



**Certificate of Compliance
for the
Calibration of Redflex HADECS3X Enforcement System**

We, Redflex Traffic Systems Pty Ltd
of 31 Market Street, South Melbourne, Victoria, Australia 3205
hereby certify that the Redflex HADECS3X system comprising of the components as listed below, has
been calibrated according to the Home Office Speed Meter Handbook (fourth edition) 15/05, and the
timing of the secondary check has been verified and both comply with the terms of the specification for
type approval.

Location:	4620B - M1
Redflex HADECS3X NK7 serial number:	HAD00302
Speed Radar - Serial number:	38148-01294
Tracking Radar - Serial number:	38147-00106
Date of calibration:	07/02/2019
Certificate Number:	CV10102396
Calibration carried out by:	Martin Watson
Signature:	
Checked By:	Ron Moore
Signature:	



CERTIFICATION RECORD

CALIBRATION CERTIFICATE NUMBER:	CV10102396	REDFLEX HADECS3X NK7 SERIAL NUMBER:	HAD00302
SR CERTIFICATE NUMBER:	<i>705083</i>	SERIAL NUMBER:	<i>38148-01294</i>
PRODUCT MODEL:	AGD SR-340		
FIRMWARE VERSION:	<i>MI-096-1</i>	TEST SOFTWARE VERSION:	<i>1.3.1.7</i>
DATE OF CERTIFICATION:	<i>07 February 2019</i>	RADAR TEMPERATURE (°C):	<i>28.94</i>
RELATIVE HUMIDITY (%):	<i>33.00</i>	AMBIENT TEMPERATURE (°C):	<i>24.00</i>
CERTIFICATION TEST PROCEDURE REFERENCE:	See 1201-007 REDFLEXradar-Certification System User Manual		
DESCRIPTION	COMMENT		Pass/Fail
EQUIPMENT TESTS			<i>Pass</i>
VISUAL INSPECTION			<i>Pass</i>
SPEED MEASUREMENTS			<i>Pass</i>
DESCRIPTION	MEASURED	LIMITS	
TRANSMIT FREQUENCY MEASUREMENT (GHz)	<i>24.09207229</i>	24.080 - 24.120	<i>Pass</i>
TRACEABILITY RECORDS OF INSTRUMENTS USED IN CERTIFICATION TEST			
INSTRUMENT DESCRIPTION:	SERIAL NUMBER:	CALIBRATION CERTIFICATE NUMBER:	NEXT CALIBRATION DUE DATE:
TEKTRONIX AFG3022B Function Generator	<i>C037185</i>	<i>18060338</i>	<i>11 June 2019</i>
PENDULUM CNT-90XL Frequency Counter	<i>178903</i>	<i>178903</i>	<i>12 June 2019</i>
FLUKE 971 Temperature Humidity Meter	<i>17580804</i>	<i>17580804</i>	<i>11 June 2019</i>
AGD MC-116 Target Simulator	<i>117117-00017</i>	<i>116050</i>	<i>27 July 2020</i>
CERTIFICATION TEST CARRIED OUT BY:	Martin Watson	NEXT CERTIFICATION TEST DUE:	06 February 2020
CHECKED BY	Ron Moore	<i>Template V20180906RX (SR)</i>	



