

## Non-Conformities FCC ID: U62-SRA100 (CKC CS Ref # E10-000022-FCC-01)

The items listed below represent requests for information following review of this application for certification under United States (FCC) regulations. Further question may arise pending review of responses to these items.

OK	ID	#	Non-Conformity or Comment	Submitted Response	Respondent / Date of Response
x	C	1	The person signing the letter of confidentiality is Pat Weston whereas the person listed on the FCC site as contact is Mathew Di Nicola. In accordance with FCC Policy (KDB 852134), please provide all cover letters signed by the authorized individual named in the applicant's grantee code information or by an authorized designee. In the latter case, please also provide letters of authorization signed by the authorized individual designating the alternate(s). In all cases, a paper trail must be demonstrated leading back to the person named under the grantee code.	<p>Matt Di Nicola's signing authority... he is no longer with the company. I am the authorized person at SynapSense.</p> <p><i>You will need to Update your Grantee Code. Provided Website.</i></p> <p><i>Customer Provided FRN Number and asked us to update the Grantee Information. Sent a Note to the Customer that the FRN Number is not needed. What is needed is the Grantee Code Registration Number. And let him know that I would send a request in to the FCC for him.</i></p> <p><i>Sent Request to the FCC Asking for the Grantee Code Registration number for Synapsense.</i></p>	<p>Pat Weston 4/5/10</p> <p><i>Jessina Hunter 4/5/10</i></p> <p><i>Jessina Hunter 4/8/10</i></p> <p><i>Jessina Hunter 4/8/10</i></p>

				5/3/10;EW, verified Grantee.	
x	C	2	<p>The provide Letter "Modular Approval Request.pdf" requested modular approval for the product. However, the letter did not declare compliance to 15.212 (a) requirement. Please provide a revised modular approval request letter with declaration to each subpart of 15.212 (a) for full modular approval.</p> <p>Alternatively, a limited modular approval can be granted in accordance with 15.121(b), in this case please provide a revised letter requesting limited modular approval with inclusion of a statement clarifying how control of the end product into which the module will be installed, will be maintained such that full compliance of the end product is always ensured</p> <p>5/3/10:Please provide Modular approval letter meeting the above requirement, this document is missing from the TEMP folder.</p>	<p>Provided Modular Approval Letter.</p> <p>Provided Letter.</p> <p>5/5/10 EW, ok</p>	<p>Pat Weston 4/5/10</p> <p>Pat Weston 5/4/10</p>
X	Report	3	<p>The title page of the test report 90296-14 claims the device was also tested to 15.207, however this device is a battery operate device where 15.207is not applicable and hence not included in the test report.</p> <p>Please provide a revised test report with reference to 15.207 removed.</p>	<p>I did not test to 15.207.</p> <p>Updated Report Provided.</p>	<p>–CKendall 2 April 2010</p> <p>Report Department 4/29/10</p>
X	L	4	<p>The bottom side of the stamp sized EUT is missing from the internal photograph.</p> <p>Please provide a revised internal photo with the device removed from the support controller board and showing the bottom side of the PCB</p>	<p>Photos Provided.</p>	<p>–CKendall 2 April 2010</p>
X	L	5	<p>The provided external photograph includes a support controller board and the bottom side of the device is hidden from clear view.</p> <p>Please provide a revised exterior photo with the device removed from the support controller board and showing the bottom side of the device.</p>	<p>Photos Provided.</p>	<p>–CKendall 2 April 2010</p>
X	L	6	<p>Page 6 of the test report 90296-14 and the test condition claims the</p>	<p>No. The controller card is required for</p>	<p>Pat Weston</p>

			<p>device was not tested with any peripheral devices. However, the setup photographs depicts the device was tested with it installed a support controller board (peripheral) .</p> <p>Please provide a revised test report meeting 2.1033(b)(8) requirement.</p> <p>Alternatively, if the controller card is part of the device seeking certification, then please provide the schematic and block diagram of the device with inclusion of the controller card.</p>	testing to provide power and control signals only.	4/5/10
X	L	7	<p>Please clarify whether this battery powered device can be operated as portable equipment. For portable equipment, please verify whether the emission profile was maximized by testing in three orthogonal orientations.</p>	Neither it is fixed. Similar to a WiFi access point or router.	Pat Weston 4/5/10
X	Report	8	<p>Page 7 of the test report section 15.31(m) claimed the device operates on single channel; however the test condition demonstrated the number of channel of operation exceeds three.</p> <p>Please provide a revise test report with corrected number of channel to be operated in the assigned frequency band.</p>	Yes. There are a total of 83 channels available and we will use most of them in operation.	Pat Weston 4/5/10
x	L	9	<p>Page 32 of the test report, the frequency of interest is 1- 18GHz, however in accordance with 15.33, the upper frequency of investigation shall be 10th harmonics of the fundamental or 40 GHz.</p> <p>Please provide a revised test report with frequency range measured up to 10th harmonics of 2480MHz.</p> <p>5/3/10 : The test condition of page 32 of the test report 90296-14A still list the frequency of interest as 1-18GHz, instead of 10th harmonics of 2480MHz. Please provide a revised test report.</p> <p>5/5/10; Page 32 of the revised test report indicated the range of measurement is 1 – 25 GHz, however the equipment list may be missing an antenna capable of measurement up to the declared frequency range. Please confirm whether antenna SN3414 is capable of measurement above 18 GHz, alternatively please provide a revised test report with equipment data for measurement in the range 18- 25</p>	<p>Revised Report Provided.</p> <p><b>Must have missed this page when we did the corrections. Need to change it to read 25 GHz.</b></p> <p>Revised Report Provided.</p>	<p>Report Department 4/29/10</p> <p><b>Chuck Kendall 5/4/10</b></p> <p>Report Department 5/5/10</p>

