



Digital Voice Control Panel

FW151

DESCRIPTION

The digital voice control panel is an intelligent emergency voice evacuation system designed for small and medium-scale facilities. The FW151 digital voice control panel is ideally suited for both new and retrofit commercial, institutional, and industrial applications. The FW151 digital voice control panel is a digital communication system that meets the requirements of UL 864 in the 10th Edition and CAN/ULC-S527 in the 3rd edition.

ATTENTION

Products must be installed in accordance with the National Fire Alarm Code, NFPA 72, CAN / ULC-S524 and / or National Electrical Code, depending on the country of installation. Check information on equipment used in the system from other manufacturers for instructions and restrictions. The digital voice control system should never be installed in the following places: where there is exposed to rain.



NOTE

Do not paint this unit. Any material extrapolated from this document or Maple Armor's instructions or other materials describing the product for promotional or advertising purposes, or for any other purpose, including the description of the application, the use, installation and testing of the product is the sole responsibility of the user. Maple Armor assumes no responsibility for the use. In no event shall Maple Armor's liability exceed the purchase price of the product.

FEATURES

Basic parameters

- ✧ 4.3" full color TFT LCD, Simple and easy to use operation interface
- ✧ Up to 128 zone selector buttons and 256 zone indicators per DCP making it a highly intuitive fire alarm user interface
- ✧ Indication of all required fault conditions
- ✧ Digitized voice capability
- ✧ Master microphone and telephone handset can be monitored by master panel. For example, a trouble signal will be reported for an open circuit
- ✧ Connect to the fire alarm control panel via CAN bus (Class A or Class B wiring supported)
- ✧ Field-programmable on panel or on PC
- ✧ History file with 999-event capacity in nonvolatile memory
- ✧ Silence inhibit and Auto Silence timer options.
- ✧ Front door opening 180 degrees
- ✧ 4-channel audio operation (Evacuation/Alert/Paging/Auxiliary audio input)
- ✧ With ACK/Signal Silence/System Reset/Lamp Test/Drill and other functions
- ✧ Over 30-minute pre-recorded audio capability

Multichannel amplifier

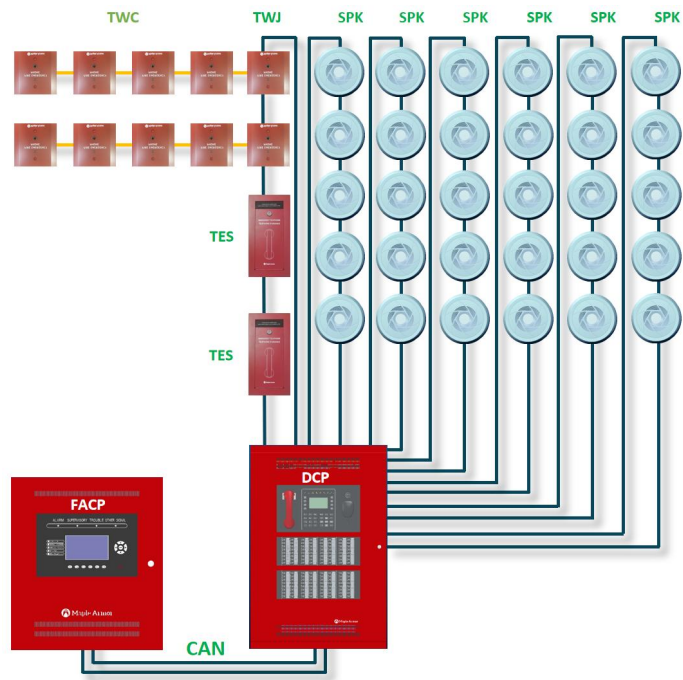
- ✧ Audio power amplifier integrated 25 V or 70 V audio signal output capability
- ✧ An amplifier board provides two separate amplifiers of 60 watts, each of which is 30 watts
- ✧ An amplifier board provides 2 Class A or 2 Class B output terminals, in support of selecting any 2 outputs (same or different) from 4 different audio sources at the same time
- ✧ Speaker control circuits are integrated with audio power amplifier circuits
- ✧ Multiple amplifier sizes (up to 4 amplifiers and maximum power of total 240 watts per enclosure)
- ✧ Amplifier is capable of 520 Hz low frequency output and usually used in sleeping room etc.
- ✧ Amplifier gain drop monitoring capability
- ✧ Backup tone generator and amplifier option
- ✧ Modular PCBA for ease of installation and maintenance

Two-line telephone

- ✧ The Fire fighter telephone system is connected by a copper twisted-pair wire, and the construction wiring is very simple
- ✧ FFT supporting up to 40 telephone zones and a maximum of 200 wall jacks per DCP

High-power switch power supply

- ✧ Full power supply and battery supervision capability
- ✧ Supports 120Vac and 240Vac input, Maximum of 300W output
- ✧ Operate from 24 VDC backup batteries in the event of a master power failure
- ✧ Battery charger supports 50AH batteries



The FW151 digital voice control panel must be wall mounted to ULC standards.

