



Certified ISO 9001

GENESIS-VP™ USER'S MANUAL



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WELCOME TO DECATUR ELECTRONICS

Thank you for choosing this Decatur Electronics product—a highly advanced traffic radar device that will reward your department with years of dependable service. The *Genesis-VP™* design incorporates high performance and long range, with many leading features.

We urge you to study this manual before using the *Genesis-VP*, so you can maximize the benefits of this sophisticated radar device. Its digital signal processor (DSP) gives the device advanced capabilities unseen by many veteran officers. If you are as pleased with its performance as we think you will be, ask your Decatur sales representative about other Decatur products, including the *Genesis™* line of dash-mount moving radar products — the *Genesis-I™*, *Genesis-II Select™*, *Genesis-II Directional™* and handheld stationary radar products, including the *Genesis Handheld Directional™* and the *Genesis-VP Directional™*— and the *Galaxy Radar Message Trailer™* product line. Also, Decatur Electronics has a Hi8™ in-car video recording solution, the *Gemini™*—the *Gemini Headliner™* for the Ford® Crown Victoria™ and Chevrolet® Impala™ that fits flush with a vehicle's interior headliner and a *Gemini™* two-piece unit that fits in anywhere in the console area of any vehicle's interior.

Traffic officers told us exactly what they wanted in a hand-held radar device—and we built it. Try any one of our products and see if you don't agree that it is best-in-class!

—The management and staff at Decatur Electronics,
the nation's oldest radar company

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Introduction

The *Genesis-VP™* gives you the option to easily select and track vehicles approaching your position.

About This Manual

Note the following symbols in this manual.



indicates a warning message about safety precautions. Please read it carefully.



indicates a helpful tip or precaution to note.

1. Quick Start

If you are already familiar with operating and using police radar guns, you probably will want to follow the quick start instructions.

1.1 Initial Set Up

1.1.1 Insert the Batteries

Remove the Black & Decker® VersaPak™ batteries from their package and charge them according to the VersaPak™ instruction sheet (see section 2.1.2 Battery Charger for more about using the battery charger.) After charging the batteries, insert them into the handle grip.

* VersaPak™ is a registered trademark of the Black & Decker® Company.



Figure 1.1.1 Insert the batteries into the handle grip.

Push the batteries into the receptacles in the bottom of the handle until you hear them snap into place.

1.1.2 Control Panel Functions

The factory default settings for the control panel are

		Default
bL	Backlight	On
Aud	Audio volume	3
SEn	Sensitivity	5
SLh	Squelch	On

See section 3 Operating Modes for more on the settings and how to change the default settings.

1.2 Trigger Operation

The *Genesis-VP* transmits and receives microwave energy when you pull the trigger. When you want to lock onto a speed, release the trigger, then pull it again within 1/2 second.¹ The speed in the left of the window will move to the right. The locked speed clears when you pull the trigger again.

¹You can request Trigger Release Lock software that works another way. When you release the pulled trigger, the target speed locks and displays in the LOCKED window.

1.3 Measuring a Target Speed in Faster Vehicle Mode

The *Genesis-VP* operates in Strongest Signal mode, which is the default. If you have purchased Faster Target software, you can select the Faster mode of operation with the *FAST* button. In Faster mode, the *Genesis-VP* can operate in Faster-Toggle or Faster-Hold setting, which you select in the secondary menu.



2. Components

2.1 Batteries

The *Genesis-VP* comes with a Black & Decker® Interchangeable Battery System: two nickel-cadmium (NiCd), silver label, 3.6-volt VersaPak™ batteries and a two-port AC auto charger (part number P702-VP135). For increased runtime, you can use nickel metal hydride (NiMH), gold label, VersaPak™ batteries. Please read all the instructions and warnings on the VersaPak™ instruction sheet to ensure proper use and storage of your batteries.

Use the battery caps provided with the batteries to store or carry them, so metal objects (keys, coins, etc.) can not come in contact with the exposed metal end. Remember to remove the caps before placing the batteries in the charger or the *Genesis-VP*.

If the device is idle for 30 minutes, it automatically powers down to save the batteries. The batteries have a minimum life of 300 charge cycles. You can purchase additional batteries at hardware stores and from Decatur Electronics.

- ▶ • *When the radar is transmitting, it consumes roughly three times as much power from the batteries than when it is not transmitting. Keep this in mind to maximize battery life.*
- *The device draws a small amount of power from the batteries even when the power is off. When you are not using the device for extended periods, remove the batteries to save the charge.*



WARNINGS

- *IMPORTANT: Do not combine a NiCd (silver label) battery with a NiMH (gold label) battery in the same gun. It can damage the batteries.*
- *IMPORTANT: Using batteries that have mismatched voltages, such as one battery fully charged and another with low voltage can cause the device to incorrectly power up.*
- *Never attempt to open a battery. If the housing breaks or cracks, immediately discontinue its use, and do not recharge it.*
- *Do not incinerate the batteries. They can explode.*

If you have problems or questions about your batteries, contact Decatur Electronics at 800.428.4315, Black & Decker® at 800.54.HOWTO, or a local Black & Decker® service center (see the Tools Electric section in the Yellow Pages.)

2.1.1 Removing Batteries

To remove the batteries, press the red button with your thumb while pulling on the battery with your fingers.

2.1.2 Battery Charger

Only charge the batteries with the VersaPak™ battery charger. It is normal for the charger to hum and for the batteries and charger to become warm while charging. If a battery does not charge properly, check the receptacle to see if it is working or move it somewhere with a temperature between +40°F and +105°F. Unplug the charger when it is not in use.

2.2 Controls

2.2.1 Faceplate

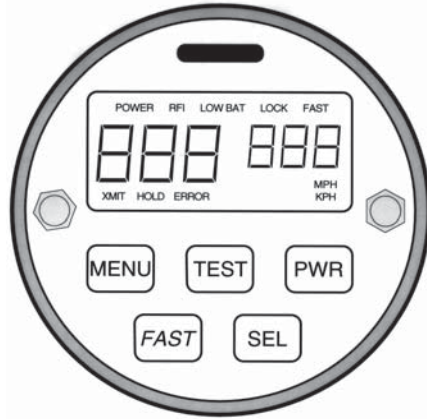


Figure 2.2.1 Faceplate

▶ *When you press the button of a valid function, the system beeps to acknowledge the command.*

MENU

The MENU button lets you view the options that you can change.

SEL

The select (SEL) button lets you choose the settings in each of the menu options. To change a menu option, press the SEL button.

TEST

When you press the TEST button, the *Genesis-VP* runs a self test. For more on tests, see section 6 Testing the Device.

FAST

When you press the *FAST* button, the *Genesis-VP* enters Faster target mode.

PWR

The PWR button turns the *Genesis-VP* on and off. If you press SEL while pressing power, the settings come up with the factory defaults.

2.3 Display

2.3.1 Number Segments

Three large digits (888) display the vehicle speed. The small digits on the right display either the locked speed or Faster target speeds.

