BT500|S Manual

Support for:

AirTurn BT500|S-2

AirTurn BT500|S-4

AirTurn BT500|S-6

AirTurn QUAD 500

Revision 1.3

CONTENTS

Thank you for purchasing an AirTurn BT500|S SERIES Bluetooth controller. We hope you enjoy many years of use from it. From page-turning to effects management and presentation control, AirTurn provides a myriad of uses.

BEFORE TURNING ON YOUR AIRTURN

The BT500 series works with most Bluetooth 4/5 devices. This includes iPad 3 and later, iPhone 4S and later, and most devices running Android 4.3 or later with Bluetooth 4/5.

Most PCs and Macs equipped with Bluetooth 4.x and HID (keyboard) support are compatible. For older PCs you can use Bluetooth 4.1 and higher USB dongles. The dongle must support HID or MIDI if you plan to connect to MIDI. It is recommended to use a WIDI Master USB adapter for MIDI on a PC/MAC if only MIDI is needed.

A compatible app is required for Android and iOS. Apps are listed on the AirTurn website: https://AirTurn.com/apps For Windows and MacOS, most apps respond to keyboard or macro commands that can be programmed with the AirTurn Manager.

Your AirTurn controller is actually three devices in one box using three different protocols: AirDirect, HID (keyboard & mouse), and MIDI. Since each compatible app may have a different method of connection, you will need to know what MODE to put your AirTurn device in. See the MODES section

for additional information. The default setting is MODE 2 since the vast majority of apps can connect with this MODE, however MODE 1 (AirDirect) is preferable if the App supports it.

BT500S SERIES/QUAD 500 CONTROLS

The BT500S series and QUAD500 use the same controls for all four models, with 2, 4, or 6 footswitches, or four silent pedals. The Function controls are identical across all four models and consist of a Power button, two LED indicators, and a Mode button. These models also feature a power port, both for extended use and recharging the built-in lithium polymer battery.
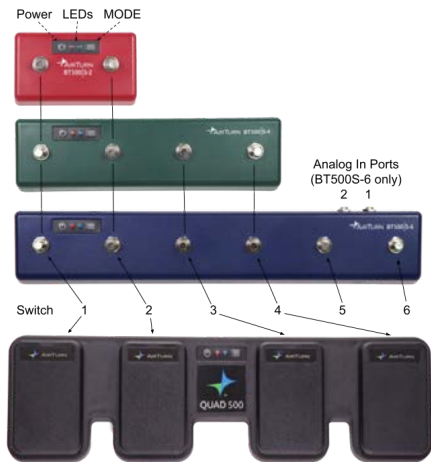
The switches or pedals of each model are in numerical order left to right, the function of each switch is explained on page 13.

POWER

ON - Press and hold the Power Button for one second until the LEDs flash.

The blue LED will blink about 2 times per second until pairing is started.

OFF - Press and hold the Power Button until the red and blue LEDs turn off.

CONNECTING AND PAIRING

There are several ways to pair to your AirTurn, depending on the use case.

- If the app you're using supports AirDirect, see the next section below.
- For the standard modes that can cycle through pages and other "keyboard and mouse" functions, skip to Pairing In Mode 2-6.
- If you're using a MIDI-enabled app, skip to Pairing in Mode 7.

Once the AirTurn is selected for pairing, the blue LED will blink about 5 times per second until pairing is completed.

Pairing in AirDirect MODE 1

Note: This MODE is for AirDirect specific apps only. (AirDirect MODE was created to prevent conflicts with the virtual keyboard). The Bluetooth connection is made with the app. See specific app directions.

1. Power on the AirTurn
2. Be sure the AirTurn is in MODE 1 (Hold down the MODE button for 1 blink of the red light)
3. Turn on your device's Bluetooth then go to the app you want to use and find the Bluetooth setup screen
4. Find the AirTurn in the device list and tap on it
5. If required, tap on the Pair button in the dialog box

Pairing in MODES 2-6 (Keyboard/Mouse)

iOS – Select Settings > Bluetooth and turn on Bluetooth if it is off. When the AirTurn is discovered, tap on the selection. A dialog box will then appear. Tap on Pair.

Android – Select Settings > Bluetooth, and turn it on if it is off. Make sure your device is set to discoverable, tap the SCAN button. When the AirTurn appears, tap to pair. If asked to verify a passcode, click OK.

PC – Select Control Panel > My Bluetooth Devices > Select "Add a device" > Choose the Keyboard/Mouse option >

Click next and complete pairing.

