

BLOCK 852 LOT 1 QUALIFICATION CODE _____ ADDRESS (SITE) 1743 Route 88 PERMIT NO. 10-1404



CONSTRUCTION PERMIT APPLICATION

Applicant Completes: Sections I, II, III (optional), IV, VI, and VII

C-10-001756

I. IDENTIFICATION

1. Proposed Work Site at 1743 Route 88, Brick, NJ 08724
2. Name of Owner in Fee: GB LTD
Tel. (732) 780-8888 e-mail _____
Address 63 West Main Street Brick, NJ 07728
3. Ownership in Fee: Public _____ Private _____
4. Principal Contractor: Im Secura, Inc. Tel. (732) 929-2636
Address 591 Fischer Blvd, T.R. NJ e-mail _____
License No. OR, if new home, Builder Reg. No. _____ Exp. Date _____
Federal Employee No. 22-326-2411 FAX: (732) 270-1277
5. Architect or Engineer _____ Contact _____
Address _____ e-mail _____
Tel. (_____) _____ FAX: (_____) _____
6. Responsible Person in Charge once Work has Begun David M. Lu
Tel. (732) 929-2636 FAX: (732) 270-1277

V. FEE SUMMARY (for office use only)

		Update	Update
1. Building	\$	<u>40</u> ✓	
2. Electrical		<u>75</u> ✓	
3. Plumbing			
4. Fire Protection			
5. Elevator Devices			
6. Subtotal	\$		
7. Less 20% for State Plan Review			
8. Subtotal	\$		
9. State Permit Surcharge Fee		<u>2</u>	
10. Subtotal	\$		
11. Cert. of Occupancy			
12. Other			
13. TOTAL	\$	<u>117</u>	

VI. BUILDING/SITE CHARACTERISTICS

- Number of Stories _____
- Height of Structure _____ ft.
- Area - Largest Floor _____ sq. ft.
- New Building Area _____ sq. ft.
- Volume of New Structure _____ cu. ft.
- Construction Classification _____
- Total Land Area Disturbed _____ sq. ft.
- Flood Hazard Zone _____
- Base Flood Elevation _____ ft.
- Wetlands yes _____ no _____
- Max. Live Load _____
- Max. Occupancy Load _____

(office use only)

- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____

II. PROPOSED WORK

	Est. Cost	Plans Rec'd by	Date Rec'd	Rejection Date	Approval Date	Re-viewer	Resubmission Dates Approval	Rejection	Re-viewer
1. ☐ Minor Work		<u>PD</u>	<u>5/26/10</u>						
2. ☐ New Building									
3. ☐ Addition									
4. ☐ a. Repair									
☐ b. Alteration									
☐ c. Renovation									
☐ d. Reconstruction									
5. ☐ Fire Protection					<u>12-10</u>	<u>GB</u>			
6. ☐ Plumbing					<u>6-7-10</u>	<u>PD</u>			
7. ☐ Electrical									
8. ☐ Elevator Devices									
9. ☐ Asbestos Abat. Subch. 8									
10. ☐ Lead Hazard Abatement									
11. ☐ Demolition									
TOTAL COSTS									

VII. DESCRIPTION OF BUILDING USE

A. RESIDENTIAL

- State Specific Use: _____
- Use Group: _____
- Change in Use Group, Indicate Former: _____
- No. of dwelling units: All Units Income-restricted
Before Construction _____
After Construction _____
Net Gain or Loss _____

B. NON-RESIDENTIAL

- State Specific Use: Sign Shop
- Use Group: _____
- Change in Use Group, Indicate Former: _____

III. DO YOU WANT: (optional)

- ☐ Partial Releases
- ☐ Prototype Processing

IV. DOES OR WILL YOUR BUILDING CONTAIN ANY OF THE FOLLOWING?

- ☐ Elevators/Escalators/Lifts/ Dumbwaiters/Moving Walks
- ☐ High Pressure Boilers
- ☐ Pressure Vessels
- ☐ Refrigeration Systems
- ☐ Cross-Connections/Backflow Preventers
- ☐ Hazardous Uses/Places of Assembly
- ☐ Sprinklers
- ☐ Smoke Control Systems in Open Wells
- ☐ Underground Storage Tanks
- ☐ Swimming Pools, Spas and Hot Tubs

CERTIFICATION IN LIEU OF OATH

I. OWNER SECTION (to be completed if the applicant is the owner in fee)

I hereby certify that I am the owner in fee of the property listed on Page 1.

Mark the following applicable boxes:

- A. ☐ I further certify that a new home (private residence) will be constructed on this property for my own use and occupancy. This dwelling is to be occupied by myself and is not to be used for any purpose other than single family residential use. I attest that all construction, plumbing, or electrical work will be done, in whole or in part, by me or by subcontractors under my supervision, in accordance with all applicable laws; and, I further acknowledge that said new home is not covered under the New Home Warranty and Builders Registration Act (N.J.S.A. 46:3B-1 et seq.) and that such fact shall be disclosed to any person purchasing this property within ten years of the date of issuance of a certificate of occupancy.

I UNDERSTAND THAT IN MARKING BOX A, I ACKNOWLEDGE THAT I AM ASSUMING RESPONSIBILITY FOR THE WORK DONE ON SAID PROPERTY, THE CONDITION OF THE PROPERTY PRIOR TO, DURING, AND AFTER ANY WORK PERFORMED, AND FOR THE PERFORMANCE OF THE SUBCONTRACTORS I HIRE, EMPLOY, OR OTHERWISE CONTRACT OR WITH WHOM I MAKE AGREEMENTS TO PERFORM WORK. I AM VOLUNTARILY AND KNOWINGLY ASSUMING THIS RESPONSIBILITY.

- B. ☐ I further certify the following as required by the New Jersey Uniform Construction Code, N.J.A.C. 5:23-2.15(e)1.vii:

I personally prepared the plans submitted for: 1) the new home referred to in A.; or, 2) an addition, alteration, renovation, or repair to an existing single family residence owned and occupied by myself and located on the property listed on Page 1; or, 3) a new structure that will be physically separate from, but that will be deemed part of, an existing single family residence that is owned and occupied by myself and located on the property listed on Page 1.

- C. ☐ I further certify that I will perform or supervise the following work:

C.1. ☐ Building C.2. ☐ Fire Protection

I further certify that I will perform the following work:

C.3. ☐ Electrical C.4. ☐ Plumbing

- D. ☒ I agree to advise all contractors on this project that they are required to be registered with the New Jersey Division of Taxation and to comply with all New Jersey tax laws.

I further certify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(a)5: All required State, county, and local prior approvals have been given, including such certification as the construction official may require.

I understand that if any of the above statements are willfully false, I am subject to punishment.

Signature _____ Date _____

II. AGENT SECTION (to be completed if the applicant is not the owner in fee)

I hereby certify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(d): the proposed work is authorized by the owner in fee; and I have been authorized by the owner in fee to make this application as his agent.

I further certify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(a)5: All required State, county, and local prior approvals have been given, including such certification as the construction official may require.

I agree to advise all contractors on this project that they are required to be registered with the New Jersey Division of Taxation and to comply with all New Jersey tax laws.

I understand that if any of the above statements are willfully false, I am subject to punishment.

☒ Check if contractor.

Agent Name Grand Mehra, Jay Security

Address 594 Fischer Blvd

Toms River, NJ 08753

Telephone (732) 929-2636

Signature [Signature]

- III. ☐ LEAD HAZARD ABATEMENT: Include Homeowner or Building Owner Affidavit as per N.J.A.C. 5:17.

OFFICE DATE RECEIVED:

VIII. PRIOR APPROVALS CHECKLIST (office use only)	LOCAL APPROVAL		COUNTY APPROVAL		REGIONAL APPROVAL		STATE APPROVAL		COMMENTS
	Prelimin. Initial	Final Date	Prelimin. Initial	Final Date	Prelimin. Initial	Final Date	Prelimin. Initial	Final Date	
☐ Zoning Officer									
☐ Planning Board									
☐ Zoning Board									
☐ Sewer Authority									
☐ Water Authority									
☐ Police Department									
☐ Health Department									
☐ Soil Conservation									
☐ N.J. Department of Community Affairs									
☐ N.J. Department of Transportation									
☐ N.J. Department of Environmental Protection									
☐ Utility Dig No.									
☐									
☐									

IX. SUBCODES AND SPECIAL REGULATIONS APPLICABLE (office use only—optional)

Name of Code & Edition	Name of Code & Edition
Building _____	Energy _____
Electrical _____	Barrier Free _____
Plumbing _____	Flood Hazard _____
Fire Protection _____	As Built Elevation Cert. _____
Mechanical _____	Other _____

