

Upgrade to the industry's most advanced Motor Program: **AMP™ Motorization** features 2-way technology with superior value and innovation paired with a smart, seemless user interface.



**RF 2W** 15 Channel TDBU Remote Control

Programming Guide

- Specially designed for patented AMP TDBU honeycomb shades
- Up to 15 channels with 3V (CR2450) battery, magnetic holder included
- Channel 0 controls all shades assigned to remote; ability to hide extra channels
- Favorite position activated by quick touch of a button
- Locking feature prevent unwanted configuration changes



# AMP™ Motorization Table of Contents

Declarations	3
Safety Instructions	4
AMP™ TDBU Remote Overview	5
AMP™ TDBU Remote Function	6
P1 Button Instructions	7
Initial Set-up	8
Adjust Limits	9
Favorite Position	10
Add or Remove Additional Remote	11
Adjust Motor Speed	12
Roller or Sheer Mode	13
Quick Index	14
Troubleshooting	14



Please scan QR code to watch videos for product programming



# **Declarations**

#### **U.S. Radio Frequency FCC Compliance**

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.

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.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

## **ISED RSS Warning:**

This device complies with Innovation, Science and Economic Development Canada licence-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. Le présent appareil est conforme aux CNR d'ISED applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.



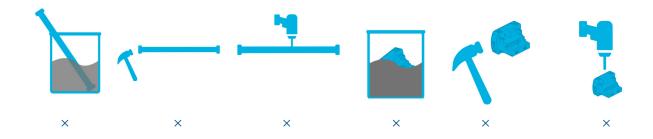
# **Safety Instructions**

#### **Attention**

Never drop, knock, drill or submerge the motor and RF receiver.

Read all safety instructions before installation.

Incorrect installation can lead to serious injury and will void manufacturer's liability and warranty.



# **Important Safety Instructions**

- 1. Do not expose motor to humid, damp, or extreme temperature conditions.
- 2. Do not drill into motor.
- 3. Do not cut the antenna. Keep it clear from metal objects.
- 4. Do not allow children to play with this device.
- 5. If the power cable or connector is damaged, do not use.
- 6. Ensure the correct crown and drive adaptor are used.
- 7. Ensure the power cable and aerial is clear and protected from moving parts.
- 8. Cable routed through walls should be properly isolated.
- 9. Motor is to be mounted in horizontal position only.
- 10. Before installation, remove unnecessary cords and disable equipment not needed for powered operation.
- 11. Installation and programming should be performed by a qualified professional. Use or modification outside the scope of these instructions may void warranty.



Do not dispose of in general waste.

Please recycle batteries and damaged electrical products appropriately.

# **AMP<sup>™</sup> TDBU Remote Overview**

# 1. Fields of Application





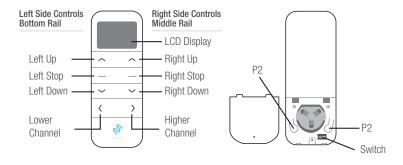
Cellular/Honeycomb TDBU

Cellular/Honeycomb Day/Night

# 2. Specification

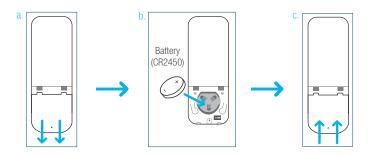
Voltage	3V (CR2450)
Radio Frequency	433.92 MHz Bi-directional
Transmitting Power	10 milliwatt
Operating Temperature	14°F to 122°F (-10°C to 50°C)
RF Modulation	FSK
Lock Function	Yes
IP Rating	IP20
Transmission Distance	up to 200m (outdoor)

# 3. Remote Button Instructions



# 4. Replace/Install CR2450 Battery

- a. Unscrew with the screwdriver then gently press down the cover.
- b. Install battery (CR2450) with positive (+) side facing up.
- c. Gently assemble the cover back and replace screw with screwdriver.





# **AMP™ TDBU Remote Function**

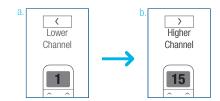
# 1. Channel Options

#### Select A Channel

- a. Press "<" button on the remote to select a lower channel.
- b. Press ">" button on the remote to select a higher channel.