2.3.2 Status Indicator Icons

The following icons can appear at the top or bottom of the display screen and describe the following conditions:

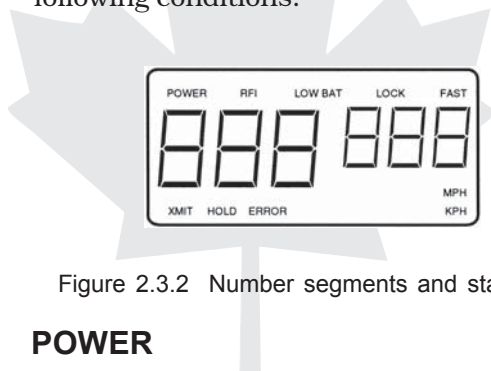


Figure 2.3.2 Number segments and status indicators

POWER

When POWER appears, the power is on.

RFI

The radio frequency interference (RFI) icon indicates that excess RFI energy is present. The radar automatically inhibits all speed measurements. No new speeds display or transmit via the serial port while this icon is active, and if the system is displaying a locked speed, the speed will remain locked. When the RFI condition no longer exists, the system will resume normal operation. Possible causes of this condition are the patrol vehicle's FM

communications, proximity to radio stations, and other broadcast equipment.

LOW BAT

The LOW BAT icon indicates that you need to recharge the batteries. The system will not transmit or display any new speeds while LOW BAT appears, and if the system is displaying a locked speed, the speed will remain locked.

LOCK

The LOCK icon indicates that the speed, previously displayed on the left window, is now locked and will appear in the right window.

FAST

FAST shows that the *Genesis-VP* is in Faster mode. When the device is not in Faster mode, it is in Strongest Signal mode, the default mode.

XMIT

XMIT means the *Genesis-VP* is transmitting.

HOLD

HOLD indicates the system is not transmitting.

ERROR

ERROR shows that the *Genesis-VP* has detected an internal hardware error, which can affect the operation of the radar device. Turn the gun off and back on. If the problem persists, contact Decatur Electronics, 800.428.4315, for what to do.

MPH and KPH

The *Genesis-VP* displays speeds in miles per hour (MPH) without the MPH indicator appearing. However, if the device is displaying speeds in kilometers per hour, KPH appears in the display.

2.4 Trigger

The *Genesis-VP* transmits and receives microwave energy when you pull the trigger. To lock onto a speed, release trigger, then quickly pull it again.¹ The speed displaying in the left of the window will move to the right. The locked speed clears when you pull the trigger again.

2.5 Mounting Configurations

The *Genesis-VP* is designed for hand-held operation. Optionally, you can mount it to a standard camera tripod. (To order tripods, see section 12 How to Order Additional Products.)



¹You can request Trigger Release Lock software that works another way. When you release the pulled trigger, the target speed locks and displays in the LOCKED window.

3. Operating Modes

The MENU button on the *Genesis-VP* control panel lets you review and change programmable options. The options are in two menus: primary and secondary. When you finish making your selection(s), release the buttons, and your new settings will be in effect. The radar gun will remember the settings you last set when it is turned off and will power up with them.

- ▶ *If you press and hold the SEL button when powering up the unit, the system will restore the factory default settings.*
- The Genesis-VP will exit menu mode if you do not press the MENU or SEL buttons after two seconds. If you press and hold either the MENU or SEL buttons, the Genesis-VP will remain in menu mode.*

3.1 Primary Menu

You can use the factory default settings listed on the next page or set your own. To select a setting, repeatedly press the MENU button until the setting you want to change appears. Then press the select (SEL) button to advance through that setting's options. When you have made your selection, release the buttons, and your new settings will be in effect. If neither MENU or SEL is pressed after 2 seconds, the radar gun will return to normal operating mode.



		Default	Options
bL	Backlight	On	On / Off



		Default	Options
Aud	Audio volume	3	0 - 6



		Default	Options
SEn	Sensitivity	5	0 - 5



		Default	Options
SLh	Squelch	On	On / Off

Figure 3.1 Primary menu settings

Backlight (bL)

This turns on and off the LCD backlight. bL ON is the default setting. To change this option to OFF, press the MENU then the select (SEL) button.

Audio (Aud)

The Audio setting controls the volume level of the Doppler tone. Press MENU, then press SEL to toggle through the volume level settings from 0 to 6 (0 is off, and 6 is the highest volume level.) It is the manufacturer's suggestion to never leave the audio setting on 0 as the audio doppler is part of the officer's tracking history requirement.

Sensitivity Level (SEn)

The SEn option lets you control the maximum target-acquisition range. SEn levels range from 0 through 5 (0 is off, 1 is the minimum range, and 5 is the maximum range.) You will normally want to start with the maximum range and decrease it until you attain the desired performance level.

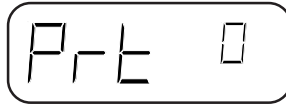
Squelch (SLh)

The squelch determines the type of Doppler audio you want the radar gun to send out. When squelch is on, the sound is only the Doppler tone for the displayed target. When squelch is off, you will hear all Doppler tones, including other vehicles, interference, and any noise the antenna receives.

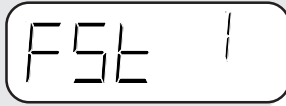
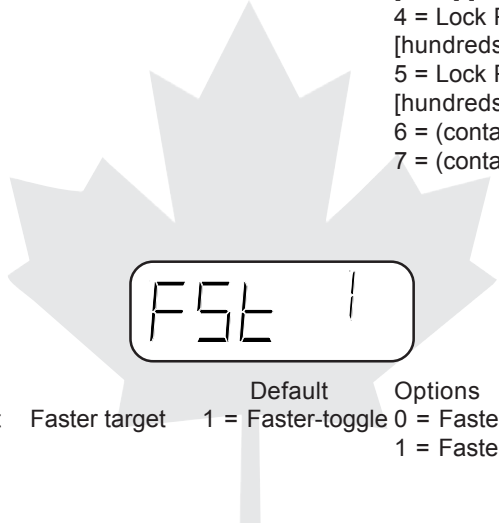
3.2 Secondary Menu

You can use the factory default settings listed on the next page or set your own. To select the secondary menu settings, press and hold the select (SEL) button, then press the MENU button. To select a setting, press and release the MENU button until the setting you want to change appears. Then press and release the SEL button to advance through that setting's options. When you have made your selection(s), release the buttons, and the new settings will be in effect. If neither MENU

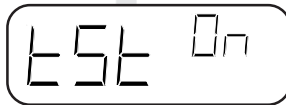
or SEL is pressed after 2 seconds, the radar gun will return to normal operating mode.



		Default	Options
Prt	Communication port	0 = None	0 = Not used 1 = sign/video 2 = Galaxy sign/video 3 = ASCII [hundreds][tens][ones].[tenths]<CR> 4 = Lock Port 1200 Baud [hundreds][tens][ones] 5 = Lock Port 9600 Baud [hundreds][tens][ones] 6 = (contact Decatur) 7 = (contact Decatur)



		Default	Options
FSt	Faster target	1 = Faster-toggle	0 = Faster-hold 1 = Faster-toggle



		Default	Options
tSt	Test	On	On / Off

Figure 3.2 Secondary menu settings

Communications Port (Prt)

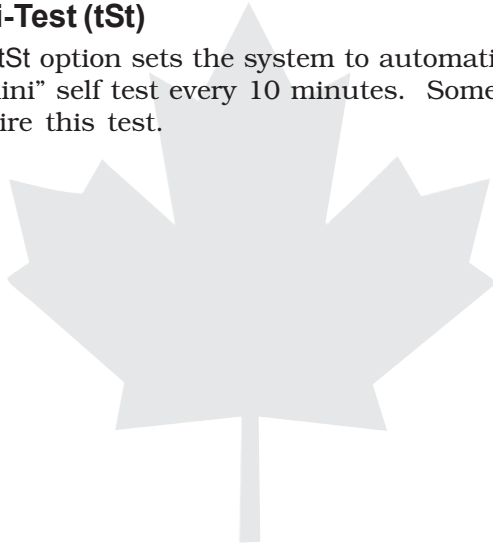
The Prt setting indicates which communication port configuration you want the system to use. Zero means no serial communication, and 1 through 7 are various setting options (see the factory default settings.)

