Designation: F967 – 03 (Reapproved 2011)

Standard Practice for Security Engineering Symbols[1]

This standard is issued under the fixed designation F967; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This practice utilizes symbols to depict security systems and equipment requirements for architectural or engineering drawings that are produced either manually or by computer aided design (CAD). The symbols depicted include some symbols that have already been somewhat universally accepted or that have already been adopted by a standards-writing body, such as by the National Fire Protection Association.

1.2 It is not proposed that all of the symbols need to be utilized since the level of detail required for drawings is likely to vary. Generic symbols of a class of security device may be sufficient in some instances. Moreover, the need to provide a measure of security in the actual drawing may also suggest a need to utilize a generic symbol rather than to depict the exact device being installed.

1.3 In the event that a greater level of detail is required, it is possible to combine many of the symbols to create new symbols that achieve the desired level. While some combinations of symbols are shown, it would be impractical to attempt to depict every conceivable combination of symbols. It is also the intent of this practice that the symbols be capable of being continuously expanded and modified as the industry state of the art changes or as emphasis varies. For example, little attention is given to document security in the security symbols since such requirements are not generally fully met during construction periods but are rather developed and provided for subsequently. Since much of this equipment is not installed but is "placed," such as furniture, there is only one symbol proposed (for example, for document shredders).

1.4 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Keywords

2.1 computer aided design; security engineering; symbols

1. ANNOTATION

Existing Equipment

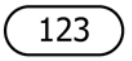
Point and Zone Indicator

Connection Between Devices (for example, button and lock)

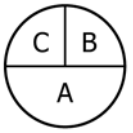
Detail and Reference Drawing

Door Number (if more than one door in room, use sub-letter)

Room or Space Number



Device Number (reference device schedule)



Device Reference
A = Drawing Sheet
B = Detail
C = Device/Zone Number

2. ACCESS CONTROL

Generic Card Reader (reference door schedule or specifications for type): *P* = pedestal mount


Card Reader with Touch Pad

[1] This practice is under the jurisdiction of ASTM Committee F12 on Security Systems and Equipmentand is the direct responsibility of Subcommittee F12.10 on Systems Products and Services.

Current edition approved March 1, 2011. Published June 2011. Originally approved in 1986. Last previous edition approved in 2003 as F967 – 03. DOI: 10.1520/F0967-03R11.

Token-Type Access Control

CCTV and Card Reader

CCTV and Intercom

Split Lens CCTV with ID Card Receptacle

Apartment Type CCTV with House Phone and Touch Pad (insert" K" "

", as appropriate for key switch)

Biometric Access Control Device (reference door schedule or specifications for type)

Touch Pad Lock or Device, Mechanical or Electronic (reference door schedule for type)

Turnstile (reference door schedule for type and function)

Post and Rail (rope)

Generic Screening Device
X: *M* = Metal Detector
E = Explosive Detector
X = X-ray
T = Tag Detector (EAS)

Sally Port

Indicating Interlocking Doors

Indicating Space is a "Man-Trap"

Card Access Reader
B = Barcode
W = Wiegand
P = Proximity
M = Mag Stripe
F = Elevator Floor Call
H = Elevator Hall Call
T = Token
S = Smart Card

Biometrics Access Control Device
H = Hand Geometry
F = Finger Print
V = Voice
R = Eye Retina
I = Eye Iris

Keypad Device

Card Reader with Keypad

Card Reader with Time and Attendance

3. ANNUNCIATION: CONSOLE/PANEL

Strip (Tallyroll) Printer

Printer

Time Clock with Card Reader

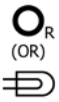
Central Processing Unit

CRT (cathode ray tube/display)

Static Map Display (for dynamic map display, use CRT symbol)

Keyboard

Jeweled Signal Light



Panel Light Indicator (R = Red, A = Amber, W = White, V = Violet, G = Green, Y = Yellow, B = Blue, O = Orange)

Multiplex Panel

Panel Sound Indicator

Panel Sound and Light Indicator


Reset

Push-Button, Momentary/Make (circuit closing)

Time Delay Module

Control Device Module, Door Release

End-of-Line Device Module

Resistance (Ohms) (indicate value; that is, 10 000 Ω)

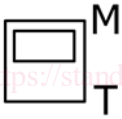
Thousands


Dry Contacts, Set

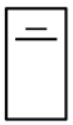

Contacts with Current

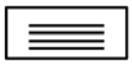

Power Switch

Field Panel
T: *C* = Card Reader
A = Alarm

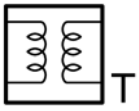


Control Panel
T: *B* = Burglar
F = Fire
P = Perimeter
D = Door


Central Processing Unit


Keyboard


Printer



Power Supply
T: *L* = Lock
C = Camera
P = Panel
I = Intercom

4. ANNUNCIATION: DEVICES


Annunciation Device, Generic


Buzzer

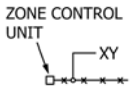

Generic Bell


Generic Chime

Generic Security Horn (differentiate from fire horn; use also for local alarm)

Audio Device
T: *L* = Lock
C = Camera
I = Intercom

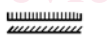
5. BARRIERS AND VEHICLE CONTROLS



Generic Fence (reference type in specification or schedule)
X: (Fence Type)
Y: (Sensor Type, see below)

Generic Masonry (reference type in specification or schedule)
X: *C* = Chain Link; *W* = Welded Mesh; *B* = Barbed Top; *R* = Razor Ribbon
Y: *E* = Electrostatic; *T* = Taut Wire; *V* = Vibration


