ALLIANCE

a division of Rock-Tenn Company

Theft Deterrent System
Electronics Package

Receiver & Transmitter User Manual

PLEASE LEAVE THIS MANUAL WITH THE STORE MANAGER

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Store Manager Note:

If unit needs support or service do the following:

Go online to **www.alliance-cvs.com** and check for the most common support questions.

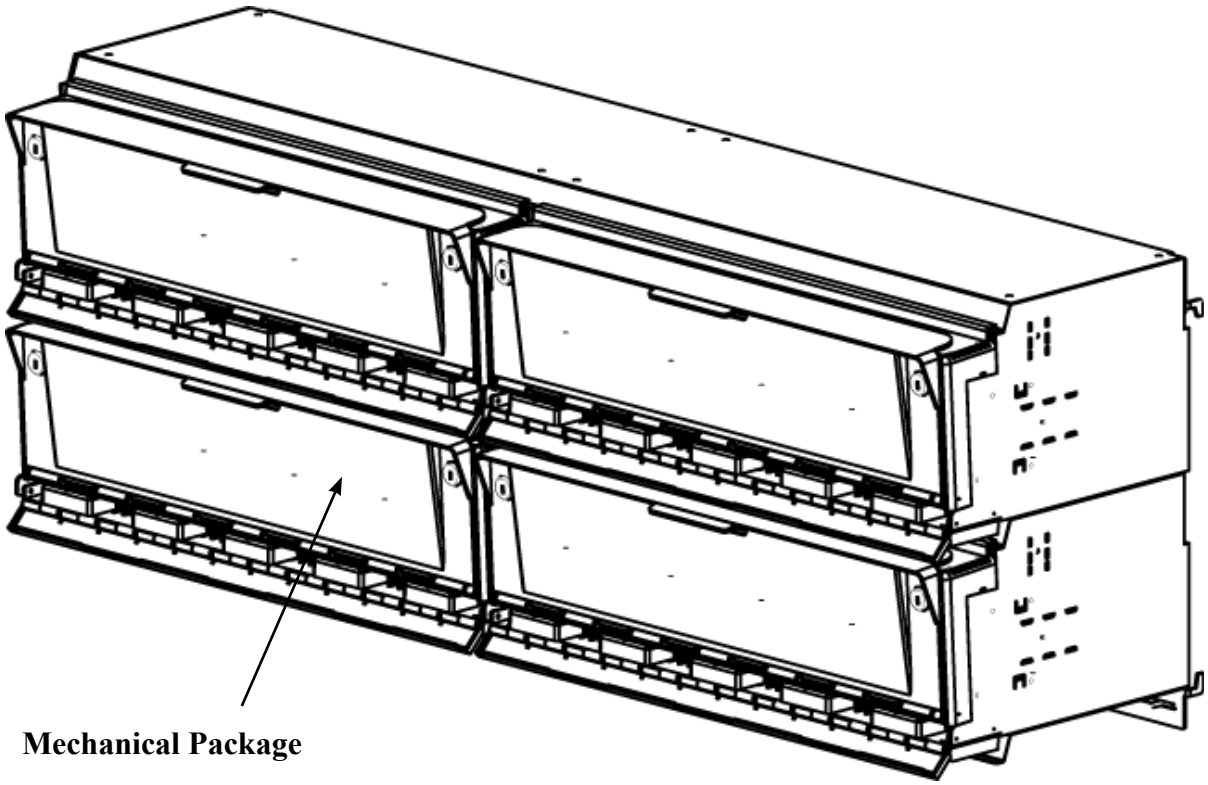
User: manager ***Password:*** razor

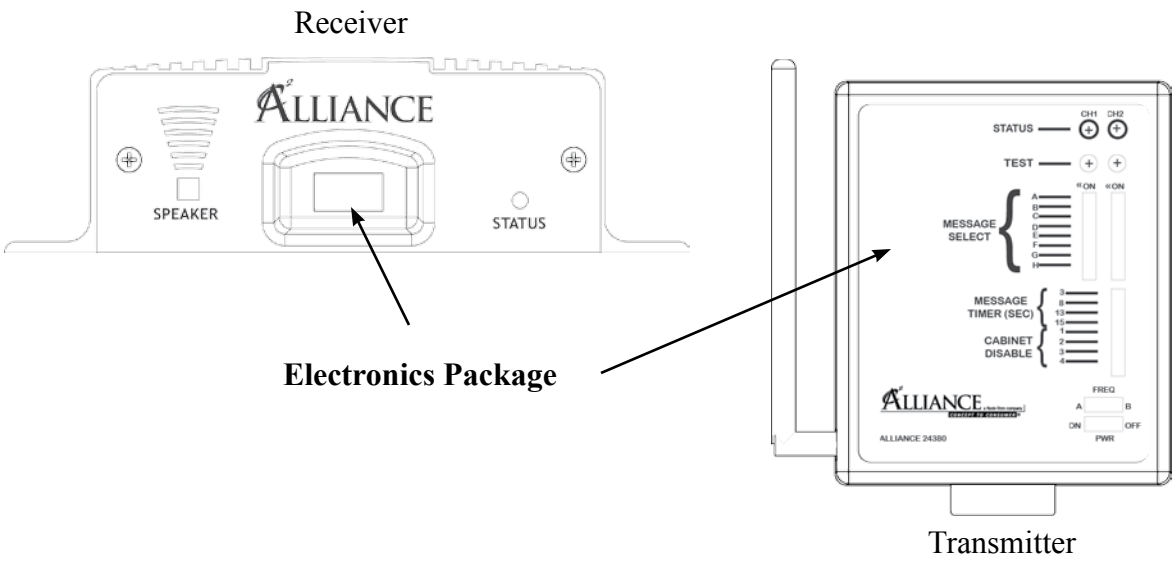
If your question is not answered or resolved then,

Call 1-866-594-7762 for assistance.

Introduction:

The Alliance Theft Deterrent / In-Store Messaging System consists of two distinct parts – the *mechanical package* (that includes the display fixture and cabinet) and the *electronics package* (that includes the transmitter and receiver modules). This kit users guide covers the electronics package only - if you are having support issues with the cabinet then please refer to the users guide for the cabinet fixture.





Receiver Instructions:

Summary:

The Receiver/Message Repeater Module is a state-of-the-art digital audio playback device with a 433MHz RF receiver designed to provide up to 255 audio messages that can be activated and played over a stores public announcement system. Messages are activated by either receiving triggering information from remote transmitters and/or by a built-in timer that will play messages on specific time intervals.

Messages are stored as encrypted MP3 files on industry standard USB flash drives from 16MB up to 4GB with playback quality up to near CD-quality (128Kbps). Audio content is easily managed by plugging the USB flash drive into a PC or MAC computer's USB port and "dragging and dropping" encrypted MP3 files to and from the drive. Managers can receive new and updated messages via e-mail or ftp and update the units themselves. Files are encrypted using Sonocrypt Level 3 technology. Sonocrypt encrypts the file itself making the MP3 file unplayable anywhere except on the unit. This makes the distribution of messaging safe, secure, and ensures against unauthorized playback.

Front Panel:

SPEAKER - The SPEAKER switch can be turned ON and OFF to monitor audio and will have no effect on the audio playing on the sales floor. Switch should normally be kept OFF.

STATUS - The STATUS indicator is a LED that during normal operation with a USB drive inserted in to the unit will be solid blue. If there is a problem with the USB drive; files are not encrypted, drive is not inserted or is empty this LED will blink blue.

USB PLUG - The USB drive is inserted here to play audio. If insertion of drive is difficult, make sure drive is oriented correctly. Drive should slide into jack smoothly.

