



# Digi-Wave® 400 Series

## WIRELESS INTERCOM AND INTERPRETATION SYSTEM



The Digi-Wave 400 system is a digital spread-spectrum (DSS), simultaneous two-way wireless communication system. The system makes hearing easier in everyday situations by reducing background noise and compensating for poor room acoustics or distance from the sound source. Its frequency-hopping algorithm avoids interference and is a very secure method of communication.

Every Digi-Wave System includes at least one two-way transceiver (DLT 400) and one or

more receivers (DLR 400 RCH or DLR 400 ALK), depending upon the application.

The system is commonly used for intercom, with up to six people able to speak simultaneously and even more listening. It's also ideal as a human interpretation system that supports one floor language and up to 14 translated languages. Digi-Wave systems are also frequently used with guided tours - with one or more tour guides (2-way), with audience participation (2-way) or without audience participation (1-way listen only).

### Key Features

- Portable digital transceiver with built-in mic
- Completely portable - no base station or rack-mounted components required
- Crystal-clear digital sound quality
- Use as a two-way wireless intercom or in one-way mode
- Accommodates six simultaneous talkers and an unlimited number of listeners
- Built for security. Optional 128+87 bit encryption, secure key code, lock for settings

### Applications

- Intercom
- Language interpretation
- Tours
- Presentations
- Hearing Assistance

### Markets

- Government - courtrooms
- Corporate - training, presentation, tours
- Broadcast
- Healthcare - medical centers
- Education - classrooms & lecture halls

## Specifications: Digi-Wave 400 Transceiver (DLT 400)

Dimensions	2.60"W x 4.22"H x 0.50"D (66 mm x 107.3 mm x 12.6 mm)
Weight	Weight 3.3 oz (94 g) including battery
Color	Black/Silver (Front/Back)
Case Material	Black ABS plastic
Battery Type	Lithium Polymer with smart charge built into transceiver; 1800 mAH
Battery Life	Up to 16 hrs talk time per charge@ 1ch Tx and 1ch Rx
Power Save	Auto Sleep Mode after 5 minutes of no RF signal from compatible devices (Power save can be turned off in Advanced Settings if desired)
Charge Time	5 hrs. approx.
System Voltages	OLED 14VDC; RF 5VDC; Logic 3.3 VDC
Operating Frequencies	2.4 GHz (ISM band); 2402 – 2476 MHz FHSS
Audio Frequency Response (-3dB level)	Interpretation, Tour, Hearing Asst (≤4 mics): 100 – 11,500 Hz Other Modes: 100 – 7,200 Hz
SNR	73 dB (A-weighted, default Rx volume with mic input )
THD	0.1 % (Default Volume, 1kHz)
Microphone Input	Internal microphone (disabled when MIC jack engaged) and 3.5 mm phone jack (sleeve) with electret microphone bias, adjustable gain with 63dB range.
Line Input	USB-C, Adjustable level
Headphone Output	3.5 mm TRRS headphone jack; 25 mW, R 32 ohms
Audio Output	Headphone: Max SSPL 90 111.8dB (EAR 013), 116.8dB 041) Line: USB-C, Adjustable level
Range	Up to 900 ft (274 m) (depending upon environmental conditions)
Modulation	FSK
RF Ouputput	19 dBm Max
Security	87 bit encryption (300 Series Compatible), 128+87 bit encryption, encryption PIN, Lock for settings
Side Tone	-6 dB below volume, tone variation (Off, Low and High settings available)
Indicators	OLED
LEDs	Red LED around Talk button when enabled; Bi-color, changing green and red LED at top
Charging Connectors	USB-C; Two contacts for use with CHG 412
Compatible Receiver	DLR 400 RCH, DLR 400 ALK, DLT 300 with some limitations and DLR 360 with some limitations
Operating Temperature Range	14º to 113ºF (-10º to 45ºC)
Approvals	FCC, Industry Canada, CE, RoHS 3, WEEE, RCM, ANATEL, KC, Giteki
Warranty	2-year warranty against component failure and manufacturing defects (6 months on internal battery). See Full Warranty on the website for details.

**Specifications: Digi-Wave 400 Receiver (Rechargeable) (DLR 400 RCH)**

Dimensions	2.60"W x 4.22"H x 0.50"D (66 mm x 107.3 mm x 12.6 mm)
Weight	3.3 oz (94 g) including battery
Color	Black
Battery type	Lithium Polymer with smart charge built into transceiver; 1800 mAH
Battery life	Up to 32 hrs per charge @ 1ch Rx
Power Save	Auto Sleep Mode after 5 minutes of no RF signal from compatible devices (Power save can be turned off in Advanced Settings if desired)
Charge time	5 hrs. approx.
System Voltage	OLED 14VDC; RF 5VDC; Logic 3.3 VDC
Operating frequencies	2.4 GHz (ISM band); 2402 – 2476 MHz FHSS
Audio Frequency response(-3dB Level)	Interpretation, Tour, Hearing Asst ( $\leq 4$ mics): 100 – 11,500 Hz Other Modes: 100 – 7,200 Hz
SNR	73 dB (A-weighted)
THD	0.1 % (Default Volume, 1kHz)
Headphone Output	3.5 mm TRRS headphone jack; 25 mW, R32 $\Omega$
Line Audio Output	USB-C, Adjustable Level
Range	Up to 900 ft (274 m) (depending upon environmental conditions)
Modulation	FSK
RF Sensitivity	19 dBm Max
Security	87-bit encryption (300 Series Compatible), 128+87 bit Encryption, encryption PIN, Lock for settings
Indicators	OLED
LEDs	Bi-color, changing green and red LED at top
Charging Connectors	USB-C; Two contacts for use with CHG 412
Compatible Units	DLT 400, DLT 300 with some limitations
Operating Temperature	14° to 113°F (-10° to 45°C)
Approvals	FCC, Industry Canada, CE, RoHS 3, WEEE, RCM, ANATEL, KC, Giteki
Warranty	2-year warranty against component failure and manufacturing defects (6 months on internal battery). See Full Warranty on the website for details.

**Specifications: Digi-Wave 400 Receiver (Alkaline Batteries) (DLR 400 ALK)**

Dimensions	2.36" W x 3.54" H x 0.63" D(60 mm x 90 mm x 16 mm)
Weight	1.7 oz. (47 g) without batteries.
Frequency Band	2.4 GHz (ISM band)
Modulation	FSK
Case Material	Black ABS Plastic
Battery Type	2 x AAA Alkaline Batteries
Battery Life	Alkaline Disposable (BAT 010-2): Up to 30 hrs
Power Save	Auto Sleep Mode after 5 minutes of no RF signal from compatible devices (Power save can be turned off in Advanced Settings if desired.)
Audio Frequency Response (-3dB level)	Interpretation, Tour, Hearing Asst ( $\leq 4$ mics): 100 – 11,500 Hz Other Modes: 100 – 7,200 Hz
SNR	74 dB (A-weighted)
THD	0.1% (typical)
Antenna	Internal
Range	Up to 900 ft (274 m) (depending upon environmental conditions)
Headphone Audio Output	3.5 mm TRRS jack with mono output for headphones, earphones, or neckloop27 mW maximum @32 ohms
Display	LCD shows status: Battery Level, RSSI, Group/Channel #
Temperature Range	14° – 113°F (-10° to 45°C)
Compatible Units	DLT 400, DLT 300
Approvals	FCC, Industry Canada, RoHS 3, CE, WEEE, RCM, ANATEL, KC, Giteki
Warranty	2-year warranty against component failure and manufacturing defects. See Full Warranty on the website for details.