# **BlueDriver-F3**™ WIRELESS AUDIO INTERFACE







**User Guide** 

# **JK Audio**

Welcome

#### Thank You

Thank you for purchasing the JK Audio BlueDriver-F3 Wireless Audio Interface. Please read this guide for instructions on setting up and using your new product.

# Getting Assistance

If you have technical or application questions:

In the US & Canada, call us toll free at: 800-552-8346

All other countries dial: 815-786-2929 (M-F 8:30-5:00pm Central Time Zone)

Email us at: support@jkaudio.com

Or, check out our FAQ section for answers to common questions.

## Limited Warranty

BlueDriver is covered by a 2 year warranty to be free from defective workmanship and materials. To obtain service, contact JK Audio by phone or email for return authorization. Once authorized, you will carefully pack and ship the faulty product and all accessories to us. You will pay for shipping to us and we will pay for return back to vou.

This warranty does not cover damages due to accident, weather, fire, flood, earthquake, misuse, unauthorized repairs or modifications, or damages occurred in shipping, only defective workmanship or materials.

THERE ARE NO EXPRESSED OR IMPLIED WARRANTIES WHICH EXTEND BEYOND THE WARRANTY HERE MADE

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## Overview

## Features

Trim Pot Adjusts Mic Level

Mini USB Power Jack

>10 Hours on Internal Li-Ion Battery

3 Pin Female XLR Input

1/8" (3.5 mm) Mic Level Output

## Introducing the BlueDriver-F3.

The BlueDriver-F3 wireless audio interface uses Bluetooth® Wireless Technology to add wireless possibilities to your microphone or the mic level output of your audio mixing console. Model F3 provides a 2-way, full duplex voice band audio path when connected to a device using the Hands Free profile. Additionally, music bandwidth stereo audio can be sent using the A2DP profile. Be aware that the standard A2DP music profile includes a 150 millisecond transmission latency.







#### Mode Switch

Before you turn the BlueDriver on, be sure to set the **Headset/Phone Switch** to the correct position. If you change that switch while the unit is on, you will need to power the unit off, then power the unit back on before the change takes effect.

In the *Bluetooth* world, a device is either a Master (like a cell phone, sound card or music player) or a Slave (like a headset or car hands-free kit). Select **Headset** if you will be using your BlueDriver with a *Bluetooth* enabled headset or any device that emulates a headset. Select **Phone** if you will be using your BlueDriver with a cell phone or other master device.

#### Mic Trim

A small flat blade screwdriver can be used to adjust the **Mic Trim** pot on the back of the unit. This adjusts the level of the audio coming from the microphone as it is sent to the *Bluetooth* wireless technology enabled device and to the recording output.

# **Recording Output**

A 3.5 mm stereo output jack contains a mic level signal suitable for recording, with the clean mic signal on the left channel and the *Bluetooth* wireless technology return audio on the right.



# Charging

To achieve maximum battery capacity, BlueDriver should be fully charged before its first use. While this battery will normally charge in about 2 1/2 hours, please allow 4-5 hours for this first charge. Connect the power supply cable to the mini USB connector on your BlueDriver to charge the battery. The red LED will flash to indicate that the battery is charging, once charging is complete, the LED will turn off.

If the battery becomes completely discharged for an extended period of time, the red LED will not flash until it can begin its charge cycle. This may take several minutes.

If the power cable is connected when the unit is shut down, the blue LED will stay lit. If the unit is in use, the blue LED will indicate the current connect mode.

Feel free to use your BlueDriver while it is charging.

# Pairing your BlueDriver

Your devices are now ready to be paired. See Bluetooth Wireless Technology on page 4 for pairing instructions.

# Bluetooth Wireless Technology

## Bluetooth Wireless Technology

When you're first connecting to a new device, you should be in an environment with no other Bluetooth wireless technology enabled devices within range that might also be in Pairing Mode.