Mac – Select Apple > System Preferences > Bluetooth and turn on Bluetooth. When the AirTurn appears, click Connect.

PAIRING IN MODE 7 (MIDI)

With all devices, ensure Bluetooth is turned on and switch your AirTurn to Mode 7.

iOS –Go to the MIDI App you wish to use and find the Bluetooth MIDI connection settings. Select your AirTurn in the list. If requested, tap Pair.

Android –Select Settings > Bluetooth. Tap the SCAN button. When the AirTurn appears, tap to pair. If you are asked to verify the passcode, click on OK.

PC – Select Control Panel > My Bluetooth Devices > Select "Add a device" > Click next and complete pairing. (Middleware may be required unless you are using a Bluetooth USB Dongle such as the WIDI BUD or WIDI Master or other MIDI over Bluetooth Dongle.)

Mac – Select File > New Finder Window > Applications > Utilities > Audio MIDI Setup > Select "Bluetooth" > Next to the AirTurn click "Connect"

MIDI MODE

MIDI Mode is for sending basic MIDI commands to your app. Support for Bluetooth MIDI is required, and special setup for your tablet or computer may be required. MIDI commands may be set up using the AirTurn Manager. More detailed instructions available online (**AirTurn.com/support/midi)** or reach out to our support team at support@AirTurn.com for further assistance.

OPEN AND CLOSED PAIRING

AirTurn devices have the ability to pair to your tablet or computer two different ways. We call them Open and Closed pairing. Open pairing is the default method. Use Open pairing when you frequently use different devices with your AirTurn. Used Closed pairing when you are in a band and you always want to rely on pairing with the same device.

OPEN PAIRING

AirTurn devices pair in the same way that almost all Bluetooth devices pair. In Open Pairing you do not need to delete the pairing to connect to another device so you can easily pair your AirTurn to your iPad, smartphone or computer. In fact, you can pair up to 8 Bluetooth devices. (In AirDirect, MODE 1, you can pair to an unlimited number of devices).

Bear in mind you can only be connected to one device at a time. If two of your devices have Bluetooth turned on, you must turn off the Bluetooth of the one you do not wish to connect to while you connect to the other device. No pairing reset is required with Open Pairing.

If you connect to more than 8 devices, the next pairing will delete a pairing that you haven't used recently. If you delete or "forget" the pairing of the AirTurn on a device, restart the Bluetooth and attempt to re-pair with the AirTurn.

CLOSED PAIRING

This method locks one AirTurn to one tablet, phone or computer.

Use the closed pairing method if you only intend to be connected to one tablet, phone or computer.

Also, use this method if you are in an ensemble with other players using AirTurn devices. It will ensure that you don't inadvertently connect to each other's devices. Pairing is required in all MODES.

SWITCHING BETWEEN PAIRING METHODS

You can easily switch between Open and Closed pairing methods. With your AirTurn powered off, hold down the MODE button and hold the power button to turn on as usual. Both LEDs will flash to confirm – twice for open pairing, three times for closed pairing. You can also change the Pairing method using the AirTurn Manager App, in Advanced settings.

RESET PAIRING

To delete all pairings, or if you would like to connect to another device in Closed Pairing, or you are having connection problems, you can pair again by removing all the existing pairings.

First, delete the pairing from the host device and turn off the Bluetooth. Then, hold the power button on the AirTurn for 8 seconds. The LEDs will turn off, but continue holding until they blink 3 more times. You are now ready to pair again.

