

Installation and Operation Manual



Wireless Audio Generator



Safety Precautions

To prevent electrical shock, do not apply electrical power to the wireless Audio Generator, signal relays or any other equipment before completing all wiring connections.

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Introduction

The Wireless Audio Generator is a device which may be used to take any MP3 file and play it through a PA system. The selected MP3 files will be stored on a USB drive which will be plugged into the Wireless Audio Generator USB input.

The Wireless Audio Generator may be triggered to play the selected MP3 files in one of two ways. The files may be triggered wirelessly through a SiteSync IQ System Controller, or manually via the manual activation switch on the front of Wireless Audio Generator.

Equipment included with the Audio Generator - Part #H004501

- 1 - Wireless Audio Generator
- 1 - USB Flash Drive
- 1 - USB Right Angle Adapter
- 2 - RCA Output Cables
- 1 - Installation & Operation Manual

Operation

Benefits & Applications

- This device can replace current tone applications, offering the flexibility to play any tone in a MP3 format.
- The user is not limited to tones. Voice alerts or pre-programmed music may also be triggered and played.
- Automatic rotation of music or tones for class changes and other events. This device can rotate through eight different MP3 files.

Specifications

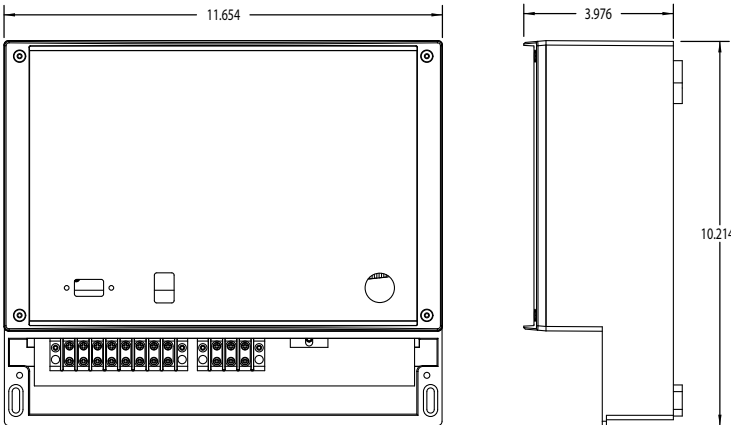
Application Examples

- Dimensions:.....10.214”h x 11.654”w x 3.97”d
 - Weight:5.5 lbs.
 - Humidity:0% - 95% Non-condensing
 - Input Power:120vac 60Hz 10 watts
 - Operating Temperature:41°F to131°F
 - Sound File Type:.....MPEG (.mp3)
 - MP3 Capacity:.....Rotates up to 8 different MP3 files
 - Sample Rate:16 KHz - 48 KHz
 - Bit Rate:.....8 Kps -128 Kps
 - Frequency Response:.....20 Hz -20 KHz
 - Inputs:USB Flash Drive; UL rated Terminal block
 - Outputs:.....8 Ω or 600Ω to a PA system
-
- Reception Fequency:.....450-470 MHz (factory set)
 - Paging Format:POCSAG, Narrow band
 - Data Baud Tate:512 BPS
 - Receiver Sensitivity:.....10uV/M
 - Channel Spacing:.....12.5 KHz

Mounting Layout

The Wireless Audio Generator is designed to be a wall mount unit.

Measurements in inches



MP3 File Setup

Eight different MP3 files may be saved on the USB drive and rotated through by triggering the Wireless Audio Generator with a SiteSync IQ system controller. After the eighth MP3 file is played, the Wireless Audio Controller will start over again with the first MP3 file. The MP3 files must be saved on the USB drive in the following naming format:

- 1.mp3
- 2.mp3
- 3.mp3
- 4.mp3
- 5.mp3
- 6.mp3
- 7.mp3
- 8.mp3

■ **Note:** Alternate file naming, such as 08.mp3, will not work with this device.