Action on Remote Control

Remote Response



Higher

Channel

<

Lower

Channel

or

11

Higher

Channel

#### **Hide Unused Channels**

- a. Press and Hold (about 3 sec) "<" and ">" buttons simultaneously until remote control displays "C" (channel).
- b. Press "<" or ">" button to select required quantity of channel (between 1 to 15).
- c. Press "Stop" button to confirm selection (the example shows a 5-channel selection). The LCD will display "<sub>0</sub>" (OK) once to confirm selection.

Action on Remote Control

Remote Response

Action on Remote Control

Remote Response

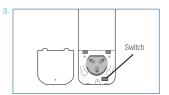


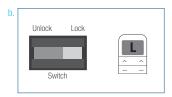
<

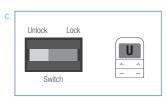
Lower Channel

# 2. Advanced Setting - Disable Limit Setting

- **a.** Remove the cover from the backside of remote, the lock switch is in the right corner.
- b. Move the switch to the "Lock" position to disable the following commands, remote will show "L" (lock):
  - Change Motor Direction
  - Setting the Upper and Lower Limit
  - Adjust Limit
  - Roller Mode or Sheer Mode
- c. Move the switch to "Unlock" position to assess all remote functions, remote will show "U" (unlock).
- \*This advanced feature is intended to be used after all shade programming is completed. User Mode will prevent accidental or unintended changing of limits.



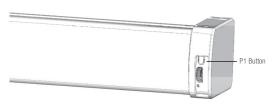






# **P1 Button Instructions**

# 2. P1 Button Location



AMP TDBU honeycomb shades

#### 2. P1 Button Instruction

# 1 Test Motor

Happening as you press for 1 second



# Activate Pairing Mode

Happening as you press for 2 seconds



# Sleep Mode

Happening as you press for 6 seconds



# (4) Reverse Motor 1 with Motor 2

Happening as you press for 10 seconds



# (5) Reset To Factory Settings

Happening as you press for 14 seconds



# **Initial Set-up**

#### 1. Pair / Unpair Remote Control

- a. Press **"P1" button** (about 2 sec) on the End Cap as shown until motor jog x1.
- b. In the next 10 secs, press and hold **Left "Stop"** button on the remote control until motor jog x2.
- \* Repeat the same procedure to unpair remote control.

# \* All setup needs to be done using LEFT SIDE of the remote.

Action on a. Endcap

Motor Response

Action on

Remote Control

Motor Response



Jog x1

## 2. Change Motor Direction (if necessary)

Press Left "Up" or Left "Down" button to check if the shade moves in the desired direction.

If you need to reverse the direction, press and hold (about 2 sec) **Left "Up"** and **Left "Down"** buttons simultaneously until motor jog x1.

\*The operation is only valid when there are no limits.

Action on Remote Control

Motor Response



# 3. Setting the Upper and Lower Limits

#### **Set Upper Limit**

- a. Press Right "Up" button to raise the Middle Rail, then press Right "Stop" button when it is in the desired upper limit.
- b. Press Left "Up" button to raise the Bottom Rail, then press Left "Stop" button when it is in the desired upper limit.
- c. Press and hold (about 2 sec) **Left "Up"** and **Left "Stop"** buttons simultaneously until motor jog x2.

Action on Remote Control

Middle Rail Response



Action on Remote Control

Bottom Rail Response



Action on Remote Control

Motor Response

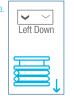


#### **Set Lower Limit**

- a. Press Left "Down" button to lower the Bottom Rail, then press Left "Stop" button when it is in the desired lower limit.
- b. Press Right "Down" button to lower the Middle Rail, then press Right "Stop" button when it is in the desired lower limit.
- c. Press and hold (about 2 sec) **Left "Down"** and **Left "Stop"** buttons simultaneously until motor jog x2.

