BT-XM Mass Notification Communicator

Features

- FM approved
- Fallback communication to hardwire connection if wired
- Transmits live-voice and pre-recorded messages from the D-21 Mass Notification System to within-building mass notification panels or wide-area speaker stations
- Receives and transmits live voice from radio, telephone, and microphone
- Pre-recorded messages can be triggered via relay contact closure
- Security features prevent unauthorized take over of live-voice transmissions
- Includes 4 onboard fire zone inputs that can also be used to report mass notification panel status
- Supports fire, intrusion detection, and access control applications with the addition of optional equipment
- Status LEDs reflect the status of the BT-XM: general trouble, system fault, in-communication, carrier detect, transmit, primary power, battery boost charge, and battery float charge
- Communication LEDs indicate the method of communication used: radio or hardwire and whether or not a live-voice message is being sent
- Full-duplex RS-232 port used to program the BT-XM via connection to a laptop computer
- 115 or 230 Vac power is monitored with automatic switchover to backup battery power that provides standby power
- Self test, stuck transmitter disconnect, reset, acknowledge, and battery reconnect switches
- Local audible alert
- Real-time clock and calendar
- 1/2 Mb of program memory
- 1/2 Mb of non-volatile data storage
- One selectable RS-422/RS-485 port for communication with peripheral equipment or hardwire connection to multiple BT-XM units connected together for communication with the D-21
- Narrowband radio communication with the D-21
  - Narrowband radio is FCC certified for narrowband operation and meets the requirements of the NTIA (National Telecommunications and Information Administration) Manual of Regulations and Procedures for Federal Frequency Management

Ordering Information

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>227-623-xx</td>
<td>BT-XM mass notification communicator with narrowband radio and capacity for fallback to hardwire communication in a 20 inches high x 12 inches wide x 4 inches deep single-wide enclosure; audio board and two 12 V, 12 Ah batteries included; Relay board is separate, see below; specify frequency when ordering*</td>
</tr>
<tr>
<td>227-621-xx</td>
<td>BT-XM mass notification communicator with narrowband radio and capacity for fallback to hardwire communication in a 20 inches high x 25 inches wide x 4 inches deep double-wide enclosure; audio board and two 12 V, 12 Ah batteries included; Relay board is separate, see below; specify frequency when ordering</td>
</tr>
<tr>
<td>227-622-xx</td>
<td>BT-XM mass notification communicator with narrowband radio and capacity for fallback to hardwire communication in a 20 inches high x 12 inches wide x 4 inches deep single-wide NEMA 3R enclosure; audio board and two 12 V, 12 Ah batteries included; Relay board is separate, see below; specify frequency when ordering*</td>
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<tr>
<td>176-214-00</td>
<td>BT-X relay board with 8 onboard Form C relays for triggering pre-recorded messages via relay</td>
</tr>
<tr>
<td>176-212-00</td>
<td>BT-X zone expansion backplane supports two zones cards (fire or security)</td>
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<tr>
<td>176-206-00</td>
<td>BT-XF fire zone expansion card provides four zone inputs and eight relay driver outputs</td>
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<tr>
<td>176-206-01</td>
<td>BT-XS security zone expansion card provides four zone inputs and eight relay driver outputs</td>
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<tr>
<td>513-412-00</td>
<td>BT-X enclosure tamper switch kit</td>
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<tr>
<td>207-607-00</td>
<td>BT-X Planner Support Kit - contains BT-X planner software and programming cable</td>
</tr>
<tr>
<td>225-163-00</td>
<td>Monaco Planner / Programmer Kit - contains Monaco FACP, D-700R and BT-X Planner software and interface cable</td>
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*An antenna is required for radio communication. See “Antenna Network Accessories” on page 101.
Description

The BT-XM is Monaco’s mass notification communicator that transmits secure live-voice messages and triggers pre-recorded messages or tones resident on a connected mass notification panel. The BT-XM communicates with a D-21 Mass Notification System via narrowband radio with fallback to hardwire connection, if so wired. The connection between the BT-XM and the multi-circuit mass notification panel is supervised.

The BT-XM provides four onboard fire zone inputs and eight relay driver outputs. The four fire inputs can be used for standard fire zone monitoring or to monitor auxiliary zones, such as trouble contacts on the mass notification panel. The onboard relay drivers can be connected to the optional BT-X Relay Board to trigger pre-recorded messages on a connected mass notification panel. Relay driver outputs are controlled via command from the D-21.

The BT-XM can transmit live voice received from a radio, telephone, or a microphone to within-building mass notification panels or wide-area mass notification speaker stations. The D-21 Mass Notification System is used to select the notification messages and direct message to be broadcast to within building mass notification panels or wide-area speaker stations.

The BT-XM continuously monitors its operation through self diagnostics and reports off-normal conditions to the D-21.

The BT-XM primary source of power is either 115 or 230 Vac (50/60 Hz); its secondary power is a 12 Vdc battery. If loss of primary ac power occurs, the BT-XM automatically switches to battery operation. The batteries included should provide power sufficient to operate in normal standby status for a minimum of 72 hours, depending upon the expansion options installed, and auxiliary power sources. The BT-XM constantly monitors and supervises its own battery and charger.

The BT-XM is in communication with the D-21, responding to commands, and sending status changes. If a BT-XM does not receive a signal within 90 seconds, it transmits unacknowledged or new messages at programmed intervals without waiting for a Central command.

With the addition of fire and security expansion zone cards, the BT-XM can also monitor fire and security inputs for status change conditions and reports these to Central. When using the BT-X Relay Board for pre-recorded messages, the BT-XM can be expanded to monitor 20 fire zones or 16 security zones in a single-wide enclosure and 52 fire zones and 48 security zones in a double-wide enclosure.

Application Example