USB Drive

The supplied **USB drive** is to be inserted in the USB slot located on the front of the Wireless Audio Generator. *See Figure 1.*

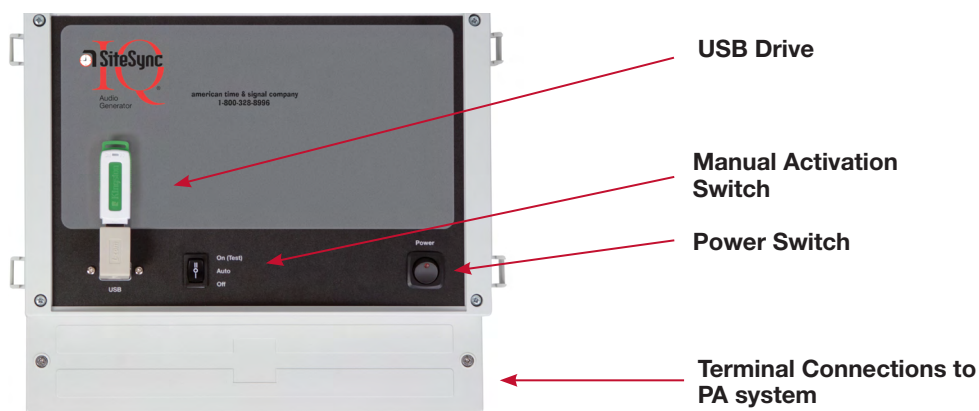


Figure 1

A **USB Right Angle Adapter** is included so that the USB drive may be inserted into the USB slot at an angle. *See Figure 2.* The use of the USB Right Angle Adapter will keep the USB drive as close (parallel) to the Wireless Audio Generator device as possible. This will reduce the possibility of damage to the USB drive.

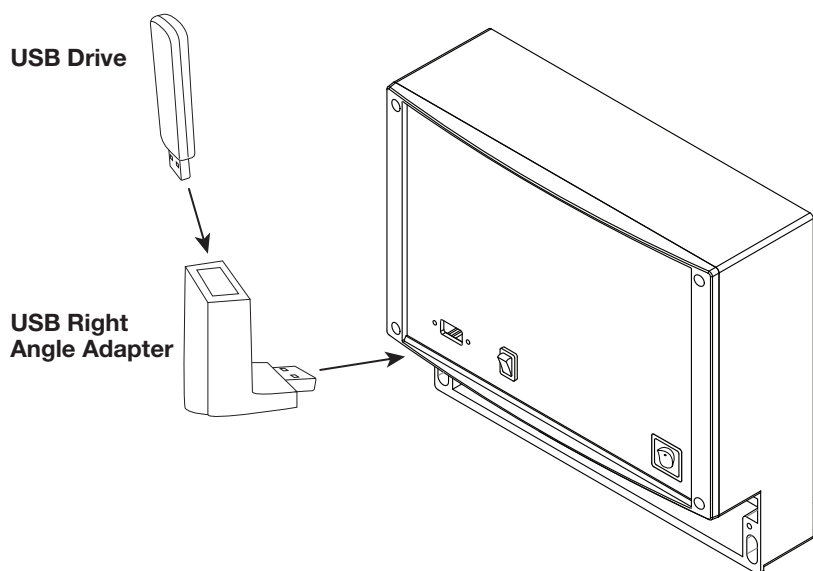


Figure 2

■ **Note:** The USB drive must stay connected to the Wireless Audio Generator for the MP3 files to play.

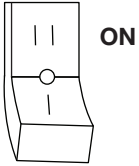
Power and Manual Activation Switch Operation

The front of the Wireless Audio Generator also contains a Power switch and a three-way Manual Activation switch. *See Figure 1.*

The **Power switch** has a red LED indicator which is illuminated when in the ON position.

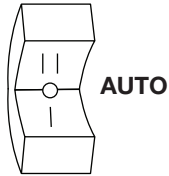
■**Note:** Once power is applied and the Power Switch is in the ON position it may take 10 to 20 seconds for the Wireless Audio Generator to fully power up and be ready to play the MP3 files.

The **Manual Activation Switch** may be used to manually trigger and play the MP3 files. This switch has three positions; ON, AUTO, OFF.



When this switch is in the ON (upper) position the Wireless Audio Generator will trigger and start to play the MP3 files. The MP3 files will continue to play through all of the MP3 files as long as this switch is in the ON position.

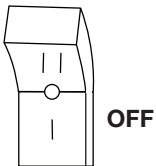
Once this switch is placed in the ON position and then back to the AUTO position, the Wireless Audio Generator will finish playing the MP3 file it had started when the switch was first placed in the ON position. The MP3 file will only stop playing when the switch is placed in the OFF position.