Action on Remote Control

Bottom Rail Response



Action on Remote Control

Middle Rail Response



Action on Remote Control

Motor Response



Factory Mode Complete
User Mode Begins



# **Adjust Limits**

# 1. Adjust the Upper Limit

- a. Press and hold (about 5 sec) Left "Up" and Left "Stop" buttons simultaneously until motor jog x1.
- b. Use Right "Up" button to raise the Middle Rail, then press Right "Stop" button when it is in the new desired upper limit.
- c. Press Left "Up" button to raise the Bottom Rail, then press Left "Stop" button when it is in the new desired upper limit.
- d. Press and hold (about 2 sec) Left "Up" and Left "Stop" buttons simultaneously until motor jog x2.

Action on Remote Control

Motor Response



Action on

Middle Rail

Response

Remote Control

Right Up **Bottom Rail** 

Action on Remote Control

Response



Action on Remote Control

Motor Response



# 2. Adjust the Lower Limit

- a. Press and hold (about 5 sec) Left "Down" and Left "Stop" buttons simultaneously until motor jog x1.
- b. Use Left "Down" button to lower the Bottom Rail, then press Left"Stop" button when it is in the new desired lower limit.
- c. Press Right "Down" button to lower the Middle Rail, then press Right "Stop" button when it is in the new desired lower limit.
- d. Press and hold (about 2 sec) Left "Down" and Left "Stop" buttons simultaneously until motor jog x2.

Action on Remote Control

Motor Response

Action on Remote Control

**Bottom Rail** Response

Left Down

Left Down

Action on Remote Control

Left Stop

Jog x1

Middle Rail Response



Action on Remote Control

Motor Response





<sup>\*</sup>If you exit the limit setting status before you finish the limi settings, the motor will take the previous existing limits.

# **Favorite Position**

#### 1. Set Favorite Position

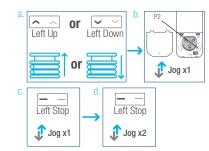
- a. Use **Left "Up" or Left "Down"** button to move the shade to desired Favorite position.
- b. Press **Right "P2"** button on the back of remote control until motor jog x1.
- c. Press and hold (about 2 sec) **Left "Stop"** button until motor jog x1.
- d. Once more, press and hold (about 2 sec) **Left "Stop"** button until motor jog x2.

Action on Remote Control

Motor Response

Action on Remote Control

Motor Response

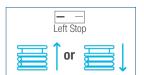


# 2. Send Shade to Favorite Position

Press and hold (about 2 sec) **Left "Stop"** button, motor will move to Favorite position.

Action on Remote Control

Shade Response



### 3. Delete Favorite Position

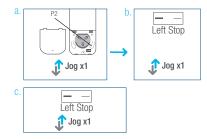
- a. Press Right "P2" button until motor jog x1.
- b. Press and hold (about 2 sec) Left "Stop" button until motor jog x1.
- c. Once more, press and hold (about 2 sec) **Left "Stop"** button until motor jog x1.

Action on Remote Control

Motor Response

Action on Remote Control

Motor Response



# **Add or Remove Additional Remote**

# 1. Using Current Remote Control

- a. On the current remote control, press Right "P2" button until motor jog x1.
- b. Once more, on the **current** remote control, press Right "P2" button until motor jog x1.
- c. On the New remote control, press Right "P2" button until motor jog x2.

\*Repeat the same procedure to remove additional remote control.

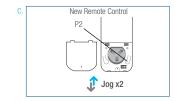
Action on Remote Control

Motor Response

Action on Remote Control

Motor Response





# 2. New Remote Control

Follow instructions under the section 1.

Pair / Unpair Remote Control

# **Adjust Motor Speed**

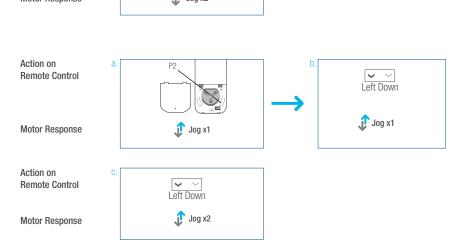
# 1. Acceleration Speed

- a. Press Right "P2" button until motor jog x1.
- b. Press **Left "Up"** button until motor jog x1.
- c. Once more, press Left "Up" button until motor jog x2.