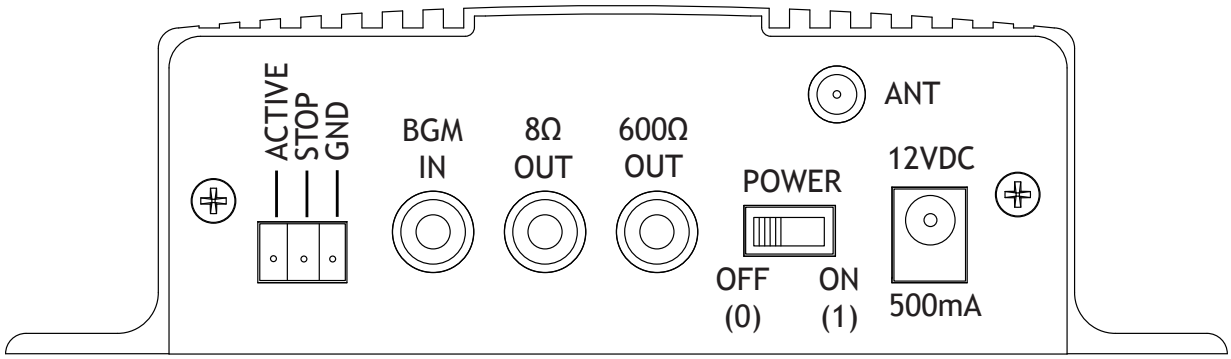
IMPORTANT:

This unit WILL NOT play standard MP3 files!

USB drives used on this playback device must be encrypted!

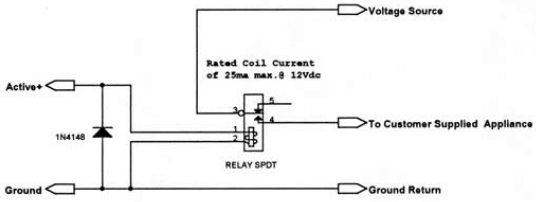
Audio changes will be made by receiving a new USB drive by mail, e-mail or web site download.

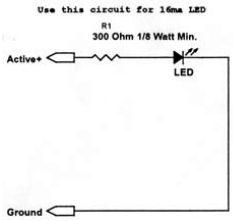
Rear Panel:

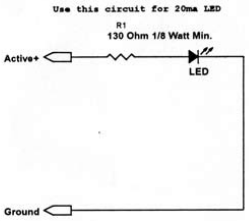


ACTIVE - This is an output circuit that outputs +12VDC @ 25mA maximum when a message is playing from the unit. If circuit is to exceed the 25mA rating then a relay is required to drive the higher load. The GND should be used as a return on the circuit. Exceeding 25mA will damage this circuit.

Example Circuits:







STOP - This is used to stop any messages that are playing or queued (stacked) on the unit. To use this circuit, short the STOP and GND connections together with either a push-button or switch.

GND - This is used as a ground return on both the ACTIVE and STOP circuits.

BGM IN - The stores background music (BGM) is connected to this jack via a RCA connection. This jack is for signal level only - amplified audio (such as a PA amplifier) should NEVER be fed into this jack or unit will be damaged. Examples of connections made to this jack may be a Satellite Receiver, CD player, or a Tape Player.

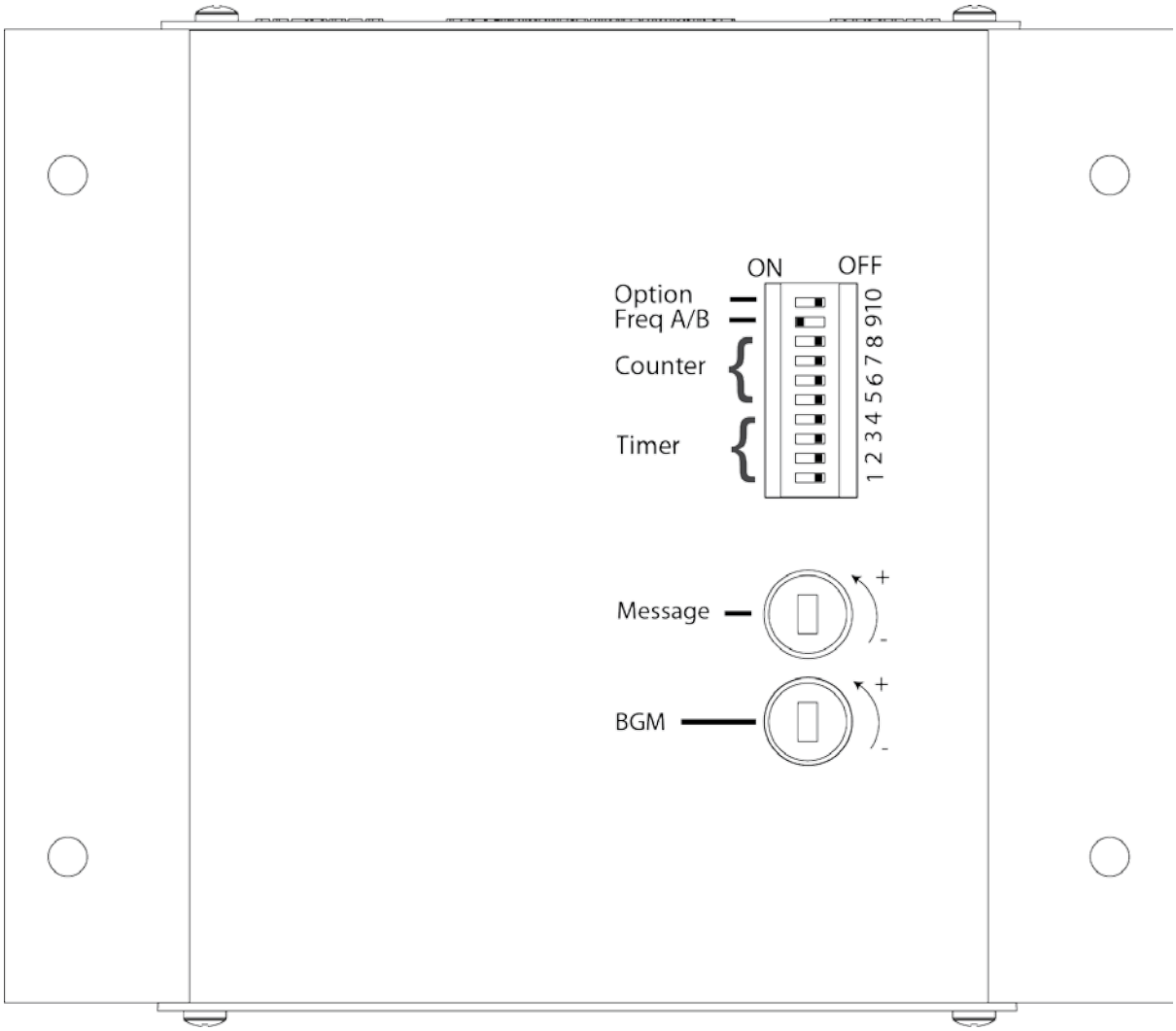
8Ω & 600Ω OUT - This is where the background music and stored message audio is fed back into the stores PA system. This RCA connection should go to the stores PA amplifier INPUT ONLY. Never connect this connection to an amplified output - back fed high voltage will damage this unit! Use either the 8Ω <u>OR</u> 600Ω output depending upon your system impedance.

POWER - Use this switch to turn the unit ON and OFF.

12VDC - This is where the supplied 12VDC 500mA power pack is connected.

ANT - This is where the supplied antenna is connected.

Bottom Panel:



BGM - This pot is used to control the final output level of the background music that is fed through the units BGM IN on the rear panel.

MESSAGE - This pot is used to control the final output level of the stored messages.

TIMER - This DIP switch positions one(1) through four(4) are used to configure the stored message timer.

COUNTER - This DIP switch positions five(5) through eight (8) are used to configure the theft counter timer.

FREQ A/B - This DIP switch position nine(9) is used to change units receive frequency. All transmitters must be set to the same channel as this receiver. Default is set to “A”.

OPTION - This is not used at this time.

Message Formatting:

All messages that are available for the receiver to play are stored on an industry standard USB flash drive. Messages must be labeled correctly so they will automatically be placed into virtual message "slots" on the unit. There are three different type of message slots:

1. Triggered Message Slots – These messages reside in slots 1 to 128 of the USB flash drive and are activated instantly when a 433MHz signal is received from a transmitter.

2. Counted Message Slots - These messages reside in slots 129 – 198 of the USB flash drive and are activated when a preset count is exceed within a specific amount of time.

3. Timed Message Slots – These messages reside in slots 199 – 255 of the USB flash drive and are activated by a built-in timer circuit.

Messages MUST be labeled in the following manner: "slot_position_number".mp3

For example, if you wanted a file named "mens_razor.mp3" put into slot eight, then it would need to renamed as file "8.mp3".