The BT500S-6 is also equipped with two 1/4" analog jacks, allowing the use of expression or CV pedals as analog inputs. These can be used to send MIDI, control a mouse cursor, or directly communicate with compatible apps. Most expression pedals will work without modification; other analog pedals or devices such as joysticks can be used when wired to a 1/4" plug according to the diagram below:
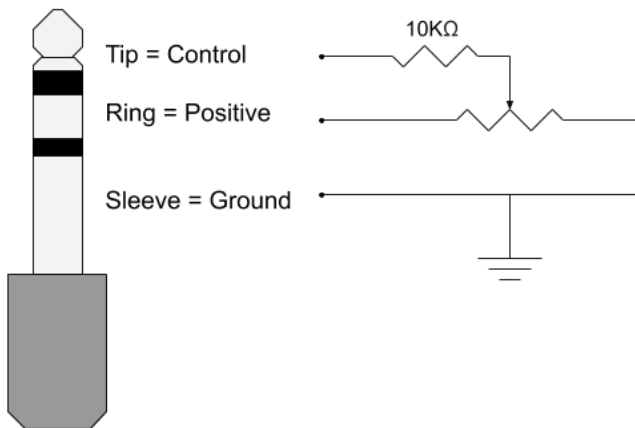
The following diagram shows how to create a cable to convert a volume pedal to an expression pedal.
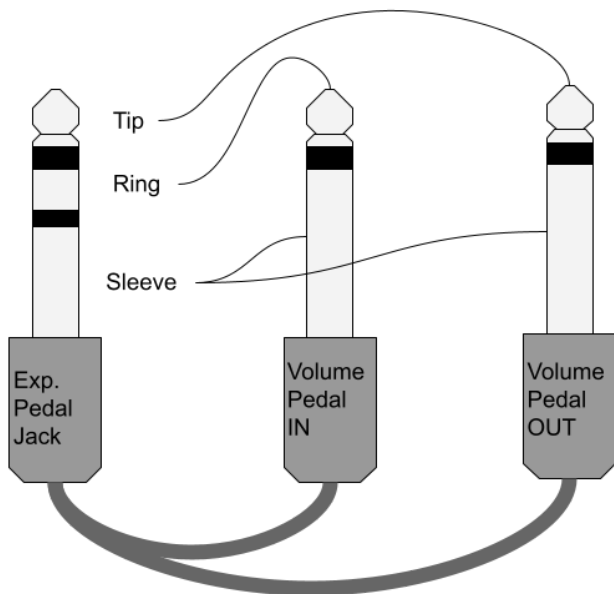
The analog ports must be calibrated and programmed via the AirTurn Manager app before use. Be sure to re-calibrate the input when changing analog devices.

Calibration for all analog functions takes place in the AirTurn Manager App. Connect a BT500S-6 and select Analog Calibration, choose a port, and follow the onscreen instructions. You will be instructed to move your expression pedal to its maximum, then back to its minimum. Once calibrated, the analog inputs must be programmed to send a signal (AirDirect, Mouse, or MIDI) in the Analog Configuration panel.

There are seven modes available on your AirTurn. Each mode sends a different signal for each pedal. The AirTurn is set to MODE 2 by default. You can also customize MODES 2-7 with the AirTurn Manager App. (See page 15 for instructions on mode changes)

	Switch 1	Switch 2	Switch 3	Switch 4	Switch 5	Switch 6
Mode 1	AirDirect	AirDirect	AirDirect	AirDirect	AirDirect	AirDirect
Mode 2	Up Arrow	Down Arrow	Left Arrow	Right Arrow	Return	Space
Mode 3	Page Up	Page Down	Left Arrow	Right Arrow	Space	Return
Mode 4	Play/ Pause	Next Track	Volume Down	Volume Up	Prev Track	Stop
Mode 5	Space	Enter	Home (iPad)	KB Toggle	Left Arrow	Right Arrow
Mode 6	F12	]	1	X	Z	Shift + Z
Mode 7	Damper	Sostenuto	Portamento	Soft Pedal	Legato	Hold 2

CHANGING THE MODE

1. Turn on the AirTurn.
2. Press and hold the MODE button. The red LED will flash once per second from 1 to 7 flashes. The number of flashes corresponds to the MODE number. Be sure to count the flashes.
3. Release the MODE button following the number of flashes that reflects the desired MODE. The blue and red LED will flash together 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 both LEDs 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.

VIRTUAL KEYBOARD CONTROL IN iOS

If you are connected to your iPhone or iPad in MODES 2-6, the AirTurn acts as a keyboard and disables the virtual (on-screen) keyboard. To turn on the virtual (on-screen) keyboard in iOS, put the cursor into a text box and press the Power Button. The Bluetooth LED will turn on to signify that the button was pressed. This feature will only work in MODES 2-6 – in other MODES, the AirTurn does not act as a keyboard, so the virtual keyboard will work as normal.

POWER CONSUMPTION

The AirTurn uses an idle timeout function to conserve power. After two hours of inactivity when powered on and connected, the AirTurn will power down automatically. The timer is reset when any button is pressed. You can change this time out period or turn it off completely using the AirTurn Manager app.

RECHARGING THE BATTERY AND BATTERY SAFETY

To charge the battery, insert the charging cable into the port and plug the other end into any dedicated USB source. For BT500S SERIES/QUAD 500 models you can also use a center negative power supply that is 9V. Charging from a laptop or a computer is not recommended. A charge will last for about 200 hours.