Faster Vehicle (FSt)

The FSt setting programs the *FAST* button for either Faster-Hold or Faster-Toggle mode. The default, 1, is Faster-Toggle, and 0 is Faster-Hold.

Mini-Test (tSt)

The tSt option sets the system to automatically perform a “mini” self test every 10 minutes. Some states require this test.



3.3 Strongest Signal Mode

All radar tracks the strongest signal, an essential function of tracking history. The *Genesis-VP* defaults to the strongest signal-tracking mode and will stay in this mode until you press the *FAST* button. In Strongest Signal tracking mode, the *Genesis-VP* displays the speed of the vehicle with the strongest return signal, which is often the closest car. This speed appears in the left window.

3.4 Faster Mode

The advanced signal processing algorithms in the *Genesis-VP* simultaneously track multiple vehicles. In Faster mode, the *Genesis-VP* takes the strongest return signal and uses it as a reference level. It then looks at the return signal levels from all other vehicles going faster than the strongest vehicle and compares them to that reference level. It will display the speed of the vehicle that is moving faster than the strongest signal and is the next strongest target. In multiple target situations, the next strongest target going faster than the strongest is often closest to the strongest vehicle. The *FAST* icon illuminates when in faster mode.

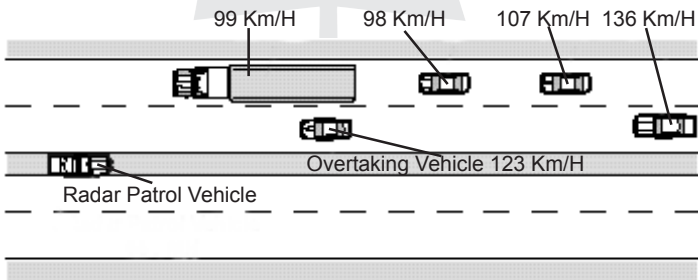


Figure 3.4 The vehicle going 123 Km/h is the next strongest target going faster than the strongest.



When in Stationary Mode, it is possible that the Faster vehicle is not traveling in the same direction as the Strongest vehicle.

3.4.1 Faster-Toggle Mode

In Faster-Toggle mode, the default setting, you can toggle between Faster target mode and Strongest Signal mode by pressing the *FAST* button (the *FAST* icon illuminates.)

To switch to Faster target mode, press and release the *FAST* button. The speed of the vehicle returning the strongest signal will continue to appear in the left window, and the speed of the next strongest target going faster than the strongest will appear in the right window. The system will remain in Faster mode until you press the *FAST* button again (the button toggles between Strongest Signal mode and Faster mode) or until you lock a speed, which automatically switches the gun back to the Strongest Signal mode.

In Faster-Toggle mode, the radar gun locks only the strongest vehicle speed. After the speed is locked, the *Genesis-VP* reverts to the Strongest Signal mode.

3.4.2 Faster-Hold Mode

To use Faster-Hold mode, press and continue to hold the *FAST* button. When active, the faster vehicle speed is in the left window. If the strongest vehicle is also the faster, the display will be blank.

To switch to Faster-Hold mode, press and hold the select (SEL) button. Then press and release the MENU button until you see FSt. Then press and release the SEL button until you see 0; release the button and this setting will be in effect.

If you lock the speed of the next strongest target going faster than the strongest, the LOCK and *FAST* icons illuminate to designate that the locked speed is a faster target lock. If these icons do not appear, the lock is on the strongest target.



Figure 3.4.2 Strongest Signal, Faster-Toggle, and Faster-Hold modes

4. Serial Output Mode

The *Genesis-VP* has an RS232 communications port on the side panel. Using a custom RS232 communications cable (part number S769-100), you can connect the *Genesis-VP* and transmit data to display signs, in-car video, and PCs for recording and analyzing speed data.



5. Performance Tips

Understanding potential radar interference and what to do when it occurs can greatly increase the radar's performance.

5.1 How Radar Works

Determining a vehicle's speed, begins with the radar antenna transmitting and directing a beam of microwave energy (radio waves) at an approaching (or departing) target vehicle. When energy from this beam strikes a vehicle, a small amount of the beam is reflected back to the antenna. The reflected signal frequency shifts by an amount proportional to the speed of the target vehicle. This is known as the Doppler effect. The radar device then determines the target vehicle speed from the difference in frequency between the reflected and transmitted signal.

5.2 Interference Sources and Remedies

When properly deployed and operated, Doppler radar technology is extremely accurate and reliable. However, variations in the environment can cause situations and circumstances, which can cause spurious (erratic and unusually low or high) speeds to display. Signs that a speed is spurious can include the following characteristics:

- A reading appears when no target vehicle is in the operational range of the antenna.
- **A target vehicle entering the operational range overrides the interference signal, causing the display speed to change suddenly to the vehicle's speed. This comment applies to paragraphs 5.2.2 through 5.2.10.**
- A target vehicle entering the operational range overrides the interference signal, causing the display speed to change suddenly to the vehicle's speed.
- The Doppler tone is corrupted with noise.

- Speeds are irregular and do not provide a valid traffic history.

Interference regardless of the source is neither additive or subtractive of a valid target reading. Interference will not impact on the accuracy of the radar unit, but it will impact on the operational range. If a member establishes a solid tracking history, as referred to in section 6.4, it can be established that interference was not present at the time of the speed reading.

5.2.1 Angular Interference (Cosine Effect)

The cosine effect causes the system to display a speed, which is lower than the actual vehicle speed. This condition exists when the target vehicle's path is not parallel to the antenna, including conditions such as the vehicle traveling on a curve or a hill.

As the angle between the beam of the antenna and the target vehicle increases, the displayed speed decreases. Ideally, an angle of zero (0) degrees is preferable, because the displayed speed is the actual target vehicle speed. However, in all uses of police radar, the radar device is always at a slight angle to the target vehicle to avoid collisions.

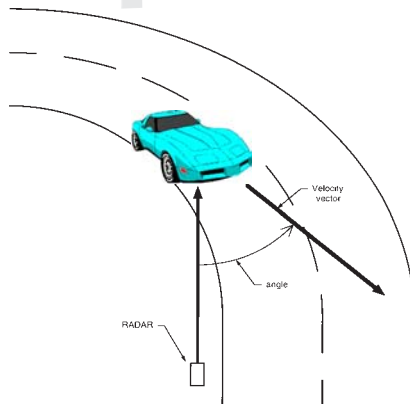


Figure 5.2.1 An angle between the antenna and the target vehicle causes the cosine effect.

The following table shows the effect that an increasing angle has on a displayed speed.

