the complexity of accounting for certain financial instruments with down round features. Down round features are features of certain equity-linked instruments (or embedded features) that result in the strike price being reduced on the basis of the pricing of future equity offerings. Current accounting guidance creates cost and complexity for entities that issue financial instruments (such as warrants and convertible instruments) with down round features that require fair value measurement of the entire instrument or conversion option. Under ASU 2017-11, down round features do not meet the criteria for derivative accounting and no liability is to be recorded until an actual issuance of securities triggers the down-round feature. Part II of this update addresses the difficulty of navigating Topic 480, Distinguishing Liabilities from Equity, because of the existence of extensive pending content in the FASB Accounting Standards Codification. This pending content is the result of the indefinite deferral of accounting requirements about mandatorily redeemable financial instruments of certain nonpublic entities and certain mandatorily redeemable non-controlling interests. The amendments in Part II of this update do not have an accounting effect. This ASU is effective for fiscal years, and interim periods within those years, beginning after December 15, 2018, with early adoption permitted. The adoption of ASU 2017-11, during the fiscal 2017 year did not have any impact on the consolidated financial statements, except for recording the deemed dividend in 2018 from triggering the anti-dilution provision feature and updating our disclosures with respect to equity instruments with down round features. See Note O for updated disclosures.

In August 2018, the FASB issued ASU No. 2018-15, Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract ("ASU 2018-15"). ASU 2018-15 aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software. The update to the standard is effective for interim and annual periods beginning after December 15, 2019, with early adoption permitted. Entities can choose to adopt the ASU 2018-15 prospectively or retrospectively. The Company is currently assessing the impact ASU 2018-15 will have on its consolidated financial statements.

Management does not believe that any other recently issued, but not yet effective, accounting standard if currently adopted would have a material effect on the accompanying consolidated financial statements.

NOTE B—REVENUE FROM CONTRACTS WITH CUSTOMERS

The Company adopted ASC 606 on January 1, 2018 using the modified retrospective method for all contracts not completed as of the date of adoption.

Disaggregation of Revenue

The following table summarizes revenue from contracts with customers for the years ended:

	North America	**South America**	**EMEA***	**Asia**	**December 31, 2018**
License fees	$318,271	$32,000	$278,516	$1,111,110	$1,739,897
Hardware	439,480	53,200	477,674	321,715	1,292,069
Support and Maintenance	805,800	665	60,820	27,321	894,606
Professional services	115,970	-	2,000	-	117,970
Total Revenues	$1,679,521	$85,865	$819,010	$1,460,146	$4,044,542

	North	**South**	**EMEA***	**Asia**

	America	America			December 31, 2017
License fees	$3,104,509	$ 583	$4,279	$111,000	$3,220,371
Hardware	1,190,500	2,341	8,252	688,330	1,889,423
Support and Maintenance	458,340	2,364	37,907	2,367	500,978
Professional services	686,812	-	-	5,400	692,212
Total Revenues	$5,440,161	$ 5,288	$50,438	$807,097	$6,302,984

* EMEA – Europe, Middle East, Africa

Financial Statement Impact of Adopting ASC 606

The Company adopted ASC 606 using the modified retrospective method. The cumulative effect of applying the new guidance to all contracts with customers that were not completed as of January 1, 2018 was recorded as an adjustment to accumulated deficit as of the adoption date. The cost of obtaining the contract reflects the outcome of the sales effort in educating, demonstrating and selling our solutions. Accordingly under ASC 606, commissions are a capitalized cost due to the acquisition of a new customer.

As a result of applying the modified retrospective method to adopt the new revenue guidance, the following adjustments were made to the following select condensed consolidated balance sheet line items as of January 1, 2018:

	As reported - December 31, 2017	**Adjustments**	**As adjusted - January 1, 2018**
Capitalized contract assets	$-	$ 240,017	$240,017
Total assets	$16,078,822	$ 240,017	$16,318,839
Accumulated deficit	$(67,076,492)	$ 240,017	$(66,836,475)
Total Stockholders' Equity	$13,753,295	$ 240,017	$13,993,312
Total Liabilities and Stockholders' Equity	$16,078,822	$ 240,017	$16,318,839

Impact of New Revenue Guidance on Financial Statement Line Items

The following table compares selected reported condensed consolidated balance sheet, statement of operations and cash flows, as of and for the year ended December 31, 2018, to the pro-forma amounts had the previous guidance still been applied:

	As of December 31, 2018		
	As reported	**Pro-forma**	**Increase (decrease)**
Consolidated balance sheet data:			
Capitalized contract costs, net	$319,199	$ -	$(319,199)

	Year Ended December 31, 2018		
	As reported	**Pro-forma**	**Increase (decrease)**
Consolidated statement of operations data:			
Selling, general and administrative expenses	5,333,906	5,413,088	79,182

Net loss	(6,868,875)	(6,948,057)	(79,182)
Net loss available to common stockholders	(8,495,874)	(8,575,056)	(79,182)
Basic & Diluted Loss per Common Share	(0.73)	(0.74)	0.00

	Year Ended December 31, 2018		
	As reported	Pro-forma	Increase (decrease)
Consolidated statement of cash flow data:			
Net loss	(6,868,875)	(6,948,057)	(79,182)
Change in contract assets	(79,182)	-	79,182
Net cash used by operating activities	(1,613,475)	(1,613,475)	-

Revenue recognized during the year ended December 31, 2018 from amounts included in deferred revenue at the beginning of the period was approximately $382,000 respectively. The Company did not recognize any revenue from performance obligations satisfied in prior periods. Total deferred revenue (contract liability) was $196,609 and $507,866 at December 31, 2018 and December 31, 2017, respectively.

Transaction Price Allocated to the Remaining Performance Obligations

ASC 606 requires that the Company disclose the aggregate amount of transaction price that is allocated to performance obligations that have not yet been satisfied as at December 31, 2018. The guidance provides certain practical expedients that limit this requirement, which the Company's contracts meet as follows:

The performance obligation is part of a contract that has an original expected duration of one year or less, in accordance with ASC 606-10-50-14.

At December 31, 2018 deferred revenue represents our remaining performance obligations related to prepaid support and maintenance, all of which is expected to be recognized within one year.

NOTE C—FACTORING

Due from factor consisted of the following as of December 31:

	Original Invoice Value	Factored Amount	Factored Balance due
Year Ended December 31, 2018			
Factored accounts receivable	$221,120	$164,438	$56,682
Year Ended December 31, 2017			
Factored accounts receivable	$423,349	$313,484	$109,865

The Company entered into an accounts receivable factoring arrangement with a financial institution (the "Factor") which has been extended to October 31, 2019. Pursuant to the terms of the arrangement, the Company, from time to time, sells to the Factor a minimum of $150,000 per quarter of certain of its accounts receivable balances on a non-recourse basis for credit approved accounts. The Factor remits 35% of the foreign and 75% of the domestic accounts receivable balance to the Company (the "Advance Amount"), with the remaining balance, less fees to be forwarded to the Company once the Factor collects the full accounts receivable balance from the customer. In addition, the Company, from time to time, receives over advances from the factor. Factoring fees range from 2.75% to 15% of the face value of the invoice factored, and are determined by the number of days required for collection of the invoice. The cost of factoring is included in selling, general and administrative expenses. The cost of factoring was as follows:

	Years Ended December 31,	
	2018	2017
Factoring fees	$186,845	$224,142

NOTE D—FAIR VALUES OF FINANCIAL INSTRUMENTS

Cash and cash equivalents, accounts receivable, inventory, due from factor, accounts payable and accrued liabilities are carried at, or approximate, fair value because of their short-term nature.

