

1106 54TH AVENUE EAST, TACOMA, WA 98424

MERIDIAN MARKET 725 & 727 AES RADIO

4423 S. MERIDIAN AVE E, #725 & #727 PUYALLUP, WA 98373

PARCEL: 04191065022

SFS PROJECT# FA22101

OVERVIEW

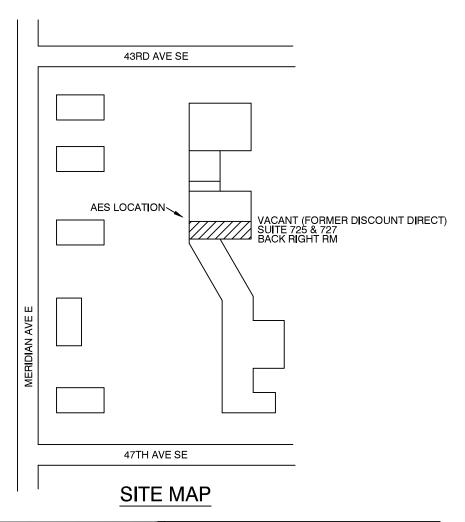
THE SCOPE OF THIS PROJECT IS TO INSTALL AN AES RADIO IN SUITE 725 & 727.

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- 2. NOTIFIER (AFP-200) FIRE ALARM CONTROL PANEL
- 3. AES (7707P-88-ULP-M) RADIO
- 4. DURACELL (DURA12-12F2) BATTERY

SCOPE OF WORK:

THE SCOPE OF THIS PROJECT IS TO INSTALL AN AES RADIO IN SUITE 725.



PARCEL# 041916022

| DESIGNER: | JEF MARQUEZ | |
|-----------|-------------|--|
| DATE: | 10/7/22 | |
| AHJ: | PUYALLUP | |
| JOB#: | FA22101 | |
| SHEET#: | FA1 OF 1 | |

SMITH FIRE SYSTEMS, INC.

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OFFICE (253) 248-2004 FAX (253) 926-0726

MERIDIAN MARKET 725 AES RADIO 4423 S. MERIDIAN, SUITE 725 & 727, PUYALLUP 98373 JEF MARQUEZ NICET LEVEL IV FIRE ALARM SYSTEMS CERT #119820 EXP 7/1/25





February 19, 2004

DN-3783 • A-105

AFP-200 Analog Fire Panel

Section: Intelligent Fire Alarm Control Panels

GENERAL

The AFP-200 is a compact, cost-effective, intelligent fire alarm control with a capacity of 198 individually identified and controlled points and an extensive list of powerful features. The AFP-200 provides capabilities that exceed most large intelligent systems, at a cost comparable to conventional control

FEATURES

- · 198 intelligent device capacity (99 analog detectors and 99 monitor/control modules). Style 4, 6, or 7.
- Overall 301 point capability (198 intelligent points, 4 programmable NAC circuits, 99 programmable relays).
- Network ready (reference NOTI FIRE NET™ and NAM-232 data sheets for more information).
- · Intelligent features:
 - Manual sensitivity adjustment.
 - ✓ Day/Night automatic sensitivity adjustment.
 - ✓ Drift compensation (U.S. Patent Pending) meets UL requirements as a calibrated test instrument.
 - Auto detector test (meets NFPA 72).
 - ✓ Maintenance alert (two separate algorithms).
 - ✓ Pre-alarm (AWACS™ U.S. Patent Pending).
 - Activate local sounder base on pre-alarm.
 - ✓ LED blink control for sleeping areas.
 - Automatic device type check.
- Releasing features:
 - Four independent hazards.
 - ✓ Sophisticated cross-zone (three options)
 - ✓ Delay timer and Discharge timers (adjustable).
 - Abort (four options).
- Optional DACT, with AC fail delay.
- LCD-80 remote display/control.
- ACS annunciators (EIA-485), including LDM custom.
- Printer interface (80-column and 40-column printers).
- 5.0 A usable regulated output power, plus 6.0 A expander (maximum 8.0 A to panel circuits).
- 80-character LCD display, backlit.
- Real-time clock, with European format option.
- History file with 650-event capacity in nonvolatile memory. Includes non-erasable shadow history.
- Waterflow or supervisory selection per point.
- Alarm Verification selection per point, with tally
- Walk Test reports two devices set to same address.
- Positive Alarm Sequence (PAS) Presignal per NFPA 72.
- Silence inhibit and Auto Silence timer options.
- March time/temporal/California code for bell circuits.
- Field-programmable on panel or on PC, with user-defined passwords, plus Autoprogram feature.
- UL-Listed modem interface allows remote/off-site system
- FZM-1 two-wire detector interface provides compatibility with many non-NOTIFIER detectors for retrofit applications (consult factory for latest compatibility listings).
- Dual-rate charger for up to 90 hours of standby power.

