



September 24th, 2021

IMPORTANT PRODUCT TECHNICAL SERVICE BULLETIN

PRODUCT TYPE SERIES COVERED BY THIS BULLETIN

Louroe Electronics: Verifact® series microphones: A, B, C, D, DV, E

Hanwha Techwin: All camera models

BACKGROUND

The result of a recent product integration review, Louroe Electronics Inc. ("LE") has discovered that the LE line of Line-level microphones has exhibited susceptibility to excessive noise and poor audio quality when connected to certain newer **(circa 2018)** Hanwha Techwin Wisenet IP cameras.

EVALUATION

As part of LE's continued commitment to ensuring optimal performance of our microphones; LE frequently evaluates the key characteristics of our range of microphones integrated with a variety of receiving digital and analog devices. The characteristics of the microphones such as frequency response, sensitivity etc. are independently measured and baselined and then compared against the audio output of the receiving device under evaluation to determine the "in-system" performance of the microphone/s. Characteristics such as audio clarity/quality, gain, noise (inherent and ambient) etc. are measured, recorded, and compared across a wide array of devices and manufacturers.

RECOMMENDATION

LE has offered sharing our findings with the Engineering leadership of Hanwha Techwin to remedy the excessive noise and poor audio quality that is emanating from the camera series discussed. We anticipate that Hanwha Techwin will be addressing this Engineering notice in a future hardware/firmware update to their respective cameras.

In the interim LE advises customers using OR planning to use newer Hanwha Techwin cameras paired with a LE Line-level microphone of the following recommendations.

- Where possible the use of Hanwha cameras that support **AAC audio encoding**.
- Where possible the use of LE microphones with **automatic gain control** viz. Verifact AGC, BGC, CGC, DGC, DVGC, EGC.
- Where possible the use of the following audio-in settings on the respective Hanwha Techwin camera as: *Audio in settings: Source: Line, Codec: AAC, Bitrate: 48K, Gain: 3, Noise reduction: Disabled.*

For further information please contact Louroe Technical Support at 1-800-927-6498 x222
Louroe Electronics, inc. is a 40+year old technology company in the business of conceiving, designing, developing, and commercializing world class microphones for the security industry