NOTE E—CONCENTRATION OF RISK

Financial instruments which potentially subject the Company to risk primarily consist of cash and accounts receivables.

The Company maintains its cash and cash equivalents with various financial institutions, which, at times may exceed the amounts insured by the Federal Deposit Insurance Corporation. The exposure to the Company is solely dependent upon daily bank balances and the respective strength of the financial institutions. No amounts were in excess of coverage at December 31, 2018 and 2017. The Company has not incurred any losses on these accounts.

The Company extends credit to customers on an unsecured basis in the normal course of business. The Company's policy is to perform an analysis of the recoverability of its receivables at the end of each reporting period and to establish allowances where appropriate. The Company analyzes historical bad debts and contract losses, customer concentrations, and customer credit-worthiness when evaluating the adequacy of the allowances.

The Company had certain customers whose revenue individually represented 10% or more of the Company's total revenue, as follows:

	Years Ended December 31,	
	2018	2017
Customer A	27 %	*
Customer B	14 %	54 %
Customer C	13 %	*

* Less than 10% of total revenue

The Company had certain customers whose accounts receivable balances individually represented 10% or more of the Company's total current accounts receivable, as follows:

	As of December 31,	
	2018	2017
Customer A	70 %	*
Customer B	*	87 %

The long term accounts receivable is represented by one customer in amount of $1,720,000 which has been past due per the terms of the invoice for forty-two months as of December 31, 2018. The Company has reserved $1,720,000 and $1,000,000 which represents 100% and 58% of the remaining balance owed under the contract.

* Less than 10% of total accounts receivable

NOTE F—INVENTORY

Inventory is stated at the lower of cost, determined on a first in, first out basis, or realizable value, and consists primarily of fabricated assemblies and finished goods. Inventory is comprised of the following as of December 31:

	2018	2017
Current		
Finished goods	496,358	487,858
Fabricated assemblies	502,471	458,989
Total current inventory	$998,829	$946,847

NOTE G—RESALABLE SOFTWARE LICENSES RIGHTS

On November 11, 2015, the Company entered into a license agreement for the rights to all software and documentation regarding the technology currently known as or offered under the FingerQ name. The license agreement grants the Company the exclusive right to reproduce, create derivative works and distribute copies of the FingerQ software and documentation, create new FingerQ related products, and grant sub-licenses of the licensed technology to end users. The license rights have been granted to the Company in perpetuity, with a stated number of end-user resale sub-licenses allowed under the contract for a total of $12,000,000. The cost of sub-license rights expected to be amortized in the following 12 months is $1,125,000 and is classified as current, with remainder as non-current.

The Company has determined the software license rights to be a finite lived intangible asset, and estimated that the software license rights shall be economically used over a 10 year period, with a weighting towards the beginning years of that time-frame. The license rights were acquired during the fourth quarter of 2015, but the usage of such rights in the Company’s products was not generally available until January 2017. Accordingly, amortization began in the first quarter of 2017.

Through 2018, the remaining license rights were amortized over the greater of the following amounts: 1) an estimate of the economic use of such license rights, 2) the amount calculated by the straight line method over ten years or 3) the actual cost basis of sales usage of such rights. The Company believes categorizing the amortization expense under Cost of Sales more closely reflects the nature of the license right arrangement and the use of the technology. A total of $2,640,000 and $1,556,687 was expensed during the twelve month periods ended December 31, 2018 and 2017, respectively. The 2018 expense was recorded based on the economic use model. Since the license purchase, a cumulative amount of $4,198,596 has been expensed, with a carrying balance of $7,801,404 as of December 31, 2018. Based on current sales, the Company believes that the economic use was front-end focused as the majority of the expected up-take of the FingerQ technology was predicted to occur during the first 4-5 years of the 10-year life cycle of the product. Based on current sales trends, the company now believes future transactions will be more evenly dispersed over the remaining life cycle of the product, indicating that the straight-line methodology, or greater of actual sales, will more closely align the expense with the remaining useful life of the product. The change in amortization will be effective beginning on January 1, 2019 based on the net remaining software license rights balance.

On December 31, 2015, the Company purchased third-party software licenses in the amount of $180,000 in anticipation of a large pending deployment that has yet to materialize. The Company is amortizing the total cost over the same methodology described above with the greatest of the three approaches being the actual sales through 2018. A total of $18,198 (net of credits of $14,400) and $35,916 was expensed during the twelve month periods ended December 31, 2018 and 2017, respectively. Since the license purchase, the actual per unit cost (actual usage) of such license rights in the cumulative amount of $65,794 net of credits has been expensed, with a carrying balance of $114,206 as of December 31, 2018. The Company has classified the balance as non-current until a larger deployment occurs. Software license rights is comprised of the following as of:

	2018	**2017**
Current software license rights	$1,125,000	$2,640,000
Non-current software license rights	6,790,610	7,933,808
Total software license rights	$7,915,610	$10,573,808

During the year ended December 31, 2018, there were no events or changes in circumstances that indicated the carrying amount of the software license rights may not be recoverable from their undiscounted cash flows. Consequently, we did not perform an impairment test. The Company did not record an impairment loss related to the software license rights during the years ended December 31, 2018 and 2017.

Estimated minimum amortization expense based on straight line amortization of the software license rights for each of the next five years and thereafter approximates the following:

Years ending December 31

2019	1,125,000*
2020	1,114,500
2021	1,114,500
2022	1,114,500
2023	1,114,500
Thereafter	2,332,610

* - Includes increase vs. straight line due to expected deployment of second tranche of licenses from fourth quarter 2018 order.

NOTE H—EQUIPMENT AND LEASEHOLD IMPROVEMENTS

Equipment and leasehold improvements consisted of the following as of December 31:

	2018	**2017**
Equipment	$619,533	$567,473
Furniture and fixtures	164,079	164,079
Software	32,045	32,045
Leasehold improvements	23,403	23,403
	839,060	787,000
Less accumulated depreciation and amortization	(690,452)	(605,835)
Total	$148,608	$181,165

Depreciation was $84,617 and $52,709 for 2018 and 2017, respectively. Amounts are recorded in Selling, General, and Administrative Expense and Cost of Services.