X. CERTIFICATES ISSUED (office use only)

	DATE ISSUED	DATE EXPIRED	DATE REISSUED	DATE EXPIRED
☐ Temporary Certificate of Occupancy	No			
☐ Temporary Certificate of Compliance	No			
☐ Continued Certificate of Occupancy	No			
☐ Certificate of Compliance	No			
☐ Certificate of Occupancy	No			
☐ Certificate of Approval	No			
☐ Lead Abatement Clearance Certificate	No			



Brick Township
401 Chambersbridge Rd
Brick, NJ 08723

Date Issued 03/11/2011
Control Number C-10-001756
Permit Number 10-1404
Permit Issue Date 06/04/2010
Certificate Number 10-1404

Certificate

Construction Code Division
(Certificate of Approval)

Identification

Work Site Location: 1743 ROUTE 88 Brick Township, NJ Block: 852 Lot: 1 Qual: _____
Owner in Fee: LP & APTS, LLC%G B LTD
Owner Address: PO BOX 5008 FREEHOLD NJ 07728
Telephone: _____
Contractor J M SECURITY
Address 591 FISCHER BLVD TOMS RIVER NJ 08753-
Telephone: 732/929-2636 Fax: 732/270-1277
License Number or Builders Registration Number: P00439 Federal Emp. Number: 22-3262411

Home Warranty Number: _____

Type of Warranty Plan: ☐ State ☐ Private

Use Group: B Construction Classification: _____

Maximum Live Load: 0 Maximum Occupancy Load: 0

Description of Work/Use: ALARM SYSTEM (BURGLAR OR FIRE)

Certificate Comments:

☐ **Certificate of Occupancy**

This serves notice that said building or structure has been constructed in accordance with the New Jersey Uniform Construction Code and is approved for occupancy.

☒ **Certificate of Approval**

This serves notice that the work completed has been constructed or installed in accordance with the New Jersey Uniform Construction Code and is approved. If the permit was issued for minor work, this certificate was based upon what was visible at the time of inspection.

☐ **Certificate of Continued Occupancy**

This serves notice that based on a general inspection of the visible parts of the building there are no imminent hazards and the building is approved for continued occupancy.

☐ **Temporary Certificate of Compliance**

The following conditions must be met no later than _____ or the owner will be subject to fine or order to vacate:

This certificate has an expiration date of: _____

Conditions to be met:

☐ **Certificate of Clearance - Lead Abatement 5:17**

This serves notice that based on written certification, lead abatement was performed as per NJAC5:17 to the following extent.

☐ Total removal of lead-based paint hazards in scope of work

☐ Partial or limited time period (_____ years); see file

☐ **Certificate of Clearance - Asbestos Abatement**

This serves notice that based on written certification, asbestos abatement was performed to the following extent.

☐ Total removal of asbestos hazards in scope of work

☐ Partial or limited time period (_____ years); see file

☐ **Certificate of Compliance**

This serves notice that said potentially hazardous equipment has been installed and/or maintained in accordance with the New Jersey Uniform Construction Code and is approved for use until _____

☐ **Temporary Certificate of Occupancy**

The following conditions must be met no later than _____ or the owner will be subject to fine or order to vacate:

This certificate has an expiration date of: _____

Conditions to be met:

Construction Official

Fee: \$0.00

Check Number: _____

Collected By: _____



CONSTRUCTION PERMIT

Date Issued _____
Control # C-10-001756
Permit # _____

IDENTIFICATION Block: 852 Lot: 1 Qualifier _____
Work Site Location: 1743 ROUTE 88 Brick Township, NJ Contractor J M SECURITY
Address 591 FISCHER BLVD. TOMS RIVER NJ 08753-
Owner in Fee LP & APTS. LLC%G B LTD
PO BOX 5008 FREEHOLD NJ 07728 Telephone: 732/929-2636
Telephone: _____ Lic. No. or Bldrs. Reg. No. P00439
Federal Employee No. 22-3262411

Is hereby granted permission to perform the following work:

- | | | |
|--|--|--|
| ☐ BUILDING | ☐ PLUMBING | ☐ LEAD HAZARD ABATEMENT |
| ☒ ELECTRICAL | ☒ FIRE PROTECTION | ☐ DEMOLITION |
| ☐ ELEVATOR DEVICES | ☐ ASBESTOS ABATEMENT
(Subchapter 8 only) | ☐ OTHER |

DESCRIPTION OF WORK:

ALARM SYSTEM (BURGLAR OR FIRE)

Note: If construction does not commence within one (1) year of date of issuance, or if construction ceases for a period of six (6) months, this permit is void.

Estimated Cost of Work \$1,300

Starko +
Construction Official

6-1-10
Date

PAYMENTS (Office Use Only)

Building	\$0
Electrical	\$40
Plumbing	\$0
Fire Protection	\$75
Elevator Devices	\$0
Other	\$0.00
DCA Training Fee	\$2
CO Fee	
Other	\$0
Total	\$117
Check No.	
Cash	\$0
Credit	\$0
Collected By	

U.C.C. F170
equiv (rev 8/03)

1 WHITE - INSPECTOR

2 CANARY - OFFICE

3 PINK - TAX ASSESSOR

4 GOLD - APPLICANT

REQUIRED INSPECTIONS

Construction work must be inspected in accordance with the State Uniform Construction Code Regulations N.J.A.C. 5:23-2.18. This agency will carry out such periodic inspections during the progress of work as are necessary to insure that the work installed conforms with the requirements of the Uniform Construction Code.

The owner or other responsible person in charge of work must notify this agency when work is ready for any required inspections specified below. Requests for inspections must be made at least 24 hours prior to the time the inspection is desired. Inspections will be performed within three business days of the time for which they are requested. The work must not proceed in a manner which will preclude the inspection until it has been made and approval granted.

☐ Required inspections for all subcodes for one- and two-family dwellings are as follows:

- The bottom of footing trenches before placement of footings, except that in cases of pile foundations, inspections shall be made in accordance with the requirements of the building subcode.
- Foundations and all walls up to grade level prior to back filling.
- All structural framing, connections, wall and roof sheathing and insulation; electrical rough wiring, panel and service installation; rough plumbing. The framing inspection shall take place after the rough electrical and plumbing inspections and after the installation of the heating, ventilation and /or air conditioning duct system. The insulation inspection shall be performed after all other subcode rough inspections and prior to the installation of any interior finish material.
- Installation of all finished materials, sealings of exterior joints, plumbing piping, trim and fixtures; electrical wiring, devices and fixtures; mechanical systems equipment.

#1404
ELECTRIC \$40.00
FIRE \$75.00
DCA \$2.00
CHECK \$117.00

Additional required inspections for all subcodes of construction, for other than one- and two-family dwellings, are fire suppression systems, heat producing devices and Barrier Free subcode accessibility, if applicable.

☐ Required special inspections. The applicant by accepting the permit will be deemed to have consented to these requirements:

☐ A final inspection is required for each applicable subcode area before a final Certificate of Occupancy or Approval may be issued. The final inspections include the installation of all interior and exterior finish materials, sealing of exterior joints, mechanical system and other required equipment; electrical wiring, devices and fixtures; plumbing pipes, trim and fixtures; tests required by any provision of the adopted subcodes, Barrier Free accessibility, if applicable; and verification of compliance with NJAC 5:23-3.5, "Posting structures".

☐ A complete copy of released plans must be kept on the job site.

If you do not understand any of this information, please ask.



FIRE PROTECTION SUBCODE TECHNICAL SECTION

10-12-04

A. IDENTIFICATION—APPLICANT: COMPLETE ALL APPLICABLE INFORMATION, WHEN CHANGING CONTRACTORS, NOTIFY THIS OFFICE. CALL UTILITY DIG NO: 1-800-272-1000.

Block 852 Qualification Code 88

Work Site Location 1743 Route 88

Building Owner Back NJ 08724

Address 610 4th

Tel (732) 7180-8888

Contractor J.M. Security

Address 1001 Highway 241

Tel (732) 929-8036

FAX (732) 270-1277

Fire Protection Equipment, NJ Div of Fire Safety Permit No. See Logies

Fire Protection Equipment, NJ Div of Fire Safety Installer No. See Logies

Federal Alarm Contractor No. 22336241

Federal Emp. No. 22336241

B. FIRE PROTECTION CHARACTERISTICS

Use Group: Present _____ Proposed _____ Fire Alarm System: [] New or [] Existing

Constr. Class: Present _____ Proposed _____ Location of Panel: _____

Heating System: [] New or [] Existing [] HVAC Fire Suppression/Standpipe System: _____

Type: [] Gas [] Oil [] Electric [] Solar [] New or [] Existing

[] Other _____ Location of Main Control Valve: _____

Location: _____

Fuel Storage Tank: _____

Fuel Type: [] Flammable or [] Combustible Capacity _____

Total Cost of Fire Protection Work \$ 630.00

JOB SUMMARY (Office Use Only)

PLAN REVIEW _____

[] No Plans Required _____

Joint Plan Review Required: _____

[] Building [] Plumbing _____

[] Electric [] Elevator _____

Date: 5-28-03 _____

Approved by: AS _____

SUBCODE APPROVAL _____

[] CO [] CCO CA _____

Date: 3-3-11 _____

Approved by: AS _____

INSPECTIONS _____

Type: _____

Alarm System _____

Suppression Sys. _____

Standpipe _____

Fire Pump _____

Pre-Eng. System _____

Mechanical _____

Smoke Control _____

TCO _____

Flam/Combust Tanks _____

Fireplace Venting _____

Final _____

Other _____



C. CERTIFICATION IN LIEU OF OATH

I hereby certify that I am the (agent of) owner of record and am authorized to make this application.