NOTI • FIRE • NET™ is a trademark of NOTIFIER, 1994.





California State Fire Marshal 7165-0028:164



MEA 104-93-E Vol. XI

U.S. Coast Guard

161.002/23/3

The AFP-200

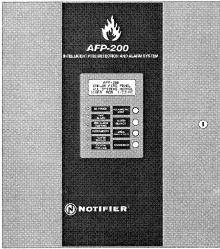


94/60004 (E2)

City of Chicago CLASS 1:

City and County of **DENVER**

1928E



3783afp2.wmf

- Two-Stage option for notification circuits (Canada).
- Tornado Warning activates different notification circuit code.
- Non-alarm points for lower priority functions.
- Remote Silence/Reset/Evacuate via monitor modules.
- Automatic time control functions, with holiday exceptions.
- Rapid poll algorithm for manual stations. Responds in < 2 seconds.
- Operates with untwisted, unshielded wire (up to 1,000 ft./ 304.8 m) for retrofit applications (U.S. Patent 5, 210, 523).
- UL Listed for Fire Signaling per Standard 864 & NFPA 72.
- UL Listed for Burglary applications per Standard 1076.
- UL Listed for Releasing Service. Complies with NFPA 12, 12A, 12B, 13, 15, 16, 17, 17A, 2001 Standards when installed in accordance with appropriate NFPA standard.
- Approved for Agent Release and Preaction/Deluge by CSFM, City and County of Denver, FM, MEA, and ULC.
- Approved for marine applications by U.S. Coast Guard and Lloyd's Register of shipping.

AGENCY LISTINGS AND APPROVALS

Listing agencies and file numbers displayed above. These listings and approvals apply to the basic AFP-200 control panel. In some cases, certain modules may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

NOTIFIER® is a Honeywell company.

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. For more information, contact NOTIFIER. Phone: (203) 484-7161 FAX: (203) 484-7118

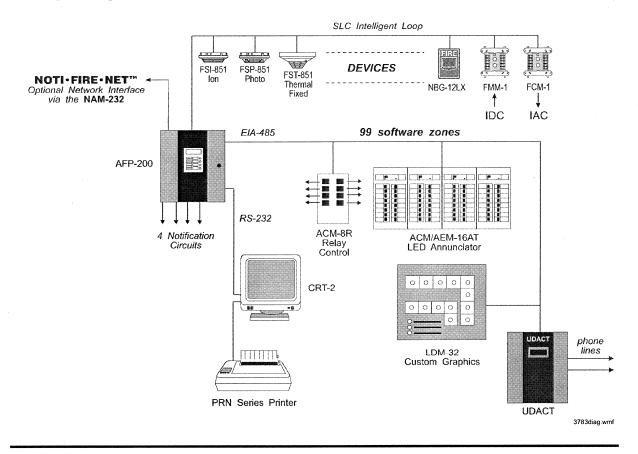


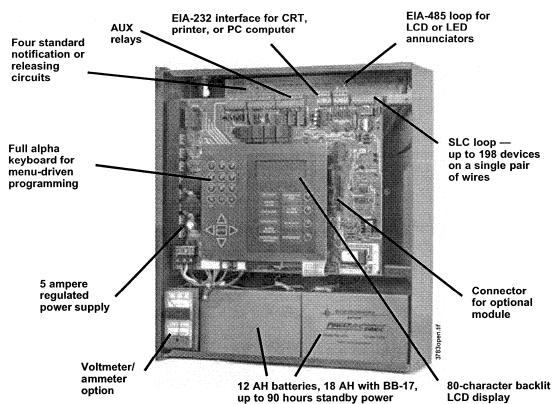
12 Clintonville Road, Northford, Connecticut 06472





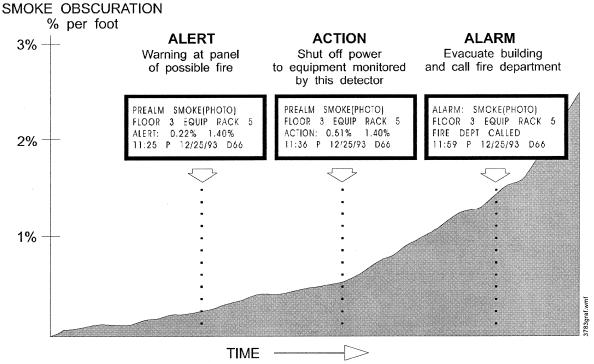
Sample System Diagram





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AWACS™ Advance Warning Addressable Combustion Sensing (U.S. Patent Pending)



ALERT and ACTION levels are completely adjustable in the field to suit the cleanliness and stability of the environment. ALARM levels are field adjustable to one of three levels within the UL permitted range. ACTION levels latch and may be used to perform control functions. ALERT levels self-restore and may be used to activate a local sounder base before general ALARM evacuation.

