# AirTurn

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BT-106 Transceiver Product Family Includes DIGIT, DUO, QUAD, StompKit, StompKit XL and TAP User Manual



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This manual is intended for firmware versions 40 and higher. The firmware number is the first two digits of the serial number.

#### THE BT-106 TRANSCEIVER

Thank you for your purchase of an AirTurn BT-106 wireless controller. We hope you enjoy the wonderful convenience of both hand-held and hands-free page turning, effects management, media players, camera control and other creative ways to trigger events with the BT-106 family of products. Send your suggestions and comments to <u>support@airturn.com</u>.

#### DESCRIPTION

The BT-106 family of multi-function wireless controllers will work with most Bluetooth-equipped computers. The "brains" of each device is the BT-106 Transceiver which functions the same way for all the controllers in this manual.

The BT-106 functions with select apps for Apple iOS<sup>™</sup> iPhones, iPads, and iPods, in addition to Bluetooth-equipped Android devices with apps that have been designed to be compatible with the BT-106. Bluetooth equipped PC's and MAC's also may use the BT-106 controllers in standard office apps and music reading software.

The BT-106 consists of a power switch, keypad, two 3.5mm stereo jacks for up to four switches, an LED indicator, and a micro-USB charging port for the internal rechargeable battery.

Using 3.5mm plugs, foot switches can be plugged into each of the two stereo jacks. Special splitter cables from AirTurn can add another port on each jack supporting up to 4 switches. The function of each switch is explained on page 9.



#### SETUP AND PAIRING

To use the BT-106 with your MAC, PC, Android or iPad, make sure the host computer you are using is in discovery mode. (Check the instructions that came with your computer or Bluetooth USB dongle. For iPad users, go into "Settings", then select "Bluetooth" and make sure it is turned on).



Turn on the BT-106 by pressing the power button for **1 second**. The LED will blink green then orange several times and attempt to pair with your computer.

If your host computer requests a code, use 0000. If you are presented a random code to validate the BT-106, accept it.

On the iPad, under the "Devices" heading within the Bluetooth settings, you should see the BT-106 appear, either as a keyboard, or as "AirTurn" with a serial number. Tap on top of Serial Number to connect and complete the pairing process. Once connected, it will blink green once every 2 seconds.

#### **RESET THE PAIRING**

A reset of the pairing is required if you switch to a new device or you upgrade the operating system. To reset the pairing on the BT-106, turn it on, wait 3 seconds, press and hold the power button for **8 seconds** until the LED blinks a rapid series of green and red, then release. If pairing is unsuccessful, delete the device displayed on the host computer and reset the BT-106 pairing again. Initial discovery may take up to 30 seconds (longer on some older PC and MAC computers). To delete the BT-106 from the iPad's Bluetooth Device listing, tap the "i" in the circle opposite the BT-106's serial number, then press the "Forget this Device" button and then the "Forget" confirmation button.

Note: Reset pairing for both devices each time you change to a new host device such as using the BT-106 with your

## desktop computer and then with your iPad. Also reset both the host and BT-106 if the pairing is dropped by the host.

#### TURNING OFF THE BT-106

Turn off the BT-106 by pressing the power button for 2-3 seconds until the LED turns red. Release and the LED will blink 3 more times while the unit shuts down. Turning power off on the host computer will automatically turn off the BT-106 after 3 minutes.

#### MODES

There are six modes that come ready to use on your BT-106. Modes are used to send different signals to the host computer, depending on the computer and the application being used.

MODE 1 **PC/MAC** Turns pages for most office document and PDF software on PC/MAC computers.

MODE 2**ProTools**Sample Mode for ProToolsMODE 3**Tablet**This is for most iOS and Androiddevices. It is the default mode of a new BT-106.

MODE 4 **Transcription** Signals used in some transcription software.

MODE 5 **Multi Media** For most media players. iOS cameras use the up arrow to trigger pictures and video.

MODE 6 Assisted Technology

The following table shows each Mode and respective switch function:

| MODE 1         | MODE 2       |
|----------------|--------------|
| 1) Page Up     | 1) 3         |
| 2) Left Arrow  | 2) P         |
| 3) Page Down   | 3);          |
| 4) Right Arrow | 4) Shift + R |
| 5) Enter       | 5) Space     |
| 6) b           | 6) Ctrl + Z  |

| MODE 3         | MODE 4                |
|----------------|-----------------------|
| 1) Up Arrow    | 1) F9                 |
| 2) Left Arrow  | 2) F4                 |
| 3) Down Arrow  | 3) F7                 |
| 4) Right Arrow | 4) $Ctrl + Shift + T$ |
| 5) Enter       | 5) F8                 |
| 6) b           | 6) F3                 |

| MODE 5              | MODE 6             |
|---------------------|--------------------|
| 1) Volume Up/Camera | 1) Space           |
| 2) Previous Song    | 2) 1               |
| 3) Volume Down      | 3) Enter           |
| 4) Next Song        | 4) 2               |
| 5) Play/Pause       | 5) Home (iPad)     |
| 6) Home (iPad)      | 6)Virtual Keyboard |

#### CHANGING THE MODE

- 1. Turn on the BT-106.
- 2. Press and hold the MODE button for 2 seconds. The



red LED will flash once per second from 1 to 6 flashes. The number of flashes corresponds to the same MODE number. Be sure to count the flashes.

