IEDA524-H / IED0520DTB

DIGITAL
MICROPHONE
STATION

Installation Instructions

IED®

Innovative Electronic Designs

INTRODUCTION

Description

The IED 524 digital microphone station is a 4-button device for initiating audio/visual announcements, messages, and pages with the GLOBALCOM and vACS Series Announcement Control Systems. It is a network appliance with a unique IP address that simplifies installation and configuration. The 524 features four zone group selection buttons plus a push-to-talk button located on the hand-held microphone.

Just like IED's other digital microphone stations, the 524 uses a single Ethernet interface for audio and control data. The 524 station is fully compatible with IEEE 802.3af standard for Power over Ethernet (PoE), allowing the 524 to be powered directly from any standard off-the-shelf PoE switch. The processing power for the 524 comes from the onboard 32-bit processor. This powerful processor manages the input buttons, Ethernet interface, audio signal processing, and self-test diagnostics.

This, and all IED LAN-based GLOBALCOM components, are designed to maximize the benefits of a standard 100 Mbps Ethernet LAN based network, using off-the-shelf switches and structured CAT5e or better cabling. The 524 Digital Microphone Station utilizes CobraNet® technology.

Ordering Options

IEDA524-H	4-button microphone station with handheld microphone for wall-mount applications
IEDA520DTB	Optional base for desktop mounting applications

IEDA524-H Wall-mount Configuration

IEDA524-H shown with optional IEDA520DTB base

Features

The 524 digital microphone station provides immediate digitization of full bandwidth audio and transmission over a standard Ethernet connection. It utilizes the IED 501HH teardrop handheld microphone that includes a programmable push-to-talk button. The station uses a metal magnet landing area for the 501HH to provide a storage position for the microphone.

In the standard configuration, it can be mounted using a standard 2-gang electrical box or a 1-gang electrical box using the included plastic backbox. An optional weighted base (IEDA520DTB) is available for desktop mounting configurations.

Buttons

The 524 series digital microphone station features four selection buttons. These buttons are configured using the announcement controller configuration software to function as one-touch action buttons to trigger any of the following types of announcements or messages:

- A live page to a designated zone group
- A recorded page to a designated zone group
- A permanent message playback to a designated zone group (e.g., customer reminder or emergency message)
- Any action type available in the GLOBALCOM configuration software

Network Requirements

The 524 digital microphone station utilizes CobraNet® technology licensed from Cirrus Logic®.

Live audio on the data network is time sensitive and requires minimal latency through the network to ensure uninterrupted audio. The 524 digital microphone station and CobraNet operate on Layer 2 (MAC Layer) of the OSI Model. This traffic will not operate on a Layer 3 Router or above. VLAN's (Virtual Local Area Networks) may be required for managing traffic as well as Quality of Service (QoS) and Prioritization configuration of network switches. All connections to the 524 digital microphone station must be full duplex 100 Mbps Ethernet auto-negotiation.
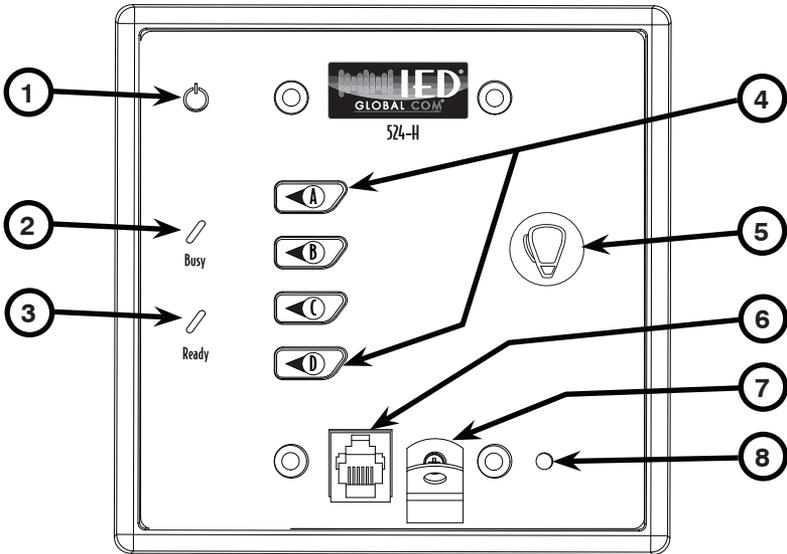

IEDA520DTB
Desktop Base

IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Only use attachments/accessories specified by the manufacturer.
10. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

SAFETY SYMBOLS

Labeling on products and the *Installation Instructions & User Manual* may use safety related graphical symbols as shown below to note safety requirements.