The BT500 series includes several battery safety features to help maintain battery life and health. The battery will stop providing power if it is too low, and stop charging when full. Charging is disabled when the unit is above 45˚C, or below 0˚C (113˚f and 32˚f). Charging resumes when the unit is back within operating range.

LED Indications

LED indication	State
3 red flashes when attempting to power on	Battery is too low to operate
Red flash every 3 seconds	Battery is low
Red flash once a second	Charging
Solid red	Fully charged
Blue flashing rapidly (twice a second)	Ready to connect
Blue flashing very rapidly (5 times a second)	Connecting
Blue flash every 3 seconds	Connected
Solid blue	Pedal or power button pressed
Rapid red flash	Temperature too high/low

AirTurn Manager

To change the configuration of your AirTurn and update its firmware to the latest available, download the AirTurn Manager App from the Apple App Store or Google Play Store. It is available for iPad, iPhone, most Android devices, and Mac computers.

The App allows you to configure the key repeat rate, power-saving settings, select the pairing method, and configure the signals for each of the pedals in each mode. In addition, the analog inputs on the BT500|S-6 may be configured and calibrated.

If any firmware updates are available, you will be notified after the App has connected. After performing the update, the AirTurn device will install it and shut down. Remove the pairing from

your iOS/Android/PC/Mac device, power on the AirTurn, and reconnect. It is recommended to check for updates quarterly.

UNIT IDENTIFICATION

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

<div align="center">

BT500S-6 **v3.0.0 ABCD**

</div>

V3.0.0 refers to the firmware number.

ABCD refers to the MAC address.

This is helpful if there are many AirTurn units in the same location. Your MAC address will always be the same so you can easily identify your device when you are pairing. You will find your specific MAC address labeled on the bottom of your AirTurn at the end of the serial number.

RESET TO FACTORY DEFAULTS

To reset the AirTurn to factory defaults, hold the first two switches while powering on the device. Both LEDs will flash 3 times and then the AirTurn will power off.

There is also a reset option through the AirTurn Manager.

CARE OF YOUR AIRTURN

Wipe down using a damp cloth with a mild detergent or soap-based cleaner to remove dirt and stains from your AirTurn.

- Do not get the AirTurn wet or place it in direct sunlight for extended periods of time or leave in a hot vehicle.
- Do not put in trash. Please recycle.

WARRANTY

AirTurn, Inc., ("AirTurn"), warrants to the first consumer purchaser that the AirTurn BT500S SERIES, (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. You may register your device to extend the warranty for another year. **warranty.airturn.com**

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 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* 5.0 low energy radio
- Transmit power: -1 dBm peak
- TX peak current: 18.2 mA
- Frequency 2.36GHz to 2.50GHz

Approximate Range: 200 feet (61 Meters) subject to orientation and other factors.

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.
Contains FCC ID: 2AA9B04
Contains transmitter module IC: 12208A-04
This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.
KCC (Korea) BMD-300 has type certification in Korea with certification number R-CRM-Rgd-BMD-300
Contains ANATEL approved module # 00820-21-05903
Este equipo contiene el módulo con IFT #: NYCE/CT/0146/17/TS
AirTurn also holds unintended emissions testing on file for FCC/CE

CE FC TELEC KC Bluetooth

R 210-106799

RECYCLING AND DISPOSAL

RoHS COMPLIANT

Electronic components and construction comply with RoHS and REACH standards.

Packaging is recyclable. Please recycle.

Contains Lithium Ion Battery. Battery should be disposed of according to local law. AirTurn will recycle returned batteries and electronics. Please request an RMA from the support desk: support@AirTurn.com

BATTERY INFORMATION

Contains Lithium-Polymer Battery. Charging with a standard 5V USB charger with the provided adaptor cable is recommended. You may use a 5-9V DC power supply with center negative configuration. Charging from a laptop or a computer with a sleep setting is not recommended.

A charge will last for about 200 hours, Generally a battery should last 2-5 years. It can be user replaced with the same model battery by opening the case, unplugging and plugging in the new battery.

Operating temperature of your AirTurn device should be between -20C and +55C. Charging temperature should be between 0C and +45C, The temperature sensor inside the case will stop the charging if temperatures go outside that range.

BATTERY DISPOSAL

— Do not put lithium ion batteries in the trash.

— Recycling is always the best option.

— The battery should be disposed of according to local law. AirTurn will recycle returned batteries and electronics. Please request an RMA from the support desk: support@AirTurn.com

TRADEMARKS

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