



## Model MP4, MP4W, or MP8-120 Instructions for Installation \*\*\*Including MP-AMP instructions below

Volume Level is adjusted to high level at the factory—Adjust accordingly when installing.

Unpack materials and verify that no damage has occurred in shipment. Caution and standard safety practices should be followed when installing and programming the MP unit.

A trained electrician should perform these tasks.

Remove the cover from the enclosure by removing the captive screws (4). (Reference is made to the bottom of the MP-- being the position where the 12 Volt DC Power supply is located in lower left/center corner).

\*\*If using the ELK-129 Wav Loader Software familiarize yourself with the recording instructions included below and the 129 instructions, and record your messages at this time—you will not require a transformer to power the Wav Loader Software as shown because power will be supplied via the ribbon cable connecting the Wav Loader Unit ELK-129 to the ELK-120 (MP4, MP4W units), or to the ELK-124 (MP8 units) message board when the AC power cord of the MP unit is plugged into an AC receptacle. Please use CAUTION, as the internal components will have electrical power applied while performing the recording operation. You will hear all message recordings playback over the speaker supplied, once you are satisfied with the recordings remove AC power, and continue with the unit installation.

The simple method of recording is as follows:

120 Volt AC power must be supplied, enclosure cover removed, the dip switches (4 for the MP4, MP4W, and 8 for the MP8) are to be placed into the up, or ON position to record to a specific channel—ONLY 1 at a time.

To record, move channel # 1 dip switch to the ON position—any message currently on the channel will play immediately over the supplied speaker. The microphone is the "aspirin size" round button on the board. Push and HOLD the push to record button for the duration of recording—beginning to end. Push the record button and begin speaking (in a quiet atmosphere) toward the microphone—the microphone is very sensitive to background noise. Release the record button when finished, and again the recorded message will playback immediately—if satisfied with the recording move the dip switch into the off position and continue with the other channels as required. If you prefer a tone, with the channel dip switch in the on position, push the record button and play the tone over a small speaker (customer supplied) from your PC (that will play the wav/sound file) locate it in close proximity to the microphone in the MP unit—set your PC attached speaker to a moderate volume and experiment with different volume levels for sufficient

recording quality. Play the wav file/tone while holding the record button, and release the record button at the end of the required duration of tone, message, or combination recording. For a tone/voice combination, play the tone from your PC over the attached speaker referred to above while holding the record button on the MP board, once the tone finishes or is stopped, begin with your voice message speaking clearly into the microphone on the MP board—ALL THE WHILE HOLDING THE RECORD BUTTON DOWN—release the record button when finished. If the recording is satisfactory, return the dip switch for that channel to off, and continue with the next channel if desired.

Mounting and further installation--Determine whether you will hard wire the 120 Volt AC source, or whether you will be using the AC power cord supplied. Once the AC power connection method is determined utilize the appropriate connectors for attachment to the enclosure, either a cord grip (supplied), or conduit fitting (customer supplied). The entry hole on the lower (underside) right of the enclosure is intended for the AC power source entry.

Final AC power connection-- if other than the included AC cord is required, the AC power (120 or 240 vac only) should be supplied to the power supply board at the point indicated on the board for AC input (L-Line, N-Neutral, and Ground) currently connected to the factory installed AC power cord.

The cord/cable grip located on the upper left hand side of the MP4/MP8 enclosure is intended for the speaker conductor. The speaker can be mounted in close proximity to the MP4, MP4W/MP8 enclosure (as supplied by the factory), or mounted remotely. If mounting remotely (up to 50 feet is possible), the speaker conductors will have to be extended using the appropriate gauge wire (18AWG) and splicing components (customer supplied). If mounting locally, determine a location and use the appropriate hardware when mounting (customer supplied). The speaker can be mounted to the MP4, MP4W/MP8 enclosure using the appropriate hardware supplied by the customer. Generally, holes will have to be drilled into the enclosure to attach the speaker securely. Consider drilling locations if intending to use the device outdoor—additional gasketing/sealants may be required (customer supplied). Use caution when drilling into the enclosure—the electronic boards should be kept clear of any drilling.

The speaker wires should be routed through the cable grip (as provided from factory), loosen as needed to fish wire through connector from the outside of the enclosure to the inside. Tighten the cable grip to the point that the cable is tight in the connector. The speaker wires (black and white only—other colors are not used) should be attached to the main terminal block positions labeled "Speaker"--these are not polarity sensitive.

If using the optional MP-AMP amplified speaker devices to extend the audible range of the MP4, MP4W/MP8 unit, a shielded 2 conductor cable (properly sized—i.e.18-22 AWG) must be routed from the MP4, MP4W/MP8 housing to the location where the MP-AMP is to be located. It is recommended that the existing cable grip be used for these additional wires. Do not ground the shield of the shielded cable used (customer supplied). The RCA jack on the MP4, MP4W/MP8 main message board is used to connect the external MP-AMP speaker/amplifier using the shielded cable noted above. This 600 ohm balanced line output can be used simultaneously with the standard speaker connected to the MP4, MP4W/MP8. Termination of the 2 conductor cable is at the "Audio Inputs" terminal jack on the MP-AMP. The MP-AMP has a 6 foot AC power cord to plug into a 120 Vac Receptacle (as with the MP4, MP4W/MP8, the 120 or 240 Vac power input can be hardwired by removing the factory supplied AC power cord from the DC power supply terminals). Mount the MP-

AMP and adjust the volume accordingly. Mount the speakers, and locate them as desired—the same 50 foot distance option from the main MP-AMP applies as noted above for the MP4, MP4W/MP8.

The cord grip opening on the lower (underside) of the MP4, MP4W/MP8 enclosure is intended to allow for wiring of remote activation of the tones, tunes, or messages available from the MP4, MP4W/MP8. If remote activation is desired, use this entry and the related cord grip, or conduit fitting (customer supplied), for the wiring/cable.

Activation of the messages is accomplished by wiring from the 12 volt dc + terminal on the main terminal block of the ELK-120 (MP4, MP4W) or the ELK-124 (MP8) (+12V position), and to the appropriate message activation terminal (+V1, +V2, +S3, +B4, etc.)—this is accomplished with a normally open dry contact closure, relay, switch, etc. (customer supplied). This will require that you place your activation +12 volt wire in tandem with the wire already installed in that position, if not already supplied by the factory. Use care to make sure both wires are firmly in place when finished. If these conductors are exposed to high voltage sources in the local area Ballasts, transformers, high voltage motors, etc), you may want to use a shielded cable so as not to induce voltage on the message trigger conductors.

Please refer to the above instructions for recording and playback of the MP4, MP4W message Board ELK-120, or the MP8 message Board ELK-124.

Once the messages and message control have been addressed, confirm that all wiring is correct and no wiring is incorrectly routed to the wrong terminals. You are now ready to apply the 120 volt AC power source. Use caution as dangerous voltage will be present. Verify that the green LED is illuminated on the power supply. Again, if not already performed, using extreme caution, perform the message recording step most appropriate from the above instructions. Once complete, you may wish to test the message playback.

Once the messages have been recorded to the ELK message board, remove the AC power source and install the main MP4, MP4W, or MP8 enclosure cover. The enclosure openings for the AC power and the potential remote input entry for message control are required to be in the down position if this product is to be used in an outdoor or damp location. If you have not already done so, proceed to mount the main MP4, MP4W/MP8 enclosure with the appropriate hardware (customer supplied), mount the speaker with the appropriate hardware (customer supplied)

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