

Communication Hub

Noise Level Report

August 2020

Contents

Introduction	3
JCDecaux Communication Hub Unit	4
Stoke SOT7202DD	4
Stoke SOT7204DD	6
Comparative recordings.....	9
BT InLink – Manchester On junction of Newton St and Portland Street.	9
Ocean double sided digital screen – Manchester Top of Portland Street near Pret a Manger	11
Ocean double sided digital screen with touchscreen – Manchester Piccadilly Gardens	12
Conclusions	14

Introduction

The purpose of this report is to compare noise levels from different street furniture using a basic sound level decibel meter. The recordings are not official laboratory noise levels and should not be used in any other way than a rudimentary comparative like for like comparison.

The sound level decibel meter used:



Item ref: 600.106UK

TSL01
DIGITAL MULTITESTER

The JCDecaux units tested in this report are two Communication Hub units in Stoke on a very sunny day. The levels of brightness and fan speeds are shown in the screen shots.



The recordings were taken by walking up to the units with the noise level meter from approximately 10 meters away and circling the unit, testing sound levels at different heights. Note: At approximately 10 meters distance the noise of the units was not discernible.

JCDecaux Hub Units

Stoke SOT7202DD



StatusVu®		Display Status	Network Settings	System Settings	Sensor Charts	Unit Upgrades
Basic Status	Display Name: UK-INF-LX0056.J					
LED Status	Current Time	Tue Aug 11 12:29:35 2020				
	Run Time Since Last Power Up	279 Days, 23 hrs, 29 mins, 10 sec				
Downtime Incidents	Num Active Downtime Incidents	0				
	Num Active Notifications	0				
Upload Status	Unit Serial Number					
	Display Serial Number	TE00247				
Startup Messages	MRI Filesystem Version	Revision 26.2.15 - Fri Jun 7 14:02:10 EDT 2019 - RELEASE				
Door Monitor	Display Statistics:					
	Total Elapsed Run Time	282 days, 9 hours, 28 mins, 25 secs				
	Total Backlight On Time	281 days, 9 hours, 10 mins, 34 secs				
	Total Valid Video Input Time	244 days, 3 hours, 15 mins, 6 secs				
Screen Snapshot	Display Status:					

StatusVu®	Display Status	Network Settings	System Settings	Sensor Charts	Unit Upgrades
	Luminance:				
Basic Status	Ambient Light		19176 (full luminance @ 1500)		
	Ambient Light Sensor		19176		
LED Status	GeoVu™ Ambient Light		1500 (Day, ignored)		
	Cloud Cover (ambient reduction)		86% (ignored)		
Downtime Incidents	Sunrise Time		05:43:30		
	Sunset Time		20:43:00		
Upload Status	Display Luminance		3495 nits		
	Desired Luminance		3500 nits		
Startup Messages	Avg Backlight Reading		3919		
	Backlight PWM Setting		93.5 %		
Door Monitor	Backlight Dac Setting		58.0 %		
Screen Snapshot	Video Input:				
	Source		Input 2 (DisplayPort)		
	Status		Valid Resolution		
	Resolution		1920x1080		
	Player 2 (DisplayPort):				
	Power LED		ON		

StatusVu®	Display Status	Network Settings	System Settings	Sensor Charts	Unit Upgrades
Basic Status	Temperatures:				
	Ambient Inlet Temperature		28.1 °C		
LED Status	Local Temperature (WeatherVu™)		26.0 °C		
	Processor Board Temperature		38.0 °C		
Downtime Incidents	Fpga Die Temperature		50.3 °C		
	Avg Power Supply Temperature		46.8 °C		
Upload Status	Avg Backlight Temperature		39.8 °C		
Startup Messages	Doors:				
	Rear Door		Closed		
Door Monitor	Open Loop Fan Bank:				
	Pwm Setting		56 %		
	Fan 1 (J41):		3660 RPM		
	Fan 2 (J42):		3780 RPM		
	Fan 3 (J43):		3600 RPM		
	Fan 4 (J44):		6600 RPM		
Screen Snapshot	Closed Loop Fan Bank:				
	Pwm Setting		99 %		
	Fan 1 (J30):		9420 RPM		
	Fan 2 (J31):		9600 RPM		
	Fan 3 (J32):		9600 RPM		
	Fan 4 (J33):		9480 RPM		



Maximum noise recorded 72.4dB. The location of the maximum reading was in the centre of the unit just below the ad case door on the advertising face.

Stoke SOT7204DD



StatusVu®

[Display Status](#)
[Network Settings](#)
[System Settings](#)
[Sensor Charts](#)
[Unit Upgrades](#)