A typical list of messages on the USB flash drive would look like this:

1.mp3
2.mp3
8.mp3
129.mp3
210.mp3

Message Encryption:

Before any messages can be put on to the USB flash drive they must be encrypted using a special program called Sonocrypt3.exe.

Step 1: Create a folder and place both the MP3 files you want to convert to SC3's and the Sonocrypt3.exe conversion tool inside it. You will need your computer to display file extensions, so this feature needs to be enabled.

Step 2: Go into the MP3 folder and click on "Tools" then "Folder Options".

Step 3: Click on the "View" tab then uncheck the "Hide File Extensions". Click on "Apply" and "OK".

Step 4: Double Click on the SonoCrypt3.exe icon and the program will begin converting your files. It places them in the same folder as your MP3 files. Once complete, move ONLY the files with the SC3 extension's to the USB flash drive.

Receiver Install Summary:

(See Installation Instruction Manual for more detail descriptions)

Step 1: Locate the stores PA system (this is usually located in the manager's office or a secured room in the store). The existing stores PA system will include two main parts - the background music receiver and the amplifier that feeds the stores speakers.

Step 2: Locate the receiver/message repeater in a location that will allow the unit to connect in series with both the stores background music receiver and amplifier. Temporarily wall mount (with the supplied screws) or if you are going to shelf mount the unit then attach the supplied four rubber feet to the bottom of the unit and set it on a shelf.

Step 3: Attach the antenna to the screw mount jack labeled ANT on the rear of the unit.

Step 4: Attach the other end of the antenna to a sales floor facing wall. It is important that the antenna is mounted as high as possible for correct reception.

Tip: For increased reception the antenna could be routed through a ceiling tile and over the wall and then attached to the ceiling grid of the sales floor. **If you have any type of reception issues you MUST use this method of installation!**

Step 5: Verify power switch on rear of unit is in OFF position. Attach the included power pack to a wall or power strip receptacle, then attach the other end to the jack on the rear of the unit labeled 12VDC. Make sure the power receptacle is live 24 hours a day and is not switched off at night.

Important Note: If the accessory kit includes a snap-on ferrite this must be attached to the end closest to the unit. The power cord should be wrapped at least 2 times around the ferrite.

Step 6: Turn OFF the stores PA amplifier.

Step 7: Unplug the RCA plug going to the stores PA amplifier (that is supplying the background music) and plug it into the rear of the Alliance receiver/message repeaters BGM INPUT jack.

Take notice of the jack this cable was removed from and write it down here.

RCA jack removed from the _____ jack on the amplifier.

In very rare instances if the plug going to PA amplifier does not have an RCA plug then replace it with the one supplied in the kit.

Warning: Do not plug from the PA amplifier into the Alliance unit – Doing this could damage unit!

Step 8: Using the supplied RCA to RCA cable or cable left over from Step 8, connect from the 8Ω OUTPUT on the rear of the Alliance receiver/message repeater unit to the input jack on the amplifier that was noted above in Step 7.

Step 9: Insert the USB flash drive into the front of the unit. Do not force the USB flash drive into the unit. If it does not fit in one way, try turning over and reinserting.

Step 10: Turn power switch on rear of unit to the ON position. After the unit initializes the STATUS LED on front of unit will turn solid blue. This process may take up to 15 seconds.

Step 11: Push the SPEAKER switch located on the front of the unit to the IN position. This speaker is for verifying audio playback and testing purposes only – DO NOT use this for setting stores speaker's volume level!

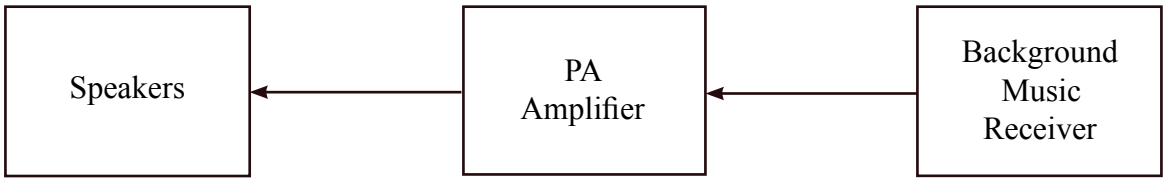
Step 12: With the included screwdriver ready, turn the stores PA amplifier back to the ON position. Once the amplifier is on, adjust the volume level pot labeled BGM on the bottom of the Alliance receiver/message repeater to match an acceptable volume level on the stores sales floor. DO NOT use the internal speaker on the unit to set this level.

If an acceptable volume level can not be achieved or audio is distorted/muffled, then take the following steps:

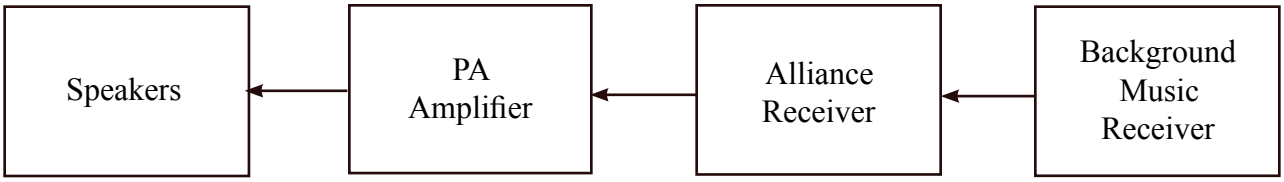
a. Turn down the pot labeled BGM on the bottom of the unit.
b. Turn the volume level UP on the stores PA amplifier.
c. Turn up the pot labeled BGM on the bottom of the unit.
d. Keep repeating above procedure until level is acceptable or go to step e.
e. Move the RCA plug from the 8Ω to 600Ω output on the rear of the Alliance receiver/message repeater.
f. Repeat step a through d.

Step 13: Push the SPEAKER switch to the OUT position.

Step 14: Receiver Install is Complete



Before Install



After Install

Important Note: Some installation may have additional equipment already installed between the background music receiver and amplifier. The Alliance receiver must fall somewhere in the chain of equipment between the background music receiver and amplifier.

Receiver Operation & Programming:

The Receiver/Message Repeater Module is a state-of-the-art digital audio playback device with a 433MHz RF receiver designed to provide up to 255 audio messages that can be activated and played over a stores public announcement system by the following means; triggered, counted or timed.

Note: Power to unit should be turned OFF when reconfiguring DIP switches.

Triggered Messages – These messages reside in slots 1 to 128 of the unit and are activated instantly when a 433MHz signal is received from the Transmitter Module. When a message is triggered the background music that is feeding through the unit will be faded down, then the message will play, then the background music will fade back up to its original level.

Counted - These messages reside in slots 129 – 198 of the unit and are activated when a preset count is exceed within a specific amount of time. The receiver has DIP switches (SW5 – SW8) on the bottom of the unit – these switches can be set to "sample" how many times a transmitter sends a signal in 30 seconds for that specific message slot. The chart is as follows:

Product Taken Over 30s	**SW5**	**SW6**	**SW7**	**SW8**
Counter OFF	OFF	OFF	OFF	OFF
4	ON	OFF	OFF	OFF
5	OFF	ON	OFF	OFF
6	ON	ON	OFF	OFF
7	OFF	OFF	ON	OFF
8	ON	OFF	ON	OFF
9	OFF	ON	ON	OFF
10	ON	ON	ON	OFF
11	OFF	OFF	OFF	ON
12	ON	OFF	OFF	ON
13	OFF	ON	OFF	ON
14	ON	ON	OFF	ON
15	OFF	OFF	ON	ON
16	ON	OFF	ON	ON
17	OFF	ON	ON	ON
18	ON	ON	ON	ON

A message will play only IF the following condition is TRUE. IF "product taken over 30 seconds" is EQUAL TO or is GREATER THAN the settings of SW5 – SW8 then play that specific message slot. IF count does NOT equal or exceed the settings of SW5 – SW8 then reset counter.