3. Release the MODE button following the number of flashes that reflects the desired MODE. The orange LED will flash the number of times indicating which MODE has been set.

**Example:** To set MODE 2 hold the MODE button for 2 flashes of the red LED, release and the orange LED will flash 2 times to confirm the MODE 2 setting.

**Note:** Once the MODE has been set, it will remain the same until it is changed following the above steps.

#### **KEY REPEAT FUNCTION**

To turn on the Key Repeat function, hold down buttons 2 and 4 together. Once you have turned it on, holding down a pedal or button, (except button 6) in any MODE for more than two seconds will repeat the key action twice per second until released. Variances may occur in the repeat timing due to environmental factors.

#### IOS VIRTUAL KEYBOARD

Some applications require the use of the keyboard to enter text or to interact with the application. Since the BT-106 is an external keyboard, the iPad or other iOS device by default disables its own virtual keyboard.

To display the virtual keyboard, open any text box on the iPad, then tap in the text box to activate the cursor. Then, quickly press and release the power switch while the BT-106 is connected to the iPad. If you close the virtual keyboard from within the application, you can press the power switch again to reactivate it. This is a toggle switch so pressing it will toggle the virtual keyboard on and off. Note that iPhones may require toggling on the keyboard for each use.

#### CHARGING

Please charge your BT-106 1-2 hours using the micro-USB to USB charging cable and any USB wall power adapter, or 6 hours connected to your computer. Note some portable computers may not sufficiently charge the BT-106. Disabling the sleep setting on the computer may improve charging performance. Any micro USB charger may also be used.

Your BT-106 should last 100 hours or many days on a charge depending on how much you use it. On a full charge, the LED

will blink green. When the power is low, the LED will blink as follows:

Yellow every second = under 25% power

Red every second = under 9% power

If the BT-106 is turned off while charging, the LED indicator will not light up, but it will still charge. If you leave the BT-106 on while it is charging, the LED will remain lit and you can monitor the charging status. Red is a low charge, solid yellow is a 75% charge and orange/green is a full charge.

**Note:** If you fail to charge your battery when it begins blinking red, you risk running it down completely which may require a replacement battery. Charge the BT-106 at least once per month to maintain good battery health.

#### COMPATIBLE SWITCHES



Most normally open (NO) momentary switches will work well with the BT-106. Please visit: <u>http://airturn.com/footswitches</u> for a list of compatible switches. Some footswitches have a latch mode. Be sure that the latch mode is turned

off and/or the momentary mode is turned on. Port 3-4 is used to turn to the next page, and Port 1-2 is used to turn to the previous page.

For best results use the AirTurn ATFS-2 footswitch or the Boss FS-5U footswitch with AirTurn patch cables. Check the AirTurn store or your dealer for cable adapters for other brands of footswitches.

Two adapter cables are provided to work with most  $\frac{1}{4}$ " phone jack-equipped switches.

#### TONGUE AND BITE SWITCHES



Tongue and Bite Switches are also available from

AirTurn or your dealer for special uses. They

are used the same way as any other momentary switch.



See the specific instructions included with each switch.

#### TROUBLESHOOTING

#### BT-106 IS NOT CONNECTING OR PAIRING

1. Turn off the BT-106.

2. Delete the AirTurn device on your host computer. On an iOS device, go to the Bluetooth settings, (Settings>General> Bluetooth), and press the "I" in the circle next to the AirTurn

selection and then press the Forget this Device button, then OK.

3. Turn off Bluetooth on the host device.

4. Turn on the BT-106. Wait 3 seconds. Then hold the power button for 8 seconds until you see the LED light blink red/green rapidly several times.

5. Turn on Bluetooth on the host device.

6. The BT-106 should appear after 5-9 seconds depending on the host.

7. Touch or click the listing when it appears and it will connect after another few seconds.

#### BT-106 IS CONNECTED BUT NOT WORKING

1. Check the Mode. To change the mode to the default mode 3, hold down button 6 until the red led blinks 3 times and release.