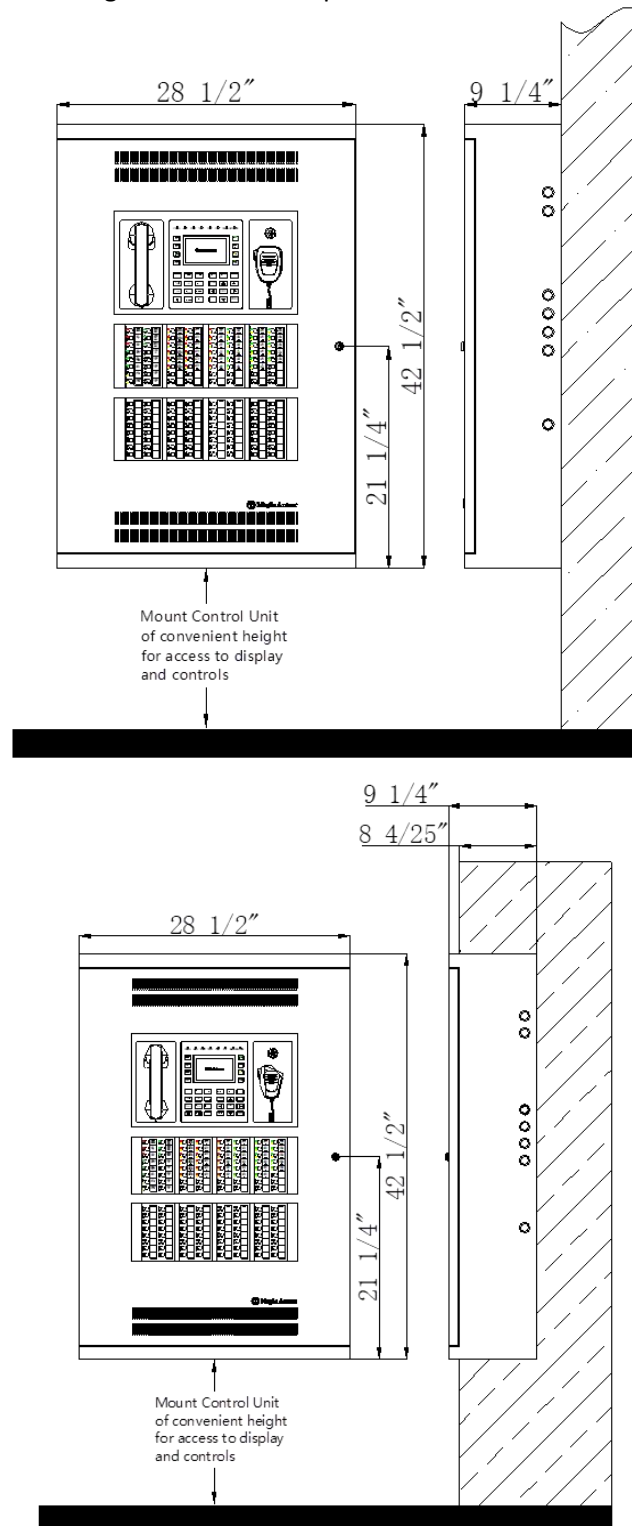
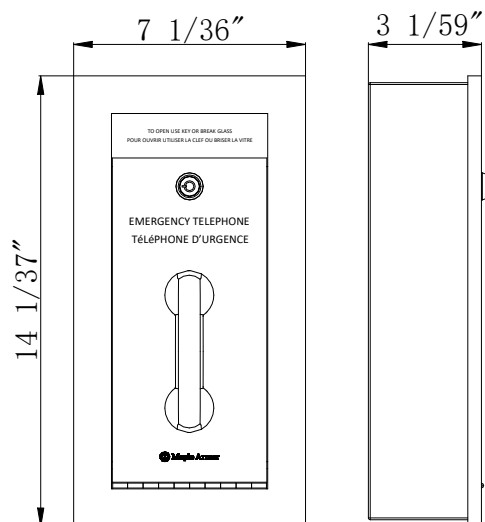