Field Programming — 3 Ways

1. AUTO-PROGRAM

The AFP-200 identifies all devices that are connected, determines the type of device, and loads default values (general alarm) into nonvolatile memory. This is completed in less than 30 seconds.

2. ON-LINE EDIT

While still providing fire protection, the AFP-200 program may be completely edited from the front keypad. Menu trees permit easy change of any parameter without referral to the programming manual. Recall, increment and edit function speeds entry of alphanumeric labels. New program check routine catches common errors.

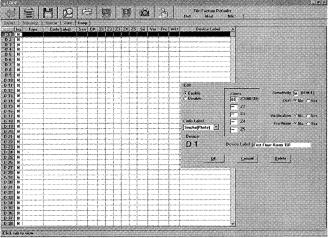
3. OFF-LINE PC: VeriFire-200 (included with VeriFire-CD)

The complete AFP-200 program may be created in an off-line PC-compatible computer with a Windows®-based utility, then loaded into the AFP-200 EIA-232 port. The program may also be off-loaded to a PC at any time. High-speed data transfer completes upload or download in less than one minute. The PC program may also be used to access remote AFP-200 systems over dial-up phone lines, providing detail status information and history file search/sort.

AUTOPROGRAM
PLEASE WAIT

0 = CLR 1 = AUTO 2 = POINT
3 = PASSWD 4 = MESSAGE
5 = ZONES 6 = SPL ZONES
7 = SYS 8 = CHECK

3783v200.jpg



SPECIFICATIONS

- Primary input power, 120 VAC, 50/60 Hz, 3.0 A; for AFP-200E: 230 VAC, 50/60 Hz, 1.5 A.
- Total Internal 24 VDC Power: 5.0 A (total shared power).
 - ✓ High-ripple regulated power: 1.5 A (suitable for EIA-485) devices, except ACM-8R); 1.0 A maximum standby.
 - Non-resettable power: 500 mA.
 - Four-wire smoke detector power: 500 mA.
 - Four built-in notification circuits:
 - NAC Circuit 1: 2.25 A.
 - NAC Circuits 2-4: 2.25 A (shared total).

NOTE: with optional APS-6R Power Supply NAC circuits 3 & 4 are expanded to 3.0 A (8.0 A total power).

- Battery charger range: 7 AH 18 AH.
- Charge high rate: 29.1 V. Float rate: 27.0 V.
- Relay contact rating: 2.0 A @ 30 VDC.
- Cabinet dimensions: 16.125" (40.958 cm) high x 14.5" (36.83 cm) wide x 5.5" (13.97 cm) deep.

SYSTEM CAPACITY

- · Total programmable input/output points: 301
- Intelligent detectors: 99
- · Addressable monitor/control modules: 99
- Programmable NAC circuits in panel: 4
- Programmable software zones: 99
- Programmable remote relay/annunciator points: 99
- · LCD-80 annunciators per system: 4
- · ACS annunciators per system: 10

CONTROLS AND INDICATORS

6 LED indicators: AC Power; Fire Alarm; Pre-Alarm; Supervisory/Security; Alarm Silenced; System Trouble.

21 Membrane Switch Controls: Acknowledge/Step; Silence; Evacuate: System Reset: 12-key Alpha pad; 4 cursor keys; Enter.

LCD Display: 80 characters (4 x 20) with long-life LED back-

Data sheets are available for many of the compatible products listed below.

COMPATIBLE INTELLIGENT DEVICES

FSI-851: Ion detector, replaces FSI-751.

FSI-751: Ion detector.

FSP-851: Photo detector, replaces FSI-751.

FSP-751: Photo detector.

FSP-851T: Photo detector with 135°F (57°C) thermal element, replaces FSP-751T.

FSP-751T: Photo detector with fixed thermal element.

FST-851: Thermal detector, 135°F (57°C), replaces FST-751.

FST-751: Thermal detector, fixed.

FST-851R: Thermal detector, 135°F (57°C) with rate-of-rise, replaces FST-751R.

FST-751R: Thermal detector, fixed and rate-of-rise.

FST-851H: 190°F (88°C) high-temperature thermal detector. FSH-751: HARSH[™] photo detector, requires B710HD base, detector replaces HPX-751.