	Horizontal angle degrees:										
	0°	1°	3°	5°	10°	15°	20°	30°	45°	60°	90°
Actual speed:	Displayed speed:										
48 km/h	48	47	47	47	47	45	45	42	34	24	0
64 km/h	64	63	63	63	63	61	60	54	45	32	0
80 km/h	80	79	79	79	79	77	74	69	56	40	0
97 km/h	96	95	95	95	95	92	90	82	50	48	0
113 km/h	112	111	111	111	111	108	105	97	79	56	0
129 km/h	128	127	127	127	127	124	121	111	92	64	0

Table 5.2.1 Actual and displayed speeds at antenna-to-target angles

Small angles (less than 10°) have little effect on accuracy. As the angle increases, the displayed speed decreases. At 90°, the target speed is 0—grossly incorrect. Cosign Effect will always result in a target speed being displayed that is less than the actual speed of the moving motor vehicle, which will always be advantageous to the motorist.

5.2.2 Fan Interference

Fan interference is the most common form of interference that an officer is likely to experience. It is caused when the radar measures the speed of the vehicle blower fan. Changing the fan speed causes a proportional change in the display speed. To correct this, relocate the radar gun so that it does not display spurious speeds or turn off the motor fan. Fan interference will result periodically in spurious speeds being displayed and will be overridden by the presence of a valid target. Spurious responses are never accompanied by a valid TRACKING HISTORY WHICH IS REQUIRED BY SECTION 6.4 OF THIS MANUAL. Fan interference will deminish the operational range only; however, it will not affect the accuracy of speed readings.

5.2.3 Electromagnetic Interference (EMI)

Operating electric motors can produce EMI. EMI from power seats or windshield wipers can also produce spurious target speeds. To correct the interference, simply turn off its source.

5.2.4 Feedback Interference

When the radar beam is directed at computer screens, streetlights, and other electronic devices, it can display spurious speeds. To correct this type of interference, relocate the radar gun antenna.

5.2.5 Multi-Path Beam Cancellation

If multi-path beam cancellation occurs, the target vehicle speed sporadically blinks and reappears at semi-random intervals. This type of interference occurs when the radar loses track of a target vehicle, because the target is reflecting two or more signals, which are interfering with each other.

The Genesis-VP is immune from multi-path cancellation.

5.2.6 Radio Frequency Interference (RFI)

The system can inadvertently process radio energy as Doppler speeds, including that from police radios, airport radar, microwave transmission towers, CB radio transmitters, and AM/FM transmission towers. For this type of interference to occur, the radar gun must be operating very close to the radio transmitter.

The *Genesis-VP* contains an RFI detection circuit that detects excess radio frequency energy. **When stray radio frequency energy reaches an excessive level, the system displays an RFI message and stops processing and displaying speeds.** The system resumes normal operation when the RFI condition no longer exists. At that time, any locked speeds will display again.

5.2.7 Scanning

The *Genesis-VP* is designed to use while attached to a solid mount or hand-held in a steady position. Moving or “scanning” the antenna past stationary objects can cause the system to detect motion. Obtaining a speed reading from scanning will not happen when you properly use the radar and is considered deliberate misuse of the system.

5.2.8 Vehicle Ignition Interference

The *Genesis-VP* has been designed to operate from the vehicle's cigarette lighter receptacle. However, some vehicles exhibit excessive alternator noise at the lighter receptacle. In these rare cases, the radar can exhibit erratic readings, especially when the vehicle's electrical system is operated under heavy load. Wiring an accessory outlet directly to the battery minimizes the effect.

If you suspect your vehicle's electrical system, contact Decatur Electronics' Customer Service Department for more information.

6. Testing the Device

6.1 Operator-Requested Self Test

Pressing the TEST button initiates a comprehensive system self test, which checks the numeric displays and runs a target speed simulation. The *Genesis-VP* will not power down during a self test and checks the following:

Display Test – The display test verifies that the digit segments and status LED lights are working correctly and that none of the pixels in the number segments are burned out.

Circuitry Test – The system checks the internal circuitry. If the unit passes all internal checks, the messages PASS or FAIL (if a test fails) will appear in the display window.

Speed Simulation Test – The *Genesis-VP* verifies the speed accuracy using synthesized Doppler frequencies corresponding to a series of four simulated speeds: 25, 50, 75, and 100 when in Km/H mode.

6.2 Mini-Test

The tSt option sets the system to automatically perform a “mini” self test every 10 minutes, which is required in some states.

6.3 Master Reset

To reset all parameters to default values (except the tSt setting), press and hold the SEL button while you turn on the gun. The system will generate a long tone, reset all the parameters to the default values, and continue powering up.

6.4 Tracking History

For each enforcement action taken by the police with respect to a speeding offence arising out of the use of this radar unit a tracking history must occur. The tracking history shall consist of:

1. A Visual Observation of an approaching or receding Motor Vehicle that appears to be in excess of the posted speed limit in the area and an estimation by the officer of the speed of that motor vehicle is traveling. Generally, skilled officers are able to estimate the speeds of moving motor vehicles within plus or minus 5 Km/H per hour of the actual speed. This is an acquired skill that is taught on the basic operators course.
2. Having made the visual observation and estimate of the rate of speed, the radar unit will be placed in the operational mode.
3. Note, that the target speed displayed on the radar unit is consistent and confirms the officers initial observations and estimate, and that the audio tracking tone emitted by the radar unit is consistent with the visual observations and the target speed displayed.
4. Absence of any one of the above tracking history components and NO ENFORCEMENT ACTION shall be undertaken.

7. Care, Cleaning, and Storage

- Avoid spilling food, beverages, and other liquids and substances on the radar device.
- When you are not using or transporting the device, store it in its original packaging.
- To clean the radar device, dust it with a soft clean cloth, which is free of cleaning solutions.
- The *Genesis-VP* can withstand temperature variations, however, only the antenna is weather resistant.



8. Specifications

8.1 Antenna Parameters

K-Band

IACP Type III

Nominal transmission frequency 24.150 GHz ± 50 MHz

Nominal horizontal beamwidth 12°

Polarization Circular, left-handed polarization

Nominal microwave power output 10 mW

Maximum aperture power density 1 mW/cm²

Environment

Ambient operating temperatures -22°F to +158°F
-30°C to +70°C

Maximum humidity 90% relative humidity (non-condensing) at 98.6°F (37°C)

Water resistance meets International Robustness Standard IEC 529:1989 and European Community Standard EN 60529 Classification IP55. These set international standards for immunity from damage by solid protrusions and water.

8.2 Voltages

Supply voltage 6.2VDC – 8.0VDC

Power supplied from replaceable Ni-Cad batteries

Low voltage threshold 6.2VDC

8.3 Speed Range Parameters

Speed Display Ranges	Minimum	Maximum
Target: Km/H option	8	320

8.4 Power Consumption Parameters

Supply voltage range 6.2VDC – 8.0VDC

All currents measured at 7.2VDC with backlight on.

Standby (antenna off)	.180 amperes
Antenna ON (no targets displayed)	.370 amperes
Antenna ON ("55" target displayed)	.440 amperes
Antenna OFF (segment check "888 888")	.180 amperes
Antenna ON (segment check "888 888")	.370 amperes

All currents measured at 7.2VDC with backlight off.

