# DW SY 1 & DW SY 2



Digi-Wave Intercom Bridge

### USER MANUAL



## **Intercom Bridge**

The Digi-Wave Intercom Bridge is a wireless add-on bundle offering a seamless expansion of an existing 2-wire intercom base system to include wireless, full-duplex Digi-Wave DLT 300 transceivers from Williams Sound. It supports up to six simultaneous open microphones and an unlimited number of Digi-Wave devices in a given area. Range is up to 750 feet (228 meters), depending on the environment.

#### System Includes

- (1) ADP 903 2 to 4 Wire Adapter
- (1) BKT 032 Digi-Wave Transceiver Cradle
- (1) TFP 058 Power Supply
- (1) WCA 127 Interface Cable
- (1) Tuning Screw Driver
- (1) DLT 300 Digi-Wave Digital Transceiver (optional)

Any additional Digi-Wave devices or accessories are not included in this system.

### Set Up

A two-way party line system is expected to already exist. The Digi-Wave system will be attached to the existing party line system via a 2-4 wire adapter.

Two DLTs will need to be configured: one as Master and one as Guest.

The Master DLT will need to be set to Group 0, the sidetone set to 0, and given a unique address. The Guest DLT will need to be set to Group 0, and given an address different from the Master DLT.

Please reference the user manual for the DLT for additional help configuring settings and using the menu system.

Snap the BKT 032 bracket onto the top of the ADP 903 Adapter. Insert the Master DLT into the slot on the bracket.

Plug the WCA 127 cable into the Master DLT, and into the TFP 058 Power supply. Connect the power supply to a outlet.

The Guest DLT is not wired into the system, and is only used wirelessly. Any additional Digi-Wave devices can be used normally.

See Figure 1 for a map of the different devices and how they connect.

### **Nulling Procedure**

You may experience sidetone echo in your headset. This echo is caused by a delay between the wireless systems transmitter and receiver.

The nulling procedure will reduce or remove this echo from the audio stream.

Before starting the nulling process, connect a master DLT to the two-wire system. Also configure a Guest DLT to send and the receive Audio from the Master DLT, with the Guest DLT set to transmit mode (the TALK button is active).

Please reference the user manual for the DLT for additional help configuring settings and using the menu system.

### **Guest DLT Setup**

- 1. Plug a headset into the headset jack.
- 2. Plug a microphone into the microphone jack.
- 3. Use the menu on the Guest DLT to set the sidetone level to 0 (off).
- 4. Set the volume to level 63 (the maximum level).
- 5. Push the TALK button. The red light will turn on.
- Speak or blow air into the microphone, while listening with the headphones to the sound. If you hear yourself or an echo (sidetone), you will need to adjust settings.

### **Adjusting Settings**

On the ADP 903 Wire Adapter, the back panel has three sections to adjust:

 In the Input from 4-wire system onto ring section, ensure the line/mic switch to Mic. The level is preset by Williams Sound at an optimum level and does not need adjustment.

- In the Output to 4-wire system from ring section, ensure the line/mic switch to Line. The level is preset by Williams Sound at an optimum level and does not need adjustment
- 3. In the **Null** section, adjust the Main Null (10 turns), HF Trim (single turn), and LF Trim (single turn) settings using the included screwdriver. Adjust until the echo (sidetone) in your headset is reduced as much as possible (it may never completely disappear).
- Nulling adjustments may need to be repeated if the two-wire intercom system configuration is changed.

#### **Reset the Guest DLT**

After the nulling process is finished, reset the Guest DLT back to usable settings.

- 1. Set the sidetone to either 1 (-6dB) or 2 (-12dB), depending on your preference.
- Set the volume level back to your preferred listening volume

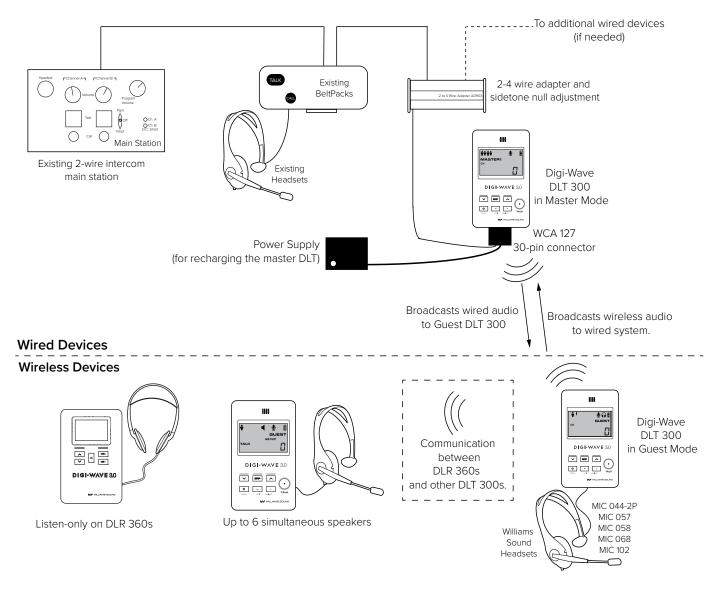


Figure 1: Connecting a Wired Intercom System to a Digi-Wave System