AUTO Position

When this switch is in the AUTO (middle) position the Wireless Audio Generator will only play an MP3 file if triggered wirelessly by the SiteSync IQ system controller.

■**Note:** This switch should be left in the AUTO position for normal operation.

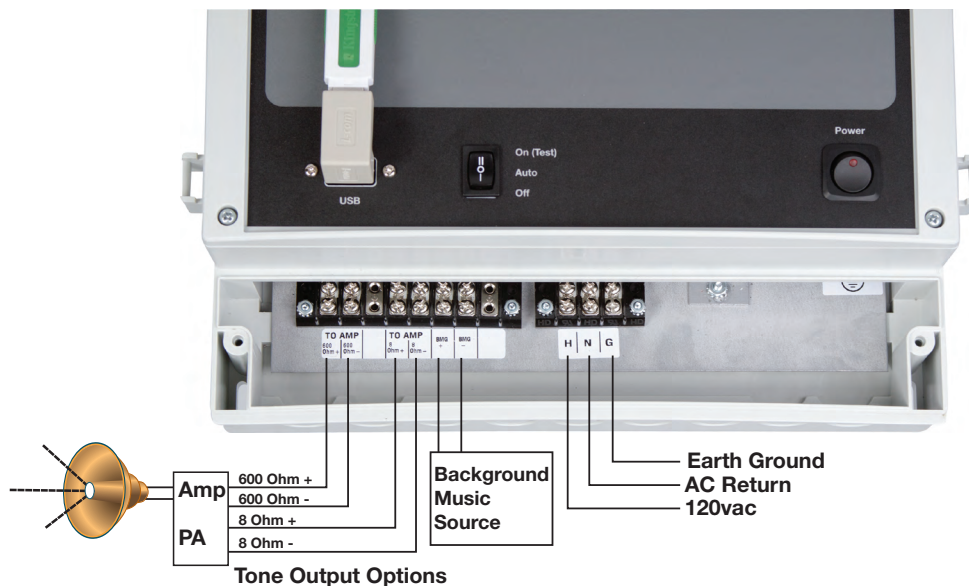


OFF Position

As long as this switch is in the OFF (lower) position the Wireless Audio Generator will not play any MP3 file, even if triggered wirelessly from the SiteSync IQ system controller. Once this switch is placed in the OFF position, any MP3 currently playing will stop immediately.

The wiring connections for the Wireless Audio Generator are located in the bottom compartment, under a 2½" by 11½" cover.

■ All electrical power should be disconnected before removing this cover. The bottom panel cover of the Wireless Audio Generator must in place when power is supplied to the device.



There are two terminal blocks where wiring connects take place. The smaller 3-position terminal block (H N G) is where the 120vac power wiring is connected.

The larger 6-position terminal block is where output signal is wired to the AMP or PA system. The terminal positions labeled **TO AMP** are for wiring either a 600Ω or 8Ω connection to the AMP/PA system.

The larger 6 position terminal block has two positions labeled **BMG**. This is where another music source such as a radio receiver may be connected to the Wireless Audio Generator. The signal wired to BMG positions will play as background music through the Wireless Audio Generator until one of MP3 files are triggered to play.