Timed – These messages reside in slots 199 – 255 of the unit and are activated by a built-in timer circuit. The receiver has DIP switches (SW1 – SW4) on the bottom of the unit – these switches set the time delay between each message. The chart is as follows:

Time Interval	SW1	SW2	SW3	SW4
Timer OFF	OFF	OFF	OFF	OFF
10 seconds	ON	OFF	OFF	OFF
20 seconds	OFF	ON	OFF	OFF
30 seconds	ON	ON	OFF	OFF
45 seconds	OFF	OFF	ON	OFF
1 minute	ON	OFF	ON	OFF
2 minutes	OFF	ON	ON	OFF
3 minutes	ON	ON	ON	OFF
4 minutes	OFF	OFF	OFF	ON
5 minutes	ON	OFF	OFF	ON
10 minutes	OFF	ON	OFF	ON
15 minutes	ON	ON	OFF	ON
20 minutes	OFF	OFF	ON	ON
30 minutes	ON	OFF	ON	ON
45 minutes	OFF	ON	ON	ON
60 minutes	ON	ON	ON	ON

For example: Slots 201, 202, 203 have messages AND the switch settings on the bottom of the unit are set for 10 minutes. During normal operation triggered and counted messages will be playing, but every 10 minutes ONE of the timed messages will play . . . first slot 201 will play then wait 10 minutes . . . then slot 202 will play . . . wait 10 minutes . . . then slot 203 . . . wait 10 minutes . . . then slot 201 . . . and so on. The BGM music will fade down to play the message then fade back up after the message is played.

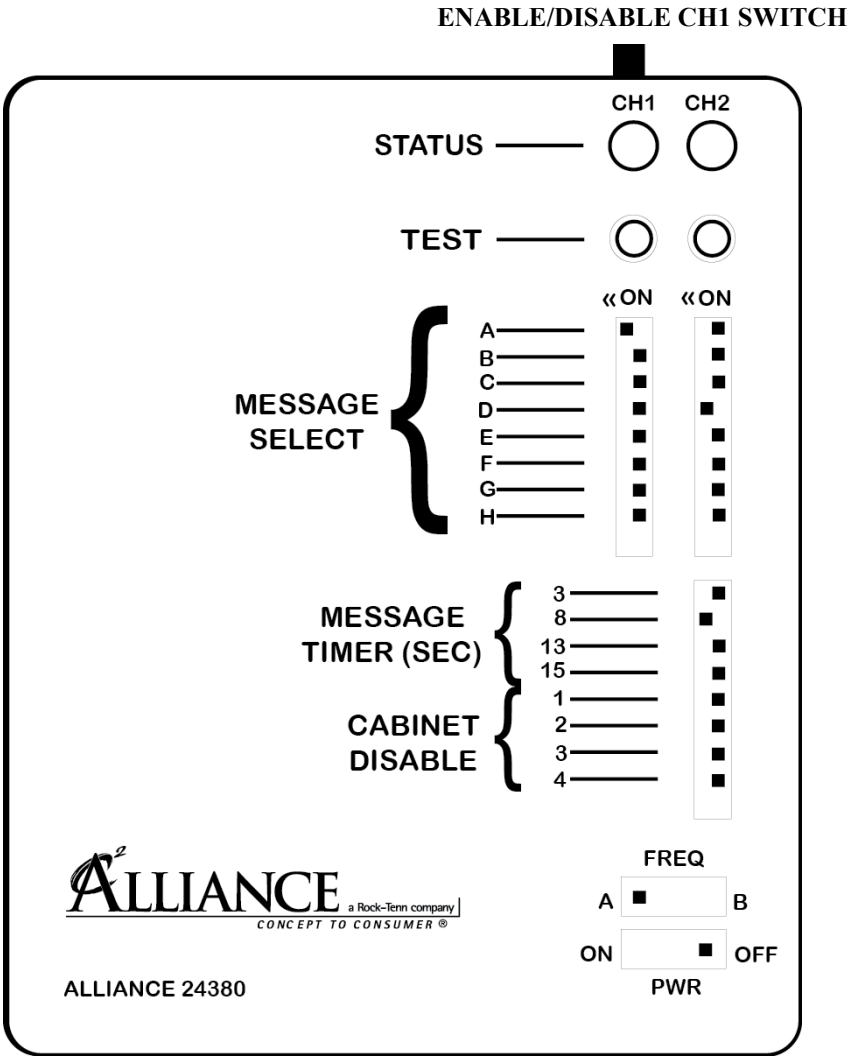
Receiver Specifications:

Decoding:	MPEG (.mp3)
Frequency Response:	20Hz to 20KHz
Bit Rate:	8Kbps to 128Kbps
Sample Rate:	16KHz to 48KHz
Memory Type:	USB Flash Drive
Memory Capacity:	64MB to 4GB
Message Capacity:	Up to 255 messages
Message Loading:	Computer via USB Flash Drive
Message Playback:	Triggered, Counted or Timed (via 433Mhz built-in receiver)
Power Supply:	110VAC 60Hz to 12VDC @ 500mA
Audio Output:	Mono RCA jack - Adjustable volume control
Impedance:	6V p-p @ 8Ω or 3V p-p @ 600Ω
Size:	6.00” x 6.00” x 1.50” (H x W x D)
Color:	Black
Shipping Weight:	3 pounds

Transmitter Instructions:

Summary & Operation:

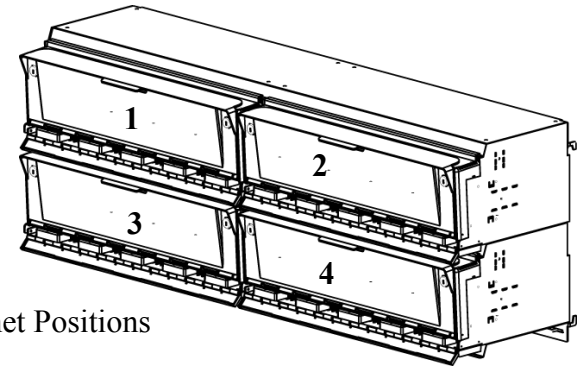
The Transmitter Module is a state-of-the-art 433MHz RF receiver capable of sending a 8-bit binary word to the Receiver Module. Each Transmitter Module has 2-channels that can trigger any 1 of the 255 messages on the Receiver Module. The Transmitter is battery operated and is rated at least one-year of operation under normal conditions.



PWR - This switch is used to turn the power ON and OFF. If transmitter is not plugged in to cabinet power must be turned OFF to conserve battery life and prevent false triggers.

FREQ - This switch is used to change the units transmit frequency. All transmitters must be set to the same channel as the receiver. Default is set to “A”.

CABINET DISABLE - These four DIP switches numbered 1, 2, 3 & 4 are used to DISABLE cabinets not being used. To DISABLE a cabinet switch should be to the LEFT. Default is set with all switches to the RIGHT.



Cabinet Positions

MESSAGE TIMER - These four DIP switches, numbered 3, 8, 13 & 15 are used to control the time before a trigger on CH2 (Channel 2) is sent to the receiver for instant trigger. CH2 on this cabinet application is connected to the door switches. When a door is left open longer than the time in seconds set by the DIP switch, a signal is sent to the receiver to play a message. Only one DIP switch should be set at a time. ON is to the LEFT. Default is set with 8 (seconds) switch to the LEFT.

MESSAGE SELECT - These eight DIP switches, lettered A through H are used to set the message trigger that will be sent to the receiver when an alert condition is activated. Each channel (CH1 & CH2) have their own independent settings and can trigger any 1 of the 255 messages stored on the receiver. ON is to the LEFT. Default on CH1 is “A” set to ON. Default on CH2 is “D” set to on. Please see MESSAGE SELECT CHART for message settings.

TEST - These two push-button tact switches are used to test both the transmitter triggering functions and in conjunction with the above STATUS LED’s test the cable connections.

Pushing the CH1 TEST button with the transmitter installed in the cabinet or as a stand-alone device will send an instant trigger to the receiver based upon the corresponding MESSAGE SELECT switches.

Pushing the CH2 TEST button is used for testing continuity of the door cable connection and if the connections are good and the doors are closed, then you will be able to trigger the receiver.

STATUS - These two LED’s when used in conjunction with the TEST switches will indicate circuit continuity.

To test the cabinet PUSH button - Press in the PUSH button on the cabinet and hold down the TEST button on the transmitter module for CH1. If the cable and circuit is good, then the LED will light GREEN for 1 second.