HPX-751: HARSH™ photo detector, requires B710HD base. LPX-751L: VIEW® laser detector.

FSD-751PL: Low-flow photo duct detector with housing, replaces FSD-751P.

FSD-751P: Duct detector, with housing.

FSD-751RPL: Low-flow photo duct detector with housing and relay, replaces FSD-751P.

FSD-751RP: Duct detector, with housing and relay.

B710LPBP: Standard flanged base, package of ten.

B501BP: Standard flangeless base, package of ten.

NOTE: Remove "BP" suffix for single-pack bases.

B710HD: Base for FSH-751 (HARSH™) only.

B224RB: Relay base. B224BI: Isolator base.

B501BH: Sounder base.

B501BHT: Sounder base with temporal sounder.

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NBG-12LX: Addressable pull station, visible LED.

ISO-X: Isolator module.

FMM-1: Monitor module.

FMM-101: Monitor module, miniature.

FDM-1: Monitor module, dual, two independent Class B circuits.

FZM-1: Monitor module, two-wire smoke detectors.

FCM-1: Control module.

FRM-1: Relay module.

FSM-101: Pull station monitor module.

XP5-M: Transponder, monitor, 5 addressable Class B circuits.

XP5-C: Transponder, control/relay, 5 addressable Class B cir-

XP6-C: Six-circuit supervised control module.

XP6-MA: Six-zone interface module; connects intelligent alarm system to two-wire conventional detection zone.

XP6-R: Six-relay (Form-C) control module.

XP10-M: Ten-input monitor module. XPIQ: Intelligent quad transponder.

COMPATIBLE DEVICES, EIA-232 Port

PRN Series: 80-column printer.

VS4095/S2: Printer, 40 column, 24 volts. Mounted in external backbox (order from Keltron, Inc.).

CRT-2: Video display terminal.

NAM-232: Network Interface Module to NOTI • FIRE • NET™ wire or fiber models.

COMPATIBLE DEVICES, RS-485 Port

ACS Series: Remote Serial Annunciator/Control systems.

LCD-80: Remote LCD display.

LDM Series: Remote custom graphic driver modules.

ACM-8R: Remote relay module. Eight Form-C relays.

NIB-96: Network Interface Board.

RPT-485: Series Repeater, isolator and/or fiber-optic modem.

UDACT: Universal Digital Communicator.

PRODUCT LINE INFORMATION

AFP-200: AFP-200 system. Includes main PC board with display and keypad, backbox and door (gray), hardware and instruction manual, 120 VAC.

AFP-200E: Same as AFP-200, but 230 VAC.

AFP-200R: Same as AFP-200, but with red backbox and door.

AFP-200RE: Same as AFP-200R, but 230 VAC.

AFP-200C: Same as AFP-200, but ULC-approved version.

AFP-200RC: Same as AFP-200R, but ULC-approved version.

DR-AFP200*: Replacement door, gray.

DR-AFP200R*: Replacement door, red.

*Add an "E" to end of part number for 230 VAC labeling.

SBB-4X: AFP-200 backbox (no door), gray, for replacement only.

SBB-4XR: AFP-200 backbox (no door), red, for replacement only.

CAB-AM: Heavy-duty outer enclosure. Required for marine agency approved applications.

4XTM: Plug-in Transmitter Module. Provides municipal box and remote station connection.

RTM-8: Plug-in Relay Transmitter Module. Provides eight Form-C relays, plus transmitter.

4XMM: Ammeter/Voltmeter.

TR-4XG: Gray Trim Ring for semi-flush mounting (TR-4XR for

DP-AFP200: Full-length dead-front panel (required for Canadian applications).

PS Series: Batteries. The AFP-200 requires two 12-volt, 7.0 to 18.0 AH batteries.

BAT Series: Batteries. The AFP-200 requires two 12-volt, 7.0 to 18.0 AH batteries.

APS-6R: 6.0 A expansion supply (requires BB-17).

BB-17: Battery box, required for batteries above 12.0 AH, or if APS-6R is used.

CHG-120: 120 AH battery charger for use with 25 to 120 AH batteries.

411 Series: Digital Alarm Communicator/Transmitter.

VeriFire-CD: Programming kit for PC. Includes a CD with a variety of VeriFire™ programs (including VeriFire-200), cable, and instructions.

ROM-AFP200SP: Spanish language kit. Includes software IC, manual, and labels.





A Newer, Smarter Alarm Communications Platform

Feature Highlights

- Leverages state of the art technology
- Applies advanced security protection
- Offers flexible power and configuration options
- Engineered for backward compatibility with legacy systems
- Enables future ready capabilities
- Provides instant subscriber status through front panel with Power and Trouble LEDs, a backlit LCD display, and Menu/Silence button
- Includes robust Multiple Communication Technologies (MCT) feature
- Emulates virtual keypad
- Improves functionality with an adaptive Graphic User Interface (GUI) for programming via smartphones, tablets and PCs
- Plus many more...

