

IP-EWST, IP-EWST-POE

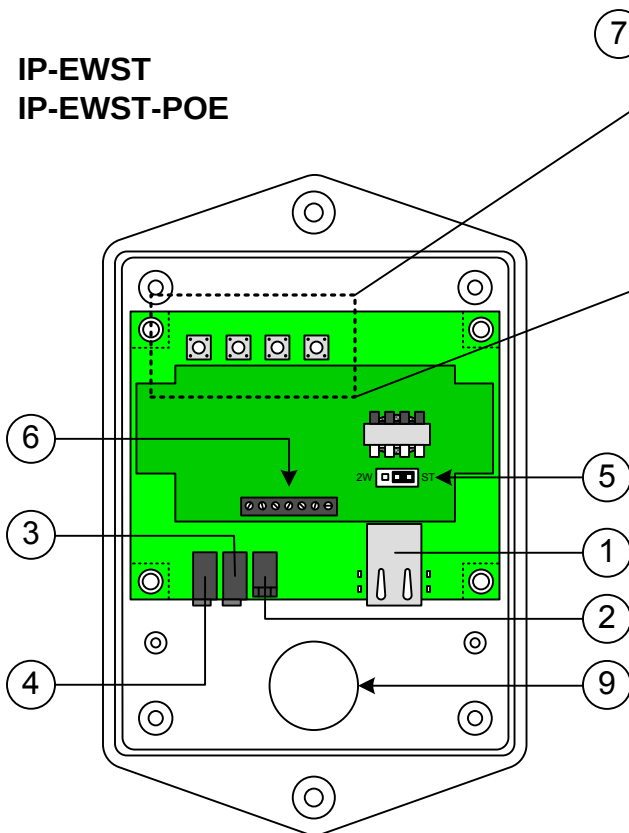
Intercom-Over-IP Adaptor Set

- INSTRUCTIONS -

The IP-EWST offers voice-quality Intercom function over TCP/IP based networks. Designed specifically to integrate seamlessly into a new or existing LAN / WAN infrastructure, the IP-EWST is capable of hundreds of stations, fulfilling a large variety of applications including commercial, industrial and residential access control; general security, office, and institutional intercom / paging; and many more. Power over Ethernet (PoE) capability is also supported (IP-EWST-POE only), allowing greater installation flexibility for both new and retrofit applications.

1 NAMES & FEATURES

IP-EWST
IP-EWST-POE



NAMES & FUNCTIONS:

1. RJ-45 10/100 Ethernet jack & connection indicator LEDs
2. 2.1mm Power jack
3. 3.5mm Audio output jack
4. 3.5mm Mic input jack
5. Sub station personality jumper
6. Sub station / relay terminals
7. Manual sub station push buttons & Diagnostic LEDs (LD1,LD8,LD9,LD10)
9. Wire access hole

FEATURES:

- Cost-effective PC-based design
- Compatible with LE-series and IE-series substations, as well as standard speaker / pushbutton stations
- Scalable to hundreds of stations / locations
- Works with standard wired and wireless TCP/ IP networks (LAN/WAN)
- Digital audio recording and playback capability
- Relay output for remote release (N/O and N/C)

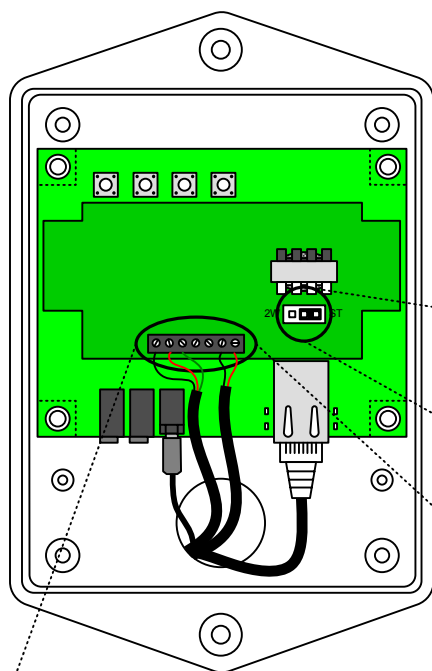
Package Contents:

- (1) IP-EWST or IP-EWST-POE
- (1) Talkmaster™LE mini-CD
- (4) Chassis screws
- (2) Adhesive-backed pull tie guides

