



**BUILT-IN AMPLIFICATION & DSP** 



## M-F3A

## A masterpiece of sophisticated German engineering

**M**-F3A is an ultra-compact active line array system offering crystal-clear sound reproduction with extremely low tonal coloration and studio quality highs due to its hornless design.



The unique PA sound is achieved by incorporating eight high-efficiency 2.8" neodymium mid-frequency drivers and 7 pieces of 1" direct radiation dome tweeters into each unit.

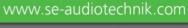
All drivers are mounted on an A4 papersized front surface in a cabinet weighing only 8 kg including the rigging, 400W class-D amplification and DSP.

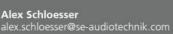














## THE ALEX SCHLOESSER COLUMN

## The Use Of Wireless Microphones



This is a never ending topic. Luckily for the younger generation in our industry, the gear has improved dramatically over the last thirty years. On the other hand, TV, Radio and Telecom's have made it an ever-tighter environment within the given frequency constraints.

I remember a time when the single line about Wireless was: "Wireless makes you clueless".

This meant that so many things can go wrong and since Murphy's law is widely accepted in our industry, this also implies that things will go wrong. I do think that this is a good approach. If you don't have to use Wireless, then don't. There is, until recently, no good sonic reason to use a wireless microphone or transmission system over a wired one. Again, some manufacturers have even addressed this and it makes sense too.

Of course, a lead artist on stage does not want to be tied down by a wired microphone and those headset and lavalier microphones sure look good. Working with wireless fits into our industry very well, as it means constantly evolving and developing your know how. Systems have gotten more stable from their electronics and transmission side, but then the environment has gotten ten times more crowded and also hostile for us in Pro Audio. So what are the key elements for success with Wireless microphones?

- 1. Plan your frequencies in advance. Better be prepared than sorry. Coordinate the frequency that you want to use and communicate this with the venue in their environment. Make sure that your gear allows enough spare and back up frequencies for situations where you might have to switch frequency on site.
- 2. You want to know about everybody, who wants to use a wireless system on your gig or on your stage. This includes the guitar player, the pyro remote controller and also the guy who will operate the drone camera. Everybody plays by the rule or they won't play. This is imperative and mission critical. One wrong thing can topple over a dozen others.
- 3. Listen first, then broadcast. Some people believe that they go into a venue and then switch on their gear (transmitters) first to "block" channels. Other users will then find other channels and frequencies which in turn might cause interference with your system that is broadcasting. Switching your receivers on and "listen" if there is problems



with the predetermined frequency and then finding the culprit is a smarter approach.

- 4. Choose and place your antennas well. Yeah, those little lambda quarter wavelength sticks on the wireless receivers are cute, but they won't be sufficient most of the times. You also don't put your speakers just anywhere, but you choose and aim them properly. There is a huge selection of solutions available, so make good use. Groundplane Antennas and cardiod pattern antennas make a lot of sense in different environments and they are mostly interchangeable when not active (with booster).
- 5. Make sure your batteries or rechargeable batteries are fresh and fully charged and keep a number of fresh ones on hand for emergency situations. And of course you will test and measure the new battery before using it on your systems. A simple battery tester costs less than five dollars and it assures there is capacity in there.

Those are just five basic rules, but keeping them in mind will keep you away from a lot of trouble.

You are very welcome to keep this interactive and to share what you want to hear about and which topics you want to see addressed.

Please send your queries to: <u>alex@asaudio.de</u>