

KDB353029 D01 II A (2) (c) - Professional installation - Antennas

The applicant should address the following items when justifying professional installation.

(1) Explain why the hardware is not readily available to average consumer.

The A20-Mini is a wireless microphone transmitter marketed and sold only to professional sound mixers/recordists, mainly the very top tier. There are several factors which support this:

- Selling price of A20-Mini plus receiving equipment is approximately \$5000 per system which puts this squarely out of reach of the average consumer. The only people willing to pay this much are top tier professionals who use these products to make a living. For comparison, a typical consumer-type wireless microphone would cost in the region of \$300.
- The A20-Mini is not in any way marketed to the average consumer.
- The A20-Mini is not sold on Amazon or any type of general consumer store.

(2) Confirm the device cannot be sold via retail to the general public or by mail order; it must be sold to authorized dealers or installers only.

The A20-Mini is not sold via mail-order or on the web (Amazon, etc). The A20-Mini is sold directly to professional users by small, local retailers who cater to sound professionals directly, such as Gotham Sound in NYC, Second City Sound in Chicago, Location Sound in LA. These retailers cater only to professional Hollywood-type sound mixers.

(3) Explain that intended use is not for consumers and general public; rather device is generally for industrial/commercial use.

The A20-Mini is used by professional sound mixers who record sound for Hollywood films, major concerts/events, and large television productions like the Olympics. This is squarely outside of the realm of consumers and consumer audio products.

(4) Explain what is unique, sophisticated, complex, or specialized about the equipment that REQUIRES it to be installed by a professional installer?

Users of A20-Mini are generally well-versed in RF theory and practical use of wireless systems. Many users will have Part 74 licenses. The A20-Mini system relies on finding clear spectrum and good frequency coordination to avoid intermodulation from multiple transmitters. A20-Mini users must be familiar with these practices – this is far outside the understanding of a typical consumer.

iv) Other professional installation requirements.

(1) Installation must be controlled – explain how.

The A20-Mini and associated components are owned, installed, and used by the person (Professional Sound Mixer) who purchases the equipment. The wireless receiver associated with the A20-Mini transmitter is normally carried in a body-worn utility bag or mounted in a small cart and operated by the Sound Mixer. The installation of these wireless components is designed and carried out by the same person.

(2) Installed by licensed professionals (e.g., device sold to dealer who hire installers) – confirm details.

Not only is the installation of these wireless products done by the Sound Mixer, but the Sound Mixer also operates these products. The Sound Mixer oversees the placement of the A20-Mini on the

Talent (typically Hollywood actors), selects the correct type of antenna for use, sets up the products for operation, and finally operates the gear personally.

- (3) Installation requires special training (e.g., special programming, access to keypad, field strength measurements made). Confirm details.

The A20-Mini transmitter itself has no controls to change any parameters. These parameters are fully controlled by the Sound Mixer using a remote-control function via an iPhone or tablet. Sound Mixers typically use spectrum analyzer equipment on set to measure field strength of given transmitters.