

Intertek Testing Services NA Inc.

EXHIBIT 1

GENERAL DESCRIPTION

1.0 General Description

1.1 Product Description

This device consists of SAW stabilized RF oscillator, power supply and a microprocessor clocked by a 4 MHz ceramic filter. The transmitter is normally off until any button is activated. This activates Q4 and Q2 thus supplying operating voltage for the RF oscillator. The microprocessor generates abase band to the RF oscillator. After a message is sent, the circuit times out and remains off until another button is depressed.

The difference between the 1, 2 and 3 button transmitter is for the number of garage doors that an individual may have.

1.2 Related Submittal(s) Grants

This is a single application for certification of a transmitter. The receiver, a completely separate device, is currently being submitted to the FCC for notification. The FCC ID is FON02-5011.

1.3 Test Methodology

Both AC mains line-conducted and radiated emission measurements were performed according to the procedures in ANSI C63.4 (1992). All measurements were performed in Open Area Test Sites. Preliminary scans were performed in the Open Area Test Sites only to determine worst case modes. For each scan, the procedure for maximizing emissions in Appendices D and E were followed. All Radiated tests were performed at an antenna to EUT distance of 3 meters, unless stated otherwise in the "**Justification Section**" of this Application.

1.4 Test Facility

The open area test site and conducted measurement facility used to collect the radiated data is located at 593 Massachusetts Avenue, Boxborough, Massachusetts. The North site was used. This test facility has been fully described in a report dated November 20, 1996 submitted to your office. Please reference the site filing number: 31040/SIT 1300F2, dated January 16, 1997. Each test site is accredited by the NVLAP program.



QUANTUMTM

GARAGE DOOR OPENERS
MODEL 3212 1/2 HP MODEL 3213 1/3 HP

Touch a button. Quantum's real power gets you inside fast.

Touch the button again, and the garage door closes and locks safely behind you.

You're inside where it's safe, warm and secure, and you never had to get out in the wind, rain, cold or dark. That's the advantage of Quantum's real power. The children weren't left unattended in the car while you wrestled with a heavy garage door. Safety and security are so easy and so powerful with a QuantumTM Garage Door Opener from Wayne-Dalton. Welcome home.

Quantum-GuardTM Multi-Level Safety System

Meets or exceeds all government safety standards. The system is equipped with a protection system that automatically reverses a closing door or stops an opening door if it encounters an obstruction. Constantly changing access codes assign a new personal code each time you open the

door with the remote to foil code grabbers.

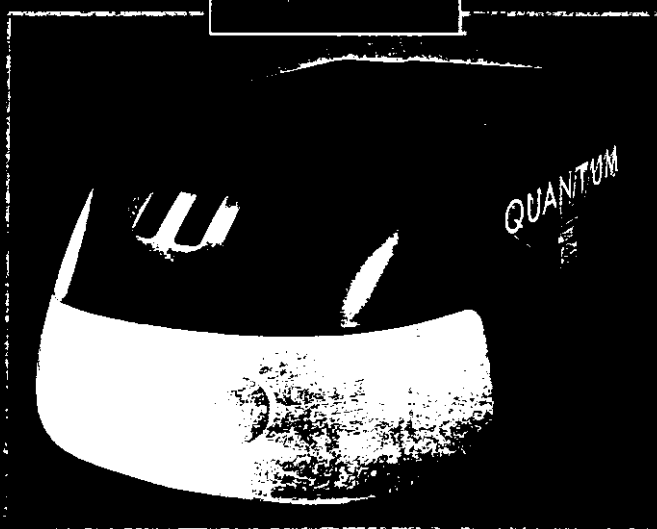
And the entire system monitors itself prior to and during operation and alerts you to malfunctions. Plus, you get a system that operates consistently at the rated horsepower. That's QuantumTM power—

all the power you need to be safe and secure.



Available Options:

- Two- or Three-Button Remote Controls
- Quantum Deluxe Wall Station with security lock out
 - Quantum Control Keyless Pad
- Outside Key Switch
- Exterior Keyed Lock, cable disconnect system



Quantum Warranties:

(Models 3212 and 3213)
Five-year limited warranty on mechanical parts.
Three years on the electronic components.
See warranty certificate for details.

**ALL THE REAL
POWER YOU NEED.**



QUANTUM™

GARAGE DOOR OPENERS MODEL 3212 1/2 HP MODEL 3213 1/3 HP



UL: Complies with UL 325 (1/2/93) FCC Certified.