Date Issued _____

Permit # 06108110

Applicant's Signature/Contractor's Signature _____

[] Certified Contractor [] Exempt Applicant

D. TECHNICAL SITE DATA _____

DESCRIPTION OF WORK: 1 MS & Fire Panel

1 Externer Heat + Smoke

Water Supply Source _____

Method of Alarm/Suppression System Supervision _____

Flammable/Combustible Tanks _____

Alarm Systems 1 Panel _____

[] System _____

[] 110v Interconnected _____

[] CO Detectors/110v _____

Alarm Devices (i.e., smoke, heat, pull, water/flow) _____

Supervisory Devices (i.e., tamper, low/high air) _____

Signaling Devices (i.e., horns/strobes, bells) _____

Other Devices _____

TOTAL _____

Suppression Systems _____

Fire Pump _____ GPM Type _____

Dry Pipe/Alarm Valves _____

Pre-action Valves _____

Sprinkler Heads (Dry and Wet) _____

Standpipes _____

Pre-engineered Systems _____

Wet Chemical _____

CO₂ Suppression _____

Foam Suppression _____

FM200 Suppression _____

Other _____

Kitchen Hood Exhaust System _____

Smoke Control System _____

Fired Appliances [] Gas or [] Oil _____

Fireplace Venting/Metal Chimney _____

Other _____

Administrative Surcharge \$ _____

Minimum Fee \$ _____

State Permit Surcharge Fee \$ _____

TOTAL FEE \$ _____



ELECTRICAL SUBCODE TECHNICAL SECTION



A. IDENTIFICATION—APPLICANT: COMPLETE ALL APPLICABLE INFORMATION. WHEN CHANGING CONTRACTORS, NOTIFY THIS OFFICE. CALL UTILITY DIG NO: 1-800-272-1000.

Block 852 Lot 1 Qualification Code 08724

Work Site Location Block N3 08724

Owner in Fee 68 LD

Address 63 West Main Street

Contractor 132 2189-8888

Address 391 Pleasant Street

Tel (132) 924-2030 FAX (132) 270-1277

Contractor License No. 22-326-2411

Federal Emp. No. 22-326-2411

B. ELECTRICAL CHARACTERISTICS

Use Group Present Proposed
☐ Pole/Pad # ☐ Temporary ☐ Other
Building Occupied as Utility Co.
Est. Cost of Elec. Work \$ 68.00

JOB SUMMARY (Office Use Only)

PLAN REVIEW	Date	Initial	INSPECTIONS				
☒ No Plans Required	6-1-10	SP	Type:	Failure	Failure	Approval	Initial
Joint Plan Review Required:			Rough				
☐ Building ☐ Plumbing			Barrier-Free				
☐ Fire ☐ Elevator			Trench				
☐ Elec. Plans Approved			Temp. Serv.				
Date: <u> </u>			Const. Serv.				
Approved by: <u> </u>			TCO				
			Other				
			Service				
			Final				
			Barrier-Free				
SUBCODE APPROVAL							
☐ CO ☐ CCO ☐ CA			Temp. Cut-In-Card Date Issued				
Date: <u>6-15-10</u>			Final Cut-In-Card Date Issued				
Approved by: <u>SP</u>			Annual Pool Inspection				
			Date of Grounding and Bonding Certification				

C. CERTIFICATION IN LIEU OF OATH

I hereby certify that I am the agent of the owner for record and am authorized to make this application and perform the work listed on this application.

Applicant's Signature/Contractor's Seal and Signature

☒ Licensed Elec. Contractor ☐ Certified Landscape Irrigation Contr ☐ Exempt Applicant

B. TECHNICAL SITE DATA

QTY. SIZE

ITEMS

Lighting Fixtures

Receptacles

Switches

Detectors

Light Poles

Motors—Fract. HP

Emergency & Exit Lights

Communications Points

Alarm Devices/F.A.C. Panel

Alarm Devices/F.A.C. Panel

FEE (Office Use Only)

TOTAL NUMBERS

Pool Permit/With UW Lights

Storable Pool/Spa/Hot Tub

KW Elec. Range/Receptacle

KW Oven/Surface Unit

KW Elec. Water Heater

KW Elec. Dryer/Receptacle

KW Dishwasher

HP Garbage Disposal

KW Central A/C Unit

HP/KW Space Heater/Air Handler

KW Baseboard Heat

HP Motors 1/4 HP

KW Transformer/Generator

AMP Service

AMP Subpanels

AMP Motor Control Center

KW Elec. Sign/Outline Light

Administrative Surcharge \$

Minimum Fee \$

State Permit Surcharge Fee \$

TOTAL FEE \$



ELECTRICAL SUBCODE TECHNICAL SECTION



A. IDENTIFICATION—APPLICANT: COMPLETE ALL APPLICABLE INFORMATION. WHEN CHANGING CONTRACTORS, NOTIFY THIS OFFICE. CALL UTILITY DIG NO: 1-800-272-1000.

Block 852 Lot 1 Qualification Code 1145

Work Site Location 145 N 100th St

Owner In Fee 103 140

Address 103 140

Tel (714) 211-1111

Contractor 103 140

Fax (714) 211-1111

Contractor License No. 103 140

Federal Emp. No. 103 140

B. ELECTRICAL CHARACTERISTICS

Use Group Present 1 Proposed 1

☐ Pole/Pad # 1 ☐ Temporary 1 ☐ Other 1

Building Occupied as 1 Utility Co. 1

Est. Cost of Elec. Work \$ 1

JOB SUMMARY (Office Use Only)

PLAN REVIEW	Date	Initial	INSPECTIONS	Dates (Month/Day)	Initial
☒ No Plans Required	6-7-10	4	Type:	Failure	Failure
Joint Plan Review Required:			Rough		
☐ Building ☐ Plumbing			Barrier-Free		
☐ Fire ☐ Elevator			Trench		
☐ Elec. Plans Approved			Temp. Serv.		
Date:			Const. Serv.		
Approved by:			TCO		
			Other		
			Service		
			Final		
			Barrier-Free		
SUBCODE APPROVAL			Temp. Cut-In-Card Date Issued		
☐ CO ☐ CCO ☐ CA			Final Cut-In-Card Date Issued		
Date:			Annual Pool Inspection		
Approved by:			Date of Grounding and Bonding Certification		

C. CERTIFICATION IN LIEU OF OATH

I hereby certify that I am the (agent of) owner of record and am authorized to make this application and perform the work listed on this application.

Applicant's Signature/Contractor's Seal and Signature

☐ Licensed Elec. Contractor ☐ Certifd Landscape Irrigation Contr ☐ Exempt Applicant

D. TECHNICAL SITE DATA

QTY SIZE ITEMS

- Lighting Fixtures
- Receptacles
- Switches
- Detectors
- Light Poles
- Motors—Fract. HP
- Emergency & Exit Lights
- Communications Points
- Alarm Devices/F.A.C. Panel

TOTAL NUMBERS

- Pool Permit/with UW Lights
- Storable Pool/Spa/Hot Tub
- KW Elec. Range/Receptacle
- KW Oven/Surface Unit
- KW Elec. Water Heater
- KW Elec. Dryer/Receptacle
- KW Dishwasher
- HP Garbage Disposal
- KW Central A/C Unit
- HP/KW Space Heater/Air Handler
- KW Baseboard Heat
- HP Motors 1/+ HP
- KW Transformer/Generator
- AMP Service
- AMP Subpanels
- AMP Motor Control Center
- KW Elec. Sign/Outline Light

FEE (Office Use Only)

Administrative Surcharge \$	
Minimum Fee \$	
State Permit Surcharge Fee \$	
TOTAL FEE \$	



FIRE PROTECTION SUBCODE TECHNICAL SECTION

A. IDENTIFICATION—APPLICANT: COMPLETE ALL APPLICABLE INFORMATION. WHEN CHANGING CONTRACTORS, NOTIFY THIS OFFICE. CALL UTILITY DIG NO: 1-800-272-1000.

