

# Wand Motor - Operation & Programming

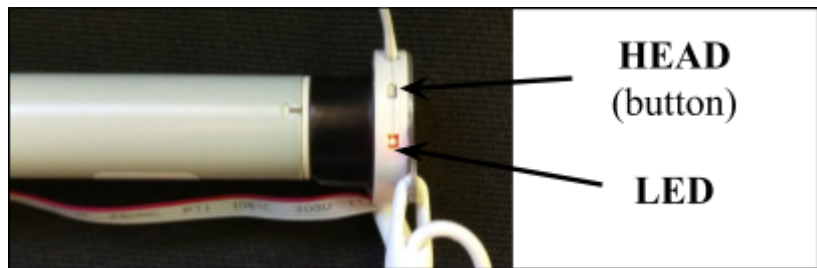
Version 1.0

All TM-WB Models

## 1. REFERENCE



Types of Button Presses	
Click	Press and release
Hold	Press and hold for specified time
Double-Click	Two clicks in less than $\frac{3}{4}$ of a second



## 2. BASIC OPERATIONS

Command	Description	Key Combination
Step-Up	Move the motor <i>up</i> a small amount.	Click UP
Step-Down	Move the motor <i>down</i> a small amount.	Click DOWN
Go-Up	Move all the way to the <i>upper</i> limit. <sup>1</sup>	Hold UP for 1 second
Go-Down	Move all the way to the <i>lower</i> limit. <sup>1</sup>	Hold DOWN for 1 second
Stop	Stop ongoing motion.	Click UP <i>or</i> Click DOWN
Go-To-Favorite-1	Move the motor to <i>favourite position 1</i> . <sup>2</sup>	Double-Click UP
Go-To-Favorite-2	Move the motor to <i>favourite position 2</i> . <sup>2</sup>	Double-Click DOWN

1- The motor will stop on button release if the limit is not yet set.

2- The motor will take no action if the favourite position is not yet set.

### 3. ADVANCED OPERATIONS

Command	Description	Key Combination
Enter-Settings-Mode	Put the motor into Settings Mode. (The motor will jog, and LED will turn ON.)	Hold SET for 5 seconds <sup>3</sup> or Hold HEAD for 3 seconds <sup>3</sup>
Leave-Settings-Mode	Return the motor to Normal Mode. (This will happen automatically if no action is taken for 30 seconds. LED will turn OFF.)	<i>Enter-Settings-Mode</i> , then Click SET
Adjust-Upper-Limit	Start the process of setting the motor's <i>upper</i> rotational limit. (See <i>Limit Setting Process</i> below)	<i>Enter-Settings-Mode</i> , then Click UP
Adjust-Lower-Limit	Start the process of setting the motor's <i>lower</i> rotational limit. (See <i>Limit Setting Process</i> below)	<i>Enter-Settings-Mode</i> , then Click DOWN
Save-Limit	End the limit setting process, and save the limit at the current position. (See <i>Limit Setting Process</i> below)	<i>Adjust-Upper-Limit</i> or <i>Adjust-Lower-Limit</i> , then Click SET <sup>3</sup>
Reverse-Rotation	Reverse the direction of rotation. i.e. switch up and down.	<i>Enter-Settings-Mode</i> , then Hold SET for 5 seconds <sup>3</sup>
Set-Favourite-1	Set <i>favourite position 1</i> at this position. (See <i>Setting Favourite Positions</i> below)	Double-Click SET, then Double-Click UP <sup>3, 4</sup>
Set-Favourite-2	Set <i>favourite position 2</i> at this position. (See <i>Setting Favourite Positions</i> below)	Double-Click SET, then Double-Click DOWN <sup>3, 4</sup>

3- The motor will jog back-and-forth after this command.

4- This entire key sequence must be completed within 10 seconds.

#### Limit Setting Process

The motor's upper and lower rotational limits are set individually. To set a limit:

1. Hold SET for 5 seconds (*Enter-Settings-Mode*).
2. Choose the limit to set. Click UP (*Adjust-Upper-Limit*) to adjust the upper limit, or Click DOWN (*Adjust-Lower-Limit*) to adjust the lower limit.
3. Adjust the motor to the desired limit position using the UP and DOWN buttons.
4. Click SET to save the limit at this new position (*Save-Limit*). The motor will jog back-and-forth to confirm the that the new limit has been saved.

#### Setting Favourite Positions

Once the upper and lower limits are set, the motor can store two favourite (intermediate) positions. To set one of these positions:

1. Move to the position you want to store as a favourite position using UP and DOWN.
2. Use *Set-Favourite-1* or *Set-Favourite-2* to save. The motor will jog back-and-forth to confirm.

You can also clear a favourite position by setting it at the same place again. For example, to delete favourite position 1:

1. Move to that stored favourite position using *GoTo-Favourite-1*.
2. Call *Set-Favourite-1* to delete. The motor will jog back-and-forth to confirm.

Note you cannot set favourite positions until after the upper and lower limits are both set.