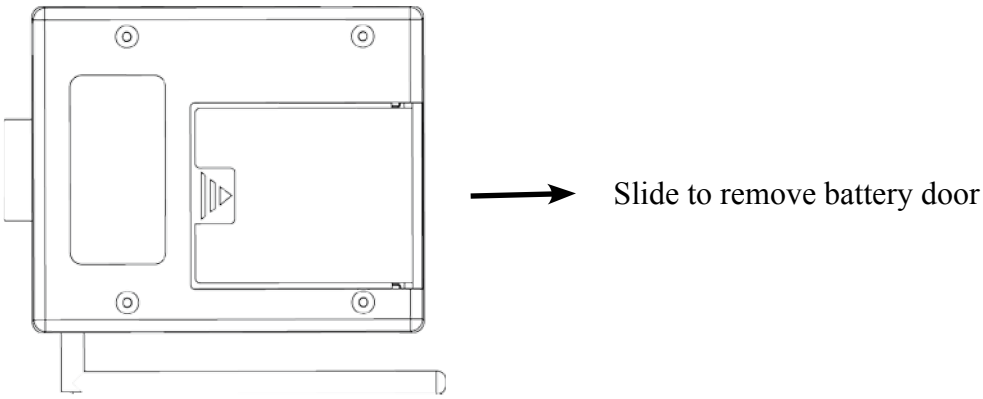
To test the cabinet DOOR open sensor - Keep the door closed and hold down the TEST button on the transmitter module for CH2. If the cable and circuit is good the LED will light GREEN when door is closed and turn off when door is open.

ENABLE/DISABLE CH1 SWITCH - This switch is used to ENABLE or DISABLE CH1 without having to remove the transmitter module from the cabinet. Looking at the transmitter from the front, ENABLE is to the LEFT and DISABLE is to the RIGHT. When in the cabinet ENABLE would be away from you and DISABLE would be towards you. Default is set to ENABLE.

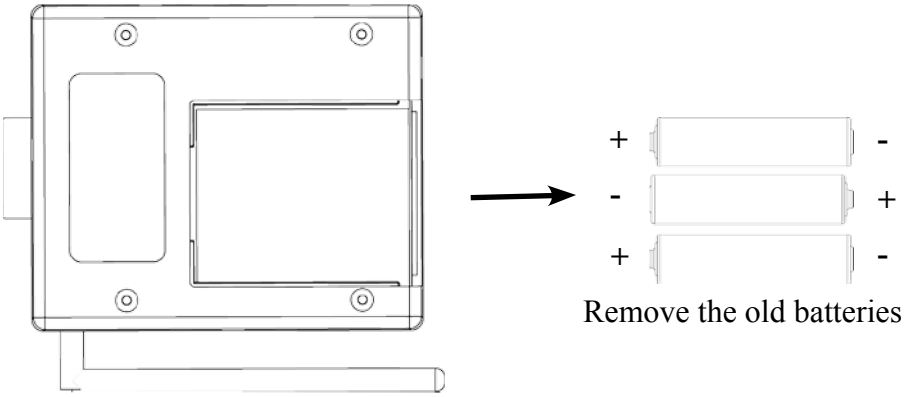
Back View (Battery Replacement):

A set of three AA batteries should last at least 1-year under normal conditions. When the time comes to replace the batteries follow these steps:

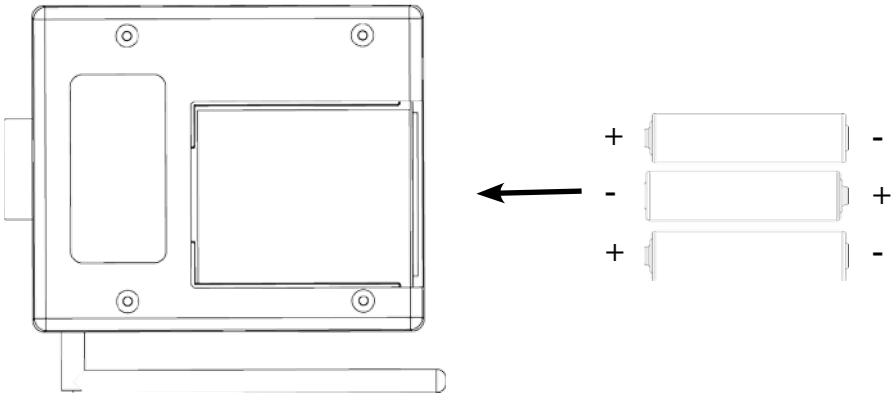
Step 1: Making sure the transmitter is OFF - flip the unit over and remove the battery door.



Step 2: Remove the old batteries and dispose of properly.



Step 3: Replace with new AA batteries of equal quality - Energizer Industrial EN91 or Panasonic Industrial AM-3PIX/2S are recommended. Take notice of battery polarity. Inserting batteries backward could damage unit. Replace battery door after new batteries are installed.

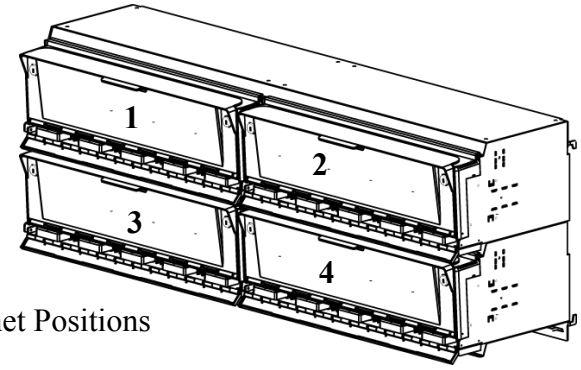


Transmitter Install Summary:

(See Installation Instruction Manual for more detail descriptions)

Step 1: Locate the Alliance Razor Display cabinets on the sales floor.

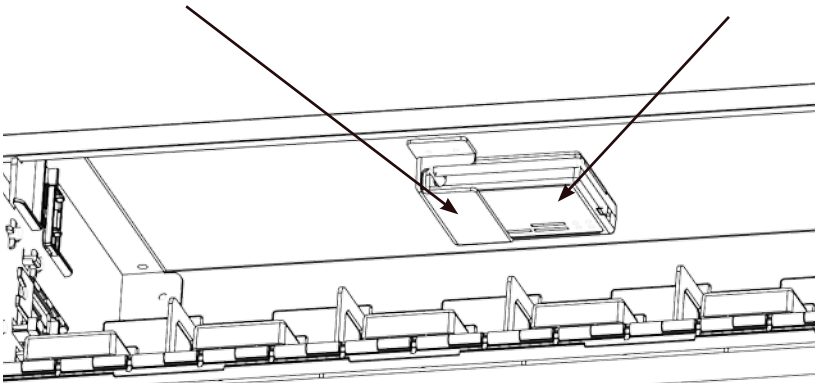
Step 2: Using the cabinet keys open POSITION 1 of the cabinet module (a cabinet module consists of a 2 x 2 assembly).



Cabinet Positions

Step 3: Slide the POWER switch to the ON position as they are being installed in to the cabinets. Do not turn transmitter module power on if there will be any delay in installation.

Step 4: Through the open POSITION 1 on each cabinet module insert the Transmitter Module (front of unit facing down, antenna facing toward door) into the existing empty Cartridge Sleeve. MAKE SURE IT IS INSERTED COMPLETELY!



Step 5: Lock all cabinets.