# Pairing to a Cell Phone with Bluetooth Wireless Technology

- 1. Set the **Headset / Phone Switch** to the *Phone* position.
- 2. From the powered-off state\*, hold the Connect Button on the BlueDriver for at least 5 seconds. Upon release, the blue LED should flash rapidly as the BlueDriver enters Pairing Mode.
- **3.** On your phone, search for Bluetooth wireless technology devices. If this is the first time you have paired with this device, select the option to add an audio device. When the cell phone has found the new device, select from the list the device ID of 'JKBDRVF3xxxx' where xxxx = the last four digits of the serial number.

# Bluetooth Wireless Technology

- 4. Enter the pin number as '0000' if requested
- 5. When bonding is complete, the blue I FD will flash at a rate of 1 second on. 2 seconds off. Once BlueDriver-F3 has been added to your cell phone, subsequent connections can be made more quickly from *Idle Mode* by holding the Connect Button for only 2 seconds before releasing.

Note: Connecting via Bluetooth wireless technology varies with different cell phones.

# Pairing to a Headset with Bluetooth Wireless Technology

- 1. Set the Headset / Phone Switch to the *Headset* position.
- 2. Following manufacturer's instructions, set your headset to Pairing Mode.
- **3.** From the powered-off state, hold the Connect Button on the BlueDriver for at least 5 seconds. After you release it, the blue LED should flash rapidly if the BlueDriver is in Pairing Mode.
- 4. When bonding is complete, the blue I FD will flash at a rate of 1 second on. 2 seconds off. Subsequent connections can be made more quickly from Idle Mode by holding the Connect Button for only 2 seconds before releasing.

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<sup>\*</sup>Holding the Connect Button for 5 seconds while in the powered-on state will power off the BlueDriver.

# **Bluetooth** Wireless Technology

#### Status LED

The blue LED on the side of the unit flashes in different sequences to indicate the current connection status.

# Pairing Mode

When in Pairing Mode, the blue LED will flash rapidly at a rate of 100ms on, 100ms off. While in pairing mode, any Bluetooth wireless technology enabled device within range can pair with your BlueDriver. Once the pairing process is complete the unique device ID is stored in Connection History. Subsequent connections can be made automatically from Idle Mode.

#### Idle Mode

To connect from Idle Mode, hold the **Connect Button** for **2** seconds. Upon release, the blue LED will flash at a slow rate of **200ms** *on* and **800ms** *off*. In Idle Mode, BlueDriver searches for paired devices.

#### Connected Mode

After bonding is complete, the blue LED will flash at a slower rate of 1 second *on*, 2 seconds *off*. The connection to that device is secure.

# **Bluetooth** Wireless Technology

## Reconnecting to Paired Devices

When reconnecting to a device that is still in BlueDriver's Connection History, you may connect from Idle Mode. While in Idle Mode, BlueDriver will automatically connect to your paired device within range.

When reconnecting to your cell phone, the switch on BlueDriver should be set to *Phone*.

When reconnecting to your Bluetooth headset, the switch on BlueDriver should be set to *Headset*.

**Note:** If left unused in *Idle* or *Pairing Mode*, the BlueDriver will automatically disconnect the Bluetooth connection in two minutes and power off.

# Disconnecting from a Device

To disconnect from any *Bluetooth* wireless technology enabled device and turn the power off, simply hold the **Connect Button** until the blue LED turns off (approx. **5** seconds).

# Connection History

BlueDriver retains the most recent 8 headset and 8 phone devices in memory. To clear connection history and return to factory default, with the blueDriver powered off, set the switch to the *Headset* or *Phone* position, then hold the **Connect Button** in for at least **20** seconds. After resetting, the BlueDriver will return to *Pairing Mode*.

# **Wireless Applications**

#### Live Man-On-The-Street Interviews

Simply plug BlueDriver-F3 into the bottom of a dynamic microphone, then pair to a cell phone and dial into the station as usual for live remote broadcast back to the station. This setup allows voice band, bidirectional audio to and from your cell phone.