Block 852 Lot 1 Qualification Code 1

Work Site Location 1113 1st St. N. 724

Building Owner 13 2230 1001

Address 13 2230 1001

Tel (408) 223-1001

Contractor 111 11 11 11 11 11

Address 111 11 11 11 11 11

Tel (408) 223-1001

Fire Protection Equipment, NJ Div of Fire Safety Permit No. 111 11 11 11 11 11

Fire Protection Equipment, NJ Div of Fire Safety Installer No. 111 11 11 11 11 11

Fire Alarm Contractor No. 111 11 11 11 11 11

Federal Emp. No. 111 11 11 11 11 11

B. FIRE PROTECTION CHARACTERISTICS

Use Group: Present 1 Proposed 1 Fire Alarm System: ☐ New or ☐ Existing
Constr. Class: Present 1 Proposed 1 Location of Panel: 1
Heating System: ☐ New or ☐ Existing ☐ HVAC Fire Suppression/Standpipe System:
Type: ☐ Gas ☐ Oil ☐ Electric ☐ Solar ☐ New or ☐ Existing
Location: 1 Location of Main Control Valve: 1

Fuel Storage Tank:

Fuel Type: ☐ Flammable or ☐ Combustible Capacity 1

Total Cost of Fire Protection Work \$ 111 11 11 11 11 11

JOB SUMMARY (Office Use Only)

PLAN REVIEW

☐ No Plans Required

Joint Plan Review Required:

☐ Building ☐ Plumbing

☐ Electric ☐ Elevator

☐ Fire Plans Approved

Date: 11/11/11

Approved by: 111 11 11 11 11 11

SUBCODE APPROVAL

☐ CO ☐ CCO ☐ CA

Date: 11/11/11

Approved by: 111 11 11 11 11 11

INSPECTIONS

Type:

Alarm System

Suppression Sys.

Standpipe

Fire Pump

Pre-Eng. System

Mechanical

Smoke Control

TCO

Flam/Combust Tanks

Fireplace Venting

Final

Other

Dates (Month/Day)

Failure

Failure

Approval

Initial

Initial



C. CERTIFICATION IN LIEU OF OATH

I hereby certify that I am the (agent of) owner of record and am authorized to make this application: 111 11 11 11 11 11

☐ Certified Contractor ☐ Exempt Applicant

D. TECHNICAL SITE DATA DESCRIPTION OF WORK:

Water Supply Source 111 11 11 11 11 11

Method of Alarm/Suppression System Supervision 111 11 11 11 11 11

Flammable/Combustible Tanks

Alarm Systems

☐ System

☐ 110v Interconnected

☐ CO Detectors/110v

Alarm Devices (i.e., smoke, heat, pulls, water/flow)

Supervisory Devices (i.e., tamper, low/high air)

Signaling Devices (i.e., horns/strobes, bells)

Other Devices 1

TOTAL

Suppression Systems

Fire Pump 1 GPM Type 1

Dry Pipe/Alarm Valves

Pre-action Valves

Sprinkler Heads (Dry and Wet)

Standpipes

Pre-engineered Systems

Wet Chemical

Dry Chemical

CO₂ Suppression

Foam Suppression

FM200 Suppression

Other 1

Other Systems

Kitchen Hood Exhaust System

Smoke Control System

Fired Appliances ☐ Gas or ☐ Oil

Fireplace Venting/Metal Chimney

Other 1

Administrative Surcharge \$ 111 11 11 11 11 11

Minimum Fee \$ 111 11 11 11 11 11

State Permit Surcharge Fee \$ 111 11 11 11 11 11

TOTAL FEE \$ 111 11 11 11 11 11



CONSTRUCTION PERMIT

Date Issued _____

Permit # _____

IDENTIFICATION Block _____ Lot _____ Qualification Code _____
Work Site Location 1743 Route 88
Blick, NJ 08724
Contractor Im Security
Address 591 Fischer Blvd
Toms River, NJ 08753
Owner in Fee GB LTD
Address 63 West Main Street
Freehold, NJ 07728
Tel. (732) 980-8888
Lic. No. or Bldrs. Reg. No. _____

Is hereby granted permission to perform the following work:

☐ BUILDING ☐ PLUMBING ☐ LEAD HAZARD ABATEMENT
☒ ELECTRICAL ☒ FIRE PROTECTION ☐ DEMOLITION
☐ ELEVATOR DEVICES ☐ ASBESTOS ABATEMENT ☐ OTHER _____
(Subchapter 8 only)

DESCRIPTION OF WORK:

NOTE: If construction does not commence within one (1) year of date of issuance, or
if construction ceases for a period of six (6) months, this permit is void.

Estimated Cost of Work \$ 650.00

Construction Official _____

Date _____

U.C.C. F170 (rev. 01/04)

1 WHITE-INSPECTOR

2 CANARY-OFFICE

3 PINK-TAX ASSESSOR

4 GOLD-APPLICANT

(see reverse side)

PAYMENTS (Office Use Only)

Building _____
Electrical _____
Plumbing _____
Fire Protection _____
Elevator Devices _____
Other _____
DCA State Permit Fee _____
Cert. of Occupancy _____
Other _____
Total _____
Check No. _____
Cash _____
Collected by _____

INSTALLATION AND MAINTENANCE INSTRUCTIONS



**SYSTEM
SENSOR®**

3825 Ohio Avenue, St. Charles, Illinois 60174
800/736-7672, FAX: 630/377-6495

156-2769-013R

Selectable Output Strobes, Horns, and Horn/Strobes

www.systemsensor.com

For use with the following models: P2R, P2RH, P2RK, P2RHK, P2W, P2WK, P2WH, P2WHK, P4R, P4RH, P4RK, P4W, P4WK, P4WHK, SR, SRH, SRK, SRHK, SW, SWK, SWH, SWHK, SW-CLR-ALERT, PC2R, PC2RH, PC2RK, PC2RHK, PC2W, PC2WK, PC2WH, PC2WHK, PC4R, PC4RH, PC4W, PC4WK, PC4WHK, SCR, SCRH, SCRK, SCRHK, SCW, SCWK, SCWH, SC-
WHK, SCW-CLR-ALERT, HR, HRK, HW, SR-P, SW-P, SRH-P, SWH-P, P2R-P, P2W-P, P2WH-P, SCW-P, PC2R-P, PC2W-P, PC2WH-P, SRK-P, SRHK-P, P2RK-P, P2RHK-P, SWK-P, SWHK-P,
P2WK-P, P2WHK-P, SR-SP, P2R-SP, PC2W-SP, SRK-R, SWK-R, SRHK-R, SWHK-R, P2RK-R, P2WK-R, P2RHK-R, P2WHK-R

NOTE: All -R models are specifically designed for use with the WTP Series of Weatherproof plates

NOTE: When replacing outdoor units; device and back box must be replaced

PRODUCT SPECIFICATIONS

Operating Temperature:	Standard Products	32°F to 120°F (0°C to 49°C)
	K Series	-40°F to 151°F
Humidity Range:	Standard Products	10 to 93% Non-condensing
	K Series	Meets NEMA 4X requirements
Strobe Flash Rate:		1 flash per second
Nominal Voltage:		Regulated 12VDC/FWR or regulated 24DC/FWR
Operating Voltage Range (includes fire alarm panels with built in sync):		8 to 17.5V (12V nominal) or 16 to 33V (24V nominal)
Operating Voltage with MDL Sync Module:		9 to 17.5V (12V nominal) or 17 to 33V (24V nominal)
Input terminal wire gauge:		12 to 18 AWG

NOTE: Strobes will operate at 12 V nominal for 15 & 15/75 candela settings only. Switching between ranges is automatic.

DIMENSIONS FOR PRODUCTS AND ACCESSORIES

WALL PRODUCTS	LENGTH	WIDTH	DEPTH	CEILING PRODUCTS	DIAMETER	DEPTH
Strobes and Horn/Strobes (including lens)	5.6"	4.7"	2.5"	Strobes and Horn/Strobes (including lens)	6.8"	2.5"
	142 mm	119 mm	64 mm		173 mm	64 mm
Horns	5.6"	4.7"	1.3"	SA-WBBC Weatherproof Back Box SA-WBBCW Weatherproof Back Box	7.1"	2.0"
	142 mm	119 mm	33 mm		180 mm	51 mm
SA-WBB Weatherproof Back Box SA-WBBW Weatherproof Back Box	5.7"	5.1"	2.0"	BBSC-2 BBSCW-2 Back Box Skirt	7.1"	2.2"
	145 mm	130 mm	51 mm		180 mm	57 mm
BBS-2 BBSW-2 Back Box Skirt	5.0"	5.9"	2.2"	NOTE: SA-WBB, SA-WBBW, SA-WBBC and SA-WBBCW dimensions do not include the two mounting tabs		
	130 mm	152 mm	57 mm			

MOUNTING BOX OPTIONS

2-Wire Indoor Products	4-Wire Indoor Products	K Series Products
4 × 4 × 1 1/2, Single Gang, Double Gang, 4" Octagon	4 × 4 × 1 1/2, Double Gang, 4" Octagon	SA-WBB/W (wall), SA-WBBC/CW (ceiling)

The products in this manual may be covered by one or more of the following patents:

5,914,665; 5,850,178; 5,598,139; 6,049,446; 6,522,261; 6,661,337; 6,822,400;
6,833,783; 6,856,241, 7,053,766

NOTICE: This manual shall be left with the owner/user of this equipment.