NOTE I—INTANGIBLE ASSETS

Intangible assets consisted of the following as of December 31:

	2018			2017		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Patents and patents pending	$378,344	$ (182,438)	$195,906	$347,946	$ (166,842)	$181,104
Total	$378,344	$ (182,438)	$195,906	$347,946	$ (166,842)	$181,104

Aggregate amortization expense for 2018 and 2017 was $15,596 and $13,726, respectively. Amounts are recorded in Research, Development and engineering expense. The estimated aggregate amortization expense of intangible assets for the years following December 31, 2018 is approximately $13,000 per year for 2019 through 2023, and approximately $131,000 thereafter.

NOTE J—ACCRUED LIABILITIES

Accrued liabilities consisted of the following as of December 31:

	2018	2017
Compensation	$224,135	$341,884
Compensated absences	154,169	164,132
Accrued legal and accounting fees	77,133	85,633
Sales tax payable	9,436	5,614
Factoring fees	19,000	32,357
Other	64,359	58,403

Total	$548,232	$688,023

NOTE K—RELATED PARTY

Licensing Agreement with Subsidiaries of China Goldjoy Group Limited.

On November 11, 2015, BIO-key Hong Kong Limited, a subsidiary of the Company, entered into a license purchase agreement with certain subsidiaries of China Goldjoy Group Limited ("CGG"). The license agreement provides for the grant of a perpetual, irrevocable, exclusive, worldwide, fully-paid license to all software and documentation regarding the software code, toolkit, electronic libraries and related technology currently known as or offered under the Finger Q name, together with perpetual license under all related patents held by the licensors and any other intellectual property rights owned by the licensors related to the forgoing software. The Company made a one-time payment of $12,000,000 to the licensors. Mr. Yao Jianhu is the chairman and chief executive officer of CGG and a director of the Company. Mr. Wong Kwok Fong served as the chief technology officer of CGG through October 2016 and is the beneficial owner of 31.4% of the Company's common stock, and a director and executive officer of the Company.

Securities Purchase Agreements with Wong Kwok Fong

On April 28, 2017, the Company issued to Wong Kwok Fong, a director and executive officer of the Company, 277,778 shares of common stock at a purchase price of $3.60 per share for gross cash proceeds of $1,000,000.

On September 22, 2017, the Company issued to Wong Kwok Fong, a director and executive officer of the Company, 427,778 shares of common stock and warrants to purchase 138,889 shares of common stock for the aggregate purchase price of $1,540,000, or $3.60 per share. The purchase price was paid via a cash payment of $1,000,000 for 277,778 shares of common stock, and the conversion of an accrued dividend payable in the amount of $540,000 on the Company's Series A-1 Convertible Preferred Stock for 150,000 shares of common stock.

On August 7, 2017, the Company received written notice from Wong Kwok Fong, the holder of an aggregate of 90,000 shares of the Company's Series A-1 Convertible Preferred Stock, of his desire to increase the maximum percentage of shares of common stock issuable upon conversion of the Series A-1 Convertible Preferred Stock from 9.99% to 35%. The Company waived a standstill provision to permit such increase. In accordance with the Certificate of Designation of the Series A-1 Shares, such notice became effective on the 61st day following the date such notice was provided to the Company.

On October 17, 2017, Wong Kwok Fong converted 27,404 of the Series A-1 Shares at a conversion price of $3.60 per share resulting in the acquisition of 761,222 shares of the Company's Common Stock.

On April 3, 2018, Wong Kwok Fong converted 39,088 of the Series A-1 Shares at a conversion price of $3.60 per share and $330,552 of accrued dividends payable, resulting in the acquisition of 1,177,598 shares of the Company's Common Stock.

On May 31, 2018 Wong Kwok Fong converted 23,508 of the Series A-1 Shares at a conversion price of $3.60 per share and $25,463 of accrued dividends payable, resulting in the acquisition of 660,073 shares of the Company's Common Stock.

NOTE L—DEFERRED REVENUE

Deferred revenue represents unearned revenue from customer prepayments prior to maintenance contractual term. Maintenance contracts include provisions for unspecified when-and-if available product updates and customer telephone support services, and are recognized ratably over the term of the service period. At December 31, 2018 and 2017, amounts in deferred revenue were approximately $197,000 and $508,000, respectively.

NOTE M—COMMITMENTS AND CONTINGENCIES

Operating Leases

The Company does not own any real estate but conducts operations from three leased premises. These non-cancelable operating leases expire at various dates through 2023. In addition to base rent, the Company pays for property taxes, maintenance, insurance and other occupancy expenses according to the terms of the individual leases.

Future minimum rental commitments of non-cancelable operating leases are approximately as follows:

Years ending December 31,	
2019	192,000
2020	156,000
2021	127,000
2022	131,000
2023	89,000
	$695,000

Rental expense was approximately $234,000 and $221,000 during 2018 and 2017, respectively. Amounts are recorded in Selling, General, and administrative expenses.

Litigation

From time to time, we may be involved in litigation relating to claims arising out of our operations in the normal course of business. As of December 31, 2018, the Company was not a party to any pending lawsuits.

NOTE N— EQUITY

1. Preferred Stock

Within the limits and restrictions provided in the Company's Certificate of Incorporation, the Board of Directors has the authority, without further action by the shareholders, to issue up to 5,000,000 shares of preferred stock, $.0001 par value per share, in one or more series, and to fix, as to any such series, any dividend rate, redemption price, preference on liquidation or dissolution, sinking fund terms, conversion rights, voting rights, and any other preference or special rights and qualifications. As of December 31, 2018, 100,000 shares of preferred stock have been designated as Series A-1 Convertible Preferred Stock, of which 90,000 were issued in 2015 and 0 remain outstanding as of December 31, 2018, and 105,000 shares of preferred stock have been designated as Series B-1 Convertible Preferred Stock, of which 105,000 were issued in 2015 and 0 remain outstanding as of December 31, 2018.

Series A-1 Convertible Preferred Stock

On October 22 and 29, 2015, the Company issued 84,500 shares of Series A-1 Convertible Preferred Stock ("Series A-1 Stock") at a purchase price of $100.00 per share, for aggregate gross proceeds of $8,450,000. On November 11, 2015, 5,500 additional shares of Series A-1 Stock were issued at a purchase price of $100.00 per share, for gross cash proceeds of $550,000. Shares of Series A-1 Stock were convertible at any time at the option of the holder into shares of common stock by dividing the Series A-1 Original Issue Price by an initial conversion price of $3.60 per share, subject to adjustment for stock dividends, stock splits, combinations, and reclassifications of the Company's capital stock, and subject to a "blocker provision" which prohibits conversion if such conversion would result in the holder being the beneficial owner of in excess of 9.99% of the Company's common stock. In connection with the request of the sole holder of the Series A-1 Stock, on August 7, 2017 the Company waived a standstill agreement to permit the holder to increase his conversion cap to 35% effective 61 days after such waiver request. The Series A-1 Stock accrued dividends at the rate of 6% per annum payable quarterly on April 1, July, 1, October 1, and January 1 of each year. Until October 1, 2017, the dividends were payable in cash provided that if payment in cash would be prohibited under applicable Delaware corporation law or cause the Company to breach any agreement for borrowed money, such dividends would be payable in kind through the issuance of additional shares of common stock having a value equal to the volume weighted average trading price of the Company's common stock for the ten (10) days preceding the applicable dividend payment date. Commencing January 1, 2018, dividends were payable at the option of the Company in cash or kind through the issuance of additional shares of common valued as described above.