Ditch Barrier


Ditch and Berm Barrier


Roll-Up Gate

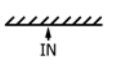

Sliding Gate


Swing Gate

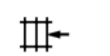

Traffic Arm


Traffic Lights (use “M” for miniature)


Generic Vehicle Sensor (reference specification or schedule for type)



Tire Treddle


Security Grill with Emergency Release

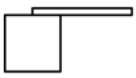

Security Grill

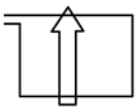

Generic Security Screen


Repair/Secure Window Operator (use “R” for repair,“ S” for security)


Turnstile


Revolving Door


Traffic Arm


Vehicle Loop Detector


Security Window Screen
T: *S* = Shade
B = Blind (see Section 10 for alarm screen)

6. COMMUNICATIONS


Telephone Handset


Intercom, Master, Hands-Free (use “S” for slave or sub)


Intercom, Push-to-Talk


Generic Speaker (reference specification or schedule for type)


Nurse Station, Master, Wall Mount (use “D” for desk mount)


Nurse Call System Device, Generic


Paging System Device, Generic


Private Telephone System Device, Generic


Public Telephone System Device, Generic


Two-Way Radio Base Station


Flush Mount Panel Board/Cabinet

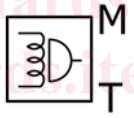

Surface Mount Panel Board/Cabinet

Intercom
T: *M* = Master
S = Substation

Two-Way Radio Microphone

Cellular Transmitter

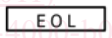
Telephone Dialer
T: *D* = Digital Communicator
V = Voice Dialer



Fiber Optic Module
T: *Tx* = Transmitter
R = Receiver
T = Transceiver

7. ELECTRICAL


Resistor



End-of-Line Device


Amplifier


Antenna

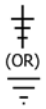

Antenna, Loop


Battery


Stand-By Battery


Capacitor


Circuit Breaker



Ground

Circuit Return, Common

Circuit Return, Frame

Relay, Normally Open

Relay, Normally Closed

Relay

Transformer

Transformer (on floor plan)

Rectifier

Diode

Visual Signaling Device

Fuse

Motor

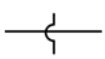
Generator

Junction Box, in Ceiling

Junction Box, Wall

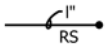
Electrical Outlet, Wall, Duplex

Triplex Receptacle



Intersection, No Connection

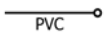
Intersection, Connection



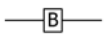
Conduit Run, Exposed, Turn Down (rigid steel—1 in.)

Conduit Run, Exposed, Armored

Conduit Run, Concealed, Turn Up (EMT)



Conduit Run, Exposed, Turn Up (PVC)

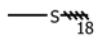


Booster

Shielded Cable

Coaxial Cable

Conductor, Twisted Pair



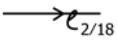
Conductor, Security System (4 conductors, No. 18 AWG)

Fiber Optic Cable

Local Radio Signal Link

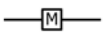
Long Range Radio Signal Link

Power Panel



Home Run, 2 Conductors, 18 AWG (number of arrows indicates number of circuits)

Feeder

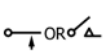


Manhole

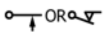
Rotary Switch

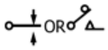
Toggle Switch, SPST

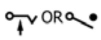
Toggle Switch, SPDT

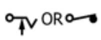


Nonlocking, Momentary Circuit Closing (make)


Nonlocking, Momentary Circuit Opening (break)


Transfer

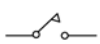

Locking, Circuit Closing (make)

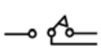

Locking, Circuit Opening (break)

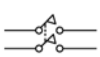

Form A, SPST, N.O.

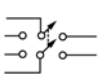

Form B, SPST, N.C.


Form C, SPDT


SPST (Single-Pole, Single-Throw)


SPDT (Single-Pole, Double-Throw)


DPST (Double-Pole, Single-Throw)


DPDT (Double-Pole, Double-Throw)

8. LIGHTING


Incandescent Light Fixture, Flush, Ceiling Mount

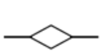

Incandescent Light Fixture, Flush, Wall Mount


Incandescent Light Fixture, Surface, Ceiling Mount


Incandescent Light Fixture, Surface, Wall Mount

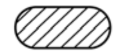

Fluorescent Fixture, Ceiling Mount


Dedicated Security Lighting, Low Pressure Sodium (use other designators for other types, that is, MV = mercury vapor)

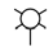

Minimum Foot-Candles or Lamberts this Area


Spotlight/Floodlight


Outdoor Strobe Light

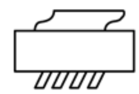

Illuminate this Area

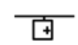

Infrared Illuminator

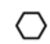

Street Light, Pole-Mounted

9. MISCELLANEOUS


Security Container; Safe; File Cabinet


Document Destroyer


Safe, Tack-Welded to Structural Member


Signage


Bar/Grill/Seal this Location

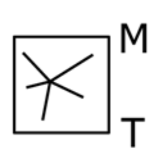

Timer

Gun Port

10. SENSORS


Generic Volumetric Motion Sensor (Mono)
X: *M* = Microwave
I = Passive IR
U = Ultrasonic
D = Dual Tech

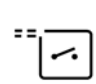
Generic Volumetric Beam Sensor (Bi-Static)
X: *M* = Microwave
I = Infrared
P = Photo-cell



Generic Glass Breakage Sensor
T: *A* = Audio
S = Shock


Capacitance Sensor


Temperature Sensor


Pad/Mat Switch