Standby (antenna off)	.155 amperes
Antenna ON (no targets displayed)	.345 amperes
Antenna ON ("55" target displayed)	.415 amperes
Antenna OFF (segment check "888 888")	.155 amperes
Antenna ON (segment check "888 888")	.345 amperes

9. Legal Requirements

9.1 FCC Document

FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

GRANT OF EQUIPMENT AUTHORIZATION
Certification

Decatur Electronics Inc
715 Bright Street
Decatur,IL 62522

Date of Grant: 02/28/2000

Application Dated: 12/21/1999

Attention: Randall Sanner

NOT TRANSFERABLE

EQUIPMENT AUTHORIZATION is hereby issued to the named GRANTEE, and is VALID ONLY for the equipment identified hereon for use under the Commission's Rules and Regulations listed below.

FCC IDENTIFIER HTRCR-1KD
Name of Grantee Decatur Electronics Inc

Equipment Class: Part 15 Field Disturbance Sensor
Notes: Traffic Safety Radar

Grant Notes	FCC Rule Parts	Frequency Range (MHZ)	Output Watts	Frequency Tolerance %	Emission Designator
	15	24075 - 24175			

Mail To:

EA96328

9.2 Canadian Industry Certificate of Technical Acceptability



Industry Canada Industrie Canada

No. > 9501

RADIO EQUIPMENT CERTIFICATE OF TYPE APPROVAL

CERTIFICAT D'HOMOLOGATION DE MATÉRIEL RADIO

CERTIFICATION No. No. DE CERTIFICATION	>	12701021259		
ISSUED TO DÉLIVRÉ À	>	DECATUR ELECTRONICS INC.		
TYPE OF EQUIPMENT GENRE DE MATÉRIEL	>	RADAR		
TRADE NAME AND MODEL MARQUE ET MODÈLE	>	G-VP GENESIS-VP		
FREQUENCY RANGE BANDE DE FRÉQUENCES	>	2413 GHz		
EMISSION DESIGNATION DESIGNATION D'ÉMISSION	>	1M2NON		
R.F. POWER RATING PUISSANCE NOMINALE H.F.	>	176.5 mWatt		
CERTIFIED TO CERTIFIÉ SELON LE	>	SPECIFICATION CHIER DES CHARGES	RSS210	ISSUE 2 ÉDITION

Certification of equipment means only that the equipment has met the requirements of the above noted specification. License applications, where applicable to use certified equipment, are acted on accordingly by the issuing office and will depend on the existing radio environment, service and location of operation.

This certificate is issued on condition that the holder complies and will continue to comply with the requirements of the radio standards specifications and procedures issued by the Department.

ISSUED UNDER THE AUTHORITY OF MINISTER OF INDUSTRY
DÉLIVRÉ AVEC L'AUTORISATION DU MINISTRE DES INDUSTRIES

DATE **October 22, 1998**

L'homologation de matériel terminal signifie seulement qu'il est conforme aux exigences du cahier des charges mentionné ci-dessus. Les demandes de licence, le cas échéant en vue de l'utilisation de matériel certifié seront traitées en conséquence par le bureau chargé de délivrer lesdites licences, en tenant compte du milieu radioélectrique ambiant, du service radio existant et de l'emplacement de la station.

Le présent certificat est délivré à condition que le détenteur se conforme et continue à se conformer aux cahiers des charges et procédures sur les normes radioélectriques publiées par le ministère.

FOR

DIRECTOR GENERAL
SPECTRUM
ENGINEERING
BRANCH

DIRECTEUR GÉNÉRAL
GÉNIE
DU SPECTRE

Canada

9.3 Radar Case Law

See Appendix A for more information on the Offense of Speeding and Training Qualifications.



10. Frequently Asked Questions (FAQ)

- Q. My radar gun will not power up. What should I do?
- A. First make sure the batteries are locked in place. If the gun still will not power up, try putting in new or recharged batteries. If it still doesn't power up after this, contact Decatur Electronics at 800.428.4315.
- Q. My radar gun has poor range. How can I remedy this?
- A. Make sure the settings are adjusted properly and verify that the antenna has no obstructions in front of it. If the gun still has poor range, increase the sensitivity level (SEn). If you still have this problem, contact Decatur Electronics.
- Q. How long will my batteries last?
- A. The batteries will last approximately as long as an average shift. For specifics, see section 2.1 Batteries.
- Q. Will my *Genesis-VP* work while my vehicle is moving?
- A. No, the radar gun is a stationary only model, so your vehicle should be parked and you need to hold it steady while operating it.
- Q. What if I drop my gun?
- A. The *Genesis-VP* is extremely durable with a Black & Decker® designed handle. Simply reload the batteries, power up, and try it. If the gun doesn't appear to work properly, contact Decatur Electronics.
- Q. Will Decatur Electronics traffic safety radar systems interface with in-car video systems?
- A. Yes. Decatur's traffic safety radar devices will interface to various in-car video systems if the device has an active communications port. A variety of in-car video systems are on the market. Please call our sales staff to see which video systems will work with your Decatur radar device.

- Q. Does Decatur Electronics carry other law enforcement products?
- A. Yes, the *Genesis™* series of hand-held guns—the *Genesis Handheld Directional™*, the *Genesis-VPD™ (Directional)*, and the *Genesis-I™*, *Genesis-II Select™* and *Genesis-II Directional™* dash-mount moving radar products, and *Gemini™ Hi8™* and *Gemini Digital™* in-car video solutions.
- Q. Does Decatur Electronics have a sports gun designed specifically for sports such as baseball, softball, racing, watercraft, or snowmobiles?
- A. Decatur Electronics has developed a radar gun specifically for use in baseball and softball. We market this radar gun exclusively through the JUGS Company. Contact 800.547.6843, www.thejugscompany.com.

Decatur's *Prospeed™ model CR-1K™* sports radar works well with almost any kind of racing, including watercraft, snowmobile, motorcycles, and cars. Contact Decatur for more information on this product.

- Q. Does Decatur make speed trailers or speed signs?
- A. Yes, Decatur has a variety of speed signs and trailers called the *Galaxy™* series. Contact your Decatur sales representative for more information.

11. Service

11.1 Warranty

TWO-YEAR RADAR WARRANTY

Decatur Electronics, Inc. guarantees the *Genesis-VP* to be free from defects in workmanship and material and to operate within specifications for a period of two years. During this period, Decatur Electronics will repair or replace, at its option, any component, except batteries or chargers, found to be defective, without cost to the owner, providing you return the unit to the factory or to a Decatur authorized warranty service center.

(Note: The VersaPak™ batteries and charger are warranted by Black & Decker®. For warranty assistance on batteries and chargers, call 800.762.6672.)

The full warranty on parts and workmanship does not include normal wear and tear, crushing, dropping, fire, impact, immersion, or damage from attempted repair or modifications by unauthorized service agents.

For repairs, simply return the unit (transportation prepaid) directly to the factory or to a Decatur authorized warranty service center. Refer to section 11.2 Service Return Procedure.

TWO-YEAR WARRANTY EXCEPTION

If you purchased the radar unit under a special buying program, such as a state purchase contract, etc., the above warranty may not apply. Please refer to the buying program contract for the appropriate warranty terms or contact Decatur Electronics.

If you are interested in an extended warranty or the Maintenance*PLUS* maintenance contract, contact your sales representative to discuss the options.

