FMX-20

INSTRUCTIONS

2-CHANNEL PORTABLE MIXER

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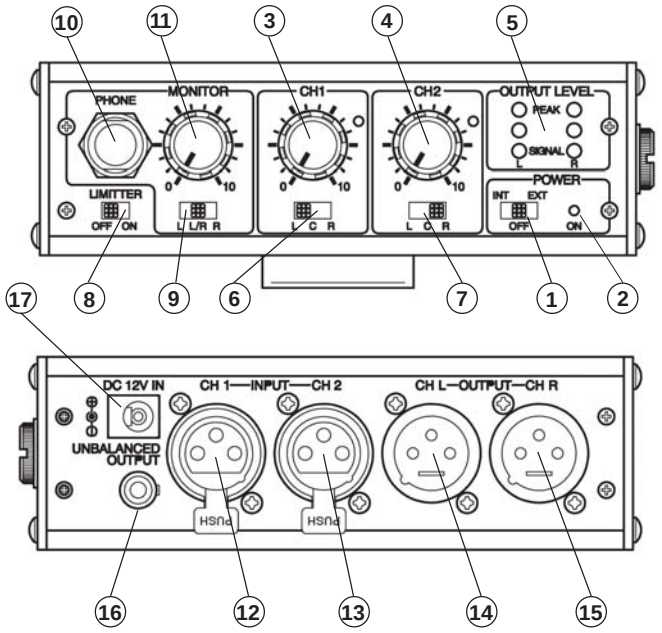

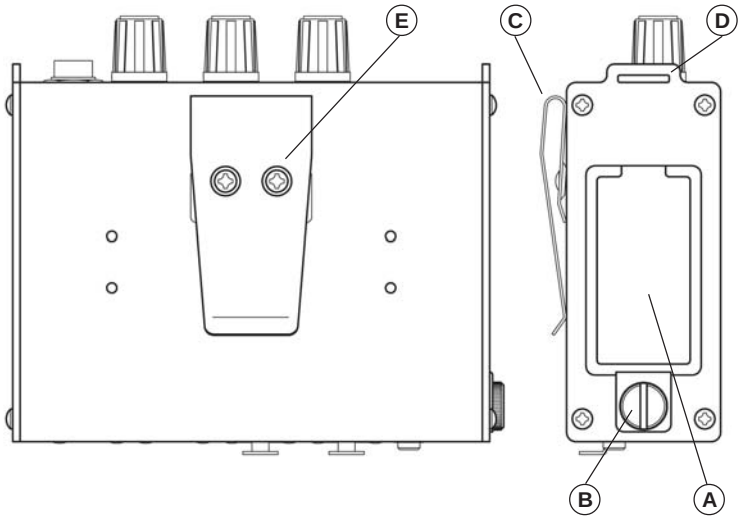

FMX-20 SPECIFICATIONS

Frequency Response
Main and Unbalanced Output ..... 40-17,000Hz (– 3dB)
Monitor Output ..... 50-17,000Hz (– 3dB)

Noise Level
Mic (– 50) ..... – 55dB
Line (+0) ..... – 57dB

T.H.D. ..... 0.15% @ 1KHz

MIC Input Level
Electronic Balanced ..... – 50dBu

MIC Output Level
Switchable Electronic Balanced ..... +0 / – 50dBu

Unbalanced Output
3.5mm Stereo ..... – 50dBu

Monitor Output
3.5mm Stereo (Max Load 16 ohm) ..... – 18dBu

Main Output
+6.5dBu with 600 ohm load ..... 0dBu ref @ 0.775Vrms
+13.5dBu with 1000 ohm load ..... 0dBu ref @ 0.775Vrms

Unbalanced Output
-32dBu with 600-1000 ohm load ..... 0dBu ref @ 0.775Vrms

Battery Type/Duration
9-volt Alkaline (006p type) ..... approx. 6 hours

Current Draw
38mA nominal ..... 50mA maximum

Size ..... 42H x 130W x 103D mm
1.65 x 5.1 x 4.05 inches

Weight with Battery ..... 21.2 ounces
601 grams

Thank you for purchasing the Azden FMX-20 portable mixer. The FMX-20 has many unique features, so please read this manual completely before using the mixer. Designed to work with all microphones that have a low-impedance XLR output, the FMX-20 can be connected to any video camera or audio recorder, which has XLR, or mini-jack mic/line inputs.

LOADING THE BATTERY: Make sure the mixer is turned off. Remove the battery cover (A) by turning the screw (B) counter- clockwise until it comes off. Place the battery strap (located in the battery compartment) around a new 9-Volt ALKALINE battery and insert it into the battery compartment. Be sure to follow the polarity diagram inside the battery compartment. If the polarity is correct the battery should go in easily. Do not force the battery into the compartment. If the battery does not go in easily turn it around and try again. Replace the battery door (A) and turn the screw (B) clockwise until tight, do not over tighten. A new 9-Volt ALKALINE battery should last for more than 6 hours.

MOUNTING OPTIONS:
1) Belt Clip (supplied): The belt clip (C) can be attached to the backside of the mixer in 3 different positions. To remove the belt clip use a Philips head screwdriver and turn the screws (E) counterclockwise until they come off. To install the belt clip, select the desired location and turn the screws clockwise until tight.
2) Hook & Loop (supplied): Hook & Loop can be attached to either side of the mixer and to any adjoining flat surface (camera body, tripod, etc.) The Hook & Loop strip with the soft surface should be attached to the mixer and the Hook & Loop strip with the rough surface should be attached to the adjoining surface.
3) Strap (not supplied): A strap can be looped through the strap cutouts (D) on the sides of the mixer.