2. Make sure you are using an app that supports the BT-106. (Check the AirTurn website. <u>http://airturn.com/apps</u>)

3. Check the application instructions to make sure you have the application set up for the AirTurn.

4. On an iOS device, be sure you are not running too many applications. See your iOS instructions for closing apps.

5. On an iOS device, try resetting the network. (Note: this procedure will cause you to lose network password settings and they will have to be re-entered.) Select General, Settings, Reset, Reset Networks. Recheck connection after the device restarts.

6. If the connection appears to drop, be sure all power saving settings are turned off on the host computer. For example, Autolock should be set to never on iOS devices.

Go to <u>www.airturn.com/support</u> for more information. Additional questions can be emailed to <u>support@airturn.com</u>

#### UNIT IDENTIFICATION

The unit name in your Bluetooth host consists of several codes to help with support and identifying your specific device. For example:

#### AirTurn106v140-220A

106 refers to the model number.

v140 refers to the firmware version.

220A refers to the MAC address.

This is helpful if there are many BT-106 units in the same location. Your MAC address will always be the same so you can easily identify your unit. You will find your specific MAC address labeled on the bottom of your BT-106.

#### DIGIT



The AirTurn DIGIT BT-106 is a combination Bluetooth transceiver that may be used in a variety of settings. It offers a keypad with six switches. The switches are also used to change the unit's mode and send different characters in each Mode. The DIGIT may also be used with up to four momentary footswitches, tongue or bite switches and

in a whole array of environments. (See BT-106 instructions for pairing, charging and other important information.)

The iOS camera and iTunes mode works on all iOS devices.

**Note**, if music is playing, the camera function is superseded by the music. The camera function will take pictures remotely and start/stop video.

When using Presentation 1 or 2 modes on a MAC or PC with PowerPoint, the tilde  $(\sim)$  button may be used to blank the screen.

The Assisted Tech mode, (Mode 4) is for use with applications designed for this protocol.

See the table on Page 9 for more details on functions for each button.

#### DUO



AirTurn's most popular product, the DUO comes with the BT-106 Transciever, two ATFS-2 silent footswitches and a charging cable. This option is ideal for many applications in which two foot

switches are needed. For example, it could be used to go forward or backwards in a page-turning application. Or trigger effects on an effects application.

The BT-106 Transceiver may be removed from the pedal board to use as a hand held remote for camera and video triggers, iTunes control and more.

The ATFS-2 footswitch uses a combination of rare earth metals to close the switch, making it silent



and highly reliable for a very long time. There are no mechanical parts to break.

Note: The foot switches correspond to buttons 1 and 3 on keypad. See the table on Page 9 for more details on functions for each button.

#### QUAD



The QUAD comes equipped with the BT-106 Transceiver, four ATFS-2 silent foot switches and a charging cable. Each footswitch is plugged into the ports of the BT-106 using a splitter cable and the pedals correspond to

the switches 1-4 on the BT-106 in order from left to right

The BT-106 or DIGIT is held in place with hook and loop fasteners so that it may be easily removed and used as a hand held controller or with other footswitch systems.

There are many apps that work with the four-pedal board, such as JamUp, OnSong, PrompterPal, and many more. Check out the app section of the website for more options:

http://airturn.com/4-pedal-apps

See the table on Page 9 for more details on functions for each button.

#### **STOMPKIT**



The StompKit comes with two BOSS FS-5U footswitches, special cables and a charging cable. For extra convenience in using the FS-5U, you can slide the two switches together.

For proper functioning of the FS5-U it is important to check the polarity switch. Make sure it is pushed to the right when operating with the BT-106.



The FS-5U switches are plugged

into ports 1-2 and 3-4 of the BT-106. Please note that you are facing the logo on the BT-106 as you place the left cable into the left side and right cable into the right side. See page 9 of the manual sections for the BT-106 for switch functions. The switches do the same tasks as pressing buttons 1 and 3 of the keypad.

#### **STOMPKIT XL**



The StompKit XL includes 2 BOSS FS-6 pedals, the BT-106 Transceiver, specially configured cables and a charging cable. Note that the FS-6 requires a separate 9V battery to function (included). The cable plugs into the center jack of the FS-6 and to the opposite port on the BT-106 so that

the cables are crossed. Be sure to set the switches on your FS-6 as shown:



Please note the position of each switch. The A pedal has the Mode and Polarity switches pointing away from each other and the B pedal has both switches pointing towards each other. You can slide the FS-6 switches together to make a 4-pedal configuration by aligning the channels on each unit and then sliding one inside the other's channel.

#### TAP



From tempos to page turning, the TAP is the drummer's best friend in accessory support. Your TAP may come as a kit with either AirTurn triggers or with Roland BT-1 triggers.

Important: Extreme vibration on stage requires isolation of the stand that the TAP is located on. Vibration and extreme sound can trigger the TAP.