Lightning Bolt: The lightning flash with arrowhead symbol, within an equilateral triangle, WARNING symbol, is intended to alert the user to the presence of un-insulated *dangerous voltage* within the product's enclosure that may be sufficient in magnitude to constitute a risk of electric shock to persons or domestic animals.

Exclamation Point: The exclamation point within an equilateral triangle, CAUTION symbol, is in-tended to alert the user to the presence of important operating and maintenance (servicing) instructions, or a hazard that can damage equipment.

Do not proceed beyond a WARNING or CAUTION notice until you have understood the hazardous condition and have taken appropriate steps.

SPECIFICATIONS

Electrical	Frequency Response .... ±0.5 dB
	22 Hz - 22 kHz, Input Level = 0 dBu
	Total Harmonic Distortion, THD .... <0.5%
	22 Hz - 22 kHz, Input Level = 0 dBu
	Signal-to-Noise Ratio, S/N .... >85 dB
	22 Hz - 22 kHz, Input Level = 0 dBu
	Compressor
	   Compression Threshold ....–15 dBu
	   Ratio 5:1
	   Attack Time ....22 mSec
	   Release Time ....1 Sec
	Maximum Output (Line Output) .... +5 dBu
	Analog-to-Digital Converter, A/D ....24 bit
	Internal Processing .... 32 bit, Floating Point
	Sample Rate ....48 kHz
	Latency (Through a maximum of 6 network switch hops) .... 5.7 mSec

Mechanical	Desktop Size..5.13" W x 5.32" H x 5.66"D *(Desktop mounting requires optional IEDA520DTB)* Wall Mount Size ....4.95" W x 4.95" H x 1.9" D Wall Mount mounting ....2-gang electrical box 1-gang electrical box (using adapter backbox)
Standards Utilized	Full-Duplex Operations .... IEEE 802.3x Fast Ethernet, 100Mbps ....IEEE 802.3u *The 524 Series specifically uses 100Base-TX* Data Terminal Equipment Power .... IEEE 802.3af *via Media Dependent Interface (PoE)*
Connecting Cable	Digital Audio/Power/Control .... CAT5e or better *For distances to a maximum of 100 Meters (approximately 300 feet) to the connected switch. Cable installed and tested in accordance with ANSI/TIA/EIA 568B Standards.*
Environmental	Operating Temperature Range .... +32˚F to +104˚F (0˚C to +40˚C) Storage Temperature Range ....–40˚F to +158˚F (–40˚C to +70˚C)
Power Consumption	Supply Power ....<2W *Supply Voltage = 48VDC*

NOTE: *This unit is __not__ compatible with 500, 510, or 520 series Announcement Control Systems (ACS).*

CONNECTIONS

Figure 1 - IEDA524-H Front View

1. **Power LED**
   This LED will illuminate when the microphone station is powered on.

2. **Busy LED**
   This red LED will flash if a button is pressed to make an announcement to indicate that the announcement cannot be made at this time because the system is busy.

3. **Ready LED**
   This LED will flash and beep to indicate that the microphone station is ready for an announcement. It will illuminate solid when the push-to-talk switch on the handheld microphone is pressed and the announcement is active. If there are time limits on announcements, it will begin to flash when the end of the time limit approaches.

4. **Selection Buttons**
   These four buttons are used to activate announcements or messages on the announcement controller. Their exact function is configured in the announcement controller software.

5. **Microphone Attachment Location**
   This marks the location for the magnetic receiver where the 501HH handheld microphone is to be placed when not in use. The actual magnet is located on the back of the 501HH handheld microphone.

6. **Microphone Input Connector**
   This RJ connector is used to connect the 501HH handheld microphone to the microphone station.