SPEED MEASUREMENT

**CALIBRATION CERTIFICATE
NUMBER:**

CV10102396

**REDFLEX HADECS3X NK7 SERIAL
NUMBER:**

HAD00302

SERIAL NO: 38148-01294

Simulated Speed (mph)	Measured Speed (mph)				Speed Limits (mph)	Pass/Fail
	Advancing		Receding			
	Min	Max	Min	Max		
13.05	13.05	13.05	13.05	13.05	12.74 - 13.36	Pass
18.64	18.58	18.63	18.58	18.63	18.33 - 18.95	Pass
24.85	24.85	24.85	24.85	24.85	24.54 - 25.17	Pass
31.07	31.01	31.04	31.01	31.04	30.76 - 31.38	Pass
37.28	37.28	37.28	37.28	37.28	36.97 - 37.59	Pass
43.50	43.43	43.45	43.43	43.45	43.19 - 43.81	Pass
49.71	49.71	49.71	49.71	49.71	49.40 - 50.02	Pass
55.92	55.86	55.86	55.86	55.87	55.61 - 56.23	Pass
62.14	62.14	62.14	62.14	62.14	61.83 - 62.45	Pass
68.35	68.29	68.29	68.29	68.29	68.04 - 68.66	Pass
74.56	74.56	74.56	74.56	74.56	74.25 - 74.88	Pass
80.78	80.72	80.72	80.72	80.72	80.47 - 81.09	Pass
86.99	86.99	86.99	86.99	86.99	86.68 - 87.30	Pass
93.21	93.14	93.14	93.14	93.14	92.89 - 93.52	Pass
99.42	99.36	99.42	99.36	99.42	99.11 - 99.73	Pass
105.63	105.57	105.57	105.57	105.57	105.32 - 105.94	Pass
111.85	111.78	111.83	111.78	111.83	111.54 - 112.16	Pass
118.06	118.00	118.00	118.00	118.00	117.75 - 118.37	Pass
124.27	124.21	124.22	124.21	124.22	123.96 - 124.58	Pass
136.70	136.64	136.64	136.64	136.64	136.39 - 137.01	Pass
149.13	149.07	149.07	149.07	149.07	148.82 - 149.44	Pass
161.56	161.49	161.49	161.49	161.49	161.25 - 161.87	Pass
173.98	173.86	173.92	173.86	173.92	173.67 - 174.29	Pass
186.41	186.29	186.33	186.29	186.33	186.10 - 186.72	Pass

Template V20180906RX (SR)

CERTIFICATION RECORD

CALIBRATION CERTIFICATE NUMBER:	CV10102396	REDFLEX HADECS3X NK7 SERIAL NUMBER:	HAD00302
TR CERTIFICATE NUMBER:	31700115	SERIAL NUMBER:	38147-00106
PRODUCT MODEL:	AGD TR-317		
BIOS VERSION:	MI-135-7	DSP SOFTWARE VERSION:	MI-144-9
PIC FIRMWARE VERSION:	N/A	TEST SOFTWARE VERSION:	1.3.1.7
DATE OF CERTIFICATION:	07 February 2019	RADAR TEMPERATURE (°C):	N/A
RELATIVE HUMIDITY (%):	34.00	AMBIENT TEMPERATURE (°C):	23.70
CALIBRATED BANDWIDTH (MHz):	41.30		
CERTIFICATION TEST PROCEDURE REFERENCE:	See 1201-007 REDFLEXradar-Certification System User Manual		
DESCRIPTION	COMMENT		
EQUIPMENT TESTS			Pass
VISUAL INSPECTION			Pass
SPEED AND RANGE MEASUREMENTS			Pass
DESCRIPTION	MEASURED	LIMITS	PASS/FAIL
TRANSMIT FREQUENCY MEASUREMENT (GHz)	24.12429069	24.123 - 24.127	Pass
BANDWIDTH MEASUREMENT (MHz)	41.50	39.00 - 44.00	Pass
TRACEABILITY RECORDS OF INSTRUMENTS USED IN CERTIFICATION TEST			
INSTRUMENT DESCRIPTION:	SERIAL NUMBER:	CALIBRATION CERTIFICATE NUMBER:	NEXT CALIBRATION DUE DATE:
TEKTRONIX AFG3022B Function Generator	C037185	18060338	11 June 2019
PENDULUM CNT-90XL Frequency Counter	178903	178903	12 June 2019
FLUKE 971 Temperature Humidity Meter	17580804	17580804	11 June 2019
AGD MC-116 Target Simulator	117117-00017	116050	27 July 2020
CERTIFICATION TEST CARRIED OUT BY:	Martin Watson	NEXT CERTIFICATION TEST DUE:	06 February 2020
CHECKED BY:	Ron Moore	Template V20180906RX (TR)	



SPEED AND RANGE MEASUREMENT

CALIBRATION CERTIFICATE NUMBER:	CV10102396	REDFLEX HADECS3X NK7 SERIAL NUMBER:	HAD00302
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SERIAL NO: 38147-00106

