

## USER'S MANUAL INFORMATION

(PRELIMINARY)

The User's Manual is in preparation. The following material will be contained in the manual:

FCC ID: MYF-WL-2401

IC: 2837A-WL-2401

This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

**WARNING:** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The term "IC:" before the radio certification number only signifies that Industry Canada technical specifications were met.

**NOTE:** The antenna system shall be installed ONLY by experienced antenna installers who are familiar with local building and safety codes, and wherever necessary have been licensed by appropriate government regulatory bodies. Failure to do so may void the Product Warranty, as well as expose the end-user to legal and/or financial liabilities. Hyperlink Technologies, its agents, resellers or distributors, are not liable for injury, damage, or violation of government regulations that may arise from failing to comply with the guidelines described in this document.

**Caution: Exposure to Radio Frequency Radiation.**

The radiated output power of this product is below the FCC radio exposure limits. Nevertheless, this product shall be used in such a manner that the potential for human contact during normal operation is minimized.

**Antenna shall be mounted in such a manner as to minimize the potential for human contact during normal operation. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20 cm (8 inches) during normal operation.**

Hyperlink Technologies is not responsible for any radio or television interference caused by unauthorized modification of this device or the substitution or attachment of connecting cables and equipment other than specified by Hyperlink Technologies. The correction of interference caused by such unauthorized modification, substitution or attachment will be the responsibility of the user.

The following table summarizes the minimum separation distance as calculated following FCC OET Bulletin 65. Because of the large variation in antenna and amplifier configurations, minimum separation distance is calculated over the full range of total EIRP only. To obtain the minimum separation distance for a particular system, the antenna gain (dBm) listed in Table 1.2 must be added to the amplifier output power (dBm) listed in Table 1.3, resulting in the total EIRP for a given system. If no amplifier is used, the output power of the radio from Table 1.2 is to be used in place of the amplifier output power. Cross referencing this EIRP (dBm) with that listed below will give the corresponding minimum separation distance for the given system.

**NOTE: THE ONLY PERMISSIBLE SYSTEM CONFIGURATIONS ARE THOSE LISTED IN THE SYSTEM CONFIGURATION TABLE AT THE END OF THIS MANUAL.**

**Table 1.1 Potential Health Hazard Radiation Level**

EIRP(dBm)	R (cm)	EIRP(dBm)	R (cm)	EIRP(dBm)	R (cm)
54	141.4	36	17.8	18	2.2
53	126.0	35	15.9	17	2.0
52	112.3	34	14.1	16	1.8
51	100.1	33	12.6	15	1.6
50	89.2	32	11.2	14	1.4
49	79.5	31	10.0	13	1.3
48	70.9	30	8.9	12	1.1
47	63.2	29	8.0	11	1.0
46	56.3	28	7.1	10	0.9
45	50.2	27	6.3	9	0.8
44	44.7	26	5.6	8	0.7
43	39.8	25	5.0	7	0.6
42	35.5	24	4.5	6	0.6
41	31.7	23	4.0	5	0.5
40	28.2	22	3.6	4	0.4
39	25.1	21	3.2	3	0.4
38	22.4	20	2.8	2	0.4
37	20.0	19	2.5	1	0.3

**Table 1.2 Amplifier Output Power Ratings**

<b>Amplifier Model</b>	<b>Output Power (dBm)</b>
None (Radio only)	11.0
HA2401-AGC -250	24.0
HA2401-AGC500	27.0
HA2401-AGC1000	30.0

**Table 1.3 Antenna Gain**

<b>Antenna Model</b>	<b>Construction</b>	<b>Gain (dBi)</b>
HG2401U	whip/monopole	1
HG2405U	whip/monopole	5
HG2406U	whip/monopole	6
HG2407U	whip/monopole	7
HG2408U	whip/monopole	8
HG2409U	whip/monopole	9
HG2410U	whip/monopole	10
HG2412U	whip/monopole	12
HG2415U	whip/monopole	15
HG2403MU	whip/automotive	3
HG2405MU	whip/automotive	5
HG2408P	patch	8
HG2409P	patch	9
HG2413P	patch	13
HG2414P	patch	14
HG2416P	patch	16
HG-UNI-16	patch	16
HG2412P	linear array	12
HG2415P	linear array	15
HG2417P	linear array	17
HG2420P	linear array	20
HG2412Y	Yagi-Uda	12
HG2415Y	Yagi-Uda	15
HG2414D	dish	15
HG2415G	dish	19
HG2419G	dish	21
HG2421G	dish	24

**WARNING:** It is the responsibility of the professional installer to ensure that when using the outdoor antenna kits in the United States (or where the FCC rules apply), only these antenna configurations shown in the table above and which are described in this document are used. The use of any other than those listed is expressly forbidden in accordance to FCC rules CFR47 part 15.204.