The holders of the Series A-1 Stock were entitled to designate one person to serve on the Board of Directors of the Company. The holders of the Series A-1 Stock were entitled to vote on an as converted to common stock basis together with the holders of our common stock on all matters presented to our stockholders. Upon any liquidation or dissolution of the Company, any merger or consolidation involving the Company or any subsidiary of the Company in

which the shares of capital stock of the Company outstanding immediately prior to such merger or consolidation do not represent immediately following such merger or consolidation at least a majority of the voting power of the capital stock of the resulting or surviving corporation, or the sale of all or substantially all assets in a single transaction or a series of related transactions, unless the holders of at least a majority of the outstanding Series A-1 Stock elected otherwise, holders of Series A-1 Stock would have been entitled to receive prior to any payment to any holders of the Company's common stock an amount per share equal to $100.00 per share plus any declared and unpaid dividends (pari-passu with the Series B-1 holders).

Between September 22, 2017 and May 31, 2018, the holder of the Series A-1 Stock converted all shares of Series A-1 Stock into an aggregate of 2,500,000 shares of common stock and purchased an aggregate of 248,893 shares of common stock in consideration of the conversion of $896,015 of accrued dividends payable on the Series A-1 Stock

As a result of the forgoing conversions, there are no longer any issued and outstanding shares of Series A-1 Stock as of December 31, 2018.

Overall balances and conversion of Series A-1 shares and accrued dividends into common stock has been as follows:

	Series A-1	**Accrued Dividends**
Balance – January 1, 2017	90,000	$ 270,000
Accrual of dividends – Q1 2017		135,000
Accrual of dividends – Q2 2017		135,000
Accrual of dividends – Q3 2017		135,000
Conversion into common stock – September 2017	-	(540,000)
Conversion into common stock – October 2017	(27,404)	-
Accrual of dividends – Q4 2017		101,658
Balance – December 31, 2017	62,596	$ 236,658
Accrual of dividends – Q1 2018		93,894
Conversion into common stock – April 2018	(39,088)	(330,552)
Accrual of dividends – Q2 2018 (until final conversion)		25,463
Conversion into common stock – May 2018	(23,508)	(25,463)
Balance – December 31, 2018	-	$ -

The Series A-1 Stock contained options that based on an evaluation of FASB ASC 815-15, “Embedded Derivatives” and FASB ASC 815-40-15, “Contracts in Entity’s Own Equity - Scope and Scope Exceptions,” are considered embedded features: Preferred Stock’s conversion option: The Series A-1 Stock was convertible at the holder’s option at any time at the fixed conversion price of $3.60 per share; Quarterly Dividend Conversion Option: From issuance until December 31, 2017, the majority of holders could have elected to have the quarterly dividend payment made in shares of common stock, having a value equal to the volume weighted average trading price of the common stock during the ten (10) trading day period preceding the applicable dividend payment date. These features were analyzed by the Company and determined that they were not required to be bifurcated from the preferred stock and recorded as derivatives as they are clearly and closely related to an equity host.

Series B-1 Convertible Preferred Stock

On November 11, 2015, the Company issued 105,000 shares of Series B-1 Convertible Preferred Stock (the “Series B-1 Stock”) at a purchase price of $100.00 per share, for gross proceeds of $10,500,000. Shares of the Series B-1 Stock were convertible at any time at the option of the holder into shares of common stock by dividing the Series B-1 Original Issue Price by an initial conversion price of $3.60 per share, subject to adjustment for stock dividends, stock splits, combinations, and reclassifications of the Company’s capital stock, and subject to a “blocker provision” which prohibits conversion if such conversion would result in the holder being the beneficial owner of in excess of 9.99% of the Company’s common stock. During a conversion detailed in the table below, the Company waived a standstill provision to permit a holder of Series B-1 Stock to increase its conversion limitation to 19.99% of the Company's issued and outstanding shares of common stock to be effective 61 days after such waiver. The Series B-1 Stock accrued dividends at the rate of 2.5% per annum payable quarterly on April 1, July, 1, October 1, and January 1 of each year payable in cash provided that if payment in cash would be prohibited under applicable Delaware corporation law or cause the Company to breach any agreement for borrowed money, or if the majority of the outstanding shares of the Series B-1 Stock elected otherwise, such dividends were payable in kind through the issuance of additional shares of common stock having a value equal to the volume weighted average trading price of the Company’s common stock for the ten (10) days preceding the applicable dividend payment date.

The holders of the Series B-1 Stock were entitled to designate one person to serve on the Board of Directors of the Company. The holders of the Series B-1 Stock were entitled to vote on an as converted to common stock basis together with the holders of our common stock on all matters presented to our stockholders. Upon any liquidation or dissolution of the Company, any merger or consolidation involving the Company or any subsidiary of the Company in which the shares of capital stock of the Company outstanding immediately prior to such merger or consolidation do not represent immediately following such merger or consolidation at least a majority of the voting power of the capital stock of the resulting or surviving corporation, or the sale of all or substantially all assets in a single transaction or a series of related transactions, unless the holders of at least a majority of the outstanding Series B-1 Stock elected otherwise, holders of Series B-1 Stock would have been be entitled to receive prior to any payment to any holders of the Company’s common stock an amount per share equal to $100.00 per share plus any declared and unpaid dividends (pari-passu with the Series A-1 holders).

Between March 23, 2018 and May 23, 2018, holders of shares of Series B-1 Stock converted all shares of Series B-1 Stock into an aggregate of 2,916,668 shares of common stock and purchased an aggregate of 131,229 shares of common stock in consideration of the conversion of $472,426 of accrued dividends payable on the Series B-1 Stock.

As a result of the forgoing conversions, there are no longer any issued and outstanding shares of Series B-1 Stock as of December 31, 2018.