Triggering and Events

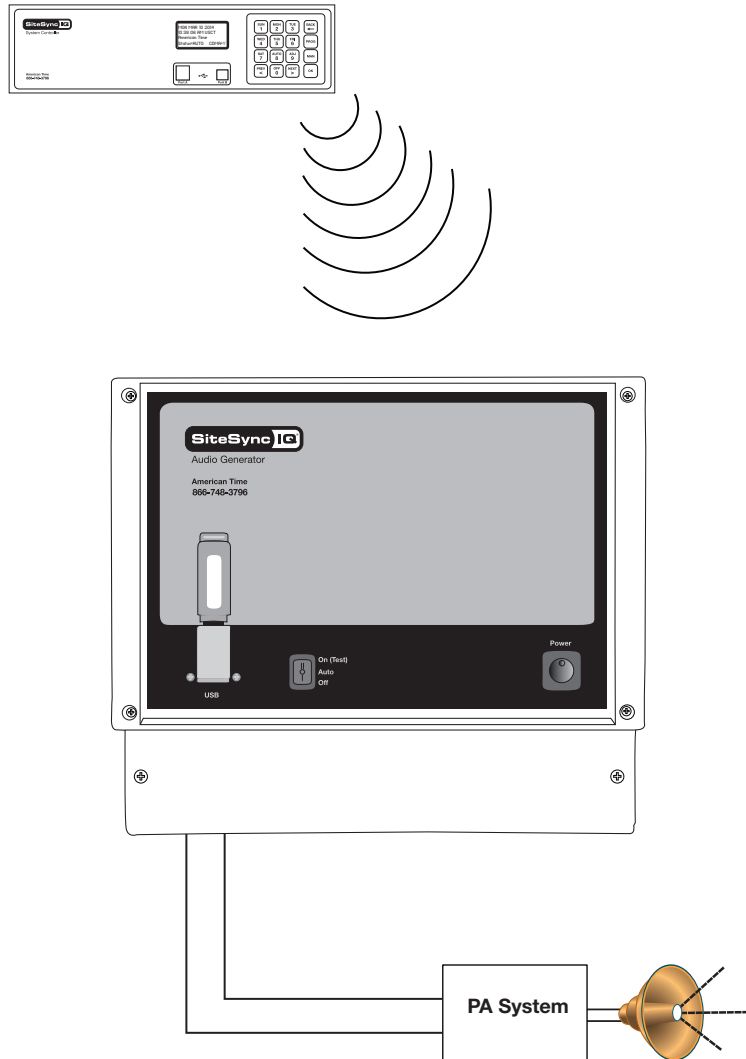
For scheduled triggering of the Wireless Audio Generator, a SiteSync IQ system controller is needed as the scheduling device.

A scheduled event may be set in the SiteSync IQ system controller by one of two ways:

- An event may be set by using the push button pad and LCD screen on the front of the Site Sync IQ system controller (Prog, 2).
- An event may also be scheduled through Remote Connect (the SiteSync IQ system controllers' web interface).

See the SiteSync IQ system controller manual for further event scheduling documentation.

■**Note:** Some models of the SiteSync IQ system controller do not come with bell/circuit functionality. Verify that the SiteSync IQ system controller being used has this functionality.



A. Example of a Scheduled School Bell Tone between Classes

One of the most common applications for the Wireless Audio Generator is for schools to play a custom school bell tone or alert between classes. In this example the school staff would do the following steps to set up the Wireless Audio Generator:

1. Make the connections between the Wireless Audio Generator and the PA system.
2. Select or create an MP3 file which sounds like a school bell (1.mp3). This should be the only MP3 file saved on the USB drive.
3. Plug the USB drive into the Wireless Audio Generator.
4. Put the Manual Activation Switch in the AUTO position.
5. Put the Power Switch in the ON position.
6. Set up the triggering Events and Circuits in the SiteSync IQ system controller.

■ **Note:** The suggested duration to trigger an MP3 file is 3 seconds.

The Wireless Audio Generator will play the school bell tone (1.mp3) to indicate the beginning of class at the following times:

- 8:00 a.m.
- 9:00 a.m.
- 10:00 a.m.
- 11:00 a.m.
- 12:00 p.m.
- 1:00 p.m.
- 2:00 p.m.

The Wireless Audio Generator will also play the school bell tone (1.mp3) to indicate the end of class at the following times:

- 8:57 a.m.
- 9:57 a.m.
- 10:57 a.m.
- 11:57 a.m.
- 12:57 p.m.
- 1:57 p.m.
- 2:57 p.m.

Sch	Event	Time	Year	Month	Date	Days	Duration	Message #	Countdown Duration
1	0	8:00am	*	*	*	MTWThF	3	0	0
1	1	8:57am	*	*	*	MTWThF	3	0	0
1	2	9:00am	*	*	*	MTWThF	3	0	0
1	3	9:57am	*	*	*	MTWThF	3	0	0
1	4	10:00am	*	*	*	MTWThF	3	0	0
1	5	10:57am	*	*	*	MTWThF	3	0	0
1	6	11:00am	*	*	*	MTWThF	3	0	0
1	7	11:57am	*	*	*	MTWThF	3	0	0
1	8	12:00pm	*	*	*	MTWThF	3	0	0
1	9	12:57pm	*	*	*	MTWThF	3	0	0
1	10	01:00pm	*	*	*	MTWThF	3	0	0
1	11	01:57pm	*	*	*	MTWThF	3	0	0
1	12	02:00pm	*	*	*	MTWThF	3	0	0
1	13	02:57pm	*	*	*	MTWThF	3	0	0
1	14	03:00pm	*	*	*	MTWThF	3	0	0
1	15	03:57pm	*	*	*	MTWThF	3	0	0