7. **Microphone Cable Strain Relief**
   This clip is used to secure the microphone cable to the microphone station to prevent unnecessary strain on the RJ connector as well as deterring unwanted microphone removal. Remove the screw and insert the microphone cable in the clamp and then reattach to the station.

8. **Reset Button**
   There is a small button located on the circuit board through this hole. Use a small tool to press the button and reset the station.
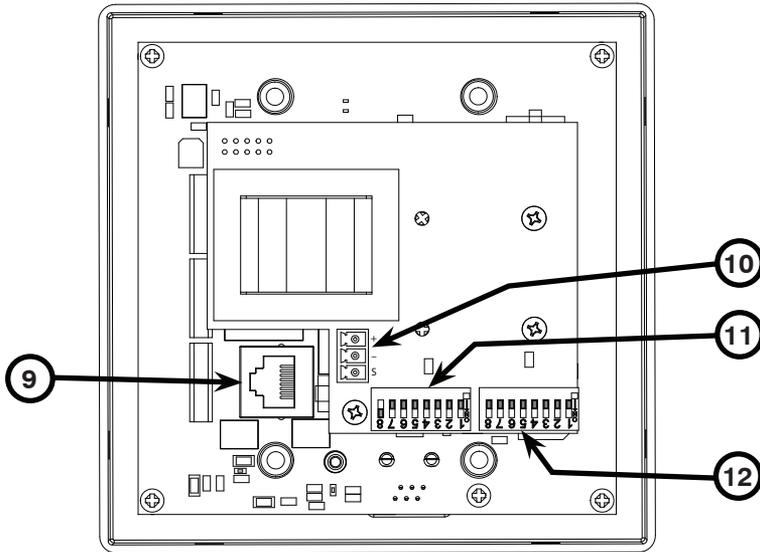
Figure 2 - IEDA524-H Rear View

9. **Ethernet Connector**
    Use this RJ45 connector to connect the device to a PoE network switch using Category 5e or better cable. The PoE power consumption for the device is less than 2W.

10. **Line Level Audio Output**
    When the Line Level Output Enable DIP switch is on, the audio from the microphone will be routed to this output connector when the network communications to the announcement controller is lost. This output can be wired to a local amplifier to provide backup local paging in the event that the microphone station cannot communicate with the announcement controller.

11. **Group and Line Level Output Enable DIP Switches**
    DIP switches 1 through 5 are used to set the group number for this microphone station. This group number must match the system number of the announcement controller that will own this microphone station. DIP switches 6 and 7 are not used. DIP switch 8 will enable the line level audio output when turned to the ON position. Refer to "Group DIP Switch Settings" on page 9 for details on setting the proper group number on the DIP switches.

12. **Mic Number DIP Switches**
    Use these DIP switches to set the mic number of this microphone station. This number is used to associate this microphone station with the configuration in the announcement controller software. Each microphone station owned by an announcement controller must have a unique mic number. Refer to "Mic Number DIP Switch Settings" on page 10 for details on setting the proper mic number on the DIP switches.

INSTALLATION

IEDA524-H Attached to Standard 2-Gang Electrical Box

The IEDA524-H is designed to fit in a standard 2-gang electrical box. Install the unit into a box as shown in Figure 3. This is the preferred installation method for wall mounting or any other flush-mount applications. When this mounting method is used, you should remove the included plastic back box and store it for any future needs and use the included screws for mounting the device in the 2-gang electrical box.
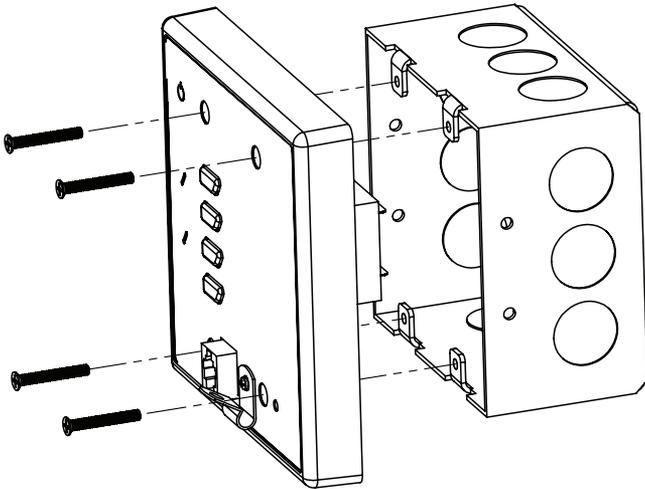