Key Benefits

- Built upon the solid foundation of AES-IntelliNet patented mesh radio technology for use in private licensed wireless networks
- Protects subscriber units against unauthorized access and rogue activity with a password-protected Dealer Code
- Makes programming and streamlined troubleshooting easy with user friendly interface
- Adds integrated supervision of AES-IntelliPro full data module
- Provides versatile power options:
 - (1) Direct from the Fire Alarm Control Panel (FACP) without requiring an electrician onsite and without Subscriber backup battery;
 - (2) Directly from the FACP with Subscriber backup battery; or
 - (3) Traditional installation with plug in Class 2 low power transformer
- Allows for enhancement upgrades and an expanded number of new features to be added easily with highly flexible and scalable alarm communications infrastructure
- Rigorously tested to the highest industry standards and future ready to meet emerging NFPA code and UL standards







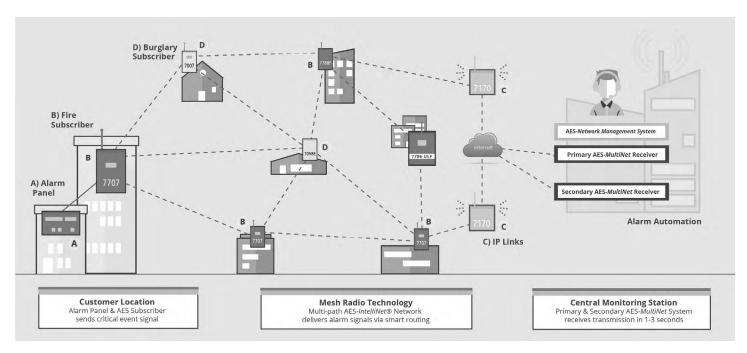


Enhanced Wireless Fire Alarm Monitoring

Powered by AES enhanced mesh radio technology, *IntelliNet* 2.0 7707 Fire Subscribers are next generation universal wireless communicators that provide advanced security protection for any new or existing alarm monitoring network. The AES Model 7707 is ideal for commercial fire applications. With the AES-*IntelliPro* full data module option, they are the ideal drop-in replacement for Plain Old Telephone Service (POTS) lines.

The red metal enclosure comes with a key lock and front panel LCD backlit display with intuitive view that provides an instant visual of the subscriber status. The user friendly GUI makes it easy to program AES subscriber units via a smartphone, laptop, tablet, or integrated Universal Serial Bus (USB)—without the need for special cables or having to use a handheld programmer. Additional knockouts make it easier to mount for faster installation.

IntelliNet 2.0 Private Wireless Mesh Radio Network



The *IntelliNet* 2.0 Fire Subscriber has an 8 Zone modular design for expansion with normal and reverse polarity, POTS and DACT interfaces with an option for the 7794A AES-*IntelliPro* full data module add-on accessory board. AES subscribers' intelligent software automatically detects new hardware and devices to reduce installation time.

An AES certified WiFi accessory allows seamless wireless connectivity for configuration and programming. A laptop, Ethernet cable, or a Wi-Fi USB dongle is required for *IntelliNet* 2.0 programming, handheld programmers will not work with 2.0 units. A FACP Power Supply Adapter is required for certain configurations when using flexible power options. The forward compatible design allows for feature add-ons, engineered to adapt seamlessly with future software upgrades as technology advances. *IntelliNet* 2.0 allows configuration cloning for faster installation time.

The AES 7707 was designed with quick configuration and installation in mind to make it easier for field technicians to get in, out, and on to the next install.

Visit our Fire Marshal Resources web page for official NFPA and UL Listings: aes-corp.com/products/fire/fire-marshal-resources