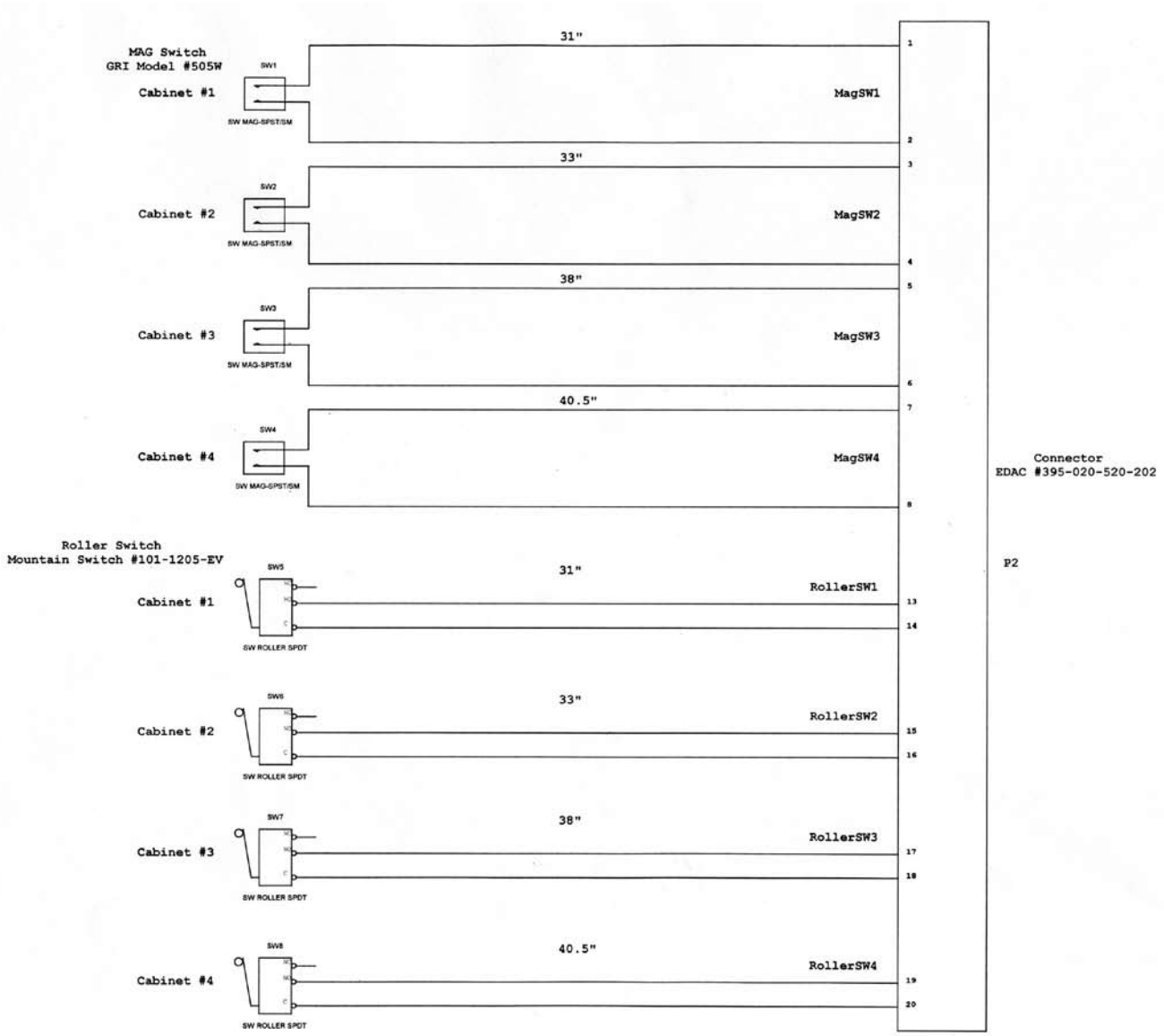
Step 6: Transmitter Install is Complete

Transmitter Specifications:

Message Playback:	Triggered or Delay (via 433Mhz built-in transmitter)
Power Supply:	4.5V (AA x 3)
Size:	4.15” x 3.45” x 1.00” (H x W x D)
Color:	Gray
Shipping Weight:	6 oz.

Transmitter Cable Harness Diagram:

The Transmitter Module has eight monitored inputs. Four of the inputs are monitored on CH1 (Channel 1) for instant triggering, the other four inputs are monitored on CH2 (Channel 2) for delay triggering. Below is a typical wiring diagram of how connections are made to the transmitter module.



Message Select Chart:

Use the chart below to set the message number to be triggered for an alert condition on the transmitter. Looking at the transmitter ON is to the LEFT, OFF is to the RIGHT.

Message	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**
1	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
2	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF
3	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF
4	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF
5	ON	OFF	ON	OFF	OFF	OFF	OFF	OFF
6	OFF	ON	ON	OFF	OFF	OFF	OFF	OFF
7	ON	ON	ON	OFF	OFF	OFF	OFF	OFF
8	OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF
9	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF
10	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF
11	ON	ON	OFF	ON	OFF	OFF	OFF	OFF
12	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF
13	ON	OFF	ON	ON	OFF	OFF	OFF	OFF
14	OFF	ON	ON	ON	OFF	OFF	OFF	OFF
15	ON	ON	ON	ON	OFF	OFF	OFF	OFF
16	OFF	OFF	OFF	OFF	ON	OFF	OFF	OFF
17	ON	OFF	OFF	OFF	ON	OFF	OFF	OFF
18	OFF	ON	OFF	OFF	ON	OFF	OFF	OFF
19	ON	ON	OFF	OFF	ON	OFF	OFF	OFF
20	OFF	OFF	ON	OFF	ON	OFF	OFF	OFF
21	ON	OFF	ON	OFF	ON	OFF	OFF	OFF
22	OFF	ON	ON	OFF	ON	OFF	OFF	OFF
23	ON	ON	ON	OFF	ON	OFF	OFF	OFF
24	OFF	OFF	OFF	ON	ON	OFF	OFF	OFF
25	ON	OFF	OFF	ON	ON	OFF	OFF	OFF
26	OFF	ON	OFF	ON	ON	OFF	OFF	OFF
27	ON	ON	OFF	ON	ON	OFF	OFF	OFF
28	OFF	OFF	ON	ON	ON	OFF	OFF	OFF
29	ON	OFF	ON	ON	ON	OFF	OFF	OFF
30	OFF	ON	ON	ON	ON	OFF	OFF	OFF
31	ON	ON	ON	ON	ON	OFF	OFF	OFF
32	OFF	OFF	OFF	OFF	OFF	ON	OFF	OFF
33	ON	OFF	OFF	OFF	OFF	ON	OFF	OFF
34	OFF	ON	OFF	OFF	OFF	ON	OFF	OFF

35	ON	ON	OFF	OFF	OFF	ON	OFF	OFF
36	OFF	OFF	ON	OFF	OFF	ON	OFF	OFF
37	ON	OFF	ON	OFF	OFF	ON	OFF	OFF
38	OFF	ON	ON	OFF	OFF	ON	OFF	OFF
39	ON	ON	ON	OFF	OFF	ON	OFF	OFF
40	OFF	OFF	OFF	ON	OFF	ON	OFF	OFF
41	ON	OFF	OFF	ON	OFF	ON	OFF	OFF
42	OFF	ON	OFF	ON	OFF	ON	OFF	OFF
43	ON	ON	OFF	ON	OFF	ON	OFF	OFF
44	OFF	OFF	ON	ON	OFF	ON	OFF	OFF
45	ON	OFF	ON	ON	OFF	ON	OFF	OFF
46	OFF	ON	ON	ON	OFF	ON	OFF	OFF
47	ON	ON	ON	ON	OFF	ON	OFF	OFF
48	OFF	OFF	OFF	OFF	ON	ON	OFF	OFF
49	ON	OFF	OFF	OFF	ON	ON	OFF	OFF
50	OFF	ON	OFF	OFF	ON	ON	OFF	OFF
51	ON	ON	OFF	OFF	ON	ON	OFF	OFF
52	OFF	OFF	ON	OFF	ON	ON	OFF	OFF
53	ON	OFF	ON	OFF	ON	ON	OFF	OFF
54	OFF	ON	ON	OFF	ON	ON	OFF	OFF
55	ON	ON	ON	OFF	ON	ON	OFF	OFF
56	OFF	OFF	OFF	ON	ON	ON	OFF	OFF
57	ON	OFF	OFF	ON	ON	ON	OFF	OFF
58	OFF	ON	OFF	ON	ON	ON	OFF	OFF
59	ON	ON	OFF	ON	ON	ON	OFF	OFF
60	OFF	OFF	ON	ON	ON	ON	OFF	OFF
61	ON	OFF	ON	ON	ON	ON	OFF	OFF
62	OFF	ON	ON	ON	ON	ON	OFF	OFF
63	ON	ON	ON	ON	ON	ON	OFF	OFF
64	OFF	OFF	OFF	OFF	OFF	OFF	ON	OFF
65	ON	OFF	OFF	OFF	OFF	OFF	ON	OFF
66	OFF	ON	OFF	OFF	OFF	OFF	ON	OFF
67	ON	ON	OFF	OFF	OFF	OFF	ON	OFF
68	OFF	OFF	ON	OFF	OFF	OFF	ON	OFF
69	ON	OFF	ON	OFF	OFF	OFF	ON	OFF
70	OFF	ON	ON	OFF	OFF	OFF	ON	OFF
71	ON	ON	ON	OFF	OFF	OFF	ON	OFF
72	OFF	OFF	OFF	ON	OFF	OFF	ON	OFF
73	ON	OFF	OFF	ON	OFF	OFF	ON	OFF
74	OFF	ON	OFF	ON	OFF	OFF	ON	OFF