GENERAL DESCRIPTION

The SpectrAlert Advance series of notification appliances offers a wide range of horns, strobes, and horn/strobes, for wall and ceiling applications, indoors and outdoors. They are designed to be used in 12 or 24 volt, DC or FWR (full wave rectified) systems. These products are electrically backward compatible with the previous generation of SpectrAlert notification appliances. Horn/strobe products are available in two versions. The 2-wire products fit systems where a single NAC controls both horn and strobe. The 4-wire products are intended for systems which have separate wiring circuits for the horn and strobe. All SpectrAlert Advance products are suitable for use in synchronized systems. The System Sensor MDL module may be used to provide synchronization.

K Series products are designed to be used over a wider range of temperatures and are suitable for use in wet locations.

Wall and ceiling products may be used interchangeably (wall products may be used on the ceiling and ceiling products may be used on the wall.)

FIRE ALARM SYSTEM CONSIDERATIONS

The National Fire Alarm Code, NFPA 72, requires that all horns, used for building evacuation produce temporal coded signals. Signals other than those used for evacuation purposes do not have to produce the temporal coded signal. System Sensor recommends spacing notification appliances in compliance with NFPA 72.

LOOP DESIGN AND WIRING

The system designer must make sure that the total current drawn by the devices on the loop does not exceed the current capability of the panel supply, and that the last device on the circuit is operated within its rated voltage. The current draw information for making these calculations can be found in the tables within this manual. For convenience and accuracy, use the voltage drop calculator on the System Sensor website (www.systemsensor.com) or CD-ROM.

When calculating the voltage available to the last device, it is necessary to consider the voltage drop due to the resistance of the wire. The thicker the wire, the smaller the voltage drop. Wire resistance tables can be obtained from electrical handbooks. Note that if Class A wiring is installed, the wire length may be up to twice as long as it would be for circuits that are not fault tolerant.

NOTE: The total number of strobes on a single NAC must not exceed 40 for 24-volt applications or 12 for 12 volt applications. Loop resistance on a single NAC should not exceed 120 ohms for 24 volt and 30 ohms for 12 volt systems.

For 4-Wire installations, terminals 1, 2, and 3 connect to the strobe; terminals 4 and 5 connect to the horn. The horn and strobe circuits must be wired independently, and each circuit must be terminated with the appropriate EOL device. Removal of a notification device will result in an open circuit indication on the strobe loop.

FIGURE 1. WIRING 2-WIRE PRODUCTS:

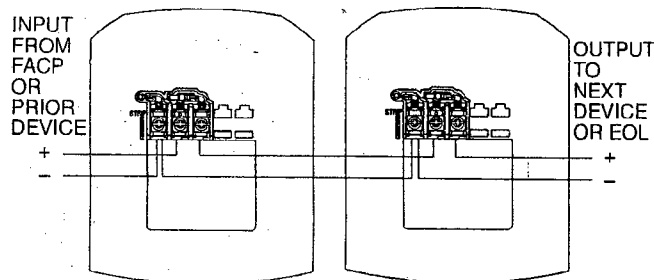


FIGURE 2. WIRING 4-WIRE PRODUCTS:

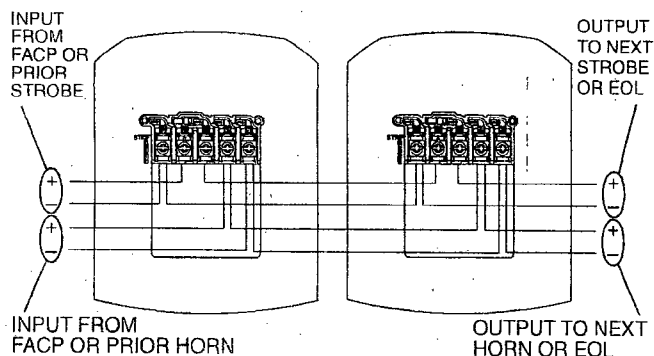
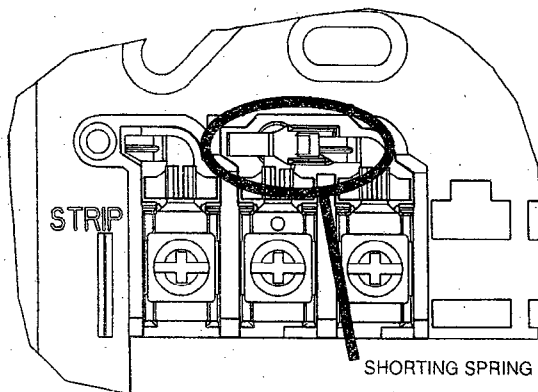


FIGURE 3. SHORTING SPRING:



NOTE: A shorting spring is provided between terminals 2 and 3 of the mounting plate to enable wiring checks after the system has been wired, but prior to installation of the final product. This spring will automatically disengage when the product is installed, to enable supervision of the final system.

CANDELA SELECTION

Adjust the slide switch on the rear of the product to position the desired candela setting in the small window on the front of the unit. All products meet the light output profiles specified in the appropriate UL Standards. For K series products used outdoors at low temperatures, listed candela ratings must be reduced in accordance with Table 2. Use Table 1 to determine the current draw for each candela setting. **WIRING DIAGRAMS**

NOTE: SpectraAlert products set at 15 and 15/75 candela automatically work on either 12V or 24V power supplies. The products are not listed for 12V operating voltages when set to any other candela settings. For 4-Wire products, total current draw may be determined by adding current draw for the specific candela selection in Table 1 with the current draw for the specific horn selection in Table 3.

TABLE 1. STROBE CURRENT DRAW (mA) FOR S, SC, P4 & PC4 SERIES:

	Candela	8-17.5 Volts		16-33 Volts	
		DC	FWR	DC	FWR
Standard Candela Range	15	123	128	66	71
	15/75	142	148	77	81
	30	NA	NA	94	96
	75	NA	NA	158	153
	95	NA	NA	181	176
	110	NA	NA	202	195
	115	NA	NA	210	205
High Candela Range	135	NA	NA	228	207
	150	NA	NA	246	220
	177	NA	NA	281	251
	185	NA	NA	286	258

TABLE 2. CANDELA DERATING:

Listed Candela	Candela rating at -40°F (K Series Outdoor Applications Only)
15	Do not use below 32°F
15/75	
30	
75	
95	44
110	70
115	110
135	115
150	135
177	150
185	177
	185

HORN SELECTION

Turn the rotary switch on the back of the product to the desired setting. For horn and 4-wire horn/strobe products, the current draw for each setting is listed in Table 3. For 2-wire horn/strobe products (P2 series), current draws are listed in Tables 4 and 5. The sound output measurement for each horn setting is shown in Table 6.

TABLE 3. HORN CURRENT DRAW (mA) FOR H, P4 & PC4 SERIES:

Pos	Sound Pattern	dA Out	8-17.5 Volts		16-33 Volts	
			DC	FWR	DC	FWR
1	Temporal	High	57	55	69	75
2	Temporal	Medium	44	49	58	69
3	Temporal	Low	38	44	44	48
4	Non-temporal	High	57	56	69	75
5	Non-temporal	Medium	42	50	60	69
6	Non-temporal	Low	41	44	50	50
7	Coded	High	57	55	69	75
8	Coded	Medium	44	51	56	69
9	Coded	Low	40	46	52	50

NOTE: In positions 7, 8, and 9, temporal coding must be provided by the NAC. If the NAC voltage is held constant, the horn output will remain constantly on. Positions 7, 8, and 9 are not available on 2-wire horn/strobe products.