The mini cable provided with your BlueDriver allows you to connect the REC output from the BlueDriver-F3 to a portable recorder to capture a full bandwidth recording of your voice on one channel, and the return from the station on the other channel. The headphone output on your recorder can then provide an outlet for listening to your voice as well as the return audio from the cell phone.



# **Wireless Applications**

#### 2. Backup Audio for Remote Broadcasts

You may have the finest IP CODEC available, but if the internet goes down, there goes the remote. Simply plug BlueDriver-F3 into the master audio output of your mixer or CODEC. Pair to your cell phone which is dialed into the station. This setup allows voice band audio, through your cell phone, back to the station

The mini cable provided with your BlueDriver allows you to connect the REC output from the BlueDriver-F3 to a mic-level 3.5 mm input on your mixer (if available) to allow for monitoring the return audio from the station.



# **Wireless Applications**

#### 3 Record Phone Interviews

Record high quality phone interviews using your favorite mic and headphones. Simply plug BlueDriver-F3 into the bottom of a dynamic microphone, then pair to a cell phone and place a call as usual. This setup allows voice band, bi-directional audio to and from your cell phone.

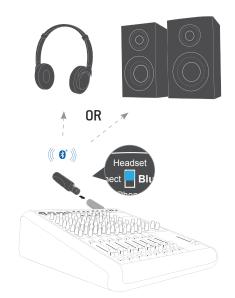
The mini cable provided with your BlueDriver allows you to connect the REC output from the BlueDriver-F3 to a portable recorder to capture a full bandwidth recording of your voice on one channel, and the caller's voice on the other channel. The headphone output on your recorder can then provide an outlet for listening to your voice as well as the return audio from the cell phone.



# **Wireless Applications**

#### 4. Transmit Bluetooth A2DP Audio

The "Headset" mode of BlueDriver-F3 connects to Bluetooth headphones or wireless speakers, and provides full 20 kHz audio bandwidth A2DP audio. Simply plug BlueDriver-F3 into the audio output of your mixer or playback system, then pair to your headphones or speaker. Also keep in mind that the 3 pin XLR is a balanced mono connection. BlueDriver-F3 sends the mono XLR signal to both left and right channels of the Stereo A2DP Bluetooth signal. A2DP is a one-way transmission. with nothing coming back on the return channel.



# **Wireless Applications**

# Broadcast High Quality Audio Through Our Wireless Link

Our BlueDriver-F3 ("Headset" mode) and BlueDriver-M3 ("Phone" mode) can be paired together to create a mono 20 kHz, full audio bandwidth wireless link. Range is limited to 40 feet, but this may be just enough for your application. A2DP is a one-way transmission, with nothing coming back on the return channel.



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FAQ's

FAQ's

#### What is the range of the transmitter/receiver?

BlueDriver-F3 transmits and receives audio signals up to 33 feet from your Bluetooth wireless technology enabled device. Maximum range of the device paired to the BlueDriver also determines the usable distance. Many cell phones and headsets only have a maximum range of 10 feet.

## Why won't the BlueDriver-F3 pair with my phone?

If this is the first time you are trying to pair to this cell phone, you might be in *Idle Mode* instead of *Pairing Mode* and your BlueDriver-F3 is not being recognized. To reach Pairing Mode, hold the Connect button in for a full 5 seconds.

# Why won't BlueDriver connect to my device?

Ideally, the master device will search for the slave device. If the BlueDriver isn't pairing with your device, try turning the second device on first from your initial attempt to connect.

Why doesn't the BlueDriver-F3 change connections when I move the switch from Headset to Phone?

If you change this switch while the unit is on, you will need to power the unit off (see page 7), then power the unit back on before the change takes effect.

# How long does it take to recharge the battery?

BlueDriver-F3 can fully charge the internal battery in about 2 1/2 hours. These batteries do not have a "charging memory" and they can be recharged at any time without changing their life expectancy.

# How long will the charge on the battery last?

Based on tests with BlueDriver-F3 about 1 meter from a Bluetooth device, the battery should last for about 10 hours under normal use. As an indicator of low battery, the blue LED will grow dim and then extinguish a short while before the battery is completely exhausted and the unit shuts down.