Action on Left Up Remote Control Jog x1 Motor Response Jog x1 Action on Left Up Remote Control Jog x2 Motor Response

# 2. Deceleration Speed

- a. Press Right "P2" button until motor jog x1.
- b. Press Left "Down" button until motor jog x1.
- c. Once more, press Left "Down" button until motor jog x2.
- \*If the motor has no response, it already has a Maximum or Minimum speed.





# **Roller or Sheer Mode**

# 1. Roller Shade Mode - continue movement after a short press - Default Mode

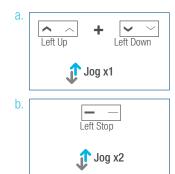
- a. Press and hold (about 5 sec) Left "Up" and Left "Down" buttons simultaneously until motor jog x1.
- b. Press and hold (about 2 sec) Left "Stop" button until motor jog x2.

Action on Remote Control

Motor Response

Action on Remote Control

Motor Response



# 2. Sheer Shade Mode - jog movement after a short press (continue movement after a long press)

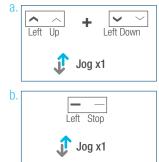
- a. Press and hold (about 5 sec) Left "Up" and "Left Down" buttons simultaneously until motor jog x1.
- b. Press and hold (about 2 sec) Left "Stop" button until motor jog x1.

Action on Remote Control

Motor Response

Action on Remote Control

Motor Response





# **Quick Index**

	Settings	Steps
1	Pairing	P1 (hold down for 2s) > Left Stop (hold down for 2s)
2	Switch Rotating Direction	Left Up + Left Down (hold down for 2s)
3	Setting Upper & Lower Limits	Upper Limit: Up (hold down for 2s) > Left Up + Left Stop (hold down for 2s)  Lower Limit: Down (hold down for 2s) > Left Down + Left Stop (hold down for 2s)
4	Add / Remove Favorite Position	P2 > Left Stop > Left Stop
5	Roller Mode & Sheer Mode Switch	Left Up + Left Down (hold down for 5s) > Stop
6	Adjust Limits	$ \label{lower}  \mbox{Upper Limit: Left Up + Left Stop (hold down for 5s) > Up or Down > Left Up + Left Stop (hold down for 2s) }  \mbox{Lower Limit: Left Down + Left Stop (hold down for 5s) > Up or Down > Left Down + Left Stop (hold down for 2s) }   $
7	Pair / Unpair Additional Emitter	P2 (existing) > P2 (existing) > P2 (new)
8	Speed Regulation	Acceleration: P2 > Left Up > Left Up Deceleration: P2 > Left Down > Left Down

# **Troubleshooting**

	External battery pack is depleted	Recharge with compatible AC adaptor and check connection and positioning of solar PV panel
The motor has no response	Insufficient charging from Solar PV Panel	Check connection and orientation of solar PV panel
	Remote control battery is discharged	Replace battery
	Battery is inserted incorrectly into remote control	Check battery polarity
	Radio interference / shielding	Ensure remote control and the antenna on the motor are positioned away from metal objects
	Receiver distance is too far from Remote Control	Move remote control to a closer position
	Power failure	Check power supply to motor is connected and active
	Incorrect wiring	Check that wiring is connected correctly (refer to motor installation instructions)
Cannot program a single motor (multiple motors respond)	Multiple motors are paired to the same channel.	Always reserve an individual channel for programming functions
		SYSTEM BEST PRACTICE - Provide an extra 15 channel remote in your multi-motor projects that provides individual control for each motor for programming purposes
		Place all other motors into sleep mode (ref to P1 button instructions)

# **Turnils Contact Information**

Turnils North America

1750 Satellite Blvd, Suite 100 Buford, GA 30518 1.800.252.2512 Amp@Turnils.com

Turnils Canada

2908 Portland Drive Oakville, Ontario L6H 5W8 1.800.268.4540 Amp@Turnils.com