Event Setup in Remote Connect

Circuit #	Enabled	Assigned Schedule	Default Duration	Switching 1		Switching 2		Circuit Description
				Schedule	Date/Time	Schedule	Date/Time	
1	<input checked="" type="checkbox"/>	1	3 Seconds	0	NA	0	NA	Class Bell
2	<input type="checkbox"/>	0	3 Seconds	0	NA	0	NA	
3	<input type="checkbox"/>	0	3 Seconds	0	NA	0	NA	

Circuit Setup in Remote Connect

B. Example of Rotating Music between Classes

Another application of the Wireless Audio Generator is its ability to play music and rotate through eight MP3 files. One situation where this would be useful is if a school wants to play different classical songs between each class to keep students relaxed.

In this example the school staff would do the following steps to set up the Wireless Audio Generator:

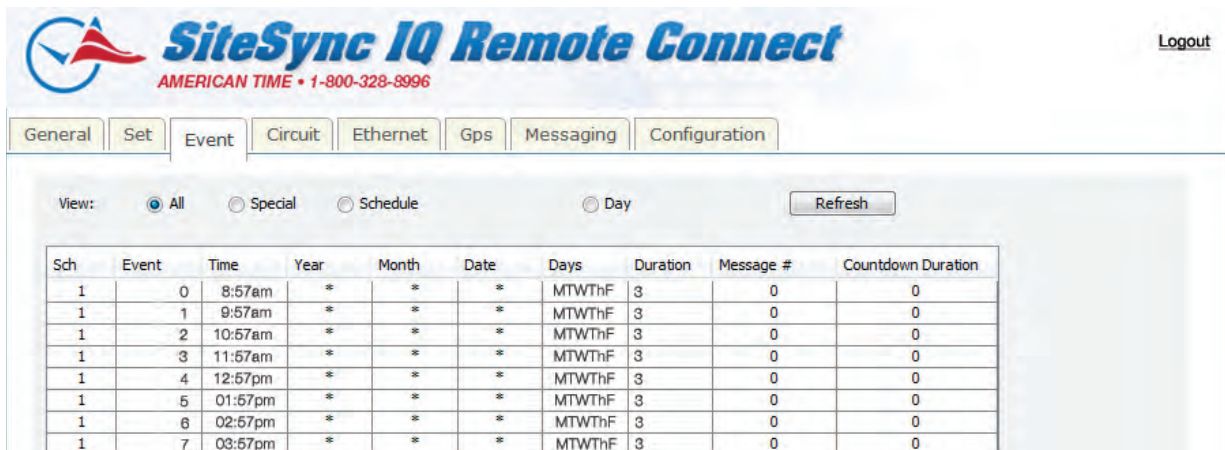
1. Make the connections between the Wireless Audio Generator and the PA system.
2. Select or create up to eight MP3 files of classical music at the desired length. These will be the only MP3 files saved on the USB drive. (1.mp3, 2.mp3,...8.mp3)
3. Plug the USB drive into the Wireless Audio Generator.
4. Put the Manual Activation Switch in the AUTO position.
5. Put the Power Switch in the ON position.
6. Set up the triggering Events and Circuits in the SiteSync IQ system controller.

■**Note:** The suggested duration to trigger an MP3 file is 3 seconds.

The first time the Wireless Audio Generator is triggered it will play the first classical song (1.mp3 at 8:57am). The second time the Wireless controller is triggered the second classical song will be played (2.mp3 at 10:57 am) and so on.