Figure 1 FW151 Enclosure Mounting Size

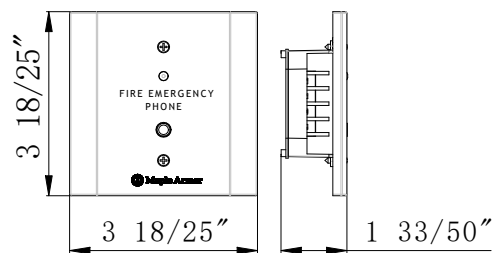
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|------------------------------------|--|
| General | Based on digital dual-core CPU processor design, fully configurable on master panel with password protection |
| Environmental | Operating temperature - 32 - 120°F (0-49°C) Relative humidity - Up to 93% @ 90° F (32°C) To be installed in normal dry indoor environment only |
| Primary Supply | High voltage side input: 110–120 VAC 60 Hz (6 Amps), or 220–240 VAC 50 Hz (3.5 Amps) Low voltage side output: 20.4 VDC–27.8 VDC |
| Secondary Power Supply | Two 12V lead-acid battery sets in series Max charging capacity: 50AH |
| Power Outputs | DC20.4V – DC27.8V Internal power supply for DCP-MB DCP-DB DCP-DK DCP-ZS DCP-BS DCP-EC DCP-TB DCP-AP TES TWJ TWC BATT |
| Amplifier Output | 1-36 addresses 2 Class A or 2 Class B audio output circuits Two independent 30 watts output circuits Selection switch on board for 25Vrms or 70.7Vrms output voltage Integrated monitoring circuits Power limited circuit for each audio |
| Addressable Telephone Loop Circuit | Maximum Current (short): 0.4A Class A/Class B circuit Supports a maximum of 40 addresses for TWJ and/or TES Output voltage range: 24V–28V Maximum normal standby current: 175mA Maximum talking current: 235mA Max line capacitance: 0.3 uF Max line resistance: 42.8 Ohm |

CATALOG NUMBERS TO ORDER

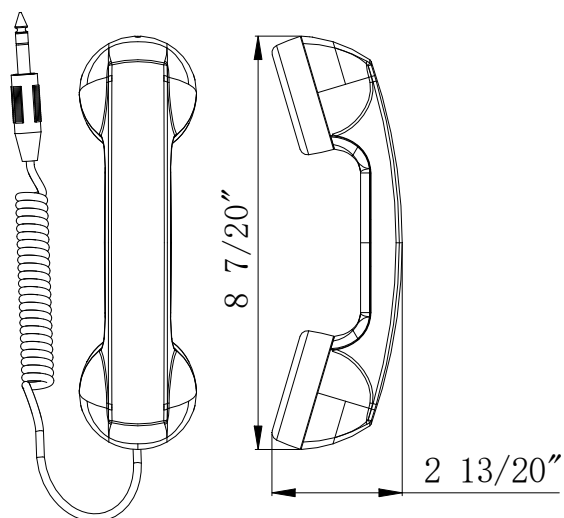
| Model | Description |
|---------------------|---|
| FW151-DCP | Digital Voice Control Panel |
| FW151-DB | Daughter Board mounted on Mother Board |
| FW151-MB | Mother Board mounted under Daughter Board |
| FW151-ZS | Zone Selector |
| FW151-EC | External Connection Board |
| FW151-TB | Master Telephone Board for fire fighter telephone circuit |
| FW151-AP | Audio Power Amplifier |
| FW151-BS | All PCBA's Board Slot |
| FW151-PS | Power Supply |
| FW151-MIC | Microphone in DCP (connect to the panel) |
| FW451-P(THP) | Handset in DCP (connect to the panel) |
| FW863(TES) | Telephone Extension Station (addressable) |
| FW451-S(THS) | Handset in Telephone Station (connect to the extension station) |
| FW864A(TWJ) | Telephone Wall Jack (addressable) |
| FW864(TWC) | Telephone Wall Jack Conventional (non-addressable) |
| FW451-W(THW) | Fire Fighter's Telephone Handset (connect to the wall jack) |



FW863(TES)



FW864A(TWJ) / FW864(TWC)



FW451-W(THW)