2 INSTALLATION & MOUNTING

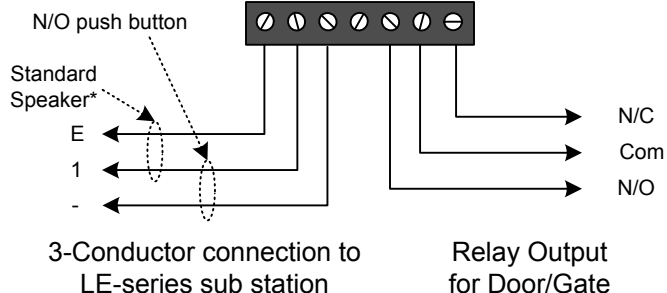
Installation Instructions:

1. If IP-EWST adaptor is not on the same LAN or network segment as the PC master station, ensure that the IP-EWST has been pre-programmed with the proper TCP/IP connection settings prior to physical adaptor installation. See TalkMaster™ installation manual (included on CD with IP-EWST).
2. Set the personality jumper based upon your chosen sub station. Any standard IE/IF-series sub will work in "2W" mode. Any standard LE-series sub (remove E/- jumper) or 4Ω ~ 20Ω speaker will work in "ST" mode.
3. Wire the sub station to the proper screw terminals on the IP-EWST, and connect to the network using the standard RJ-45 jack. Wiring from the sub station to the IP-EWST should be jacketed multi-conductor with overall shield. Connect the included power supply to 2.1mm power jack (unless using IP-EWST-POE)



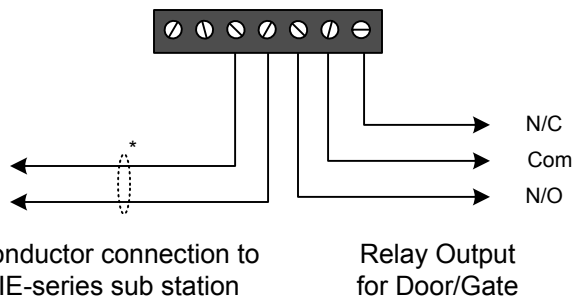
Personality Switch Settings	
2W ST	2W ST
IE/IF-Series Sub stations	LE-Series Sub stations

LE-Series Sub station or Speaker



* When using a standard speaker, connect to E and 1 termination points. Wiring should be jacketed 3-conductor.
Wire distance from IP-EWST to LE series sub:
22AWG = 650 feet, 18AWG = 1600 feet

IE/IF-Series Sub stations



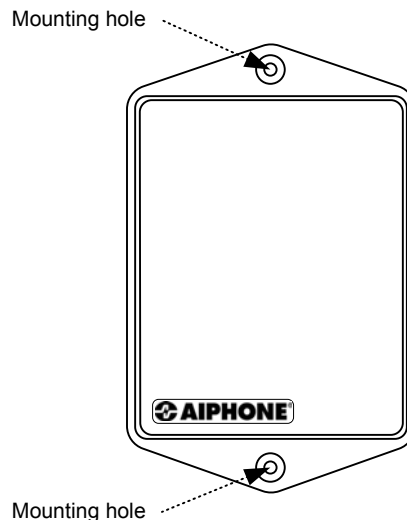
* Wiring to sub station should be jacketed 2-conductor.
Wire distance from IP-EWST to IE/IF series sub:
22AWG = 500 feet, 18AWG = 1180 feet

Mounting Instructions:

1. Ensure that proper sub station and network connections have been made prior to closing the IP-EWST chassis.

NOTE: Once unit is mounted, the chassis cannot be opened to modify sub station wiring and internal settings.

2. Mount the IP-EWST adaptor in a controlled area or in an enclosure suitable to the installation environment. The stock IP-EWST chassis is **not vandal resistant or weather resistant**. Mounting holes are located on the top center and bottom center of the back chassis.



3 SOFTWARE INSTALLATION

1. Insert the mini-CD (included with the IP-EWST / IP-EWST-POE set) into the PC to be used as a master station.
2. Install the TalkMaster™ software by following the on-screen prompts, or by navigating to your CD drive and executing “**setup.exe**” to begin the installation process.
3. Consult the TalkMaster™ User Guide document for further software functionality and configuration information.

4 HARDWARE DIAGNOSTICS & TROUBLESHOOTING

To confirm proper hardware functionality, it is best to use an Ethernet crossover cable (not included). This can be used to directly connect the IP-EWST to any PC with a standard 10/100 Ethernet interface for troubleshooting and preprogramming.