Figure 3 - 2-Gang Electrical Box Installation

IEDA520DTB Desktop Base

The IEDA520DTB is available as an option when a desktop mounting solution is preferred. The IEDA524-H ships with the plastic back box that you can then use to attach the unit to the base as shown in Figure 4. The unit is then secured to the base by tightening the retaining screws using the nuts located on the back of the base mounting plate. The microphone station can be removed from the base by loosening the retaining screws using the nuts located on the back of the base mounting plate. The plastic box contains keyhole slots, so you simply loosen the screws and slide the unit up to remove it from the base. You can then access the DIP switches, connect the cable(s) and re-attach it to the base. Simply tighten the retainer screws with the nuts to secure the unit to the base.
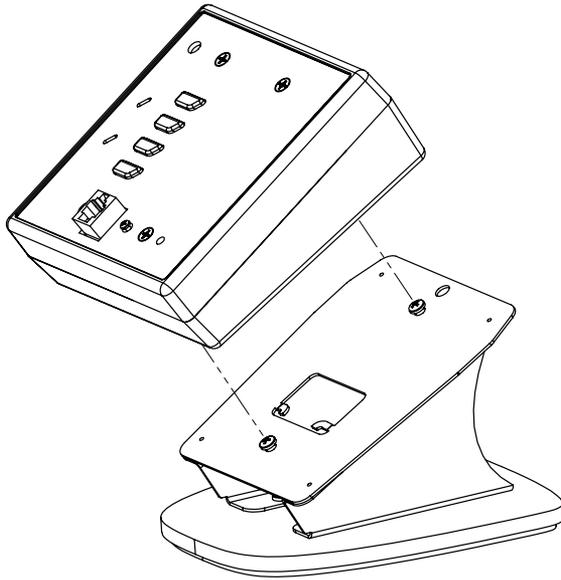
Figure 4 - IEDA520DTB Desktop Base Installation

Alternative Single-Gang Electrical Box Installation

The IEDA524-H is shipped with a plastic back box that can be used if the installation does not allow for the recommended 2-gang electrical box installation. This box can also be used if you later decide to mount the unit to a desktop base. The box has two keyholes that fit a standard single-gang electrical box hole pattern. This allows you to install the unit in an installation where you may already have single-gang boxes installed. The box provides a slight forward slant which is excellent for surface mounting the unit in a console. Figure 5 illustrates the process for mounting the unit in such an application. The washers shown are optional and can be used to prevent the unit from being forced off of the box due to the keyhole mounting points.
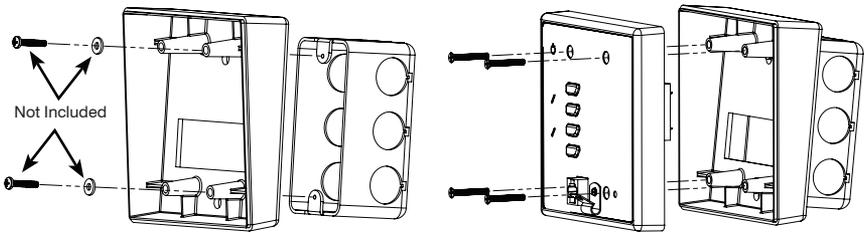
Not Included