- 8:57 a.m. 1.mp3
- 9:57 a.m. 2.mp3
- 10:57 a.m. 3.mp3
- 11:57 a.m. 4.mp3
- 12:57 p.m. 5.mp3
- 1:57 p.m. 6.mp3
- 2:57 p.m. 7.mp3

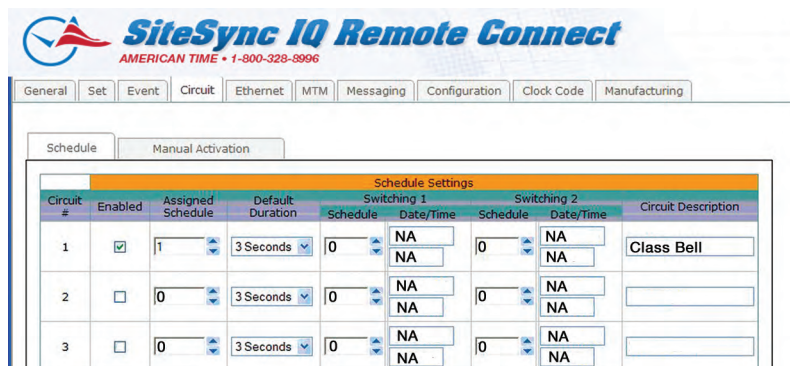
■**Note:** MP3 files may need to be adjusted to the desired duration. A wireless controller with multiple outputs can also be purchased for further control of starting and stopping of MP3 files.



The screenshot shows the 'Event' tab in the SiteSync IQ Remote Connect interface. The 'View' section has radio buttons for 'All' (selected), 'Special', 'Schedule', and 'Day', along with a 'Refresh' button. Below is a table with the following columns: Sch, Event, Time, Year, Month, Date, Days, Duration, Message #, and Countdown Duration.

Sch	Event	Time	Year	Month	Date	Days	Duration	Message #	Countdown Duration
1	0	8:57am	*	*	*	MTWThF	3	0	0
1	1	9:57am	*	*	*	MTWThF	3	0	0
1	2	10:57am	*	*	*	MTWThF	3	0	0
1	3	11:57am	*	*	*	MTWThF	3	0	0
1	4	12:57pm	*	*	*	MTWThF	3	0	0
1	5	01:57pm	*	*	*	MTWThF	3	0	0
1	6	02:57pm	*	*	*	MTWThF	3	0	0
1	7	03:57pm	*	*	*	MTWThF	3	0	0

Event Setup in Remote Connect



The screenshot shows the 'Circuit' tab in the SiteSync IQ Remote Connect interface. The 'Schedule' sub-tab is active. The 'Schedule Settings' table has columns: Circuit #, Enabled, Assigned Schedule, Default Duration, Switching 1 (Schedule, Date/Time), Switching 2 (Schedule, Date/Time), and Circuit Description.

Circuit #	Enabled	Assigned Schedule	Default Duration	Switching 1		Switching 2		Circuit Description
				Schedule	Date/Time	Schedule	Date/Time	
1	<input checked="" type="checkbox"/>	1	3Seconds	0	NA	0	NA	Class Bell
2	<input type="checkbox"/>	0	3Seconds	0	NA	0	NA	
3	<input type="checkbox"/>	0	3Seconds	0	NA	0	NA	

Circuit Setup in Remote Connect

C. Example of Playing Background Music and Triggering Alerts

The Wireless Audio Generator has the ability to play background music which may be interrupted for scheduled alerts or messages. This would be a useful application for a quiet manufacturing area where background music is played until an alarm tone is triggered to indicate a break or end of shift.

The background music may be from a source such as a radio receiver. This background music source would be connected to the BMG connections on the Wireless Audio Generator.