The Quantum-Guard™ Multi-Level Security System:

- The Quantum-Guard™ system automatically monitors itself for malfunctions in critical systems prior to and during door operation.
- Light will flash during an alert, yet you can open the door. You can close the door safely and securely using constant pressure on the wall station control button.
- System provides thermal overload protection and surge protection to electronics & motor for longer life.
- Easy-to-operate radio controls with Quantum-Guard™ rolling access codes foil code-grabbers from gaining access to your home through the garage door. Every time you operate the door with the remote, the unit automatically chooses your new personal access code.
- If you accidentally press the remote when out of range, remote and opener codes will not be out of sync.
- Protection sensors automatically reverse a closing door's direction or stops an opening door when it encounters an obstruction. Sensitivity can be adjusted without hampering normal operation. Since the door produces little vibration, it remains highly sensitive to any contact.
- Opener must safely complete the "down" cycle within 21 seconds or door will automatically reverse to "open" position.

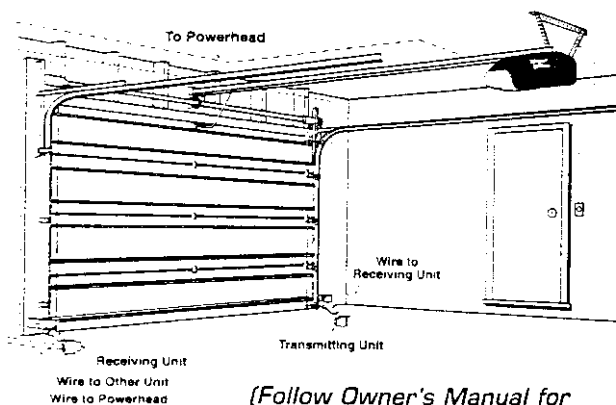
- Photo eyes' light beam will signal clear opening unless the beam is broken during closing operation.
- Quantum-Guard™ lock provides extra security only when door is in fully closed position, unlike other units that rely on backforce of the drive unit to provide "locking" of the door.
- Energy-efficient, long-lasting security light stays on for 4 minutes to provide safer and easier night entry to garage and home.

Quantum™ Construction Features:

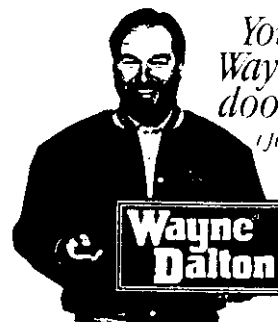
- Hot-dipped galvanized double-angle rail assembly for smooth operation
- Heavy-duty, pre-lubricated full-length chain, instead of half chain/half aircraft cable, for reliable operation and long life
- The tough, all-steel trolley with non-metallic glide surfaces has no metal-to-metal contact for smooth, efficient performance with a minimum of maintenance problems
- External "open" "close" limit adjustment for safety and ease of adjustment
- All the real power you need with Quantum's safer-by-design, direct drive, high-efficiency motor with permanently lubed bearings and thermal overload protector
- Sleek, one-piece molded housing for quiet operation
- System design includes shock absorbing cushion arm to assure that door closes completely even if garage floor heaves in cold weather

SPECIFICATIONS

Models	3212	3213
HP	1/2	1/3
Volts	120v/60Hz	120v/60Hz
Quick-set Radio Controls with Rolling Access Codes	One	One
Wall Button	Yes	Yes
Quantum Lens Cover	Yes	Yes
Color	Black	Black
Head Weight	24 5 lbs.	23 lbs.
Dimensions		
Overall Dimensions	7 ft. @ 119 in. 9 ft. @ 149 in.	8 ft. @ 131 in. 10 ft. @ 163 in.
	All Models	
Unit Weight	(7 ft.) 50 5 lbs.	(7 ft.) 48 lbs.
(Rail and Head)	(8 ft.) 52 5 lbs.	(8 ft.) 50 lbs.
	(9 ft.) 55 5 lbs.	(9 ft.) 53 lbs.
	(10 ft.) 57 5 lbs.	(10 ft.) 55 lbs.
Maximum Door Height	7 to 10 ft. heights available for all models (Door height to be specified by customer)	
Door Width	For single or double residential garage doors	
Minimum Clearance	2" all models	
Lifting Rate	7-2" per second all models	
Quantum Warranty	5 years limited	5 years limited



(Follow Owner's Manual for all wiring instructions.)



You want a
Wayne-Dalton
door system..
(Just to be safe.)