Commander 2000
Control Panel

Interactive Technologies, Inc.

ITI Part # 60-437-10-95-8Z
or 60-437-10-95-17Z

Overview

The Commander 2000™ is an affordable wireless security system that is easy to install and easy to use. The system is designed for detection and reporting of burglary, fire, and medical emergencies and responds to dozens of sensors for all kinds of residential and commercial applications.

The reliable design of the Commander 2000 helps create a safe environment for system users. The digital voice tells owners whether they have turned their systems on or off properly and whether doors and windows are properly secured. In an emergency, the system can flash house lights on and off, turn on piercing sirens to scare off would-be intruders, and call the central station to send help. Owners can also operate the system with a variety of portable touchpads.

The versatility of this sophisticated system lets owners expand their system as their security needs change. Sensors can be added without disruptive drilling and lengthy installer visits. Magic Keys™ allow installers to rapidly set up identical systems in apartment buildings. The Interrogator™ Alarm Verification Module is a snap to add on with the optional Tabletop Base.

Applications

The Commander 2000 Control Panel is recommended for

- Small business and residential security and fire protection
- Apartment building security

Features

Commander 2000 features include the following:

- Reliable security at an affordable price
- Wireless and hardwire capabilities that meet a variety of installation conditions
- 2- and 4- Button Keychain Touchpad compatibility for remote control operation (60-607 and 60-606) (requires 4.0 software)
- Interrogator Alarm Verification Module compatibility for live "Listen-In and Talk-Back" dependability (60-471)
- Magic Key compatibility for even easier system installation and operation (60-576 and 60-577)
- Digitized voice feedback that reassures installers and users

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Specifications

Power Supply

Required Transformer	9 VAC Class II (60-515) or Line Carrier Transformer (60-346-500)
Current Draw	70 mA
Backup Battery	Alkaline (6-AA, 60-606) or NiCd (6-AA, 60-601)
Battery Current	50 mA
Battery Life	24-hour backup (alkaline) or 12-hour backup (NiCd)
Battery Test	2 minutes under load every 24 hours
Panel Fuse	Self-resetting polyfuse

Radio Receiver

Type	Super-heterodyne with spatial diversity
Frequency	319.5 MHz
Nominal Range	700 ft open air

Telephone/Modem

Dialing	DTMF and Pulse
Modem	Bell 103 or 4/2 format
Fail-to-Communicate Output	Open collector
Baud Rate	110 and 300
Protocol	ITI and 4/2 formats

Inputs/Outputs

Auxiliary Power Output	Polyfuse 285 mA (6.8V to 12V)
RF Zones	8 or 17
Hardwire Zones	1
Siren Outputs	Hardwire Interior Siren (HIS) output and Hardwire Exterior Siren (HES) output (6.8V to 12V)

Microprocessor

Processor Type	Motorola 68HC11
Processor Clock Frequency	12 MHz
System ROM Size	16 kilobytes
System RAM Size	512 bytes
Memory Retention	512 bytes EEPROM
Reset Events	Watchdog Timer

Digitized Voice

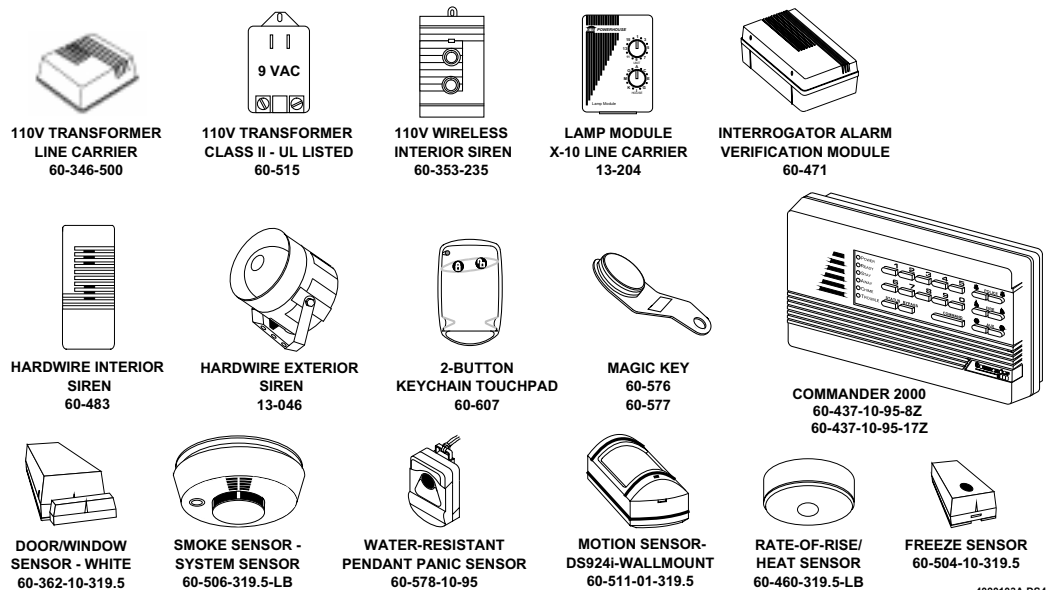|	
Digitization Type	Adaptive Differential Pulse Coded Modulation (ADPCM)
Playback Rate	8 to 32 kilobits/sec (varies by word)
Vocabulary Size	28 words
Total Speech Capacity	24 seconds