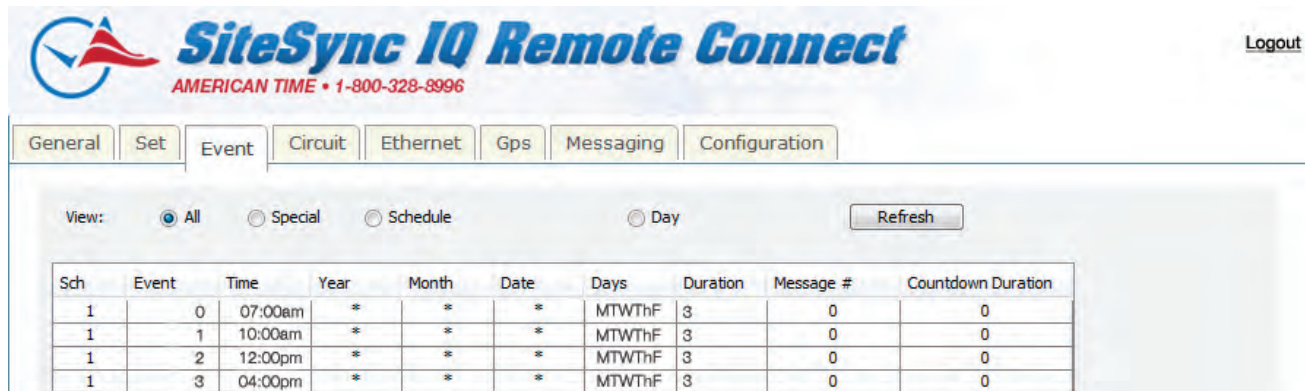
In this example the user would do the following steps to set up the Wireless Audio Generator:

1. Make the connections between the Wireless Audio Generator and the PA system.
2. Connect background music source to the BMG connection on the Wireless Tone Generator.
3. Select or create an MP3 file of the desired alert tone (1.mp3). This will be the only MP3 file saved on the USB drive.
4. Plug the USB drive into the Wireless Audio Generator.
5. Put the Manual Activation Switch in the AUTO position.
6. Put the Power Switch in the ON position.
7. Set up the triggering Events and Circuits in the SiteSync IQ system controller.

■ **Note:** The suggested duration to trigger an MP3 file is 3 seconds.

Background music will be played until the alert tone is triggered. When the alert tone is triggered the background music will fade out and the alert tone will be played over the PA system. When the alert tone is finished playing the background music will automatically fade back in and be played over the PA system.

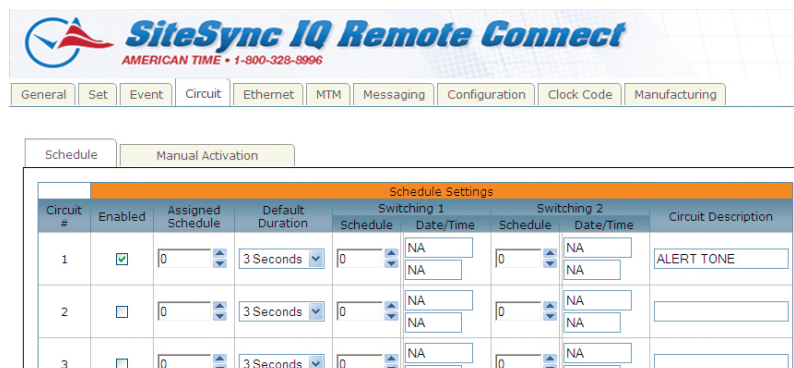
- 7:00 a.m. indicating beginning of the work shift
- 10:00 a.m. indicating morning break
- 12:00 p.m. indicating lunch break
- 4:00 p.m. indicating end of the work shift



The screenshot shows the 'Event' tab in the SiteSync IQ Remote Connect interface. The 'View' section has radio buttons for 'All' (selected), 'Special', 'Schedule', and 'Day', along with a 'Refresh' button. Below is a table of events:

Sch	Event	Time	Year	Month	Date	Days	Duration	Message #	Countdown Duration
1	0	07:00am	*	*	*	MTWThF	3	0	0
1	1	10:00am	*	*	*	MTWThF	3	0	0
1	2	12:00pm	*	*	*	MTWThF	3	0	0
1	3	04:00pm	*	*	*	MTWThF	3	0	0

Event Setup in Remote Connect



The screenshot shows the 'Circuit' tab in the SiteSync IQ Remote Connect interface. The 'Schedule' sub-tab is active. Below is a table of circuit settings:

Circuit #	Enabled	Assigned Schedule	Default Duration	Switching 1		Switching 2		Circuit Description
				Schedule	Date/Time	Schedule	Date/Time	
1	<input checked="" type="checkbox"/>	0	3 Seconds	0	NA	0	NA	ALERT TONE
2	<input type="checkbox"/>	0	3 Seconds	0	NA	0	NA	
3	<input type="checkbox"/>	0	3 Seconds	0	NA	0	NA	

Circuit Setup in Remote Connect

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