TABLE 4. 2-WIRE HORN/STROBE CURRENT DRAW (mA) FOR P2 AND PC2 STANDARD CANDELA SERIES:

DC Input	8-17.5 Volts		16-33 Volts						
	15 cd	15/75 cd	15 cd	15/75 cd	30 cd	75 cd	95 cd	110 cd	115 cd
Temporal High	137	147	79	90	107	176	194	212	218
Temporal Medium	132	144	69	80	97	157	182	201	210
Temporal Low	132	143	66	77	93	154	179	198	207
Non-temporal High	141	152	91	100	116	176	201	221	229
Non-temporal Medium	133	145	75	85	102	163	187	207	216
Non-temporal Low	131	144	68	79	96	156	182	201	210
FWR Input									
Temporal High	136	155	88	97	112	168	190	210	218
Temporal Medium	129	152	78	88	103	160	184	202	206
Temporal Low	129	151	76	86	101	160	184	194	201
Non-temporal High	142	161	103	112	126	181	203	221	229
Non-temporal Medium	134	155	85	95	110	166	189	208	216
Non-temporal Low	132	154	80	90	105	161	184	202	211

TABLE 5. 2-WIRE HORN/STROBE CURRENT DRAW (mA) FOR P2 AND PC2 HIGH CANDELA RANGE SERIES:

Sound Pattern	16-33 Volts Volts DC				16-33 Volts Volts FWR			
	135 cd	150 cd	177 cd	185 cd	135 cd	150 cd	177 cd	185 cd
Temporal High	245	259	290	297	215	231	258	265
Temporal Medium	235	253	288	297	209	224	250	258
Temporal Low	232	251	282	292	207	221	248	256
Non-temporal High	255	270	303	309	233	248	275	281
Non-temporal Medium	242	259	293	299	219	232	262	267
Non-temporal Low	238	254	291	295	214	229	256	262

TABLE 6. HORN OUTPUT (dBA) IN UL REVERBERANT ROOM:

Switch Position	Sound Pattern	dA	8-17.5 Volts**		16-33 Volts**		24 V Nominal Measurements			
			DC	FWR	DC	FWR	Reverberant		Anechoic	
							DC	FWR	DC	FWR
1	Temporal	High	78	78	84	84	88	88	99	98
2	Temporal	Medium	74	74	80	80	86	86	96	96
3	Temporal	Low	71	73	76	76	83	80	94	89
4	Non-temporal	High	82	82	88	88	93	92	100	100
5	Non-temporal	Medium	78	78	85	85	90	90	98	98
6	Non-temporal	Low	75	75	81	81	88	84	96	92
7*	Coded	High	82	82	88	88	93	92	101	101
8*	Coded	Medium	78	78	85	85	90	90	97	98
9*	Coded	Low	75	75	81	81	88	85	96	92

*Horn & 4-wire Horn/Strobe only. ** Minimum dB rating for Operational Voltage Range as per UL 464.

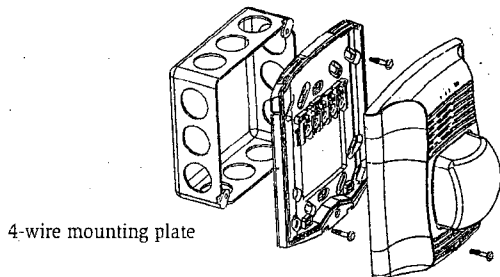
MOUNTING INDOOR WALL OR CEILING PRODUCTS

1. Attach mounting plate to junction box as shown in Figures 4 and 5. The mounting plate is compatible with 4-inch square, double gang, and 4-inch octagon junction boxes (2-wire products may be used with a single gang box). If using a back box skirt, attach the mounting plate to the skirt and then attach the entire assembly to the junction box (see Figures 6 and 7).
2. Connect field wiring to terminals, as shown in Figures 1 and 2.
3. If the product is not to be installed at this point, use the paint cover to prevent contamination of the mounting plate. (For indoor models only)
4. To attach product to mounting plate, remove the paint cover, then hook tabs on the product housing into the grooves on mounting plate.
5. Then, swing product into position to engage the pins on the product with the terminals on the mounting plate. Make sure that the tabs on the back of the product housing fully engage with the mounting plate.
6. Secure product by tightening the single mounting screw in the front of the product housing. For tamper resistance, the standard captivated mounting screw may be replaced with the enclosed Torx screw.

K SERIES MOUNTING

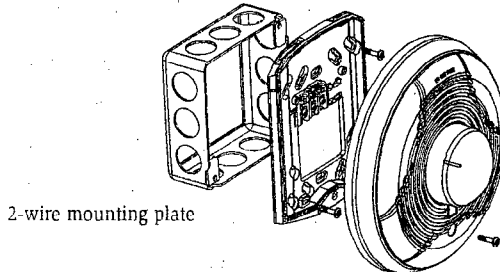
1. K Series products may be used indoors or outdoors. They must be installed using the proper SpectraAlert Advance weatherproof back box (SA-WBB, SA-WBBW, SA-WBBC or SA-WBBCW). Do not attempt to use boxes other than the ones supplied with the product.
2. The wall mount box (SA-WBB or SA-WBBW) must be mounted with its internal post in the lower left corner, as shown in Figure 8.
3. Threaded holes are provided in the sides of the box for ¼-inch conduit adapters. Knockout plugs in the back of the box can be used for ¼-inch rear entry. Unused holes must be sealed. Plugs and O-Rings are provided with the box for this purpose.
4. It is the responsibility of the installer to make sure that all openings and connections are sealed properly. Outdoor installations that are protected from direct exposure to rain are still subject to condensation or leakage through hidden areas, such as a soffit.
5. Water may pool on the back box due to condensation or direct exposure to rain or snow. Use watertight fittings for all wiring connections, including the knockout plugs on the back of the box. When using plastic plugs to fill unused threaded holes, apply teflon tape and/or silicone sealant to reduce the chance of leakage.
6. Attach the mounting plate to the weatherproof back box using the four unpainted screws.
7. Follow steps 2 - 6 of the indoor mounting instructions to wire and attach the product.

FIGURE 4. WALL MOUNT PRODUCT:



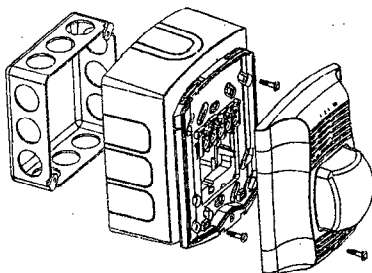
4-wire mounting plate

FIGURE 5. CEILING MOUNT PRODUCT:



2-wire mounting plate

FIGURE 6. WALL MOUNT PRODUCT WITH BACK BOX SKIRT:

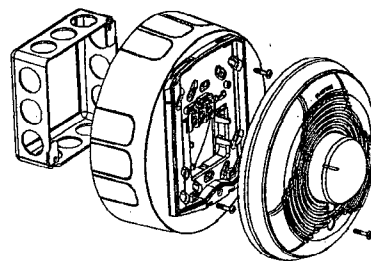


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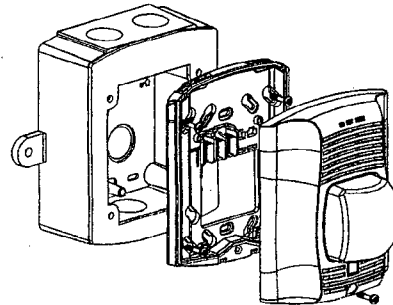
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FIGURE 7. CEILING MOUNT PRODUCT WITH BACK BOX SKIRT:



A0370-00

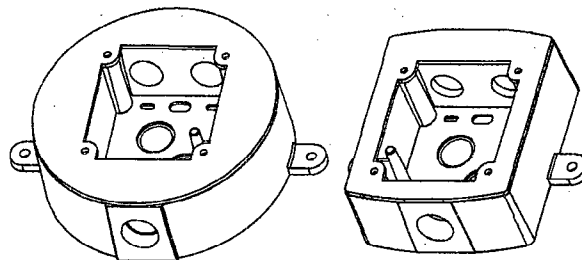
FIGURE 8. WALL MOUNT HORN/STROBE WITH WEATHERPROOF BACKBOX:



A0418-00

NOTE: Use all four mounting plate screws when installing outdoor units.

FIGURE 9. WALL AND CEILING MOUNT WEATHERPROOF BACKBOXES:



A0417-00

NOTE: Wall and Ceiling models may be used interchangeably (wall products may be used on the ceiling and ceiling products may be used on the wall).

Please refer to insert for the Limitations of Fire Alarm Systems

WARNING

The Limitations of Horn/Strobes

The horn and/or strobe will not work without power. The horn/strobe gets its power from the fire/security panel monitoring the alarm system. If power is cut off for any reason, the horn/strobe will not provide the desired audio or visual warning. The horn may not be heard. The loudness of the horn meets (or exceeds) current Underwriters Laboratories' standards. However, the horn may not alert a sound sleeper or one who has recently used drugs or has been drinking alcoholic beverages. The horn may not be heard if it is placed on a different floor from the person in hazard or if placed too far away to be heard over the ambient noise such as traffic, air conditioners, machinery or music appliances that may prevent alert persons from hearing the alarm. The horn may not be heard by persons who are hearing impaired.

NOTE: Strobes must be powered continuously for horn operation.

The signal strobe may not be seen. The electronic visual warning signal uses an extremely reliable xenon flash tube. It flashes at least once every second. The strobe must not be installed in direct sunlight or areas of high light intensity (over 60 foot candles) where the visual flash might be disregarded or not seen. The strobe may not be seen by the visually impaired.

The signal strobe may cause seizures. Individuals who have positive photoic response to visual stimuli with seizures, such as persons with epilepsy, should avoid prolonged exposure to environments in which strobe signals, including this strobe, are activated.