			MHz.		
x	C	10	<p>Antenna separation distance for RF exposure compliance is missing from the user manual.</p> <p>Pleas provide a revised user manual with inclusion of antenna separation distance.</p> <p>5/3/10: To protect the user from excessive RF exposure, please provide a revised user manual with inclusion of antenna separation distance equals or exceeds that as declared in the MPE calculation.</p>	<p>Change applied. Document attached</p> <p>The installation manual changes are on Page 3.</p>	<p>PW 4/5/10</p> <p>Pat Weston 5/4/10</p>
X	C	11	<p>The user manual is missing a statement regarding changes or modification to the any portion equipment.</p> <p>Please provide an updated user's manual incorporating the statement required by 15.21.</p>	Change applied. Document attached	PW 4/5/10
X	Report /C	12	<p>Page 7 of the test report 90296-14 under 15.203, the statement claims the antenna is an integral part of the EUT and non-removable. However the test condition and internal photographs Internal Photo-011.pdf shows the device includes provision for external antenna option.</p> <p>Please provide a revised test report demonstrating compliance to 15.203.</p> <p>Alternatively if the device is for professional installation only, then compliance to 15.203's unique antenna connector is not necessary, HOWEVER, the revised test report shall indicate as such and additionally, the manufacture shall furnish professional installation justification</p> <p>To qualify for professional installation, a manufacturer must explain why the hardware cannot simply be purchased and installed by the average (technically inclined) person</p> <p>1) Marketing * The device cannot be sold retail, to the general public or by mail order. It must be sold to dealers.</p>	There are two options. One is an internal antenna with no connector attached, the second is an external antenna that will have a connector (MMCX) attached. These are the only antenna options available.	Pat Weston 4/5/10

			<p>2) Requires professional installation;</p> <ul style="list-style-type: none"> <li>• installation must be controlled.</li> <li>• installed by licensed professionals ( EUT sold to dealer who hire installers)</li> <li>• installation requires special training ( special programming, access to keypad, field strength measurements made)</li> </ul> <p>What is unique, sophisticated, complex, or specialized about your equipment which REQUIRES it to be installed by a professional installer?</p> <p>3) Application</p> <ul style="list-style-type: none"> <li>• The intended use is generally not for the general public. It is generally for industry/commercial use.</li> </ul>		
X	L	13	<p>Radiated bandedge plot on page 55and 56 of the test report 90296-14, the plots were recorded with rbw of 100kHz. For radiated bandedge measurement, the rbw = 1MHz for emission &gt; 1 GHz. in the restricted band</p> <p>Please provide revised radiated bandedge plots acquired with RBW=1MHz, alternatively if delta marker method was employed, where reduced RBW is allowed, please provide a statement and calculation to include the applicable bandwidth correction</p> <p>5/3/10. Bandedge plots presented on page 58 thru 61 of the test report, 90296-14A, The limit line of Peak and Average are of different level, please confirm whether this is due to a Duty cycle correction being added to the limit line ?</p>	<p>Revised Report Provided.</p> <p>Yes, it is due to a duty cycle correction factor being added to the limit line.</p>	<p>Report Department 4/29/10</p> <p>Chuck Kendall 5/4/10</p>
X	L	14	<p>Documentation is not available to demonstrate compliance to the RFX requirement in 1.1307(b)(1)</p>	MPE Report Provided.	Report Department 4/1/10

The items indicated above must be submitted before processing can continue on the referenced application. Failure to provide the requested information within 60 days may result in application dismissal pursuant to Section 2.917(c) and forfeiture of the filing fee pursuant to Section 1.1106.

*How to read the table:*

**OK** column indicates closure by CKC CS.

**ID** column is for use with Agents to assist in identifying the probable source for closure.

A – Application issue

TL – Test lab issue

C – Client issue

R – Retesting may be necessary

**#** column indicates unique or separate non-conformity items (note some items may be related).

**Non-Conformity or Comment** column indicates the evaluators specific question or comment.

**Submitted response** column indicates the response or a summary of the response provided.

**Respondent / Date of Response** column indicates the responding party or agent and the date of the response was either received or logged.