CONTROLS and INPUTS/OUTPUTS
1 through 16

POWER SWITCH (1) and *POWER* LED (2):
To power the FMX-20 by the internal battery. Move the *POWER*switch (1) to *INT* position. The *POWER ON* LED (2) will turn green. When the battery voltage level is low the *POWER ON* LED (2) will turn to RED. When the *POWER ON* LED (2) turns to red replace the battery with a new 9-Volt ALKALINE battery. (see LOADING THE BATTERY above). When not in use turn the mixer *OFF* to conserve battery life.

To power the FMX-20 with an external power supply. (*Note: The FMX-20 does not come with an external power supply. An optional power supply part number BC-26U is available from the Azden parts department. Call 516-328-7500 for details. If you use a different power supply make sure its output does not exceed 12 volts or you may damage the unit.*) Move the power switch (1) to EXT position. The *POWER ON* LED (2) will turn green. When not in use turn the mixer *OFF* and disconnect the power supply from the mixer.

INPUT LEVEL CONTROLS for *Channel 1* (3) and *Channel 2* (4):
CH1 (3): Controls the input level (volume) of the microphone connected to Input *CH 1* (12). Zero is the lowest (quietest) setting, 10 is the highest (loudest). For the best possible sound and lowest noise increase the input level control until the input LED lights occasionally.

CH2 (4): Controls the input level (volume) of the microphone connected to Input *CH 2* (13). Zero is the lowest (quietest) setting, 10 is the highest (loudest).For the best possible sound and lowest noise increase the input level control until the input LED lights occasionally.

OUTPUT LEVEL LED INDICATORS (5)
For the best sound increase the *INPUT LEVEL* of *CH1* (3) and/or *CH2* (4) so that the corresponding *PEAK* LED indicator (5) flashes red occasionally during the loudest parts of what you are recording. If the indicator does not light it means that the input (volume) level is too low and the sound may be accompanied by background hiss. If the indicator is lit continuously it means that the input (volume) level is too high and the sound may be distorted. Monitor the sound with headphones and adjust the input levels for the best sound.

OUTPUT SELECT CH A (6) and *CH B* (7)
By setting the *OUTPUT SELECT* switch (6) and/or (7) to *L* the sound of any microphone plugged into the corresponding *INPUT CH1* (12) and/or *CH2* (13) will be sent to *OUTPUT CH L* (14). If using the *UNBALANCED OUTPUT* (16) the sound of this microphone will be sent to the left channel.

By setting the *OUTPUT SELECT* switch (6) and/or (7) to *C* the sound of any microphone plugged into the corresponding *INPUT CH1* (12) and/or *CH2* (13) will be sent to *OUTPUT CH L* (14) and *OUTPUT CH R* (15). If using the *UNBALANCED OUTPUT* (16) the sound of this microphone will be sent to the left and right channels.

By setting the *OUTPUT SELECT* switch (6) and/or (7) to *R* the sound of any microphone plugged into the corresponding *INPUT CH1* (12) and/or *CH2* (13) will be sent to *OUTPUT CH R* (15). If using the *UNBALANCED OUTPUT* (16) the sound of this microphone will be sent to the right channel.

MONITOR CONTROL (11) and *MONITOR* OUTPUT (10)
The *MONITOR* control (11) adjusts the volume level of headphones connected to the *MONITOR* output (10). Zero is the lowest (quietest) setting, 10 is the highest (loudest).

MONITOR SELECTOR SWITCH (#9)
Normally, set the *MONITOR* selector (9) to position *L/R*. In the *L/R* position you will monitor the sound of all connected microphones using either stereo or mono headphones. If you only want to hear the output from *CH L*, use stereo headphones and set the switch to position *L*. Or, if you only want to hear the output from *CH R*, use stereo headphones and set the switch to position *R*.

LIMITER SWITCH (8)
After setting the Input Levels, turn this switch to *ON*. The limiter circuit reduces possible overload distortion from very loud sound levels without affecting normal sound levels. If you prefer the overall sound quality of the mixer without the limiter circuit engaged leave the switch *OFF*.

INPUT CH 1 (12) and *CH 2* (13)
Connect the output of a microphone or wireless receiver to *INPUT CH 1* (12) and/or *CH 2* (13). The inputs accept a standard 3-pin male XLR connector equipped cable. Push the connector into the input jack until it locks. To remove the connector, press the *PUSH* tab and pull out the connector. For a more detailed description of how *INPUT CH 1* (12) and *INPUT CH 2* (13) work see *OUTPUT SELECT* above.

OUTPUT CH A (14) and *CH B* (15)
Connect a cable from *OUTPUT CH A* (14) and/or *CH B* (15) to the mic or line input of your video camera or audio recorder. The outputs accept a standard 3-pin female XLR connector equipped cable. Push the cable connector into the output jack until it locks, and to remove the connector press the release tab on the connector and pull out. For a more detailed description on how *OUTPUT CH A* (14) and *CH B* (15) work see *OUTPUT SELECT* above.

UNBALANCED OUTPUT (16)
This output is stereo (dual-channel). It is recommended to use a stereo-to-stereo mini-cable (not supplied) from the *UNBALANCED OUTPUT* (16) to the mic or line input of your video camera or audio recorder. The *UNBALANCE OUTPUT* (16) is designed for video cameras or audio recorders, which have mini-jack microphone or line inputs. Because the FMX-20 has low-impedance XLR inputs and a mini-plug output, users of mini DV cameras that have mini-plug microphone inputs can now use high-quality microphones with XLR outputs. For a more detailed description on how the *UNBALANCED OUTPUT* (16) works see *OUTPUT SELECT* above.

DC 12V Input (17)
For external powering of the mixer connect a power supply to this input. Maximum rating of the power supply should not exceed 12 volts, 350mA.