Overall balances and conversion of Series B-1 shares and accrued dividends into common stock has been as follows:

	Series B-1	**Accrued Dividends**
Balance – January 1, 2017	105,000	$ 131,250
Accrual of dividends – Q1 2017		65,625
Accrual of dividends – Q2 2017		65,625
Accrual of dividends – Q3 2017		65,625
Accrual of dividends – Q4 2017		65,625
Balance – December 31, 2017	105,000	393,750
Conversion into common stock – March 2018	(60,420)	(417,084)
Accrual of dividends – Q1 2018		62,268
Accrual of dividends – Q2 2018 (until final conversion)		16,408
Conversion into common stock – May 2018	(44,580)	(55,342)
Balance – December 31, 2018	-	$ -

The Series B-1 Stock contained options that based on an evaluation of FASB ASC 815-15, “Embedded Derivatives” and FASB ASC 815-40-15, “Contracts in Entity’s Own Equity - Scope and Scope Exceptions,” are considered embedded features: Preferred Stock’s conversion option: The Series B-1 Stock was convertible at the holder’s option at any time at the fixed conversion price of $3.60 per share; Quarterly Dividend Conversion Option: The majority of holders could have elect to have the quarterly dividend payment made in shares of common stock, having a value equal to the volume weighted average trading price of the common stock during the ten (10) trading day period preceding the applicable dividend payment date. These features were analyzed by the Company and determined that they were not required to be bifurcated from the preferred stock and recorded as derivatives as they are clearly and closely related to an equity host.

2. Common Stock

Holders of common stock have equal rights to receive dividends when, as and if declared by the Board of Directors, out of funds legally available therefor. Holders of common stock have one vote for each share held of record and do not have cumulative voting rights.

Holders of common stock are entitled, upon liquidation of the Company, to share ratably in the net assets available for distribution, subject to the rights, if any, of holders of any preferred stock then outstanding. Shares of common stock are not redeemable and have no preemptive or similar rights. All outstanding shares of common stock are fully paid and nonassessable.

Issuances of Common Stock

On March 23, 2018, the holders of Series B-1 Stock converted shares and accrued dividends payable into a total of 1,794,190 shares of common stock.

On April 3, 2018, the holder of Series A-1 Stock converted shares and accrued dividends payable into a total of 1,177,598 shares of common stock.

On May 23, 2018, the holders of Series B-1 Stock converted shares and accrued dividends payable into a total of 1,253,707 shares of common stock.

On May 31, 2018, the holder of Series A-1 Stock converted shares and accrued dividends payable into a total of 660,073 shares of common stock.

On August 22, 2018, the Company entered into an underwriting agreement (the "Underwriting Agreement") with Maxim Group LLC (the "Underwriter") with respect to the issuance and sale of an aggregate of 1,200,000 units ("Units") with each unit consisting of one share of common stock and a warrant to purchase 0.75 shares of common stock at an exercise price of $1.50 per share, in an underwritten public offering pursuant to the Underwriting Agreement. Each Unit was sold for a price of $1.50. The Warrants have a term of five years and are immediately exercisable. Pursuant to the Underwriting Agreement, the Company granted the Underwriters a 45-day option to purchase up to an additional 180,000 shares of Common Stock and/or 135,000 Warrants to cover over-allotments, if any (the "Over-Allotment"). On August 22, 2018, the Underwriter exercised its Over-Allotment option in full on both the Common Stock and the Warrants. Pursuant to this agreement, 1,380,000 shares of common stock and warrants to purchase 1,035,000 shares of stock were issued on August 24, 2018 for aggregate gross proceeds of $2,070,000. The gross proceeds were reduced by a 7% commission ($144,900) and $50,000 of underwriting expenses to net to $1,875,100 cash received.

Costs of $143,945 were incurred during 2018 in relation to the issuance of common stock.

Issuances to Directors, Executive Officers and Consultants

During the year ended December 31, 2018, the Company issued 20,976 shares of common stock to its directors in lieu of payment of board fees, valued at $37,532.

During the year ended December 31, 2017, the Company issued 11,244 shares of common stock to its directors in lieu of payment of board fees, valued at $32,030.

During the year ended December 31, 2017, the Company issued 117,849 shares of common stock to consultancy firms in lieu of payment for services. The fair value at issuance was $354,585 and was expensed over the period of the services.

Employees' exercise options

During 2018, no employee stock options were exercised. There were 4,167 employee stock options exercised resulting in the cashless issuance of 1,610 shares of common stock during 2017.

Derivative Liabilities

In connection with the issuances of equity instruments or debt, the Company may issue options or warrants to purchase common stock. In certain circumstances, these options or warrants may be classified as liabilities, rather than as equity. In addition, the equity instrument or debt may contain embedded derivative instruments, such as conversion options or listing requirements, which in certain circumstances may be required to be bifurcated from the associated host instrument and accounted for separately as a derivative liability instrument. The Company early-adopted the new provisions issued July 2017, for derivative liability instruments under FASB ASU 2017-11, Earnings Per Share (Topic 260), Distinguishing Liabilities from Equity (Topic 480) and Derivatives and Hedging (Topic 815): I. Accounting for Certain Financial Instruments with Down Round Features; II. Replacement of the Indefinite Deferral for Mandatorily Redeemable Financial Instruments of Certain Nonpublic Entities and Certain Mandatorily Redeemable Non-controlling Interests with a Scope Exception. Under ASU 2017-11, down round features do not meet the criteria for derivative accounting and no liability is to be recorded until an actual issuance of securities triggers the down-round feature. Prior to these provisions, the liabilities were recorded without the actual issuance of the securities triggering the down-round feature.

Securities Purchase Agreement dated November 13, 2014

Pursuant to a Securities Purchase Agreement, dated November 13, 2014, by and between the Company and a number of private and institutional investors, the Company issued to certain private investors 664,584 shares of common stock and warrants to purchase an additional 996,877 shares of common stock for aggregate gross proceeds of $1,595,000.

The warrants have a term of five years and an initial exercise price of $3.60 per share, and have been fully exercisable since February 2015. The warrants have customary anti-dilution protections including a "full ratchet" anti-dilution adjustment provision which are triggered in the event the Company sells or grants any additional shares of common stock, options, warrants or other securities that are convertible into common stock at a price lower than $3.60 per share, The anti-dilution adjustment provision is not triggered by certain "exempt issuances" which among other issuances, includes the issuance of shares of common stock, options or other securities to officers, employees, directors, consultants or service providers.

Pursuant to the Underwriting Agreement with Maxim Group, on August 24, 2018 the Company issued Common Stock and Warrants to investors at a purchase price of $1.50 per unit which triggered the anti-dilution protection provision under this Securities Purchase Agreement. Due to this provision, the total number of outstanding and fully vested warrants was increased from 996,877 to 2,392,502, and the exercise price was reduced from $3.60 to $1.50 per share. The Company recognized a non-cash deemed dividend of $1,288,139 in connection with these adjustments.

As a result of the early adoption of ASU 2017-11, the “full ratchet” anti-dilution feature is no longer a determinant for derivative liability accounting. As the “full ratchet” anti-dilution feature was determined to have no value in the past, the adoption had no effect on the balance sheets or statements of operations.

Securities Purchase Agreement dated September 23, 2015

On September 23, 2015, the Company issued a warrant to purchase 69,445 shares of common stock in connection with the issuance of a promissory note. The warrants are immediately exercisable at an initial exercise price of $3.60 per share and have a term of five years.