Figure 5 - Alternate Single-Gang Electrical Box Method A

Figure 6 illustrates an alternative mounting option where the box has been rotated 180˚ to provide a slight backward slant to the microphone station. In this case, you must use appropriately sized washers when attaching the box to the electrical box to prevent it from sliding off due to the keyhole mounting points. When the plastic box is attached in this orientation, you will no longer have direct access to the DIP switches or connectors. You will need to set the DIP switches and make any connections prior to placing the unit in the box. Use care when routing the cables as the clearance between the connector and the box is minimal.
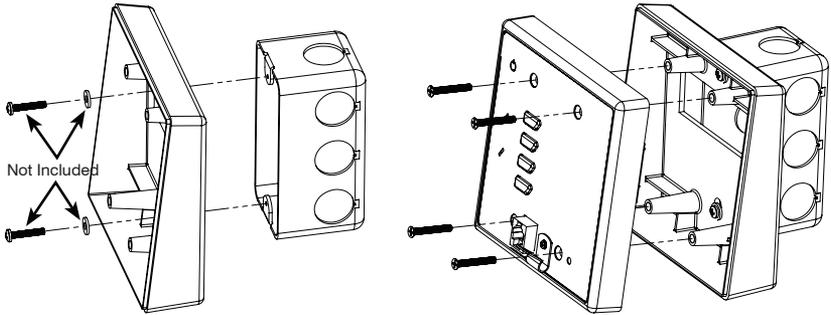
Not Included

Figure 6 - Alternate Single-Gang Electrical Box Method B

Line Level Audio Output Connection

If used, connect a balanced audio cable to the line level audio output connector using the supplied connector as shown in Figure 7. Ensure that DIP switch 8 is set to the ON position. Connect the other end of the cable to an appropriate audio device. This line level output will become active if the microphone station loses communications with the announcement controller.
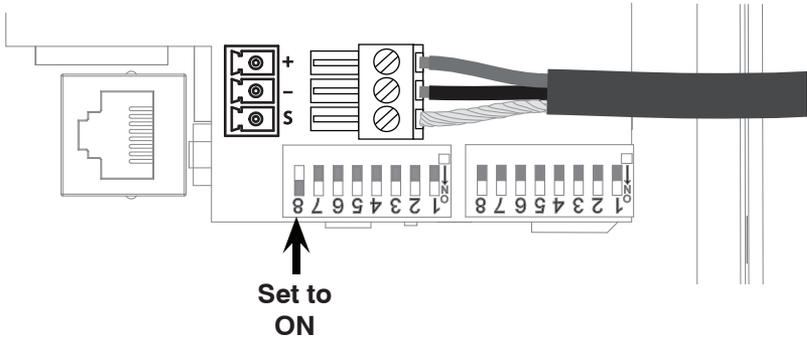
**Set to
ON**

Figure 7 - Line Level Audio Output

CONFIGURATION

All microphone station operational functions are configured in the announcement controller software. You must correctly set the DIP switches on the microphone station so that it is correctly addressed on the network in order to communicate with the announcement controller. Refer to Figure 8 for the DIP switch functions. The DIP switches use binary encoding with DIP switch 1 referencing the least significant bit (LSB). Tables have been provided containing the correct switch combinations for each available group and mic number.
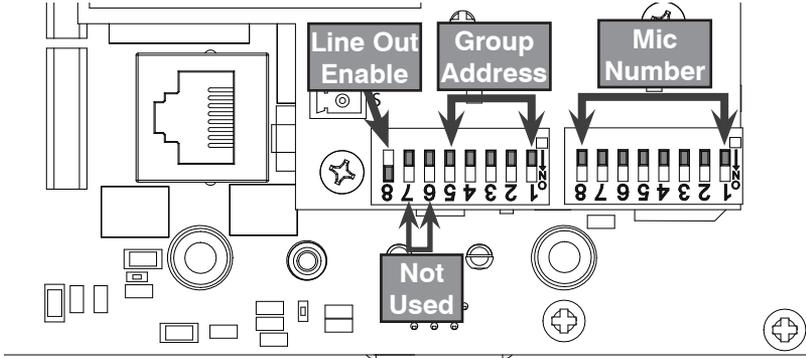