The signal strobe cannot operate from coded power supplies. Coded power supplies produce interrupted power. The strobe must have an uninterrupted source of power in order to operate correctly. System Sensor recommends that the horn and signal strobe always be used in combination so that the risks from any of the above limitations are minimized.

Three-Year Limited Warranty

System Sensor warrants its enclosed product to be free from defects in materials and workmanship under normal use and service for a period of three years from date of manufacture. System Sensor makes no other express warranty for this product. No agent, representative, dealer, or employee of the Company has the authority to increase or alter the obligations or limitations of this Warranty. The Company's obligation of this Warranty shall be limited to the replacement of any part of the product which is found to be defective in materials or workmanship under normal use and service during the three year period commencing with the date of manufacture. After phoning System Sensor's toll free number 800-SENSOR2 (736-7672) for a Return Authorization number, send defective units postage prepaid to: System Sensor, Returns

Department, RA # _____, 3825 Ohio Avenue, St. Charles, IL 60174. Please include a note describing the malfunction and suspected cause of failure. The Company shall not be obligated to replace units which are found to be defective because of damage, unreasonable use, modifications, or alterations occurring after the date of manufacture. In no case shall the Company be liable for any consequential or incidental damages for breach of this or any other Warranty, expressed or implied whatsoever, even if the loss or damage is caused by the Company's negligence or fault. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

FCC Statement

SpectrAlert Strobes and Horn/Strobes have been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses,

and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Regulated Load in Alarm						
Device Type	Qty	X	[Current Draw]	=	Total	
Main Circuit Board						
(note 1) MS 2 (1 MAX)	1	X	0.112	=	0.112	
(note 1) MS 4 (1 MAX)	0	X	0.175	=	0.000	
CAC-4 (1 MAX)		0	X	0.001	=	0.000
(note 2) 4XTMF (1 MAX)		0	X	0.011	=	0.000
4XZMF (1 MAX)		0	X	0.008	=	0.000
4XLMF/RZA-4XF (1 PAIR MAX)		0	X	0.019	=	0.000
(note 3) 2 wire Detector Heads		0	X		=	0.000
(note 4) 4 wire Detector Heads		0	X		=	0.000
(note 5) Power Supervision Relays		0	X		=	0.000
(note 6) NAC #1	1	X	0.142	=	0.142	
NAC#2	0	X		=	0.000	
(note 7) Current Draw from TB1 (non-alarm)		X		=	0.000	
Total Regulated Alarm Load				=	0.254	

Total Secondary Power Requirements at 24 DC						
Total Regulated Standby Load	0.080	X	Required Standby Time (24 or 60 hours) 24	=	1.92 AH	
Total Regulated Alarm Load	0.254	X	Required Alarm Time for 5 min enter .084, for 10 mins, enter 0.168 .168	=	0.043 AH	
Sum of Standby and Alarm Ampere Hours					1.963 AH	
Multiply by the Derating Factor		X			1.200 AH	
Battery Size/Total Amperes Required					2.355 AH	

Since the current draws listed here can be edited, the user is fully responsible for verifying these calculations.

Entries only to be made in the Yellow cell locations

Battery Check		The panel is capable of charging the selected batteries. You can house your batteries in the fire panel.	
----------------------	--	---	--

Current Draw Check	Total System Current (Alarm + Standby)	0.334
1 If using the MS-2, your total current output is:		Within the current limitations of the panel
If using the MS-4 without optional transformer, your total current output is:		Within the current limitations of the panel
If using the MS-4 WITH the optional transformer, your total current output is:		Within the current limitations of the panel

Footnotes	
Note 1	The current shown represents one zone on the main circuit board in alarm.
Note 2	If using the Reverse Polarity Alarm output, add 0.005 amps; if using the Reverse Polarity Trouble output add another 0.005 amps.
Note 3	Refer to the Device Compatibility Document for standby and alarm current.
Note 4	Refer to the Device Compatibility Document for standby and alarm current.
Note 5	Must use compatible listed Power Supervision Relay.
Note 6	Current limitations of Terminal TB2 circuits is 2.50 amps per NAC (MS 4 requires optional tranformer for max current of 5 amps.)
Note 7	The total standby current must include both the resettable (TB1 Terminals 3&4) and non-resettable for MS-4 only (TB1 Terminals 1&2 power. Caution must be taken to ensure that current drawn from these outputs during alarm does not exceed maximum ratings specified. Current Limitations of TB1, Terminals 1&2 = 0.500 amps, filtered 24 VDC +/- 5%, 120 Hz ripple @ 10mVRMS, non-resettable power and TB1 Terminals 3&4 = 0.500 amps, filtered 24VDC +/- 5%, 120Hz ripple @10mVRMS, resettable power.
Note 8	Total current draw for the MS-2 or MS-4(without optional transformer cannot exceed 3.0 amps. Total current draw for the MS-4 with standard, and optional transformer cannot exceed 6.0 amps.

MS-2(E)

2-Zone Fire Alarm Control Panels



Conventional

General

The Fire-Lite MS-2 and MS-2E Fire Alarm Control Panels

(FSTM) using the latest in microprocessor technology to control conventional fire controls. The MS-2 is compatible with the smoke detectors from System Sensor with drift compensation, maintenance alert, and freeze warning. Automatic synchronization of audio/visual devices with three selections for manufacturer protocol. The Notification Appliance Circuit (NAC) protocol can silence audible devices while strobes continue to flash, using a single pair of wires.

The MS-2 is compatible with conventional input devices such as two- and four-wire smoke detectors, pull stations, waterflow devices, tamper switches and other normally-open contact devices. Refer to the *Fire-Lite Device Compatibility Document* no. 15384 for a complete list of compatible devices.

Note: Unless indicated otherwise, the term "MS-2" refers to both MS-2 and MS-2E models.

Features

- Two Style B (Class B) Initiating Device Circuits (IDCs).
- One Style Y (Class B) NAC.
- 24 VDC.

- ***JSTM* Technology features:**

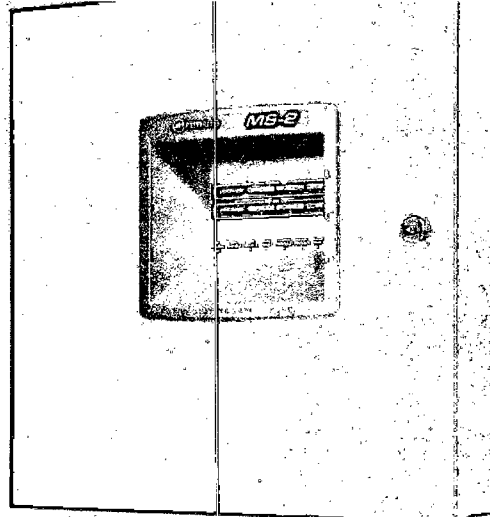
- Drift compensation automatically adjusts detector sensitivity and increases resistance to false alarms caused by dust accumulation.
- Maintenance Alert LEDs (per zone) warn of excessive dirt accumulation, preventing false alarms (meets NFPA 72 requirements).
- Detector sensitivity is automatically measured by the detector, which automatically adjusts its sensitivity back to the factory settings when it becomes more sensitive due to contaminants settling in the chamber.
- Wireless handheld sensitivity meter eliminates the need for voltmeters, magnets, and a physical connection to the detector. The reader displays sensitivity in terms of percent per foot obscuration and provides text status indication.
- Supervisory LED (per zone) provides warning if a detector senses temperature approaching freezing.
- Special test protocol and LED indication allows quick test of all detectors without need for a ladder.

- **NAC synchronization features:**

- Synchronization of standard ANSI audible signals as required by NFPA 72.
- Synchronization of ADA compliant strobes per NFPA 72.
- Selectable for System Sensor, Wheelock, and Gentex protocols.
- Selective Silence for manual silence of horns while strobes continue to flash on the same NAC.
- Alarm verification selectable for each zone.
- Disable switches provided per zone.

- **NAC programmable for:**

- Silence Inhibit
- Auto Silence
- Strobe Synchronization
- Selective Silence (horn-strobe mute)



MS2.wmf.jpg

- Temporal or Steady signal

- Silenceable or Nonsilenceable

- Silent or audible Walk Test operation mode commanded from the front keypad, with automatic return-to-normal after one hour of inactivity.
- Each zone may be programmed for supervisory or fire; each zone has separate red and yellow LEDs.
- Disable switches provided for each zone.
- Form-C Alarm and Trouble relays.
- 3.0 amps total usable current.
- Piezo sounder for alarm, trouble, supervisory and maintenance.
- **Control buttons:**
 - ACK (Acknowledge)
 - Alarm Silence
 - Reset
 - Walk Test
 - Zone Enable/Disable (one per zone)
- **LED indicators:**
 - Fire Alarm (one per zone)
 - Supervisory (one per zone)
 - Trouble (one per zone)
 - Maintenance (one per zone)
 - AC Power
 - NAC Disable
 - Zone Disable
 - NAC Fault
 - System Trouble

- Power Trouble
- Walk Test
- Alarm Silence
- Earth Fault (on circuit board)
- Battery Fault (on circuit board)
- Charger Fault (on circuit board)
- Optional dress panel.