The left trigger on the TAP is the same as button 1 and the right trigger is the same as button 3. See page 9 for more on switch functions. The BT-106 is removable for use as a handheld. However, only switches 1 and 3 are available to use as triggers with the jacks.



You can attach up to 2 Roland BT-1 to the TAP in lieu of the AirTurn triggers. Attach the BT-106 TAP to your stand using hook and loop fasteners.

#### **CUSTOM IMPLEMENTATION**

There are many environmental options that the BT-106 can be placed in, including external power, use with custom codes, embedding with special switching, use with Behringer pedal board and more.

You can integrate your BT-106 to the power system on your pedal board. 3-12V power supply can be soldered onto the BT-106 PCB directly. This requires some electrical skills.

Custom codes can be placed on any or all profiles to use your BT-106 for many different and unique environments. Codes can be up to 4 characters in length not including modifiers such and Command, Shift, Ctrl, etc. Just about anything you can type on a keyboard we can program for you. We can even adjust the repeat rates for you.

You may also wire in special switches to the board and other creative uses for the BT-106. Contact us for more information at: <a href="mailto:support@airturn.com">support@airturn.com</a>

Please see the support section of the website for additional details. <u>http://airturn.com/BT-106.</u>

#### WARRANTY

AirTurn, Inc., ("AirTurn"), warrants to the first consumer purchaser that the AirTurn BT-106 transceiver (the "Product"), when shipped in its original container, will be free from defective workmanship and materials, and agrees that it will, at its option, either repair the defect or replace the defective Product or part thereof with a new or remanufactured equivalent at no charge to the purchaser for parts or labor for one year from date of purchase.

This warranty does not apply to any appearance items of the Product nor to any Product the exterior of which has been damaged or defaced, which has been subjected to misuse, abnormal service or handling, or which has been altered or modified in design or construction, nor does it apply to cables or batteries that may be supplied.

In order to enforce the rights under this limited warranty, the purchaser should request a RMA number via email or phone following the directions on the support page at www.airturn.com/support. The purchaser shall return the product at their expense. The repaired or replaced product will be returned at the expense of AirTurn.

The limited warranty described herein is in addition to whatever implied warranties may be granted to purchasers by law. ALL IMPLIED WARRANTIES INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR USE ARE LIMITED TO ONE YEAR FROM THE DATE OF THE PURCHASE. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

The warranties described herein shall be the sole and exclusive warranties granted by AirTurn and shall be the sole and exclusive remedy available to the purchaser. Correction of defects, in the manner and for the period of time described herein, shall constitute complete fulfillment of all liabilities and

responsibilities of AirTurn to the purchaser with respect to the Product and shall constitute full satisfaction of all claims, whether based on contract, negligence, strict liability or otherwise. In no event shall AirTurn be liable, or in any way responsible, for any damages or defects in the Product which were caused by repairs or attempted repairs performed by anyone other than an authorized servicer, nor shall AirTurn be liable or in any way responsible for any incidental or consequential economic or property damage. Some states do not allow the exclusion of incidental or consequential damages, so the above exclusion may not apply to you.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY ALSO HAVE OTHER RIGHTS, WHICH VARY FROM STATE TO STATE.

#### **RADIO INFORMATION**

Bluetooth 2.1/2.0/1.2/1.1 certified (3.0 compliant)

Bluetooth v2.0+EDR support

Low power

Approximate Range:

After One Wall 60 feet, After Two Walls 55 feet After Three Walls 36 feet

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.

CAUTION: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

--Reorient or relocate the receiving antenna.

--Increase the separation between the equipment and receiver.

--Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

--Consult the dealer or an experienced radio/TV technician for help.

FCC ID:T9J-RN42

Part 15 Subpart B: 2008 Class B

CRF Title 47 Part 15 Subpart C

Unintentional frequency radiation report is available upon request.



#### **RECYCLING AND DISPOSAL**



Electronic components and construction comply with RoHS standards.



Packaging is recyclable. Please recycle.

Contains Lithium Polymer Battery. Battery should be disposed of according to local law.

#### WARNINGS

- Do not plug any device that generates an electric current into the BT-106 footswitch ports
- Do not get the BT-106 wet or place in direct sunlight for extended periods of time.
- Do not open the unit, as there are no user serviceable parts.
- Do not put in trash. Please recycle.

#### TRADEMARKS

iPhone, iPod, iOS, iPad, MAC are trademarks of Apple, Inc.

Android is a trademark of Google, Inc.

AirTurn, DUO, QUAD, StompKit, DIGIT, and respective logos are trademarks of AirTurn, Inc.

#### **OTHER GREAT AIRTURN PRODUCTS**



AirTurn provides all the accessories you need to support your tablet in many different configurations. From portable mic stands to universal tablet holders, check them out at your dealer or airturn.com.



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