Figure 8 - 524 DIP Switch Locations

Group DIP Switch Settings

Switch	1	2	3	4	5
Group					
1	ON	OFF	OFF	OFF	OFF
2	OFF	ON	OFF	OFF	OFF
3	ON	ON	OFF	OFF	OFF
4	OFF	OFF	ON	OFF	OFF
5	ON	OFF	ON	OFF	OFF
6	OFF	ON	ON	OFF	OFF
7	ON	ON	ON	OFF	OFF
8	OFF	OFF	OFF	ON	OFF
9	ON	OFF	OFF	ON	OFF
10	OFF	ON	OFF	ON	OFF
11	ON	ON	OFF	ON	OFF
12	OFF	OFF	ON	ON	OFF
13	ON	OFF	ON	ON	OFF
14	OFF	ON	ON	ON	OFF
15	ON	ON	ON	ON	OFF
16	OFF	OFF	OFF	OFF	ON
17	ON	OFF	OFF	OFF	ON
18	OFF	ON	OFF	OFF	ON
19	ON	ON	OFF	OFF	ON
20	OFF	OFF	ON	OFF	ON
21	ON	OFF	ON	OFF	ON
22	OFF	ON	ON	OFF	ON
23	ON	ON	ON	OFF	ON
24	OFF	OFF	OFF	ON	ON
25	ON	OFF	OFF	ON	ON
26	OFF	ON	OFF	ON	ON
27	ON	ON	OFF	ON	ON
28	OFF	OFF	ON	ON	ON
29	ON	OFF	ON	ON	ON
30	OFF	ON	ON	ON	ON
31	ON	ON	ON	ON	ON
32	OFF	OFF	OFF	OFF	OFF

Mic Number DIP Switch Settings

Switch Mic	1	2	3	4	5	6	7	8
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

Switch Mic	1	2	3	4	5	6	7	8
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

Switch Mic	1	2	3	4	5	6	7	8
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

Switch Mic	1	2	3	4	5	6	7	8
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
256	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF

NOTE: *The maximum total number of microphone stations supported in GLOBALCOM is 240.*

Line Level Audio Output Enable

Switch	8
Line Output Enabled	ON
Line Output Disabled	OFF

DIMENSIONS
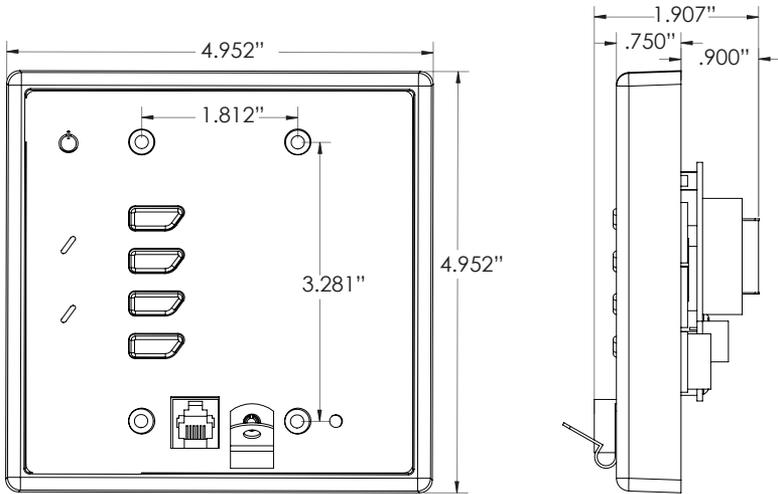
Figure 9 - IEDA524-H
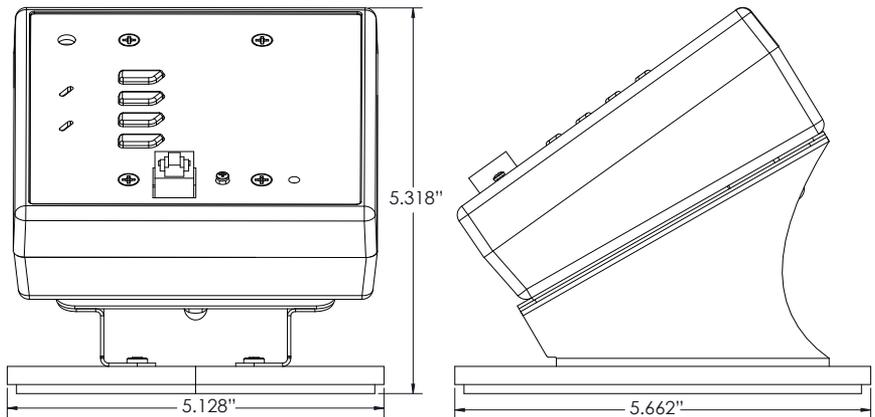
Figure 10 - IEDA524-H with optional IEDA520DTB