



A20-TX

Digital Wireless Bodypack Transmitter with GainForward and SpectraBand

Specifications

Frequency Range

- 169 to 1525 MHz
- Transmitter tunable in 25 kHz steps
- Available frequencies are dependent on region

RF Output Power

- Off, Low – 2 mW, Normal – 10 mW, High – 20 mW, Extra High – 40 mW

Modulation Mode

- Proprietary, 100% digital RF modulation
- Standard or Long Range, selectable

Antennas

- UHF RF: SMA connector, removable antenna
- 2.4 GHz built-in, bottom of unit

Audio Frequency Response

- 10 Hz – 20 kHz, +/- 1 dB re 1 kHz

Audio Input

- **Lavalier Microphone**
 - 2-wire- or 3-wire-type lavalier mics supported
 - Auto-selected when lavalier mic connected to Lemo input
 - Dynamic range: 130+ dB min, A-weighted
 - Input clip level: 5V p-p (limited by lavalier microphone)
 - Lemo pin 1 = ground; Lemo pin 2 = 5V bias power; Lemo pin 3 = audio/bias (8k to 5V internal)
 - Auto unit power on/off with connection/removal of lavalier microphone (menu selectable)
- **Balanced Mic**
 - True, fully balanced, 8-Series mic preamp
 - Dynamic range: 140 dB min, A-weighted
 - Menu selectable with connection of XL-BALXLR-4 cable to Lemo input
 - Phantom power: 12V or 48V, full 10mA available per IEC 61938
 - XLR pin 1 = ground; XLR pin 2 = +; XLR pin 3 = –
- **Line Input**
 - True, fully balanced line-level input (no external resistors required)
 - Input clip level: +26 dBu
 - Menu selectable with connection of XL-BALXLR-4 cable to Lemo input
 - XLR pin 1 = ground; XLR pin 2 = +; XLR pin 3 = –
- **AES42**
 - AES digital input with common mode power for Digital mics such as Schoeps SuperCMIT
 - 250mA current available
 - Selectable audio channel 1 or 2 via menu
 - Menu selectable with connection of XL-BALXLR-4 cable to Lemo input
 - XLR pin 1 = ground; XLR pin 2 = +; XLR pin 3 = –
- **AES3**
 - AES digital input without common mode power
 - Selectable audio channel 1 or 2 via menu
 - Menu selectable with connection of XL-BALXLR-4 cable to Lemo input
 - XLR pin 1 = ground; XLR pin 2 = +; XLR pin 3 = –
- **Guitar**
 - Auto-selected when connected with A20-TX Smart Guitar Cable
 - ¼” tip = + ¼” sleeve = ground
 - 18V p-p max input level
 - Input impedance: 100k, 1M, 10M (menu selectable)
 - Cable capacitance: 0 pF – 3000 pF in 50 pF steps (menu selectable)
 - Balanced connection from ¼” plug to Lemo for low noise susceptibility

Menu and Controls

- e-Paper screen highly visible in direct sunlight
- e-Paper screen keeps display even with no batteries
- Power/Pair button and three navigation buttons protected inside battery compartment
- Optional user-programmable bayonet switch for top of transmitter (A20-TX Switch)

Remote Control

- A20-Remote Android, iOS, and iPad app via Bluetooth 5.2 LE
- A20-Nexus, A20-Nexus Go receivers via super-long-range NexLink

Recording Media

- Micro SD card

Recording File Format

- 32 Bit Float, 48 kHz, Monophonic
 - Broadcast WAV (<4 GB), RF64 WAV (>4 GB)
- Simultaneous Record and Transmit mode when using lavalier mic input is not available on A20-TX units sold or operated in the United States of America.*

Timecode

- Input via XL-TC-USBC-LEMO, XL-TC-USBC-BNC, USB-A to USB-C (from 8-Series) or wirelessly over NexLink (from A20-Nexus/A20 Nexus Co)
- LTC: 0.3 V – 3 V p-p (–17 dBu to +3 dBu), 20k ohm impedance
- LTC Output via XL-TC-USBC-LEMO: 3 V p-p, 400 ohm impedance

Timecode Clock

- 0.2 ppm accuracy
- Holds accurate clock for four hours while powered down with batteries inserted, holds for one hour without batteries via internal supercapacitor
- Auto Jams timecode via USB-C connector or wirelessly via NexLink

Timecode Frame Rates

- 23.98, 24, 25, 29.97 DF, 29.97 ND, 30 DF, 30 ND

Frame rates are auto-detected from incoming source

USB-C

- Mass Storage (USB-C): USB 2.0 high speed for file transfer
- Charges Li-ion and LiFePO4 batteries inserted in A20-TX
- Pairing to A20-Nexus, A20-Nexus Go
- Timecode I/O

Powering

- “1.5V” Alkaline, Lithium primary, NiMH AA batteries; 3 for operation
- “3.7V” Rechargeable Lithium-Ion, Rechargeable LiFePO4 AA batteries; 1, 2, of 3 for operation
- Energizer Ultimate AA primary cells recommended for longest runtime

Battery Charging

- Built-in charging of Lithium-Ion and LiFePO4 batteries via USB-C

Battery Runtime

- Up to 12 hours (depending on battery chemistry, number of batteries, RF power, input type, mode)
- Unit can be completely powered off remotely via app or via NexLink to extend battery runtime

Environmental

- Operating: -10° C to 38° C
- Storage: -40° C to 85° C
- 0 to 90% relative humidity (non-condensing)

Dimensions (H x W x D)

- 3.3 x 2.5 x 0.71 in
- 8.5 x 6.4 x 1.81 cm

Weight

- 0.2lbs (without batteries)
- 98g (without batteries)