11.2 Service Return Procedure

If you have questions, want a quick problem diagnosis, or need to return your *Genesis-VP* to the factory:

- Call Decatur Electronics Customer Service and ask for the Repair Services Department. Have the serial number of the radar gun ready.

Phone: 800.428.4315

Fax: 217.428.7508

If you need to return your radar gun to Decatur Electronics:

- Return ALL of the *Genesis-VP* parts in the original packaging (transportation prepaid).
- Include a note describing the problem and/or the incident that resulted in the problem. Failure to do so can delay the return of the system.
- The Repair Services Department will issue you a return authorization (RA) number. Write the RA number on your note and shipping label.
- Return the system to:

Decatur Electronics, Inc.

715 Bright Street

Decatur, IL 62522 USA

RA# XXXXXX

The customer is responsible for the shipping charges to send the system to Decatur Electronics.

If we receive a system from a customer COD that is still under warranty, we will charge the customer for the amount of COD freight charges plus an additional 10% for handling after we repair the system. Also, we

will add COD and a 10% handling fee to the repair bill as out-of-warranty repairs.

The customer is responsible for all shipping charges to the Decatur service location. Decatur does not accept incoming COD shipments. Decatur Electronics will pay the freight (up to \$10.00 US) for shipping the system from the repair facility to the customer, providing the system is still under warranty. We will charge the customer for any shipping charges above the initial \$10.00. If you want to ship your package express or next day air, we will invoice you for these freight charges.

If your radar is out of warranty and you would like to know the cost of repair prior to the actual repair work being performed, Decatur would be happy to give you a repair estimate. To obtain an estimate, request it either on the paperwork you submit with the radar when you send it in for service or when you obtain a return authorization (RA) number. Decatur provides estimates only upon request.

The initial charge for an estimate is currently \$50.00 per unit if your radar gun is not under warranty plus the return shipping and handling fees. If, after reviewing the estimate cost, you decide not to have your radar repaired, you will be invoiced \$50.00 as a minimum charge. If you decide to have your radar gun repaired, you do not owe the estimated charge (the charge is waived) and only pay the amount stated in the estimate.

12. How to Order Additional Products

You can order upgrades to the *Genesis-VP* (when available) as well as cases, power supplies, tripods, and tuning forks. To see product descriptions or order products, see the Decatur Electronics Web site at www.decaturradar.com or call the sales office at 800.428.4315.

Product Description	Part Number	Price
Black & Decker® VersaPak™ batteries and charger		
Two nickel cadmium (NiCd), silver label, 3.6-volt batteries and AC 2-port charger	P702-VP135	\$29.95*
Nickel metal hydride (NiMH) gold label battery	P702-VP110-BULK	\$22.25
Nickel cadmium (NiCd) silver label battery	P702-VP100-BULK	\$14.95
Custom RS232 communications cable	S769-100	\$70.00
Molded holster	S780-400-0	\$79.99
Pole mount bracket	S758-75-0	\$29.95
Tripod	P761-1	\$70.00
Tripod adapter	S761-6	\$ 4.70
Carrying cases		
Cardboard packing box/carrying case	P1025-37	\$15.00
Hard case with cut-out foam (recommended)	P801-GVP	\$75.00
Soft case (black)	P801-22BLK	\$34.95

*Prices are subject to change.

Appendix A Radar Case Law

The Offence of Speeding (General)

R. v. Hickey (O.C.A.) 1976

Speeding is an offence of absolute liability. Defence of reasonable mistake of fact is not available.

R. v. Hickey (O.H.C.J.) 1976

Speeding - defendant's speedometer inaccurate - Court held speeding was a strict liability offence to which defence of reasonable mistake of fact did exist.

NOTE: OVERTURNED ON Appeal, See: R.v. Hickey (O.C.A.) 1976

R. v. Cunningham (O.H.C.J.) 1979

Accused misread speed limit sign and believed he was in a higher speed limit zone. HELD: Accused's mistake was a mistake of law, which is no defence to the charge of speeding.

R. v. Naugler (N.S.S.C.) 1981

Speeding is an offence of absolute liability, to which mistake of fact is no defence.

R. v. Bigioni (O.C.A.) 1988

ISSUE: What evidence is required to satisfy burden on crown prima facie in prosecution of charge of speeding when evidence obtained by radar?

The Ontario Court of Appeal affirmed that the evidence adduced at trial was sufficient prima facie evidence of speeding. (Refer to transcript of trial proceedings for particulars of evidence adduced)

R. ats. Sim (O.C.A.) 1988

See transcript of evidence at trial

- no evidence of visual observation
- no evidence of officer's training and qualifications
- no evidence tests performed on radar unit conformed with manufacturer's specifications
- no evidence as to accuracy of tuning forks
- no evidence radar units "is capable of accurately measuring the speed of moving motor vehicles"

Held on appeal: Evidence before trial Court was sufficient to support conviction.

R. v. Grainger (O.C.A.) 1958

Speed by radar: Counsel argued it must be established that radar, when properly used, was capable of registering speed of a motor vehicle on a highway and that the machine was in good working condition and was properly used.

HELD: On summarized evidence it was implicit that radar when properly used is capable of registering speed of motor vehicle and at time was being properly used and in good working order. As defence merely claimed but did not show machine subject to weaknesses, conviction proper on weight of evidence.

R. v. Werenka (Alta. Q.B.) 1981

ISSUE: What evidence Crown must establish to prove prima facie case where speed by radar.

HELD: Crown only had to prove prima facie case. Not obliged to demonstrate that the instrument was capable of accurately registering speeds over the entire range of the instrument where there was no evidence to throw doubt on the officer's evidence.

1. qualified operator
2. tested and accurately measured the speed of the appellant's vehicle
3. evidence prima facie notwithstanding that the officer did not have a detailed knowledge of the working of the radar set.

R. v. Joudrey (1992) Nova Scotia Prov. Court

The accused was charged with speeding contrary to s. 106(2) of the Motor Vehicle Act. The night of the alleged offence was foggy and drizzly. The accused insisted that he was not driving over the speed limit and challenged the accuracy of the RADAR readings. His lawyer cross-examined the RADAR operator and, in doing so, referred to a textbook, “the Law of Speeding and RADAR”, and specifically to passages stating that certain atmospheric or environmental conditions could give spurious readings. The court did take judicial notice of the passages in the textbook and the accused was acquitted.

Griffin v. the Queen (N.S. Cnty. Ct.) 1980

Officer testified the appellant traveled at 107 kilometres in a zone marked for a maximum of 80 kilometres. He neither described the speed in terms of “kilometres per hour”, nor did he describe the purpose or functioning of the radar gun. HELD: Judicial notice could be taken of the functioning of the radar gun. While the description of the speed was imprecise, the intended meaning was clear.