How to Order 7707 Fire

| | IntelliNet 2.0 Fire Subscribers | | | | | | |
|-------------------------------|---|--|--|--|--|--|--|
| 2.0 PREMIUM (UL & ULC Listed) | | | | | | | |
| 7707P-88-M | IntelliNet 2.0 Fire Subscriber, 8 Zone with Multiple Communication Technologies (MCT), Red Enclosure | | | | | | |
| 7707P-88-ULP-M | IntelliNet 2.0 Fire Subscriber, 8 Zone with 7794A AES-IntelliPro, and integrated onboard Local Annunciator plus MCT, Red Enclosure | | | | | | |
| 7707P-44-M | IntelliNet 2.0 Fire Subscriber, 4x4 Zone (4 Reversing Polarity, 4 Supervised) with Multiple Communication Technologies (MCT), Red Enclosure | | | | | | |
| 7707P-44-ULP-M | IntelliNet 2.0 Fire Subscriber, 4x4 Zone (4 Reversing Polarity, 4 Supervised) with 7794A AES-IntelliPro, and integrated onboard Local Annunciator plus MCT, Red Enclosure | | | | | | |
| 2.0 ACCESSORIES | | | | | | | |
| 7794A | Standalone AES- <i>IntelliPro</i> Fire full data module add-on accessory board with firmware for new <i>IntelliNet</i> 2.0 units only, cannot be used in legacy units | | | | | | |
| 77-WiFi | AES certified WiFi adapter | | | | | | |
| 77-FACPA | FACP Power Supply Adapter for internal mount | | | | | | |
| 77-FACPA-KIT | External installation hardware for 2-way Junction Box | | | | | | |
| Legacy Fire Subscribers | | | | | | | |
| 7706-ULF | Integrated Fire Monitoring System, Red Enclosure | | | | | | |
| 7788F-ULP-P | Legacy Fire Subscriber, 8 Zone with 7795 AES- <i>IntelliPro</i> (7794 full data module, 7762 hardware supervisory module, and 7740 Local Annunciator), Red Enclosure | | | | | | |
| 7788F-ULP | Legacy Fire Subscriber, 8 Zone, 8 Supervised Zones with 7794 AES-IntelliPro, Red Enclosure | | | | | | |
| 7788F | Legacy Fire Subscriber, 8 Zone, 8 Supervised Zones, Red Enclosure | | | | | | |
| 7744F-ULP-P | Legacy Fire Subscriber, 4 Zone with 7795 AES- <i>IntelliPro</i> (7794 full data module, 7762 hardware supervisory module, and 7740 Local Annunciator), Red Enclosure | | | | | | |
| 7744F-ULP | Legacy Fire Subscriber, 4x4 Zone, 4 Supervised Zones with 7794 AES-IntelliPro, Red Enclosure | | | | | | |
| 7744F | Legacy Fire Subscriber, 4x4 Zone, 4 Reversing Polarity, 4 Supervised Zones, Red Enclosure | | | | | | |
| LEGACY ACCESSORIES | | | | | | | |
| 7794 | Standalone AES- <i>IntelliPro</i> Fire full data module add-on accessory board for legacy units only, please see 7794A above for <i>IntelliNet</i> 2.0 version | | | | | | |

DIMENSIONS 13"H x 8.5"W x 4.5"D (33cmH x 21.5cmW x 11.4cmD)

WEIGHT
5.8 lbs (2.6 kilograms)
excluding battery
13 lbs (5.9 kilograms) with
10 Ah battery

RADIO FREQUENCY Standard Frequency Range: 450-470 MHz Contact AES for other UHF and VHF frequencies

ANTENNA

2.5 dB tamper resistant antenna included, mounts on enclosure Optional remote mounting antenna available

POWER INPUT
AC SOURCES
Transformer: Class 2
16.5V AC nominal output
1.9 A max current (40 VA MIN)
ELK ELK-TRG1640,
MG ELECTRONIC SALES MGT1640,
or AES 1640 (not included)
DC SOURCES (includes FACP)
24V DC Regulated Power Supply
with Subscriber
Rechargeable Battery
1.9 A max current

BACKUP BATTERY 10-12 Ah, UL recognized lead acid gel cell, size based on subscriber configuration

ALARM SIGNAL INPUTS/ZONES

- · 8 individually programmable E.O.L. type zone inputs
- 4+4: 4 reverse polarity input and 4 individually programmable
 E.O.L. type zone inputs
- Optional 7794A AES-IntelliPro for full data via Contact ID, Pulse, Modem IIe and Modem IIIa2

UL LISTINGS
UL 864 10th Edition
Standard for Control Units and
Accessories for Fire Alarm Systems
ULC S559-04 1st Edition
Equipment for Fire Signal
Receiving Centres and Systems

TROUBLE OUTPUT—ACK
DELAY/ANTENNA CUT
Form C relay, fail secure, rated 24V
DC 1A resistive, unsupervised

RESET BUTTON
Located on main circuit board

OPERATING TEMPERATURE 32 to 120°F (0 to 49°C)

STORAGE TEMPERATURE 14 to 140°F (-10 to 60°C)

RELATIVE HUMIDITY 0 to 93%, non-condensing

RECHARGE CAPABILITY Will charge 12V battery size from 10-12 Ah

PORTS

Ethernet for configuration and message communication USB access for software upgrade

