

Deity Microphones 'Deity Connect' Product Sheet

The BP-TX is made out of brushed aluminum to give it tough, durable build quality. The top of the unit features an SMA antenna connector, a 1/4" 20 mounting point for the belt clip, and a locking 3.5mm standard microphone input. With 2 multi-color LED alert lights you will be able to tell the status at just a glance. The daylight bright OLED display offers a fast refresh rate so VU meters bounce in real time. The high resolution of the OLED display allows for the statuses of all the major features to be displayed on the home screen.

The Transmitter RF power output is 100mw / 50mw / 25mw / 10mw/ or AUTO. When you set the BP-TX to AUTO RF Power the Deity Connect's DUO-RX will transmit a pulse to the BP-TX (if the signal drops below the threshold), telling the BP-TX to increase its RF power output to help prevent a loss of signal. Using AUTO RF Power will also increase your battery life because you will never use more power than the system actually needs.

All settings on the BP-TX can be overwritten in the menu of the DUO-RX. Now you no longer have to walk over to an actor to change a simple setting. Simple pull up which transmitter you need to adjust in the menu of the DUO-RX, make the change, and instantly the selected BP-TX updates to the new setting.

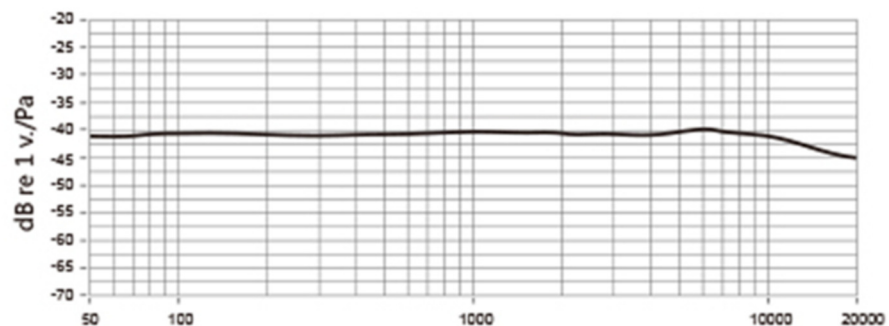
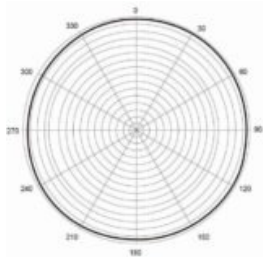
From the start Deity Microphones wanted the Deity Connect system to work with the ergonomics of a sound bag. The DUO-RX was designed so that the screen, buttons, and antenna all face up in a sound bag so the operator does not need to remove it. And with the USB-C power and audio outputs on the bottom, the cable management can be maximized inside the audio bag. These two ergonomic principals also allow for the screen to face camera operators when mounting it onto a camera, instead of facing the ceiling like other brands.

Deity Microphones added dual SMA elbow antennas so no matter how you mount the DUO-RX your external antenna can always be mounted vertically. But Deity Microphones took it a step further by adding two dipole internal horizontal antennas to capture signals on the horizontal plane. This quad design gives us a dual true diversity setup across two receiver modules. This is the same method used in commercial grade WiFi and high-end drones. And because Deity Microphones offer users removable antennas, you can upgrade the antenna array yourself if you want to add a clover antenna, directional antenna, or even connect to a 2.4Ghz antenna splitter.

The Deity Connect ecosystem uses a proprietary protocol that was engineered with several mechanisms to ensure a strong audio link while at the same time co-existing peacefully with other 2.4Ghz devices using the same frequency band.

The first mechanism is adaptive frequency hopping, automatically hopping before RF interference even happens. At any given time, the BP-TX is hopping between 9 different frequencies. The Deity Connect system is more than just a transmitter and a receiver link – it's a bi-directional transceiver system that is always scanning and mapping out the whole 2.4Ghz frequency band, coordinating and planning the next 70 frequency hops.

The second mechanism used to prevent RF Interruption is called Listen-Before-Talk. If RF Interruption is detected or even thought to have taken place, the system will add the audio and data in the next two frequency hops after the 'bad' hop. The DUO-RX will then add that extra audio and data back into the stream as if the 'bad' never existed, giving you an uninterrupted stream of audio from your transmitter. Deity Connect uses the natural latency in the system as a buffer, allowing it to absorb 'bad' hops much like the CD Player Skip Protection feature but in a millisecond flash.



Spec List:

Receiver :

Channels	Up to 18 Channels
Frequency	2.4Ghz
Antenna	SMA
Antenna Array	Dual True Diversity
Receiving Sensitivity	-83/-86dBm
Audio Output Connector	Dual Locking 3.5mm TRS
Audio Delay	19ms
Audio Distortion	$\leq 0.5\%$
Signal to Noise Ratio	$\geq 67\text{dB}$

Frequency Response	50Hz-20KHz
Display Type	1.3" OLED Display
Battery Type	Lithium-Ion Rechargeable Battery
Battery Life	10hrs
Battery Recharge Time	70 minutes via USB QuickCharge 2.0/3.0
Mounting Options	Cold shoe mount & Magic tape
Dimensions	113mm*87.4mm*33.5mm
Weight	248g
Transmitter :	
Channel	Up to 18 Channels

Frequency	2.4Ghz
Limiter	Analog
Low Cut	75Hz / 150Hz
High Frequency Boost	7Khz-20Khz Boost @ +1dB steps
Antenna	SMA
Mute Switch	Yes
Audio Input Connectors	Locking 3.5mm TRS
Audio Delay	19ms
Audio Distortion	≤0.5%
Transmitting Power	10mW/25mW/50mW/100mW/AUTO

Range	Up to 100m / +300ft
Signal to Noise Ratio	≥67dB
Level Control	21dB to -51dB
Display Type	1.3" OLED Display
Battery Type	Lithium-Ion Rechargeable Battery
Battery Life	10hrs @ 100mw RF Output
Battery Recharge Time	70 minutes via USB QuickCharge 2.0/3.0
Mounting Options	Belt clip
Dimensions	92.8mm*63mm*26mm
Weight	148g

Microphone:

Frequency Response	50Hz-20KHz
Directivity	Omni-directional
Capsule Type	Pre-Polarized Condensor
Sensitivity	-40±2dB re 1 V/Pa @ 1kHz
Dynamic Range	110dB
Maximum Input-40dB	-40dB
Microphone Head Size	19.2mmH x 10.4mmW x 10.4mmD
Power Requirements	1.5-3V
Cable Length	1.6m

3rd Party Compatible Accessories:

Transmitter Belts:

- Ursa Straps Large Pocket Belts
- Ursa Straps Large Pouches
- Vivanna Straps Medium Pocket Belts
- NeoPax Standard Size Belts

Replacement Transmitter Antenna:

- Remote Audio – Ultra Flexible SMA Antenna KIT
- Remote Audio – “Miracle Whip” SMA Flexible Antenna Kit
- Lectrosonics – A8U Kit Whip . Antenna

Receiver Upgrade Antenna:

- RF-Links- AD-24S 2.4 GHz Omni-Directional Antenna
- RF-Links – F250 2.4Ghz Backfire Antenna
- Shure – PA805Z2-RSMA
- RF Venue – 2.4Ghz CP Beam
- WA5VJB – 2.4Ghz 10dBi Yagi PCB