The warrants have customary anti-dilution protections including a "full ratchet" anti-dilution adjustment provision which are triggered in the event the Company sells or grants any additional shares of common stock, options, warrants or other securities that are convertible into common stock at a price lower than $3.60 per share. The anti-dilution adjustment provision is not triggered by certain "exempt issuances" which among other issuances, includes the issuance of shares of common stock, options or other securities to officers, employees, directors, consultants or service providers.

Pursuant to the Underwriting Agreement with Maxim Group, on August 24, 2018 the Company issued Common Stock and Warrants to the investors at a purchase price of $1.50 per unit which triggered the anti-dilution protection provision under this Securities Purchase Agreement. Due to this provision, the total number of outstanding and fully vested warrants for the investor was increased from 69,445 to 166,668, and the exercise price was reduced from $3.60 to $1.50 per share. The Company recognized a non-cash deemed dividend of $140,827 in connection with these adjustments.

As a result of the early adoption of ASU 2017-11, the “full ratchet” anti-dilution feature is no longer a determinant for derivative liability accounting. As the “full ratchet” anti-dilution feature was determined to have no value in the past, the adoption had no effect on the balance sheets or statements of operations.

3. Warrants

The Company has issued warrants to certain creditors, investors, investment bankers and consultants. A summary of warrant activity is as follows:

	Total Warrants	Weighted average exercise price	Weighted average remaining life (in years)	Aggregate intrinsic value
Outstanding, as of December 31, 2016	1,260,080	3.84	2.78	
Granted	138,889	3.60		
Exercised	—	—		
Forfeited	—	—		
Expired	—	—		
Outstanding, as of December 31, 2017	1,398,969	3.81	2.06	—
Granted	1,035,000	1.50		
Increase due to trigger of anti-dilution provision feature	1,492,848	1.50		
Exercised	—	—		
Forfeited	—	—		
Expired	(145,841)	6.00		
Outstanding, as of December 31, 2018	3,780,976	1.59	2.05	—
Vested or expected to vest at December 31, 2018	3,780,976	1.59	2.05	—
Exercisable at December 31, 2018	3,780,976	1.59	2.05	—

NOTE O—STOCK OPTIONS

2004 *Stock Option Plan*

On October 12, 2004, the Board of Directors of the Company approved the 2004 Stock Option Plan (the 2004 Plan). The 2004 Plan was not presented to stockholders for approval and thus incentive stock options were not available under this plan. Under the terms of this plan, 166,667 shares of common stock were reserved for issuance to employees, officers, directors, and consultants of the Company at exercise prices which may not be below 85% of fair market value. The term of stock options granted may not exceed ten years. Options issued under the 2004 Plan vest pursuant to the terms of stock option agreements with the recipients. In the event of a change in control, as defined, all options outstanding vest immediately. The 2004 Plan expired in October 2014.

2015 *Stock Option Plan*

On January 27, 2016, the shareholders approved the 2015 Equity Incentive Plan (the 2015 Plan). Under the terms of this plan, 666,667 shares of common stock are reserved for issuance to employees, officers, directors, and consultants of the Company at exercise prices which may not be below 100-110% of fair market value. The term of stock options granted may not exceed ten years. Options issued under the 2015 Plan vest pursuant to the terms of stock option agreements with the recipients. In the event of a change in control, certain stock awards issued under this plan may be subject to additional acceleration of vesting as may be provided in the participants' written agreement. The 2015 Plan expires in December 2025.

Non-Plan Stock Options

Periodically, the Company has granted options outside of the 2004 and 2015 Plans to various employees and consultants. In the event of change in control, as defined, certain of the non-plan options outstanding vest immediately.

Stock Option Activity

Information summarizing option activity is as follows:

	Number of Options				Weighted average exercise price	Weighted average remaining life (in years)	Aggregate intrinsic value
	2004 Plan	2015 Plan	Non Plan	Total			
Outstanding, as of December 31, 2016	**69,380**	**25,003**	**247,280**	**341,663**	**$ 3.99**		
Granted	—	64,167	1,170,000	1,234,167	2.69		
Exercised	—	—	(4,167)	(4,167)	2.16		
Forfeited	—	(7,084)	(65,140)	(72,224)	2.62		
Expired	(17,084)	—	(4,862)	(21,946)	8.86		
Outstanding, as of December 31, 2017	**52,296**	**82,086**	**1,343,111**	**1,477,493**	**$ 2.91**	**5.64**	**$ 0**
Granted	—	351,918	—	351,918	1.97		
Exercised	—	—	—	—	—		
Forfeited	—	(38,613)	(111,253)	(149,866)	2.63		
Expired	(18,961)	(13,473)	(59,097)	(91,531)	3.03		
Outstanding, as of December 31, 2018	**33,335**	**381,918**	**1,172,761**	**1,588,014**	**$ 2.72**	**5.00**	**$ 0**
Vested or expected to vest at December 31, 2018				**1,321,981**	**$ 2.79**	**4.83**	**$ 0**
Exercisable at December 31, 2018				**593,573**	**$ 3.17**	**3.94**	**$ 0**

The options outstanding and exercisable at December 31, 2018 were in the following exercise price ranges:

Options Outstanding	**Options Exercisable**

Range of exercise prices	Number of shares	Weighted average exercise price	Weighted average remaining life (in years)	Number exercisable	Weighted average exercise price
$1.83 - 2.50	413,843	$ 2.01	5.88	81,230	$ 2.15
2.51 - 3.50	1,000,415	2.69	5.23	338,587	2.69
3.51 - 4.92	173,756	4.58	1.76	173,756	4.58
$1.83 - 4.92	1,588,014			593,573	

The aggregate intrinsic value in the table above represents the total intrinsic value, based on the Company's closing stock price of $0.75 as of December 31, 2018, which would have been received by the option holders had all option holders exercised their options as of that date. The total number of in-the-money options exercisable as of December 31, 2018 was 0.

The weighted average fair value of options granted during the years ended December 31, 2018 and 2017 was $1.53 and $2.32 per share, respectively. The total intrinsic value of options exercised during the years ended December 31, 2018 and 2017 was $0 and $5,667, respectively. The total fair value of shares vested during the years ended December 31, 2017 and 2016 was $946,435 and $197,281 respectively.

As of December 31, 2018, future forfeiture adjusted compensation cost related to nonvested stock options is $1,228,771 and will be recognized over an estimated weighted average period of 1.50 years.

NOTE P—INCOME TAXES

There was no provision for federal or state taxes as at December 31, 2018 and 2017.

In December 22, 2017, the U.S. government enacted comprehensive tax legislation commonly referred to as the Tax Cuts and Jobs Act (the "Tax Act"). The Tax Act significantly impacts the future ongoing U.S. corporate income tax by, among things, lowering the U.S. corporate income tax rates from 34% to 21%, providing for unlimited net operating loss carry-forward periods, and implementing a territorial tax system. The reduction of the U.S. corporate tax rate required the Company to revalue its U.S. deferred tax assets and liabilities and valuation allowances to the recently enacted federal rate of 21%. This transitional impact resulted in a provisional reduction of certain of the Company's US deferred tax assets which are offset by a full valuation allowance.