75	ON	ON	OFF	ON	OFF	OFF	ON	OFF
76	OFF	OFF	ON	ON	OFF	OFF	ON	OFF
77	ON	OFF	ON	ON	OFF	OFF	ON	OFF
78	OFF	ON	ON	ON	OFF	OFF	ON	OFF
79	ON	ON	ON	ON	OFF	OFF	ON	OFF
80	OFF	OFF	OFF	OFF	ON	OFF	ON	OFF
81	ON	OFF	OFF	OFF	ON	OFF	ON	OFF
82	OFF	ON	OFF	OFF	ON	OFF	ON	OFF
83	ON	ON	OFF	OFF	ON	OFF	ON	OFF
84	OFF	OFF	ON	OFF	ON	OFF	ON	OFF
85	ON	OFF	ON	OFF	ON	OFF	ON	OFF
86	OFF	ON	ON	OFF	ON	OFF	ON	OFF
87	ON	ON	ON	OFF	ON	OFF	ON	OFF
88	OFF	OFF	OFF	ON	ON	OFF	ON	OFF
89	ON	OFF	OFF	ON	ON	OFF	ON	OFF
90	OFF	ON	OFF	ON	ON	OFF	ON	OFF
91	ON	ON	OFF	ON	ON	OFF	ON	OFF
92	OFF	OFF	ON	ON	ON	OFF	ON	OFF
93	ON	OFF	ON	ON	ON	OFF	ON	OFF
94	OFF	ON	ON	ON	ON	OFF	ON	OFF
95	ON	ON	ON	ON	ON	OFF	ON	OFF
96	OFF	OFF	OFF	OFF	OFF	ON	ON	OFF
97	ON	OFF	OFF	OFF	OFF	ON	ON	OFF
98	OFF	ON	OFF	OFF	OFF	ON	ON	OFF
99	ON	ON	OFF	OFF	OFF	ON	ON	OFF
100	OFF	OFF	ON	OFF	OFF	ON	ON	OFF
101	ON	OFF	ON	OFF	OFF	ON	ON	OFF
102	OFF	ON	ON	OFF	OFF	ON	ON	OFF
103	ON	ON	ON	OFF	OFF	ON	ON	OFF
104	OFF	OFF	OFF	ON	OFF	ON	ON	OFF
105	ON	OFF	OFF	ON	OFF	ON	ON	OFF
106	OFF	ON	OFF	ON	OFF	ON	ON	OFF
107	ON	ON	OFF	ON	OFF	ON	ON	OFF
108	OFF	OFF	ON	ON	OFF	ON	ON	OFF
109	ON	OFF	ON	ON	OFF	ON	ON	OFF
110	OFF	ON	ON	ON	OFF	ON	ON	OFF
111	ON	ON	ON	ON	OFF	ON	ON	OFF
112	OFF	OFF	OFF	OFF	ON	ON	ON	OFF
113	ON	OFF	OFF	OFF	ON	ON	ON	OFF
114	OFF	ON	OFF	OFF	ON	ON	ON	OFF

115	ON	ON	OFF	OFF	ON	ON	ON	OFF
116	OFF	OFF	ON	OFF	ON	ON	ON	OFF
117	ON	OFF	ON	OFF	ON	ON	ON	OFF
118	OFF	ON	ON	OFF	ON	ON	ON	OFF
119	ON	ON	ON	OFF	ON	ON	ON	OFF
120	OFF	OFF	OFF	ON	ON	ON	ON	OFF
121	ON	OFF	OFF	ON	ON	ON	ON	OFF
122	OFF	ON	OFF	ON	ON	ON	ON	OFF
123	ON	ON	OFF	ON	ON	ON	ON	OFF
124	OFF	OFF	ON	ON	ON	ON	ON	OFF
125	ON	OFF	ON	ON	ON	ON	ON	OFF
126	OFF	ON	ON	ON	ON	ON	ON	OFF
127	ON	ON	ON	ON	ON	ON	ON	OFF
128	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON
129	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON
130	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON
131	ON	ON	OFF	OFF	OFF	OFF	OFF	ON
132	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON
133	ON	OFF	ON	OFF	OFF	OFF	OFF	ON
134	OFF	ON	ON	OFF	OFF	OFF	OFF	ON
135	ON	ON	ON	OFF	OFF	OFF	OFF	ON
136	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON
137	ON	OFF	OFF	ON	OFF	OFF	OFF	ON
138	OFF	ON	OFF	ON	OFF	OFF	OFF	ON
139	ON	ON	OFF	ON	OFF	OFF	OFF	ON
140	OFF	OFF	ON	ON	OFF	OFF	OFF	ON
141	ON	OFF	ON	ON	OFF	OFF	OFF	ON
142	OFF	ON	ON	ON	OFF	OFF	OFF	ON
143	ON	ON	ON	ON	OFF	OFF	OFF	ON
144	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON
145	ON	OFF	OFF	OFF	ON	OFF	OFF	ON
146	OFF	ON	OFF	OFF	ON	OFF	OFF	ON
147	ON	ON	OFF	OFF	ON	OFF	OFF	ON
148	OFF	OFF	ON	OFF	ON	OFF	OFF	ON
149	ON	OFF	ON	OFF	ON	OFF	OFF	ON
150	OFF	ON	ON	OFF	ON	OFF	OFF	ON
151	ON	ON	ON	OFF	ON	OFF	OFF	ON
152	OFF	OFF	OFF	ON	ON	OFF	OFF	ON
153	ON	OFF	OFF	ON	ON	OFF	OFF	ON
154	OFF	ON	OFF	ON	ON	OFF	OFF	ON

155	ON	ON	OFF	ON	ON	OFF	OFF	ON
156	OFF	OFF	ON	ON	ON	OFF	OFF	ON
157	ON	OFF	ON	ON	ON	OFF	OFF	ON
158	OFF	ON	ON	ON	ON	OFF	OFF	ON
159	ON	ON	ON	ON	ON	OFF	OFF	ON
160	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON
161	ON	OFF	OFF	OFF	OFF	ON	OFF	ON
162	OFF	ON	OFF	OFF	OFF	ON	OFF	ON
163	ON	ON	OFF	OFF	OFF	ON	OFF	ON
164	OFF	OFF	ON	OFF	OFF	ON	OFF	ON
165	ON	OFF	ON	OFF	OFF	ON	OFF	ON
166	OFF	ON	ON	OFF	OFF	ON	OFF	ON
167	ON	ON	ON	OFF	OFF	ON	OFF	ON
168	OFF	OFF	OFF	ON	OFF	ON	OFF	ON
169	ON	OFF	OFF	ON	OFF	ON	OFF	ON
170	OFF	ON	OFF	ON	OFF	ON	OFF	ON
171	ON	ON	OFF	ON	OFF	ON	OFF	ON
172	OFF	OFF	ON	ON	OFF	ON	OFF	ON
173	ON	OFF	ON	ON	OFF	ON	OFF	ON
174	OFF	ON	ON	ON	OFF	ON	OFF	ON
175	ON	ON	ON	ON	OFF	ON	OFF	ON
176	OFF	OFF	OFF	OFF	ON	ON	OFF	ON
177	ON	OFF	OFF	OFF	ON	ON	OFF	ON
178	OFF	ON	OFF	OFF	ON	ON	OFF	ON
179	ON	ON	OFF	OFF	ON	ON	OFF	ON
180	OFF	OFF	ON	OFF	ON	ON	OFF	ON
181	ON	OFF	ON	OFF	ON	ON	OFF	ON
182	OFF	ON	ON	OFF	ON	ON	OFF	ON
183	ON	ON	ON	OFF	ON	ON	OFF	ON
184	OFF	OFF	OFF	ON	ON	ON	OFF	ON
185	ON	OFF	OFF	ON	ON	ON	OFF	ON
186	OFF	ON	OFF	ON	ON	ON	OFF	ON
187	ON	ON	OFF	ON	ON	ON	OFF	ON
188	OFF	OFF	ON	ON	ON	ON	OFF	ON
189	ON	OFF	ON	ON	ON	ON	OFF	ON
190	OFF	ON	ON	ON	ON	ON	OFF	ON
191	ON	ON	ON	ON	ON	ON	OFF	ON
192	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON
193	ON	OFF	OFF	OFF	OFF	OFF	ON	ON
194	OFF	ON	OFF	OFF	OFF	OFF	ON	ON