Environmental

Operating Temperature	32°F (0°C) to 110°F (43°C)
Maximum Humidity	85% at 110°F (43°C), noncondensing
UL Standards	UL 985, UL 1023, and UL 1637
FCC Standards	Part 15 and Part 68
ULC Standards	S309 Burglary and S545 Fire pending
State Standards	California Fire Marshal Approval

Physical Description

Color	Belgian gray
Dimensions	9.63 in (24.45 cm) wide x 6 in (15.24 cm) high x 1.19 in (3.02 cm) deep
Weight	1 lb 9.5 oz (3.5 kg)
Mounting	4 – #8 screws
Housing Material	Polycarbonate ABS Plastic

Figure 1: Sample Commander 2000 Security System with Peripheral

110V TRANSFORMER LINE CARRIER 60-346-500

110V TRANSFORMER CLASS II - UL LISTED 60-515

110V WIRELESS INTERIOR SIREN 60-353-235

LAMP MODULE X-10 LINE CARRIER 13-204

INTERROGATOR ALARM VERIFICATION MODULE 60-471

HARDWIRE INTERIOR SIREN 60-483

HARDWIRE EXTERIOR SIREN 13-046

2-BUTTON KEYCHAIN TOUCHPAD 60-607

MAGIC KEY 60-576 60-577

COMMANDER 2000 60-437-10-95-8Z 60-437-10-95-17Z

DOOR/WINDOW SENSOR - WHITE 60-362-10-319.5

SMOKE SENSOR - SYSTEM SENSOR 60-506-319.5-LB

WATER-RESISTANT PENDANT PANIC SENSOR 60-578-10-95

MOTION SENSOR- DS924i-WALLMOUNT 60-511-01-319.5

RATE-OF-RISE/ HEAT SENSOR 60-460-319.5-LB

FREEZE SENSOR 60-504-10-319.5

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Optional Accessories (Partial List)

2- & 4-Button Keychain Touchpad (60-607, 60-606)	The Keychain Touchpad allows the system user to conveniently perform basic control panel functions, including arming and disarming the system, canceling alarms, or activating panic alarms.
Upload/Download Magic Key (60-576)	The Upload/Download Magic Key allows the installer to quickly configure and store panel information.
Access Magic Key (60-577)	The Access Magic Key allows the user to set special limited time and/or date access privileges for each key.
Interrogator Alarm Verification Module (60-471)	The Interrogator Alarm Verification Module allows the central station operator to "listen in" and/or "talk back" to the system user at the installation site after an alarm has occurred.
Slim Line Siren (60-483)	The Slim Line Siren emits a loud siren noise during an alarm. This siren conveniently fits within the optional Tabletop Mounting Base.
Water-Resistant Pendant Panic (60-578-10-95)	The Pendant Panic is a portable device that allows the system user to activate an alarm by pressing a button.
System Sensor™ Smoke Sensor (60-506-319.5)	The Smoke Sensor detects smoke passing through its photoelectric chamber. The sensor also has an alarm horn and low battery annunciator.
Rate-of-Rise Heat Sensor (60-460-319.5)	The Rate-of-Rise Heat Sensor detects the rate at which the temperature rises and sends an alarm signal if the temperature rises by 15°F (8 °C) or more per minute. It also sends an alarm when the temperature reaches about 135°F (57 °C).
Door/Window Sensor (60-362)	The Door/Window Sensor detects when the monitored door, window, or protected area opens or closes.
DS924 PIR Motion Detector (60-511-319.5)	The PIR detects movement on the premises by sensing changes in heat patterns.
Line Carrier Transformer (60-346-500)	The Line Carrier Transformer allows the panel to communicate with line carrier devices such as a Wireless Interior Siren or X-10 Lamp Module.
Wireless Interior Siren (60-353-235)	The Wireless Interior Siren is a plug-in device that emits a loud siren noise during an alarm (requires a Line Carrier Transformer).
X-10® Lamp Module (13-204)	The Lamp Module is a plug-in device used to turn premises lights on during exit and entry delay and during alarms (requires a Line Carrier Transformer).
Hardwire Exterior Siren (HES) (13-046)	The HES provides alarm sounds for fire alarm (steady), burglar alarm (intermittent), and auxiliary and medical alarms (fast intermittent).

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