Simulated Range (m)	Simulated Speed (mph)	Measured Advancing Range (m)	Measured Advancing Speed (mph)	Measured Receding Range (m)	Measured Receding Speed (mph)	Range Limits (m)	Speed Limits (mph)	Pass/Fail
23.80	31.07	23.90	31.07	23.79	31.01	22.10 - 25.50	30.76 - 31.38	Pass
23.80	62.14	24.00	62.20	23.70	62.07	22.10 - 25.50	61.83 - 62.45	Pass
23.80	93.21	24.10	93.33	23.61	93.27	22.10 - 25.50	92.89 - 93.52	Pass
23.80	124.27	24.10	124.34	23.60	124.33	22.10 - 25.50	123.96 - 124.58	Pass
23.80	155.34	24.10	155.40	23.60	155.34	22.10 - 25.50	155.03 - 155.65	Pass
23.80	186.41	24.02	186.47	23.69	186.41	22.10 - 25.50	186.10 - 186.72	Pass
51.00	7.46	51.10	7.58	51.10	7.46	49.30 - 52.70	7.15 - 7.77	Pass
51.00	12.43	51.12	12.55	51.09	12.32	49.30 - 52.70	12.12 - 12.74	Pass
51.00	18.64	51.14	18.77	51.06	18.64	49.30 - 52.70	18.33 - 18.95	Pass
51.00	24.85	51.20	24.92	51.01	24.81	49.30 - 52.70	24.54 - 25.17	Pass
51.00	31.07	51.20	31.07	51.00	31.00	49.30 - 52.70	30.76 - 31.38	Pass
51.00	37.28	51.20	37.40	51.00	37.19	49.30 - 52.70	36.97 - 37.59	Pass
51.00	43.50	51.20	43.62	51.00	43.50	49.30 - 52.70	43.19 - 43.81	Pass
51.00	49.71	51.20	49.77	51.00	49.71	49.30 - 52.70	49.40 - 50.02	Pass
51.00	55.92	51.21	55.93	50.97	55.86	49.30 - 52.70	55.61 - 56.23	Pass
51.00	62.14	51.28	62.26	50.93	62.06	49.30 - 52.70	61.83 - 62.45	Pass
51.00	68.35	51.29	68.48	50.90	68.35	49.30 - 52.70	68.04 - 68.66	Pass
51.00	74.56	51.30	74.63	50.90	74.56	49.30 - 52.70	74.25 - 74.88	Pass
51.00	80.78	51.30	80.83	50.90	80.72	49.30 - 52.70	80.47 - 81.09	Pass
51.00	86.99	51.30	87.12	50.90	86.93	49.30 - 52.70	86.68 - 87.30	Pass
51.00	93.21	51.30	93.33	50.90	93.21	49.30 - 52.70	92.89 - 93.52	Pass
51.00	99.42	51.30	99.49	50.90	99.42	49.30 - 52.70	99.11 - 99.73	Pass
51.00	105.63	51.31	105.70	50.89	105.57	49.30 - 52.70	105.32 - 105.94	Pass
51.00	111.85	51.33	111.96	50.85	111.78	49.30 - 52.70	111.54 - 112.16	Pass
51.00	118.06	51.36	118.19	50.85	118.06	49.30 - 52.70	117.75 - 118.37	Pass
51.00	124.27	51.36	124.40	50.84	124.27	49.30 - 52.70	123.96 - 124.58	Pass
51.00	136.70	51.38	136.82	50.85	136.64	49.30 - 52.70	136.39 - 137.01	Pass
51.00	149.13	51.35	149.25	50.84	149.13	49.30 - 52.70	148.82 - 149.44	Pass
51.00	161.56	51.35	161.67	50.87	161.49	49.30 - 52.70	161.25 - 161.87	Pass
51.00	173.98	51.31	174.11	50.89	174.01	49.30 - 52.70	173.67 - 174.29	Pass
51.00	186.41	51.28	186.52	50.91	186.35	49.30 - 52.70	186.10 - 186.72	Pass
81.60	31.07	81.81	31.13	81.70	30.94	79.90 - 83.30	30.76 - 31.38	Pass
81.60	62.14	81.90	62.30	81.60	62.01	79.90 - 83.30	61.83 - 62.45	Pass
81.60	93.21	82.00	93.39	81.52	93.17	79.90 - 83.30	92.89 - 93.52	Pass
81.60	124.27	82.00	124.40	81.50	124.27	79.90 - 83.30	123.96 - 124.58	Pass
81.60	155.34	82.00	155.45	81.50	155.28	79.90 - 83.30	155.03 - 155.65	Pass
81.60	186.41	81.93	186.59	81.58	186.32	79.90 - 83.30	186.10 - 186.72	Pass

Template V20180906RX (TR)