REMOTE ANNUNCIATOR
AES Model 7740
Remote Annunciator, supervised

COMPATIBLE RECEIVERS 7705i AES-MultiNet Receiver

CONFIGURATION INTERFACE Web browser capable device accessible via smartphone, tablet, laptop, or PC

CURRENT CONSUMPTION
Standby w/ charged backup battery:
200 mA (1.2 A Transmitting)
Standby + charging backup battery:
900 mA (1.9 A Transmitting - MAX)

POWER OUTPUT 2 or 5 Watts Factory set

ENCLOSURE MATERIAL Steel with paint finish

FINISH COLOR Red

VISUAL INDICATORS
Front panel LCD
(2 x 20 alphanumeric character
backlit display)
Power and Trouble LEDs
(ALM, Trouble, Tx, Rx, WA)

Contact Us

For pricing and availability or to learn more about *IntelliNet* 2.0, please call your local AES Sales Representative at (800) 237-6387 or email sales@aes-corp.com.













DURACELL® SLA Batteries **ULTRA**



Duracell® Ultra SLA technology offers high-density power that outperforms traditional lead acid batteries. The Absorbed Glass Mat (AGM) construction is designed for efficient gas recombination and allows for maintenance-free operation. Duracell® Ultra SLA batteries maintain

their high capacity with a design that is resistant to damage caused by deep discharge. Every Duracell® Ultra SLA battery is inspected to ensure the highest standards in materials and fabrication.







Features:

- Duracell® Ultra SLA GEL batteries contain a proprietary grid alloy formula combined with advanced plate curing techniques to provide maximum performance.
- Duracell® Ultra batteries contain a unique electrolyte formula with a special sub-colloid additive for higher reliability and longer life.
- Will achieve more life cycles than standard AGM and Deep Cycle batteries.
- The unique construction and sealing techniques of these batteries are guaranteed to give you leak-proof operation.
- Heavy-duty lead calcium tin alloy grids provide an extra margin of performance and service life in cyclic applications, even after repeated over-discharges.
- Quality Assurance Engineers monitor and control the entire production process.
- Recycling of used SLA batteries available.
- Delivery available.