R. v. Longmire (1993) Nova Scotia Supreme Court (Appeal Div.)

The appellant’s conviction was affirmed on appeal. The appellant appealed further, arguing that the trial Judge erred in his interpretation and application of s. 88(5) of the Motor Vehicle Act and that the Crowns refusal to provide him with a copy of the RADAR operation manual violated his rights under ss. 7 and 11(d) of the Charter, preventing him from making full answer to the charge. Defence council indicated that his reason for asking for the manual was “so that the defence can make itself familiar with the particular operation of this RADAR unit and in order that we can intelligently cross-examine the Crown with regards to how he operated the RADAR on that day.” He also wished to have the manual to review sources of interference that may make the unit

susceptible to inaccuracies. In addition, the testing procedure was sought for review. The Crown, in response to the preliminary motion, indicated that it would not provide a copy of the manual, but would consent to an adjournment so the defence could hire an expert in the operation of the RADAR machine. The trial Judge declined to order a stay, as defence requested, but did grant an adjournment so that defence counsel might obtain the manual from another source. Defence counsel did not pursue the matter of disclosure on the adjourned date, nor did they cross-examine the officer with respect to the operation of the RADAR. The appellant did not lay a rational basis or factual foundation for his claim for disclosure. In an absence of an air of reality to the request for production, there was no evidence of a breach of the Charter. The appeal was dismissed.

R. v. Windrem (May 27, 1986, Brampton Prov. Off. Appt. Ct.)

Defence agents/counsel use this case to support their argument that there must be evidence before the Court that the tests conducted on the radar device were in accordance with the accepted manufacturer's technique. It is apparent from the Judgment that the appeal was allowed as the Justice of the Peace at trial misdirected himself on the evidence. The J.P. in his reasons for judgement found that the officer had checked the radar before and after use by the accepted manufacturer's technique. That evidence was not before the J.P. at trial.

R. v. Furlong (P.O.A.) 1985

Defence agents/counsel use this case to support their argument that the officer must state in evidence “- I tested the radar...” It is apparent from the Judgment on appeal, that the appeal was allowed due to the fact that the J.P. at trial misdirected himself on the evidence before him. The J.P. found as a fact that the officer was the person that did the testing, because there was no one else in the police car. There was no such evidence before the J.P. at trial.

Owusu v. R. (P.O.A. Appeal Ct.) 1988

1. It is not mandatory for the speed limit sign to display a tab sign below.
See Reg. 486 (d) "MAY" display...
2. There is no statutory provision in Ontario Highway Traffic Act, for the admissibility
Of a certificate as to the accuracy of the tuning forks.
(Alberta Court of Appeal decision Re: speeding and necessity to file certificate distinguished)

R. v. Wagner (1999), **Ontario Court of Justice**

The appellant in this case as charged for speeding and requested a trial. The officer in charge of the matter encouraged the woman to plead guilty in exchange for a reduction of the offence by 10 km/h. The officer later had a paralegal approach the woman and offer his unsolicited opinion that she was unlikely to be successful at trial and should accept the officer's reduction, which she did and plead guilty. She later appealed the conviction citing that she had been intimidated into the agreement. In his ruling, Judge K.P.Evans stated, "This long time practice of having the charging police officer attempt to negotiate a plea or arrange a settlement of a case such as this, is archaic and fraught with dangers to the integrity of our judicial system as it stands today. The responsibility for offering or accepting any plea negotiations are solely within the jurisdiction of the Provincial Prosecutor assigned to the said Court." The appeal was granted and a dismissal was ordered.

R. v. Howe (P.O.A. Appeal Ct.) 1988

Requirement in Alberta case for a certificate as to accuracy of tuning forks is unreasonable and not necessary. See R. v. Bourque (1985 Alta. Q.B.)

R. v. Meyer (P.O.A. Appeal Crt.)

On appeal, Court held that there must be evidence that the radar device was “capable of registering the speed of vehicles”.

R. v. O'Reilly (Alta. Dist. Crt.) 1979

Where Crown failed to adduce evidence that the radar set was capable of accurately measuring the speeds and that the tests were approved tests, which evidence would have been given by the officer who testified, then appeal must be allowed and conviction set aside.

NOTE: Speeding is an offence of absolute liability. This means that MENS REA (a guilty mind) is not an element that must be proven. Guilt follows proof of the ACTUS REUS (proscribed act).

Because speeding is an absolute liability offence, a defence argument that, owing to a defective speedometer the accused honestly believed that he or she was not exceeding the speed limit, would not be successful.

R. v. Keenan (1994) British Columbia Supreme Court

The accused appealed a conviction for speeding. One of his three grounds for appeal was that there was insufficient evidence of the accuracy of the RADAR measurement showing that the accused was speeding.

The police officer testified that, prior to starting his shift, he had tested the device using a tuning fork. He also testified that he visually estimated the speed of the vehicle to be 90 km/h: the RADAR device displayed a speed of 92 km/h. There was ample evidence to support the justice of the peace's conclusion that the measured speed was accurate. It was not necessary that the accuracy of the tuning fork be proven.

R. v. Cook (1994) Nova Scotia Supreme Court

The accused was convicted of speeding based on a reading from a moving RADAR. The accused appealed arguing that the trial Judge erred in finding that a prima facie case as to the accuracy of the RADAR equipment had been established since no certificate was produced attesting to the frequency used by the tuning fork to calibrate the machine. He also argued that the Crown failed to make full disclosure in that it failed to give notice that it intended to give expert testimony from the officer/RADAR operator. Finally, he argued that the Crown failed to prove that signs were erected and maintained imposing an 80 km/h speed limit at the time and place in question. The appeal was dismissed.

The Motor Vehicle Act makes it clear that, whether posted or not, there is a prima facie speed limit on all highways in Nova Scotia of 80 km/h. The accused conceded that he had the entire file of the Crown. There was no withholding of any information; there was no expert's report and no need for the preparation of any expert report. The accused argument as to the accuracy of the instrument would be persuasive if the alleged offence was one in which there was a marginal difference between the speed limit (80km/h) and the speed of the accused (130km/h) and if there was no other persuasive evidence.

R. v. Lounsbury (1993) Manitoba Court of the Queen's Bench

The accused was charged for speeding. The RADAR operator testified at trial that it was his usual practice to test the unit both before and after issuing an offence notice, but he had no independent recollection of performing the tests in this case. He made a note in his notebook that he had performed a test or tests, but did not note the time of the test. The accused was convicted and appealed. The appeal was allowed.

Evidence as to the operator's usual practice did not constitute proof beyond a reasonable doubt that the

RADAR device was operation in this case. All that could be safely inferred from the RADAR operators testimony and notes was that he tested the RADAR device and found it to be in good working order at some point or points during the relevant shift. As a result, the appeal was allowed and the conviction was quashed.

R. v. Friedlan (1993) Ontario Court of Justice (Prov. Div.)

Where a person is charged with speeding in a construction zone, the onus is on the Crown to prove that the portion of the highway travelled was designated as construction zone under s. 128(8) of the Highway Traffic Act. Pursuant to s.128(9) of that Act, such designation is not a regulation within the meaning of the Regulations Act.

In this case, despite the fact that the officer testified that this was a construction zone in question and the area was clearly posted as an 80 km/h zone, the court allowed the conviction, but amended the offence to indicate the non-construction zone speed limit of 100 km/h.

Quebec c. Robitaille (1991) Quebec Court of Appeal

A police officer who was following the accused's vehicle testified that the speedometer of his own car recorded a speed of 140 km/h while the speed limit was 90 km/h. At the end of the Crown's case, the accused moved for non-suit on the grounds that the speed at which he was travelling was not established. This argument was rejected and the accused was convicted. On appeal by trial de novo, the Superior Court quashed the conviction. The Crown appealed.