Operation

Activation of a compatible smoke detector or any normally-open fire alarm initiating device activates audible and visual signaling devices, illuminates an indicating LED, sounds the piezo sounder at the FACP, activates the FACP alarm relay and operates an optional module used to notify a remote station or initiate an auxiliary control function.

Specifications

AC POWER — TB8

- MS-2: 120 VAC, 50/60 Hz, 2.3 A.
- MS-2E: 240 VAC, 50 Hz, 1.15 A.
- Wire Size: Minimum 14 AWG (2.0 mm²) with 600 V insulation.

BATTERY (SEALED LEAD-ACID ONLY) — J8

- **Maximum charging circuit:** normal flat charge 27.6 VDC @ 0.8 A.
- **Maximum battery charger capacity:** 18.0 AH battery (two 7.0 AH batteries can be housed in the FACP cabinet. Larger batteries require a separate battery box such as the Fire•Lite BB-17F).

INITIATING DEVICE CIRCUIT — TB3

- Alarm zones 1 & 2.
- Power-limited circuitry.
- Operation: all zones Style B (Class B).
- Normal operating voltage: nominal 20 VDC.
- Alarm current: 15 mA minimum.
- Short-circuit current: 40 mA maximum.
- Maximum loop resistance: 100 ohms.
- End-of-line resistor: 4.7K ohm, ½ watt (P/N 71252).
- Standby current: 4 mA.
- Compatible devices: refer to the *Fire•Lite Device Compatibility Document* no. 15384 for a complete list of compatible devices.

NOTIFICATION APPLIANCE CIRCUIT — TB2

- One NAC.
- Power-limited circuitry.
- Normal operating voltage: nominal 24 VDC.
- Maximum signalling current: 2.5 A total with standard transformer.
- End-of-line resistor: 4.7K ohm, ½ watt (P/N 71252).
- Compatible devices: refer to the *Fire•Lite Device Compatibility Document* no. 15384 for a complete list of compatible devices.

FORM-C RELAYS

- Trouble Relay TB5 (fail-safe).

- Alarm Relay TB6.
- Relay contact ratings: 2.0 A @ 30 VAC (resistive).

AUXILIARY OUTPUT: RESETTABLE POWER — TB1

- Operating voltage: nominal 24 VDC.
- Maximum available current: 500 mA — appropriate for powering four-wire smoke detectors (see notes).
- Power-limited circuitry.

Notes: 1) Refer to the *Fire•Lite Device Compatibility Document* no. 15384 for a complete list of compatible devices.

2) Total current for resettable power and one NAC must not exceed 3.0 A for MS-2.

CABINET DIMENSIONS

Door: 15.342" (38.97 cm) high x 14.667" (37.28 cm) wide x 0.375" (0.95 cm) deep.

Backbox: 15.0" (38.10 cm) high x 14.5" (36.83 cm) wide x 3.0" (7.62 cm) deep.

BACKBOX MOUNTING

The cabinet can be surface mounted. The door is removable during installation by opening and lifting it off the hinges. The cabinet mounts using two key slots at the top of the backbox and two additional 0.25" diameter holes at the bottom.

Listings and Approvals

- UL Listed: S624.
- MEA: 297-01-E.
- CSFM: 7165-0075:200.

Ordering Information

MS-2: Two-zone conventional FACP. 120 VAC, 50/60 Hz, 2.3 A.

MS-2E: Same as above with 240 VAC, 50 Hz, 1.15 A operation.

BB-17F: Battery box, required to house two batteries greater than 7 AH to a maximum of 18 AH.

DP-MS2: Optional dress panel.

MS-2RB: MS-2E replacement board.

TR-1-R: Optional trim ring for semi-flush mounting.

4XTMF: Transmitter Module provides a supervised output for a local energy municipal box transmitter in addition to alarm and trouble reverse polarity.

A 4-zone version of this panel is also available. See DF-52266.

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This document is not intended to be used for installation purposes.
We try to keep our product information up-to-date and accurate.
We cannot cover all specific applications or anticipate all requirements.
All specifications are subject to change without notice.



Made in the U.S.A.

For more information, contact Fire•Lite Alarms. Phone: (800) 627-3473, FAX: (877) 699-4105.
www.firelite.com



State of New Jersey
Department of Community Affairs
Division of Fire Safety



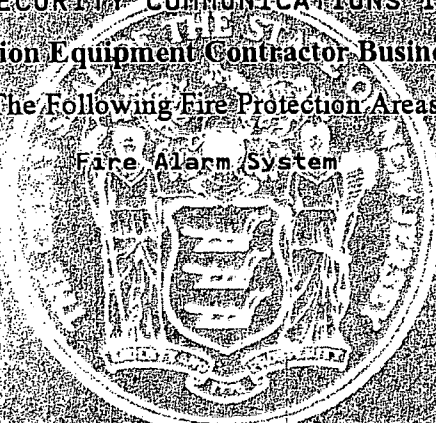
Hereby Issues To

JM SECURITY COMMUNICATIONS INC

Fire Protection Equipment Contractor Business Permit

In The Following Fire Protection Areas

Fire Alarm System



P00439

10/31/2009 to 10/31/2012

Permit ID

Date Issued

Lapse Date

Charles A. [Signature]
Acting Commissioner



State of New Jersey
Department of Community Affairs
Division of Fire Safety



Hereby Issues To

GERARD R. MELIA

The Following Certification As

FIRE ALARM SYSTEM

09/28/2009 to 10/31/2012

Issue Date

Lapse Date

153691

ID Number



New Jersey Office of the Attorney General
Division of Consumer Affairs
Board of Examiners of Electrical Contractors

TELECOMMUNICATIONS

Limited Wiring Exemption*

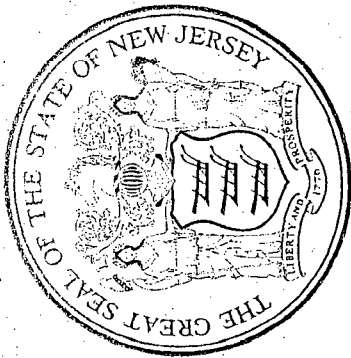
Issued to: JM Security Communications
591 Fischer Blvd.
Toms River, NJ 08753

Gerard R. [Signature]

Signature of holder

1457

Exemption No.



Business License

Fire Alarm, Burglar Alarm and Locksmith Advisory Committee

Issued to:

JM Security Communications

591 Fischer Boulevard
Toms River NJ 08753

34BF00031800

BA and FA Business

Issue Date: 10/02/2009

Expiration Date: 01/31/2011

NOT AN
ELECTRICIAN'S
OR PLUMBER'S
LICENSE

State Of New Jersey
New Jersey Office of the Attorney General
Division of Consumer Affairs

THIS IS TO CERTIFY THAT THE
Division of Consumer Affairs

HAS REGISTERED

JM Security Communications
Gerald Melia
591 Fischer Boulevard
Toms River NJ 08753

FOR PRACTICE IN NEW JERSEY AS A(N): Home Improvement Contractor

10/21/2009 TO 12/31/2010
VALID

13VH02037500
LICENSE/REGISTRATION/CERTIFICATION #

Signature of Licensee/Registrant/Certificate Holder


DIRECTOR

New Jersey Office of the Attorney General
Division of Consumer Affairs
THIS IS TO CERTIFY THAT THE
Division of Consumer Affairs
HAS REGISTERED
JM Security Communications
Home Improvement Contractor

NOT AN ELECTRICIAN'S OR PLUMBER'S LICENSE
10/21/2009 TO 12/31/2010

VALID

SIGNATURE

13VH02037500

License/Registration/Certificate #

DIRECTOR

PLEASE DETACH HERE
IF YOUR LICENSE/REGISTRATION/
CERTIFICATE ID CARD IS LOST
PLEASE NOTIFY:

Division of Consumer Affairs
P.O. Box 46016
Newark, NJ 07101

PLEASE DETACH HERE



State of New Jersey

BURGLAR ALARM
LICENSE

34BA00098600

EXPIRES: 8/31/2010

DOB: 3/23/1950

GERARD R. MELIA SR



State of New Jersey

FIRE ALARM
LICENSE

34FA00081800

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State of New Jersey

BURGLAR ALARM
LICENSE

34BA00142200

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DOB: 9/13/1974

GERARD R. MELIA JR.



State of New Jersey

FIRE ALARM
LICENSE

34FA00113100

EXPIRES: 8/31/2010

DOB: 9/13/1974

GERARD R. MELIA JR.



State of New Jersey
Department of Community Affairs
Division of Fire Safety



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ID Number

Charles A. R. Jr.
Acting Commissioner