#### How do I replace the battery in this unit?

This is not a user replaceable battery. Please contact JK Audio or a factory authorized service center for battery replacement.

## Will BlueDriver-F3 work with my condenser mic?

BlueDriver-F3 does not provide phantom power to condenser microphones.

BlueDriver-F3 Wireless Audio Interface

Input	
Connection	3 pin female XLR
Impedance	1000 ohms
Level	15mv RMS ( -34dBu ) nom
Output	
Connection	1/8" (3.5 mm) stereo
Impedance	1.1k ohms
Level	-34 dBu nom
Bluetooth	
Standard	Bluetooth 2.0
Distance	33 feet ( 10 meters )

Misc	
Profile	<b>HF</b> = full duplex voice 300Hz-3400Hz
	<b>A2DP</b> = 30Hz-17kHz End-to-End Latency = 150 ms
Power	120-240 VAC power supply (included)
Battery	Internal Lithium-Ion Polymer rechargeable
Dimensio	ns
Size	1.1" x 4.4" (2.8 cm x 11.2 cm)
Weight	2.1 Ounces (60 grams)

# **Battery Information**

BlueDriver contains a rechargeable Lithium-Ion battery. These batteries do not have a "charging memory" and can be recharged at any time without changing their life expectancy. All rechargeable batteries have a limited life and will gradually lose their capacity to hold a charge. This loss of capacity is irreversible. To get the most from your BlueDriver, the battery should not be allowed to fully discharge. If this unit is not in use, the battery should be recharged at least every 90 days. The Lithium-Ion battery in this device is not user replaceable. Please contact JK Audio or a factory authorized service center for battery replacement.

# FCC-B Part 15 Compliance

# FCC-B Part 15 Compliance

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual. may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. Changes or modifications not expressly approved by JK Audio can void the user's authority to operate the equipment.

## FCC Registration

Your new JK Audio product has been registered with the Federal Communications Commission (FCC). This product complies

with the standards in Part 68 of the FCC rules.

- 1. Connection And Use With The Nationwide Telephone Network
  The FCC requires that you connect this telephone equipment to the national telephone network through a USOC RJ-11C modular telephone jack. This equipment may not be used with Party Line Service or Coin Telephone Lines. This equipment is hearing aid compatible.
- 2. Information For The Telephone Company
  Upon request from your local telephone
  company, you are required to provide
  the following information: a) The "line"
  to which you will connect the telephone
  equipment (that is, your telephone number),
  and b) The telephone equipment's FCC
  registration number. This can be found on
  the bottom of your telephone equipment,
  and, c) The ringer equivalence number
  (REN) for this equipment. The REN is used
  to determine the quantity of devices which
  will be connected to the telephone line.
  Excessive RENs on the telephone line may
  result in the devices not ringing in response

## FCC Registration Cont'd

to an incoming call. In most, but not all areas, the sum of the RENs should not exceed 5.0. To be certain of the number of devices that may be connected to the line, as determined by the total RENs, contact the local telephone company.

3. Repair Instructions

If it is determined that your telephone equipment is malfunctioning, the FCC requires that it not be used and that it be unplugged from the modular outlet until the problem has been corrected. Repairs to this telephone equipment can only be made by the manufacturer or its authorized agents or by others who may be authorized by the FCC. For repair procedures, follow the instructions outlined under the warranty section of the manual.

4. Rights Of The Telephone Company If telephone equipment is causing harm to the network, the telephone company may temporarily discontinue your telephone service. If possible, they'll notify you before they interrupt service. If advanced notice isn't practical, you'll be notified as soon as possible. You'll be given the opportunity to correct the problem, and you'll be informed of your right to file a complaint with the FCC. Your telephone company may make changes in its facilities, equipment, operations or procedures that could affect the proper functioning of your JK Audio product. If such changes are planned, you'll be notified by your telephone company.

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### BlueDriver-F3™

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