The appeal was allowed and the conviction was restored. If a speed established by a RADAR device is sufficient prima facie evidence, a fortiori is the speed recorded by the speedometer. Expert evidence establishing the speed at which the accused was driving is not required, since the accused had not adduced evidence raising a reasonable doubt as to the accuracy of the police officer's

speedometer. Therefore, the conviction was justified and had to be restored.

Quebec c. Mason (1988) Quebec Superior Court

The accused was convicted of speeding. He appealed, challenging the RADAR evidence. The appeal was dismissed. Leaving aside cases in which calibration, verification of calibration, method of operation, qualifications of the operator or other factors cast a doubt on the evidence of operation and capabilities of a device, the testimony of a qualified operator can found a conviction. Once the conditions precedent are met the fallibility of the device goes to weight. It is unnecessary to show scientifically the principles of RADAR.

R v. Strong (1988) Nova Scotia Court

The accused was acquitted of a speeding charge. Although the trial Judge accepted the evidence of the police officer with respect to the actual speed of the accused's vehicle as indicated by the RADAR, he entered an acquittal on the basis that the Crown had failed to prove that the accused had passed a speed zone sign indicating the posted speed in the area in question. The Crown appealed. The appeal was allowed.

There was requirement in the relative statutory provision that speed zone signs be erected so as to be always visible to a motorist traversing a section of highway covered by the speed approved for that area. Common sense dictated that such could not have been the intention of the Legislature - otherwise such signs would have to be erected at each street intersection and at various intervals along all the province's roadways.

Quebec c. Rannaud (1988) Quebec Provincial Court

The accused was stopped for speeding. The sole evidence was from a RADAR operator. The operator testified that he took an instruction course and that he frequently used the device on duty. He indicated that on the night

in question he manually and electronically verified the accuracy on three occasions. He also verified the devices operation after stopping the accused. Manual checks were done by means of a tuning fork. The accused was convicted.

No expert was needed to provide evidence regarding calibration. The absence of legislative approval of the use of tuning forks did not invalidate its effectiveness on calibration. If the operator carries out tests correctly and in conformity with recognized methods, he can speak to accuracy of the device and its proper functioning. An operator need not be familiar with the relevant laws of physics. Here, the results of the test confirmed the accuracy.

TRAINING/QUALIFICATIONS

R. v. Wolfe (B.C.C.C.) 1979

The officer had some training and experience operating radar set, but training “fell short” which cast doubt on the accuracy of the device and its results.

R. v. Brewer (May 19, 1988, Prov. Off. Ct. Nwkt, Ont.)

At trial, officer had stated in-chief that he was a qualified radar operator and that he had received some basic training from an experienced officer in the use of the radar. In cross-examination, the officer’s qualifications were challenged.

HELD ON APPEAL: In this case, the officer could not be regarded as a “qualified radar operator” and therefore, a prima facie case was not made out.

NOTE: Can be distinguished on the facts of this case, as officer had no formal training.

R. v. Waschuk (Sask. Q.B.) 1970

Judicial notice of radar: Judicial notice may only be taken of facts which are known to intelligent persons

generally, therefore, judicial notice may not be taken of meaningfulness of tests.

Radar operator should be able to give evidence as to whether the machine is in good working order and capable of recording the speed of the vehicle being tested.

R. v. Karpetz (Unreported, March 18, 1982 (Prov. Off. App. Ct.)

His Honour, Provincial Court Judge W. Hryciuk.

Failure to show the radar reading to the defendant does not make the charge bad. No duty is cast upon the officer to show the reading on the radar screen. As a matter of courtesy, he can advert the defendant's attention to the reading whether the defendant asked to see it or not.

R. v. Axler (Unreported August 20, 1981, Prov. Off. App. Ct.)
His Honour, Provincial Court Judge R.B. Dnieper.

Radar alone is good evidence. After 42 years of use, the courts will accept as prima facie evidence, the accuracy of radar devices. No longer is radar merely corroborative evidence. It is now primary evidence.

Before the prima facie rule applies, it has to be established in evidence that:

1. the radar machine was in proper working order, and
2. the radar operator was qualified to operate the machine in question.

At all times, the onus is on the crown to prove its case beyond a reasonable doubt.

R. v. Seymour (Unreported, June 16, 1982 Prov. Off. App. Ct., County of Huron, Ont.)

The crown must establish in evidence that the officer is a person who has been properly trained in the use of the device and further, that at the time in question the radar device was operating accurately.

R. v. Lehane (1982, 15 M.V.R. 160 (Ata Q.B.))

There was no evidence that the device had been recently tested to determine whether or not the device was operating properly and was capable of accurately registering speeds.

The Judge stated in his opinion it would be easy matter for police to test the accuracy of radar devices by means of a calibrated tuning fork or by some other means before and after a duty shift during which the device was used.

R. v. Ellision (Feb. 11, 1987, British Columbia County Court)

The accused was convicted of speeding. He appealed on the ground that the denial by the police officer who stopped his car of his request to see the radar reading erasure of the reading by the officer contravened the best evidence rule and violated his right to make full answer and defence under section 7. of the Charter.

Held - The appeal was dismissed.

The best evidence rule was confined largely to documentary evidence; apart from documentary evidence it was not usually applied to exclude secondary evidence otherwise admissible. There was no suggestion of an attempt to conceal evidence. The accused had been given the opportunity to make full answer and defence.

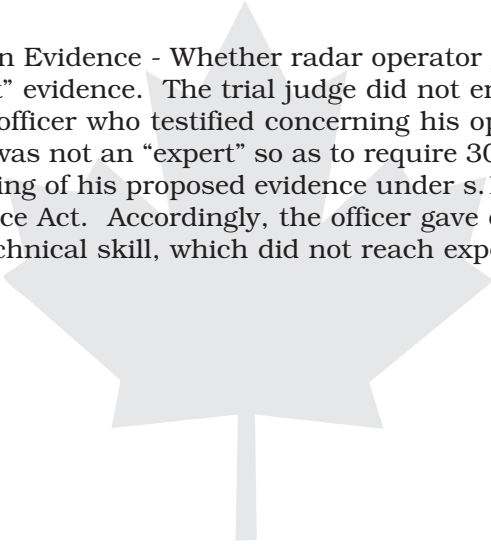
R. v. Hallett (May 3, 1988, N.S. Co. Ct.)

Appeal by accused from his conviction on a charge. The accused's vehicle had been clocked on radar and the accused now argued that the police officer operating the radar device had never been properly qualified as an expert to do so - No objection had been raised as to the qualifications of the police officer during his evidence at trial nor was the officer cross-examined as to his qualifications. In the circumstances it was not

necessary for the Crown to establish that the police officer was an “expert” as the evidence which he was being asked to give was not in the nature of an opinion but more in nature of observations. The trial judge clearly found that the police officer could operate the machine, that the machine was working properly, and that there was no evidence to show that it’s reading was inaccurate. There was no basis to disturb those findings on appeal.

R. v. McDonald (Feb. 26, 1987, B.C. Co. Ct.)

Opinion Evidence - Whether radar operator giving “expert” evidence. The trial judge did not err in finding police officer who testified concerning his operation of radar was not an “expert” so as to require 30 days’ notice in writing of his proposed evidence under s.11 of the Evidence Act. Accordingly, the officer gave evidence only of a technical skill, which did not reach expert status.



User Notes



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