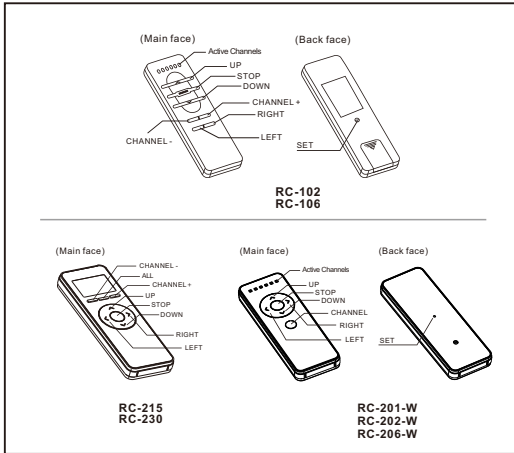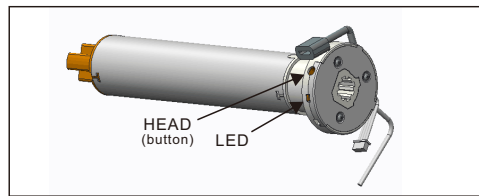# RF Motor - Operation & Progamming

All TM-RB, TM-RE, & TM-RT 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 ¾ of a second

Unless noted, all commands are sent from a remote control to a motor, and will only have effect if the remote control's active channel has been paired with the target motor. (See *Pairing Process* below)

2. BASIC OPERATIONS

Command	Description	Key Combination
Go-Up	Move all the way to the *upper* limit.[1]	Click UP
Go-Down	Move all the way to the *lower* limit.[1]	Click DOWN
Stop	Stop ongoing motion.	Click STOP
Step-Up	Move the motor *up* a small amount.	Click LEFT
Step-Down	Move the motor *down* a small amount.	Click RIGHT
Go-To-Favorite-1	Move the motor to *favourite position 1*.	Hold LEFT for 2 seconds
Go-To-Favorite-2	Move the motor to *favourite position 2*.	Hold RIGHT for 2 seconds
Next-Channel[2]	Cycle to the next channel (or group of channels) on the remote, making it active.	Click CHANNEL

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

2- This command is not sent to the motor, and affects only the remote control on which it is executed.

3. ADVANCED OPERATIONS

For each of the below commands, the motor will jog back-and-forth at the end of the key combination to indicate that the command has been received.

Command	Description	Key Combination
Enter-Settings-Mode	Put the motor into Settings Mode. The LED will turn on. (If no further action is taken, the motor will leave Settings Mode after 30 seconds.)	Hold SET for 3 seconds *or* Hold HEAD for 3 seconds
Pair-Channel[3]	Pair the remote's active channel with a motor. (See *Pairing Process* below)	*Enter-Settings-Mode, then Click SET*
Delete-Channels	Delete all paired channels from a motor's memory. (This does *not* delete the rotational limits or favourite positions.)	*Enter-Settings-Mode, then Hold HEAD for 7 seconds.*
Adjust-Upper-Limit	Start the process of setting the motor's *upper* rotational limit. LED will turn on. (See *Limit Setting Process* below)	Hold UP *and* SET *simultaneously* for 3 seconds
Adjust-Lower-Limit	Start the process of setting the motor's *lower* rotational limit. LED will turn on. (See *Limit Setting Process* below)	Hold DOWN *and* SET *simultaneously* for 3 seconds
Save-Limit	End the limit setting process, and save the limit at the current position. (See *Limit Setting Process* below)	*Adjust-Upper-Limit or Adjust-Lower-Limit, then* Click SET
Delete-Limits	Delete *all* rotational limits and favorite positions.	Hold STOP *and* SET *simultaneously* for 3 seconds
Reverse-Rotation	Reverse the direction of rotation. i.e. switch up and down.	*Enter-Settings-Mode, then Click CHANNEL - and STOP simultaneously or CHANNEL and STOP simultaneously*
Set-Favourite-1	Set *favourite position 1* at this position. (See *Setting Favourite Positions* below)	Click LEFT *and* SET *simultaneously*
Set-Favourite-2	Set *favourite position 2* at this position. (See *Setting Favourite Positions* below)	Click RIGHT *and* SET *simultaneously*

3- This command does not require the remote control's active channel to have been previously paired with the motor, thus allowing new remotes/channels to be paired with the motor.

Pairing Process

In order for a remote control to execute commands on a motor, its active channel must be paired with that motor. To pair a channel:

1. Put the motor into Settings Mode by either holding the HEAD button for 3 seconds, or holding the SET button on a previously paired remote/channel for 3 seconds (*Enter-Setting-Mode*). The motor will jog back-and-forth, and its LED will turn on.
2. Make the channel you wish to pair active on the new remote control by clicking the CHANNEL button (*Next-Channel*) until you have cycled to the desired channel.
3. Save the channel to the motor's memory by clicking the SET button on the new remote control (*Pair-Channel*), the motor will jog back-and-forth again to confirm.

Note that channel pairings are unique to the remote control. For example if your motor has been paired with Remote Control A on channel 1, it will not work with Remote Control B on channel 1 unless also paired. Note a motor can pair with up to 16 remote control / channel combinations.

Also note that you can pair a motor on more than one channel within the same remote control. This allows you to create custom grouping. For e.g. you could pair Motor A on channels 1 and 4, Motor B on channels 2 and 4, and Motor C on channel 3. Then channel 4 would serve to operate Motors A and B together simultaneously.

Limit Setting Process

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

1. Choose the limit to set, by either holding the UP and SET buttons for 3 seconds (*Adjust-Upper-Limit*), or holding the DOWN and SET buttons for 3 seconds (*Adjust-Lower-Limit*). In either case, the motor will jog back-and-forth and its LED will turn on to indicate the process has started.
2. Adjust the motor to the desired limit position using the UP and DOWN buttons.
3. Click SET *(Save-Limit)* to save the limit at this new position. The motor will jog back-and-forth to confirm the that the new limit position 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 Basic Operations.
2. Hold SET and LEFT for 3 seconds (*Set-Favourite-1*) or hold SET and RIGHT for 3 seconds (*Set-Favorite-2*) to save the current position as a favourite. The motor will jog back-and-forth to confirm.

You can move the motor to its favourite positions by holding LEFT *(Go-To-Favourite-1)* or RIGHT (*Go-To-Favourite-2*). The motor will jog, keep holding the button, then it will go to the favourite position.

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