The Company has deferred taxes due to income tax credits, net operating loss carryforwards, and the effect of temporary differences between the carrying values of certain assets and liabilities for financial reporting and income tax purposes. Significant components of deferred taxes are as follows at December 31:

	2018	**2017**
Accrued compensation	$91,000	$118,000
Accounts receivable allowance	474,000	277,000
Stock-based compensation	644,000	387,000
Basis differences in fixed assets	(13,000)	(18,000)
Basis differences in intangible assets	50,000	46,000
Net operating loss and credit carryforwards	12,735,000	12,052,000
Valuation allowances	(13,981,000)	(12,862,000)
	$—	$—

The Company has a valuation allowance against the full amount of its net deferred taxes due to the uncertainty of realization of the deferred tax assets due to operating loss history of the Company. The Company currently provides a valuation allowance against deferred taxes when it is more likely than not that some portion, or all of its deferred tax assets will not be realized. The valuation allowance could be reduced or eliminated based on future earnings and future estimates of taxable income. Similarly, income tax benefits related to stock options exercised have not been recognized in the financial statements.

As of December 31, 2018, the Company has federal net operating loss carryforwards of approximately $60 million subject to expiration between 2021 and 2037. These net operating loss carryforwards are subject to the limitations under Section 382 of the Internal Revenue Code due to changes in the equity ownership of the Company.

A reconciliation of the effective income tax rate on operations reflected in the Statements of Operations to the US Federal statutory income tax rate is presented below.

	2018	2017
Federal statutory income tax rate	21 %	34 %
Permanent differences	—	—
Change in tax laws/tax rate	—	(13)
Effect of net operating loss	(21)	(21)
Effective tax rate	— %	— %

The Company has not been audited by the Internal Revenue Service (“IRS”) or any states in connection with income taxes. The Company files income tax returns in the U.S. federal jurisdiction and various state jurisdictions. The periods from 2015 through 2018 remain open to examination by the IRS and state jurisdictions. The Company believes it is not subject to any tax audit risk beyond those periods. The Company’s policy is to recognize interest and penalties accrued on any unrecognized tax benefits as a component of income tax expense. The Company does not have any accrued interest or penalties associated with any unrecognized tax benefits, nor was any significant interest expense recognized during the years ended December 31, 2018 and 2017.

NOTE Q—PROFIT SHARING PLAN

The Company has established a savings plan under section 401(k) of the Internal Revenue Code. All employees of the Company, after completing one day of service, are eligible to enroll in the 401(k) plan. Participating employees may elect to defer a portion of their salary on a pre-tax basis up to the limits as provided by the IRS Code. The Company is not required to match employee contributions but may do so at its discretion. The Company made no contributions during the years ended December 31, 2018 and 2017.

NOTE R—EARNINGS PER SHARE (EPS)

The Company's basic EPS is calculated using net income (loss) available to common shareholders and the weighted-average number of shares outstanding during the reporting period. Diluted EPS includes the effect from potential issuance of common stock, such as stock issuable pursuant to the exercise of stock options and warrants and the assumed conversion of preferred stock.

The reconciliation of the numerator of the basic and diluted EPS calculations, due to the inclusion of preferred stock dividends was as follows for the following fiscal years ended December 31:

	2018	**2017**
Basic Numerator:		
Loss from continuing operations	$(6,868,875)	$(4,275,338)
Deemed dividend from trigger of anti-dilution provision feature	(1,428,966)	-
Convertible preferred stock dividends	(198,033)	(769,158)
Net loss available to common stockholders (basic and diluted EPS)	$(8,495,874)	$(5,044,496)

The following table summarizes the weighted average securities that were excluded from the diluted per share calculation because the effect of including these potential shares was antidilutive.

	Years ended December 31,

	2018	2017
Preferred stock	1,426,756	5,264,422
Stock options	83	15,529
Warrants	697,879	2,109
Potentially dilutive securities	2,124,718	5,282,060

Items excluded from the diluted per share calculation because the exercise price was greater than the average market price of the common shares:

	Years ended December 31,	
	2018	2017
Stock options	1,583,014	1,390,428
Warrants	186,806	1,351,052
Total	1,769,820	2,741,480

NOTE S—SUBSEQUENT EVENTS

On March 21, 2019, the Company issued 12,716 shares of common stock to its directors in payment of board and committee fees.

On March 21, 2019, the Company issued options to purchase 235,334 shares of the Company’s common stock to certain officers, employees, and contractors. The options have a three year vesting period, seven year term, and exercise price of $1.18.

On March 28, 2019, the Company issued 1,104 shares of common stock to its directors in payment of committee fees.

The Company has reviewed subsequent events through the date of this filing.

EXHIBIT INDEX

Exhibit No.	Exhibit
3.1	Certificate of Incorporation of BIO-key International, Inc., a Delaware corporation (incorporated by reference to Exhibit 3.1 to the current report on Form 8-K, filed with the SEC on January 5, 2005)
3.2	Bylaws (incorporated by reference to Exhibit 3.3 to the current report on Form 8-K, filed with the SEC on January 5, 2005)
3.3	Certificate of Amendment to Certificate of Incorporation (incorporated by reference to Appendix A to the definitive proxy statement, filed with the SEC on January 18, 2006)
3.4	Certificate of Amendment of Certificate of Incorporation of Bio-key International, Inc., a Delaware corporation (incorporated by reference to Exhibit 3.4 to the annual report on Form 10-K, filed with the SEC on March 31, 2015)
3.5	Certificate of Elimination of BIO-key International, Inc. filed October 6, 2015 (incorporated by reference to Exhibit 3.5 to the registration statement on Form S-1 File No. 333-208747 filed with the SEC on December 23, 2015)
3.6	Certificate of Designation of Preferences, Rights and Limitations of Series A-1 Convertible Preferred Stock (incorporated by reference to Exhibit 3.1 to the current report on Form 8-K, filed with the SEC on November 2, 2015)
3.7	Certificate of Designation of Preferences, Rights and Limitations of Series B-1 Convertible Preferred Stock (incorporated by reference to Exhibit 3.1 to the quarterly report on Form 10-Q, filed with the SEC on November 16, 2015)
3.8	Certificate of Amendment of Certificate of Incorporation of Bio-key International, Inc., a Delaware corporation (incorporated by reference to Exhibit 3.1 to the current report on Form 8-K, filed with the SEC on December 28, 2016)
4.1	Specimen Stock Certificate (incorporated by reference to Exhibit 4.1 to the registration statement on Form SB-2, File No. 333-16451)
10.1	Employment Agreement by and between BIO-key International, Inc. and Mira LaCous dated November 20, 2001 (incorporated by reference to Exhibit 10.39 to the current report on Form 8-K, filed with the SEC on January 22, 2002)
10.2	BIO-key International, Inc. 2004 Stock Incentive Plan (incorporated by reference to Exhibit 10.48 to amendment no. 1 the registrant's registration statement on Form SB-2, File No. 33-120104, filed with the SEC on December 14, 2004)