**ONLY THOSE SYSTEMS MARKED WITH AN X CAN BE USED FOR A GIVEN NUMBER OF CHANNELS.**

HYPERLINK LUCENT/ORINOCO

FCC ID: MYF-WL-2401

IC: 2837A-WL2401

CHANNEL FREQUENCY (MHz):		2412			2417			2422			2427			2432			2437			2442			2447			2452			2457			2462		
		AMPLIFIER MODEL:			HA2401-AGC1000	HA2401-AGC500	HA2401-AGC-250	None	HA2401-AGC1000	HA2401-AGC500	HA2401-AGC-250	None	HA2401-AGC1000	HA2401-AGC500	HA2401-AGC-250	None	HA2401-AGC1000	HA2401-AGC500	HA2401-AGC-250	None	HA2401-AGC1000	HA2401-AGC500	HA2401-AGC-250	None	HA2401-AGC1000	HA2401-AGC500	HA2401-AGC-250	None	HA2401-AGC1000	HA2401-AGC500	HA2401-AGC-250	None		
OUTPUT POWER (dBm):		30	27	24	30	27	24	30	27	24	30	27	24	30	27	24	30	27	24	30	27	24	30	27	24	30	27	24	30	27	24			
ANTENNA	GAIN (dBi)																																	
HG2401U	1			X	X		X	X		X	X		X	X		X	X		X	X		X	X		X	X		X	X		X	X		
HG2405U	5			X	X		X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
HG2406U	6			X	X		X	X		X	X		X	X		X	X		X	X		X	X		X	X		X	X		X	X		
HG2407U	7			X	X		X	X		X	X		X	X		X	X		X	X		X	X		X	X		X	X		X	X		
HG2408U	8			X	X		X	X		X	X		X	X		X	X		X	X		X	X		X	X		X	X		X	X		
HG2409U	9			X	X		X	X		X	X		X	X		X	X		X	X		X	X		X	X		X	X		X	X		
HG2410U	10			X	X		X	X		X	X		X	X		X	X		X	X		X	X		X	X		X	X		X	X		
HG2412U	12			X	X		X	X		X	X		X	X		X	X		X	X		X	X		X	X		X	X		X	X		
HG2415U	15			X	X		X	X		X	X		X	X		X	X		X	X		X	X		X	X		X	X		X	X		
HG2403MU	3			X	X		X	X		X	X		X	X		X	X		X	X		X	X		X	X		X	X		X	X		
HG2405MU	5			X	X		X	X		X	X		X	X		X	X		X	X		X	X		X	X		X	X		X	X		
HG2408P	8			X			X			X			X			X				X				X				X			X			
HG2409P	9			X			X			X			X			X				X				X				X			X			
HG2413P	13			X			X			X			X			X				X				X				X			X			
HG2414P	14			X			X			X			X			X				X				X				X			X			
HG2416P	16			X			X			X			X			X				X				X				X			X			
HG-UNI-16	16			X			X			X			X			X				X				X				X			X			
HG2412P	12			X			X			X			X			X				X				X				X			X			
HG2415P	15			X			X			X			X			X				X				X				X			X			
HG2417P	17			X			X			X			X			X				X				X				X			X			
HG2420P	20			X			X			X			X			X				X				X				X			X			
HG2412Y	12			X			X			X			X			X				X				X				X			X			
HG2415Y	15			X			X			X			X			X				X				X				X			X			
HG2414D	14			X			X			X			X			X				X				X				X			X			
HG2415G	15			X			X			X			X			X				X				X				X			X			
HG2419G	19			X			X			X			X			X				X				X				X			X			
HG2421G	21			X			X			X			X			X				X				X				X			X			
HG2424G	24			X			X			X			X			X				X				X				X			X			

- X Configurations tested to demonstrate FCC/IC compliance
- X Configurations that comply with FCC/IC regulations
- X Configurations that require a filter between the radio and the DC injector (tested)