Sealed Lead **Acid**





Design







1 Year Warranty

Stringent Quality Control

DURACELL SLA Batteries ULTRA

| PROJECT NAME: | |
|---------------|--|
| CATALOG # | |
| FIXTURE TYPE | |
| NOTES | |

General Purpose

| Battery | Volts | Capacity Ah (20Hrs) | Dim | ensions (LxWxH | Inches) | Terminal Type | Group Size | Weight (Lbs.) |
|------------------|-----------|---------------------|---------------|----------------|---------|----------------------------------|------------|---------------|
| DURA12-0.8WL 12V | | 0.8 | 3.78 0.98 2.4 | | | WL | - | 0.77 |
| DURA12-1.3F | 12V | 1.3 | 3.82 | 1.69 | 2.28 | F1, T1 | - | 1.37 |
| DURA12-2.3F | 12V | 2.3 | 6.97 | 1.38 | 2.64 | F1, T1 | - | 2.04 |
| DURA12-2.9F | 12V | 2.9 | 3.11 | 2.2 | 3.9 | F1, T1 | - | 2.36 |
| DURA12-3.3F | 12V | 3.3 | 5.28 | 2.64 | 2.63 | F1, T1 | - | 3.18 |
| DURA12-3.3F2 | 12V | 3.3 | - | - | - | - | - | - |
| RAYA12-4F | 12V | 4 | 3.54 | 2.76 | 4.21 | F1, T1 | - | - |
| DURA12-5F | 12V | 5 | 3.54 | 2.76 | 4.21 | F1, T1 | - | - |
| DURA12-5F2 | 12V | 5 | 3.56 | 2.77 | 3.94 | F2, T2 | - | - |
| DURA12-5.1A | 12V | 5.1 | 5.51 | 1.89 | 4.21 | F1, T1 | - | 4.6 |
| DURA12-5.5F | 12V | 5.5 | 3.54 | 2.76 | 3.98 | - | - | _ |
| RAYA12-7F | 12V | 7 | 5.95 | 2.56 | 3.94 | F1, T1 | - | - |
| DURA12-7F | 12V | 7 | 5.94 | 2.56 | 3.94 | F1, T1 | - | - |
| DURA12-7F2 | 12V | 7 | 5.94 | 2.56 | 3.7 | F2, T2 | - | - |
| DURA12-8F | 12V | 8 | 5.94 | 2.56 | 3.94 | F1, T1 | - | _ |
| DURA12-8F2 | 12V | 8 | 5.94 | 2.56 | 3.94 | F2, T2 | - | - |
| DURA12-9NB | 12V | 9 | 5.95 | 2.56 | 3.9 | NB, J | _ | _ |
| DURA12-9F2 | 12V | 9 | 5.95 | 2.56 | 3.94 | F2, T2 | _ | _ |
| DURA12-10F2 | 12V | 10 | 5.95 | 2.54 | 4.38 | F2, T2 | _ | 7.5 |
| DURA12-11NB | 12V | 11 | 5.28 | 3.15 | 6.5 | - | _ | 10.1 |
| DURA12-12F2 | 12V | 12 | 5.94 | 3.9 | 3.98 | F2, T2 | _ | - |
| DURA12-12F | 12V | 12 | 5.94 | 3.86 | 3.96 | F1, T1 | _ | _ |
| DURA12-14F2 | 12V | 14 | 5.94 | 3.86 | 3.98 | F2, T2 | _ | 8.91 |
| DURA12-14F2 | 12V | 18 | 7.13 | 3.03 | 6.57 | F2, T2 | | - 0.91 |
| DURA12-18NB | 12V | 18 | 7.13 | 3.03 | 6.57 | NB, J | _ | 12.43 |
| DURA12-16NB | 12V | 26 | 6.5 | 6.93 | 4.92 | NB, J | - | 20.7 |
| DURA12-35C | 12V | 35 | 7.72 | 5.16 | 6.5 | (C | - | 27.3 |
| DURA12-44C/FR | 12V | 46 | 7.72 | 6.54 | 6.85 | С | - | 38 |
| DURA12-55C/FR | 12V | 55 | 9.02 | 5.43 | 8.35 | - | - | 42.1 |
| DURA12-33C/FR | 12V | 80 | | | 8.46 | - C | - | 42.1 |
| | 12V | 100 | 10.24 | 6.65 | _ | С | _ | |
| DURA12-100C/FR | | | 12.09 | 6.65 | 8.46 | С | - | 74.6 |
| DURA12-140C/FR | 12V 4V | 140 4.5 | 13.43 | 6.81 | 11.3 | | | 108 |
| DURA4-4.5F2 | 6V | | 1.85 | 1.85 | 3.98 | F2, T2 | - | 1.4 |
| DURA6-1.3F | | 1.3 | 3.82 | 0.94 | 2.28 | F1, T1 | - | 0.715 |
| DURA6-2ST | 6V | 2 | 1.69 | 1.45 | 2.99 | ST ST | - | 0.75 |
| DURA6-2.9F | 6V | 2.9 | 2.6 | 1.46 | 3.82 | F1, T1 | - | 1.26 |
| DURA6-3.3F | 6V | 3.3 | 5.28 | 1.34 | 2.64 | F1, T1 | - | 1.65 |
| RAYA6-4F | 6V | 4 | 2.76 | 1.85 | 4.13 | F1, T1 | - | - 2.00 |
| DURA6-5SP | 6V | 5 | 2.6 | 2.6 | 4.53 | SP 54 T4 | - | 2.09 |
| DURA6-5F | 6V | 5 | 2.76 | 1.85 | 4.21 | F1, T1 | - | - |
| DURA6-7.2F | 6V | 7.2 | 5.94 | 1.34 | 3.68 | F1, T1 | - | 2.43 |
| DURA6-8.2F | 6V | 8.2 | 3.9 | 2.24 | 4.53 | F1, T1, | - | 3.8 |
| DURA6-10F | 6V | 10 | 5.94 | 1.97 | 3.98 | F1, T1 | - | 4.851 |
| DURA6-12F | 6V | 12 | 5.94 | 1.97 | 3.98 | F1, T1 | - | - |
| DURA6-12F2 | 6V | 12 | 5.94 | 1.97 | 3.98 | F2, T2 | - | 4.602 |
| RAYA6-14T2 | 6V | 14 | 4.25 | 2.8 | 5.51 | Н | - | 6.24 |
| DURA6-14A | 6V | 14 | 4.25 | 2.8 | 5.51 | F1 (-) F2 (+), T1 (-) T2 (+), FP | - | 6.16 |
| DURA6-42F2 | 6V | 42 | 6.25 | 3.37 | 6.37 | F2, T2 | - | 16.64 |
| DURA6-42NB | 6V | 42 | 6.34 | 3.43 | 6.42 | NB, J | - | 16.62 |
| DURA6-200C | 6V | 200 | 12.05 | 6.65 | 8.63 | С | - | - |
| DUDAG 2 2F | 01/ | 2.2 | F 20 | | 2.40 | E4 T4 | | 1.00 |



DURA8-3.2F

F1, T1

3.2

5.28

1.44

2.48