Basic Status	Temperatures: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="border: 2px solid black;">Ambient Inlet Temperature</td> <td style="border: 1px solid black;">30.0 °C</td> <td rowspan="6" style="vertical-align: top; padding-left: 10px;">inlet hotter than forecast!</td> </tr> <tr> <td>Local Temperature (WeatherVu™)</td> <td>23.9 °C</td> </tr> <tr> <td>Processor Board Temperature</td> <td>39.3 °C</td> </tr> <tr> <td>Fpga Die Temperature</td> <td>51.8 °C</td> </tr> <tr> <td>Avg Power Supply Temperature</td> <td>49.3 °C</td> </tr> <tr> <td>Avg Backlight Temperature</td> <td>41.2 °C</td> </tr> </table>	Ambient Inlet Temperature	30.0 °C	inlet hotter than forecast!	Local Temperature (WeatherVu™)	23.9 °C	Processor Board Temperature	39.3 °C	Fpga Die Temperature	51.8 °C	Avg Power Supply Temperature	49.3 °C	Avg Backlight Temperature	41.2 °C							
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Door Monitor																					
Screen Snapshot	Open Loop Fan Bank: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Pwm Setting</td> <td>68 %</td> </tr> <tr> <td>Fan 1 (J41):</td> <td>4500 RPM</td> </tr> <tr> <td>Fan 2 (J42):</td> <td>4620 RPM</td> </tr> <tr> <td>Fan 3 (J43):</td> <td>4440 RPM</td> </tr> <tr> <td>Fan 4 (J44):</td> <td>7140 RPM</td> </tr> </table> Closed Loop Fan Bank: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Pwm Setting</td> <td>99 %</td> </tr> <tr> <td>Fan 1 (J30):</td> <td>9540 RPM</td> </tr> <tr> <td>Fan 2 (J31):</td> <td>9660 RPM</td> </tr> <tr> <td>Fan 3 (J32):</td> <td>9660 RPM</td> </tr> <tr> <td>Fan 4 (J33):</td> <td>9660 RPM</td> </tr> </table>	Pwm Setting	68 %	Fan 1 (J41):	4500 RPM	Fan 2 (J42):	4620 RPM	Fan 3 (J43):	4440 RPM	Fan 4 (J44):	7140 RPM	Pwm Setting	99 %	Fan 1 (J30):	9540 RPM	Fan 2 (J31):	9660 RPM	Fan 3 (J32):	9660 RPM	Fan 4 (J33):	9660 RPM
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StatusVu®

[Display Status](#)
[Network Settings](#)
[System Settings](#)
[Sensor Charts](#)
[Unit Upgrades](#)

Basic Status	Luminance: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Ambient Light</td> <td>19236 (full luminance @ 1500)</td> </tr> <tr> <td>Ambient Light Sensor</td> <td>19237</td> </tr> </table>	Ambient Light	19236 (full luminance @ 1500)	Ambient Light Sensor	19237				
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LED Status	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>GeoVu™ Ambient Light</td> <td>1500 (Day, ignored)</td> </tr> <tr> <td>Cloud Cover (ambient reduction)</td> <td>33% (ignored)</td> </tr> </table>	GeoVu™ Ambient Light	1500 (Day, ignored)	Cloud Cover (ambient reduction)	33% (ignored)				
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Downtime Incidents	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Sunrise Time</td> <td>05:40:15</td> </tr> <tr> <td>Sunset Time</td> <td>20:29:57</td> </tr> </table>	Sunrise Time	05:40:15	Sunset Time	20:29:57				
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Screen Snapshot	Video Input: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Source</td> <td>Input 2 (DisplayPort)</td> </tr> <tr> <td>Status</td> <td>Valid Resolution</td> </tr> <tr> <td>Resolution</td> <td>1920x1080</td> </tr> </table> Player 2 (DisplayPort): <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Power LED</td> <td>ON</td> </tr> </table>	Source	Input 2 (DisplayPort)	Status	Valid Resolution	Resolution	1920x1080	Power LED	ON
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Status	Valid Resolution								
Resolution	1920x1080								
Power LED	ON								
	Environmentals:								



Maximum noise recorded 73.5dB. The location of the maximum reading was in the centre of the unit just below the ad case door on the advertising face.

Comparative Readings

BT InLink

Junction of Newton St and Portland Street.





Maximum recording 83dB.

Ocean Outdoor

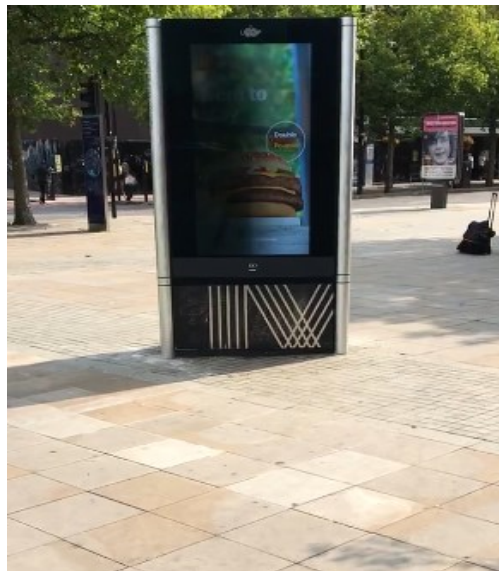
1. Portland Street near Pret a Manger



Maximum recording 86.3dB.



2. Manchester Piccadilly Gardens





Maximum recording 84.9dB.

Conclusions

Noise levels recorded

	Maximum Noise level	Approximate position of recording from ground. (all located approximately at the centre of the unit from right to left)
JCD Hub 1	72.4dB	455mm
JCD Hub 2	73.5dB	455mm
BT InLink	83dB	1200mm
Ocean 1	86.3dB	100mm
Ocean 2 with touchscreen	84.9dB	400mm

Ambient noise levels during the recordings tended to vary between 50-60dB.

All recordings were taken on sunny and hot days (above 25°C).

The perceived noise on the BT InLink product was considerably higher due to the height and direction of the noise (closer to ear level and directed forward).

The JCDecaux units appeared considerably quieter due to the height and direction of the noise (lower and directed downwards).

Further tests would be required to determine exact levels but the above recordings appear to depict an accurate portrayal.