195	ON	ON	OFF	OFF	OFF	OFF	ON	ON
196	OFF	OFF	ON	OFF	OFF	OFF	ON	ON
197	ON	OFF	ON	OFF	OFF	OFF	ON	ON
198	OFF	ON	ON	OFF	OFF	OFF	ON	ON
199	ON	ON	ON	OFF	OFF	OFF	ON	ON
200	OFF	OFF	OFF	ON	OFF	OFF	ON	ON
201	ON	OFF	OFF	ON	OFF	OFF	ON	ON
202	OFF	ON	OFF	ON	OFF	OFF	ON	ON
203	ON	ON	OFF	ON	OFF	OFF	ON	ON
204	OFF	OFF	ON	ON	OFF	OFF	ON	ON
205	ON	OFF	ON	ON	OFF	OFF	ON	ON
206	OFF	ON	ON	ON	OFF	OFF	ON	ON
207	ON	ON	ON	ON	OFF	OFF	ON	ON
208	OFF	OFF	OFF	OFF	ON	OFF	ON	ON
209	ON	OFF	OFF	OFF	ON	OFF	ON	ON
210	OFF	ON	OFF	OFF	ON	OFF	ON	ON
211	ON	ON	OFF	OFF	ON	OFF	ON	ON
212	OFF	OFF	ON	OFF	ON	OFF	ON	ON
213	ON	OFF	ON	OFF	ON	OFF	ON	ON
214	OFF	ON	ON	OFF	ON	OFF	ON	ON
215	ON	ON	ON	OFF	ON	OFF	ON	ON
216	OFF	OFF	OFF	ON	ON	OFF	ON	ON
217	ON	OFF	OFF	ON	ON	OFF	ON	ON
218	OFF	ON	OFF	ON	ON	OFF	ON	ON
219	ON	ON	OFF	ON	ON	OFF	ON	ON
220	OFF	OFF	ON	ON	ON	OFF	ON	ON
221	ON	OFF	ON	ON	ON	OFF	ON	ON
222	OFF	ON	ON	ON	ON	OFF	ON	ON
223	ON	ON	ON	ON	ON	OFF	ON	ON
224	OFF	OFF	OFF	OFF	OFF	ON	ON	ON
225	ON	OFF	OFF	OFF	OFF	ON	ON	ON
226	OFF	ON	OFF	OFF	OFF	ON	ON	ON
227	ON	ON	OFF	OFF	OFF	ON	ON	ON
228	OFF	OFF	ON	OFF	OFF	ON	ON	ON
229	ON	OFF	ON	OFF	OFF	ON	ON	ON
230	OFF	ON	ON	OFF	OFF	ON	ON	ON
231	ON	ON	ON	OFF	OFF	ON	ON	ON
232	OFF	OFF	OFF	ON	OFF	ON	ON	ON
233	ON	OFF	OFF	ON	OFF	ON	ON	ON
234	OFF	ON	OFF	ON	OFF	ON	ON	ON

235	ON	ON	OFF	ON	OFF	ON	ON	ON
236	OFF	OFF	ON	ON	OFF	ON	ON	ON
237	ON	OFF	ON	ON	OFF	ON	ON	ON
238	OFF	ON	ON	ON	OFF	ON	ON	ON
239	ON	ON	ON	ON	OFF	ON	ON	ON
240	OFF	OFF	OFF	OFF	ON	ON	ON	ON
241	ON	OFF	OFF	OFF	ON	ON	ON	ON
242	OFF	ON	OFF	OFF	ON	ON	ON	ON
243	ON	ON	OFF	OFF	ON	ON	ON	ON
244	OFF	OFF	ON	OFF	ON	ON	ON	ON
245	ON	OFF	ON	OFF	ON	ON	ON	ON
246	OFF	ON	ON	OFF	ON	ON	ON	ON
247	ON	ON	ON	OFF	ON	ON	ON	ON
248	OFF	OFF	OFF	ON	ON	ON	ON	ON
249	ON	OFF	OFF	ON	ON	ON	ON	ON
250	OFF	ON	OFF	ON	ON	ON	ON	ON
251	ON	ON	OFF	ON	ON	ON	ON	ON
252	OFF	OFF	ON	ON	ON	ON	ON	ON
253	ON	OFF	ON	ON	ON	ON	ON	ON
254	OFF	ON	ON	ON	ON	ON	ON	ON
255	ON	ON	ON	ON	ON	ON	ON	ON

Limited Warranty

TERMS: Alliance warrants to the original purchaser ("Buyer") that the Product sold is free from defects in material and workmanship at the time of purchase. The warranty period begins at the time of Product's original purchase by the first end-user. The warranty applies for one (1) year from the original date of purchase, or as long as the product is owned by the original purchaser, whichever comes first. Included in the warranty are parts and labor. Buyer must provide written notice to Alliance of any defective part or conditions within the warranty period. If the defect is not the result of improper use, service, maintenance or installation, and if the equipment has not been otherwise damaged or modified after shipment, Alliance or its authorized representative shall either replace or repair the defective Product at Alliance's option. No credit shall be allowed for work performed by Buyer or unauthorized parties. Out-of-warranty repairs are invoiced at the current Alliance hourly rate plus the cost of parts, shipping and handling. In the event that the product serial number is missing or has been tampered with in any way, the foregoing warranty is void and without effect and Alliance shall have no liability whatsoever on account of defects to such product.

LIMITATIONS: Except as stated above, there are no warranties, express or implied, that extend beyond the specifications for the product. Alliance expressly disclaims any warranty, express or implied, that equipment sold hereunder is of merchantable quality or that it can be used, or is fit for any particular purpose. Buyer purchases and accepts equipment solely on the basis of the warranty here in above expressed. Under no circumstances shall Alliance be liable by virtue of this warranty or otherwise for any special indirect, secondary or consequential damages to any person or property arising out of the use or inability to use the product.

REPAIRING OR REPLACING PRODUCT: Buyer may obtain the repair or replacement of any eligible part or equipment covered under this warranty through a Alliance dealer only. Buyer is responsible for all shipping and handling charges in connection with the performance of this warranty. Products returned to Alliance must be securely packaged to prevent damage in transit, freight prepaid, and insured for replacement value. A return authorization number assigned by Alliance must be clearly marked on the outside of the shipping container. Proof of purchase must accompany shipment. Items delivered to Alliance without a return authorization clearly marked on the outside of the shipping container, and/or without proof of purchase is refused.

CONTACT: Please contact Alliance at the address and phone number below to receive a return authorization number and to arrange for the repair or replacement of a flawed part covered by this warranty. Please indicate the Product's serial number in all correspondence or a RMA authorization number in the absence of a serial number. Alliance, 5900 Grassy Creek Blvd., Winston-Salem, NC 27105, Phone: 1-866-594-7762.

FCC Part 15 : This equipment has been tested and found to comply within the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of the equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct interference at his own expense. In order to maintain compliance with FCC regulations shielded cables must be used with this equipment. Operation with non-approved equipment or unshielded cables is likely to result in interference to radio & television reception.

Changes or modifications not expressly approved by Alliance could void the users' authority to operate the equipment.

IC ES 003 : This Class A digital apparatus complies with Canadian ICES-003 C et appareil numérique de la classe A est conform e à la norme NMB-003 du Canada.

CE CONFORMITY : The Alliance Theft Deterrent System conforms with the following standards, in accordance with the EU Safety, EMC Emissions, & EMC Immunities : EN 60950-1:2001, EN 55022:1998 for Class A, EN 55024:1998 + A1:2001 + A2:2003, EN 61000-4-2:1995 + A1:1998, EN 61000-4-3:1995, EN 61000-4-4:1995, EN 61000-4-5:1995, EN 61000-4-6:1996, EN 61000-5-11:1994.

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Designed, Developed and Manufactured in the USA

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