Follow these steps to troubleshoot proper connection:

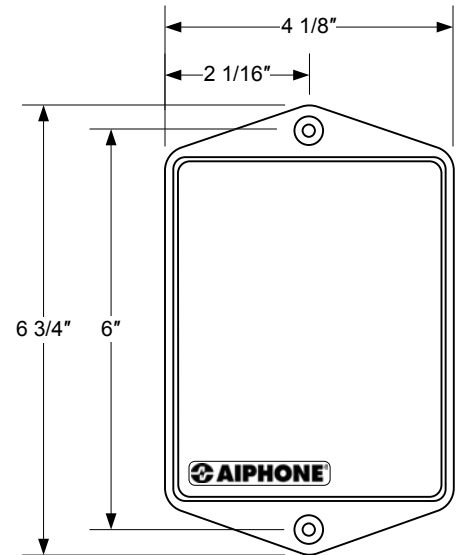
1. Ensure proper power is connected to the IP-EWST. If using the IP-EWST-POE, make sure that the Ethernet device being connected is 802.3af-compliant, or that a proper power supply is used (7.5 to 9VDC, 500mA). **Do not connect both Power-over-Ethernet and a separate power supply!**
2. Check the IP-EWST diagnostic LEDs labeled **LD10**, **LD9**, **LD8**, and **LD1** for proper illumination (located next to the manual substation pushbuttons). Consult the following table for LED indicator status meanings:

Operational Mode	LD10	LD9	LD8	LD1
Normal operational mode. TalkMaster™ is active. Intercom can communicate.	ON	ON	-	-
LAN connection is inactive. The RJ-45 may be unplugged, or LAN lost power.	FLASH	OFF	-	-
DHCP IP is enabled but address is not being assigned.	FLASH	ON	-	ON
TalkMaster™ software is not running on PC or not set to communicate.	FLASH	ON	-	-
TalkMaster™ software at the server has "Scanned" for intercoms in the Configuration Mode utility setup.	FAST FLASH	ON	-	-
Receiving audio. The TalkMaster™ software / PC microphone is on.	ON	ON	-	FLASH
Sending audio. Manual talk button is pressed or TalkMaster™ has engaged "listen" mode.	ON	ON	-	ON
Intercom is in "Server" mode, waiting for a client to request connection (LD10 flash alternates 1sec fast, 1sec slow).	DUAL FLASH	-	-	-

5 SPECIFICATIONS

Hardware Specifications:

Input Voltage:	IP-EWST – 7.5-9VDC, 500mA, use included power supply 
	IP-EWST-POE – IEEE 802.3af compliant
Network Interface:	10/100 Base-T Ethernet (Auto detection) RJ-45
IP Assignment:	Static or Dynamic via DHCP
Hardware Protocols:	TCP, UDP, IP, ARP, ICMP, Ethernet MAC
Transport Bandwidth:	≈80kbps per TCP/IP session
LED Indicators:	Active, Link, Talk, Reserved
Audio Resolution:	PCM-8 and uLAW-16 bit
Audio Sample Rate:	8kHz
Audio Buffers:	4kb transmit and receive
Audio Latency:	Target delay < .5 sec. Typical delay ≈ .3 sec.
Output Amplification:	Maximum 2W @ 4Ω. Actual determined by sub
Relay Contact Rating:	30VDC / 1A (resistive)
Operating temperature:	32°F to 158°F (0°C to 70°C)
Dimensions:	6-3/4"H x 4-1/8"W x 1-3/4"D



Software System Requirements:

For optimum performance, TalkMaster™ requires a minimum of the following:

Operating System:	Microsoft Windows® 98SE, Windows ME, Windows NT® (SP6), Windows 2000, or Windows XP
Processor:	750MHz or faster
Memory:	128MB of RAM (256MB recommended)
Hard drive:	50MB of available disk space
Sound Card:	Windows supported sound card (with speaker and microphone)

WARRANTY

Aiphone warrants its products to be free from defects in material and workmanship under normal use and service for a period of one year after delivery to the ultimate user. We will repair free of charge or replace at no charge Aiphone product, that upon examination by an Aiphone Repair Technician is proven defective and under warranty. Aiphone reserves the right to make the final decision whether there is a defect in materials and/or workmanship; and whether or not the product is within the warranty.

This warranty covers bench repairs by the Aiphone Service Department only, and does not extend to units that have been repaired or altered outside of the factory. Aiphone is not responsible for any costs incurred involving on-site service calls.

This warranty shall not apply to any Aiphone product that has been subjected to misuse, neglect, accident, power surge, or used in violation of instructions furnished.

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