10.3	Employment Agreement, effective March 25, 2010, by and between the Company and Michael W. DePasquale (incorporated by reference to Exhibit 10.93 to the annual report on Form 10-K, filed with the SEC on March 26, 2010)
10.4	Form of Warrant (incorporated by reference to Exhibit 10.30 to the registration statement on Form S-1, filed with the SEC on July 26, 2013)
10.5	Employment Agreement by and between BIO-key International, Inc. and Cecilia Welch dated May 15, 2013 (incorporated by reference to Exhibit 10.42 to the annual report on Form 10-K, filed with the SEC on March 31, 2014)
10.6	Third Amendment to Lease Agreement by and between BIO-key International, Inc. and Victor AOP, Inc. dated June 30, 2013 (incorporated by reference to Exhibit 10.43 to the annual report on Form 10-K, filed with the SEC on March 31, 2014)
10.7	First Amendment to Lease Agreement by and between BIO-key International, Inc. and BRE/DP MN LLC dated September 12, 2013 (incorporated by reference to Exhibit 10.44 to the annual report on Form 10-K, filed with the SEC on March 31, 2014)
10.8	Form of Investor Warrant, by and between the Company and certain investors dated November 13, 2014 (incorporated by reference to Exhibit 10.2 to the quarterly report on Form 10-Q, filed with the SEC on November 14, 2014)
10.9	Form of Convertible Preferred Stock Purchase Agreement (incorporated by reference to Exhibit 10.1 to the current report on Form 8-K, filed with the SEC on November 2, 2015)

10.10	Form of Registration Rights Agreement (incorporated by reference to Exhibit 10.2 to the current report on Form 8-K, filed with the SEC on November 2, 2015)
10.11	Form of Securities Purchase Agreement (incorporated by reference to Exhibit 10.1 to the quarterly report on Form 10-Q, filed with the SEC on November 16, 2015)
10.12	Form of Registration Rights Agreement (incorporated by reference to Exhibit 10.2 to the quarterly report on Form 10-Q, filed with the SEC on November 16, 2015)
10.13	BIO-key International, Inc. 2015 Equity Incentive Plan (incorporated by reference to Appendix B to the definitive proxy statement filed with the SEC on December 15, 2015)
10.14	Software License Purchase Agreement Dated November 11, 2015 by and among BIO-key Hong Kong Limited, Shining Union Limited, WWTT Technology China, Golden Vast Macao Commercial Offshore Limited, Giant Leap International Limited (incorporated by reference to Exhibit 10.36 to the registration statement on Form S-1 File No. 333-208747 filed with the SEC on December 23, 2015)**
10.15	Securities Purchase Agreement dated November 11, 2016 by and between Registrant and Wong Kwok Fong (Kelvin) (incorporated by reference to Exhibit 10.1 to the quarterly report on Form 10-Q, filed with the SEC on November 14, 2016)
10.16	Securities Purchase Agreement dated April 28, 2017 by and between Registrant and Wong Kwok Fong (Kelvin) (incorporated by reference to Exhibit 10.1 to the quarterly report on Form 8-K, filed with the SEC on May 3, 2017)
10.17	Common Stock Purchase Agreement dated May 2, 2017 by and between Registrant and Xanthe Holdings Ltd. (incorporated by reference to Exhibit 10.2 to the quarterly report on Form 8-K, filed with the SEC on May 3, 2017)
10.18	Form of Registration Rights Agreement (incorporated by reference to Exhibit 10.3 to the current report on Form 8-K, filed with the SEC on May 3, 2017)
10.19	Form Non-Plan Option Agreement between the Company and certain of its directors, officers, employees and contractors (incorporated by reference to Exhibit 10.4 to the quarterly report on Form 10-Q filed with the SEC on May 15, 2017)
10.20	Securities Purchase Agreement dated April 3, 2018 by and between the Registrant and Wong Kwok Fong (Kelvin) (incorporated by reference to Exhibit 10.1 to the current report on Form 8-K, filed with the SEC on April 4, 2018
10.21	Securities Purchase Agreement dated May 23, 2018 by and between the Registrant and Giant Leap International Limited (incorporated by reference to Exhibit 10.1 to the current report on Form 8-K, filed with the SEC on May 30, 2018
10.22	Securities Purchase Agreement dated May 23, 2018 by and between the Registrant and Micron Technology Development Limited (incorporated by reference to Exhibit 10.2 to the current report on Form 8-K, filed with the SEC on May 30, 2018

10.23	Securities Purchase Agreement dated May 31, 2018 by and between the Registrant and Wong Kwok Fong (Kelvin) (incorporated by reference to Exhibit 10.1 to the current report on Form 8-K, filed with the SEC on June 4, 2018
10.24	Underwriting Agreement dated August 22, 2018 by and between the Registrant and Maxim Group LLP (incorporated by reference to Exhibit 1.1 to the current report on Form 8-K, filed with the SEC on August 27, 2018
10.25	Form of Common Stock Purchase Warrant dated August 24, 2018 (incorporated by reference to Exhibit 4.1 to the current report on Form 8-K, filed with the SEC on August 27, 2018
10.26	GLP 2nd Amendment to Lease dated July 27, 2018***
10.27	Marlen 4th Amendment to Lease dated June 2, 2018***
21.1	List of subsidiaries of BIO-key International, Inc. (incorporated by reference to Exhibit 21.1 to the annual report on Form 10-K, filed with the SEC on March 30, 2016)
23.1*	Consent of RMSBG
31.1*	Certification of the Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2*	Certification of the Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1*	Certification of the Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2*	Certification of the Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

101.INS* XBRL Instance

101.SCH* XBRL Taxonomy Extension Schema

101.CAL* XBRL Taxonomy Extension Calculation

101.DEF* XBRL Taxonomy Extension Definition

101.LAB* XBRL Taxonomy Extension Labels

101.PRE* XBRL Taxonomy Extension Presentation

* filed herewith

** Confidential treatment has been requested with respect to certain portions of this exhibit. Omitted sections have been filed separately with the Securities and Exchange Commission

*** Filed previously with Form 10-K

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

BIO-KEY INTERNATIONAL, INC.

Date: April 5, 2019 By: /s/ MICHAEL W. DEPASQUALE
Michael W. DePasquale
CHIEF EXECUTIVE OFFICER

(Principal Executive Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities on the dates indicated.

Signature	**Title**	**Date**
/s/ MICHAEL W. DEPASQUALE Michael W. DePasquale	Chairman of the Board of Directors, Chief Executive Officer and Director (Principal Executive Officer)	April 5, 2019
/s/ CECILIA WELCH Cecilia Welch	Chief Financial Officer (Principal Financial and Accounting Officer)	April 5, 2019