



**DIGITECH**  
Audio Visual

# DiSEqC™ Satellite Dish Motor

**With Metal Gear**



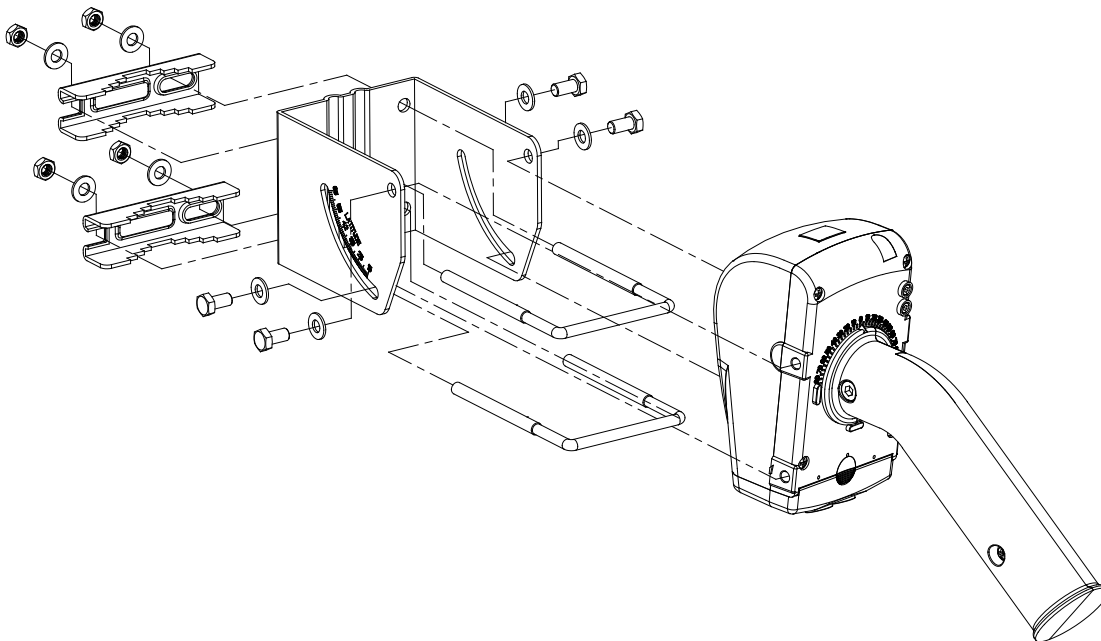
**User Manual**

## Specifications:

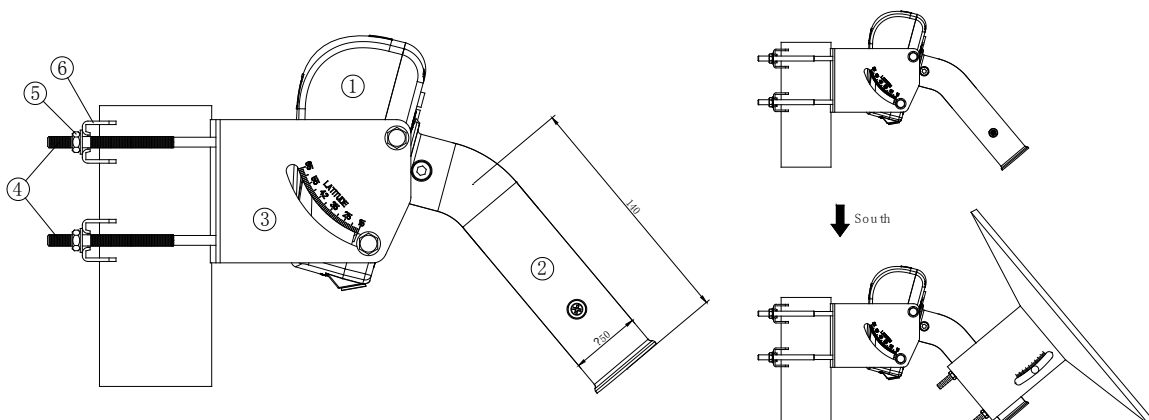
Protocol:	DiSEqC™ 1.2 & Goto "X"
Compatible receiver:	Receiver with DiSEqC™ 1.2 or Interface Box
Compatible satellite dish size:	120cm max.
Satellite position:	100 positions
Azimuth Angle:	80° East - 80° West (160°)
Elevation Angle:	25° - 75°
Speed:	2.5°/second at 13V or 3.2°/second at 18V
Input/Output voltage:	13/18VDC
Dimensions (mount):	345(L) x 168(H) x 110(D) mm

## Installing the Mount:

1. Assemble the H-H Mount as per the following diagram:



2. Ensure the mounting tube indicates 0°. If not, adjust it to exactly 0° using the manual buttons on the bottom of the mount. The cable must be connected to the receiver which must be switched on.
3. Make sure the mounting pole is exactly vertical before installation.
4. Fix the H-H Mount onto the mounting pole, or stand and tighten the two u-bolts evenly. Make sure there is no obstacle towards the south of the DiSEqC™, such as a tree or a building.



## Aligning the Mount:

### 1. Finding True South:

Attach the antenna dish to the mount. Make sure the dish is at the center of the mounting tube. Rotate the mount together with the antenna toward True South. You can find True South using a magnetic variation table and a compass that indicates the Magnetic South.

### 2. Setting Elevation Angle (A):

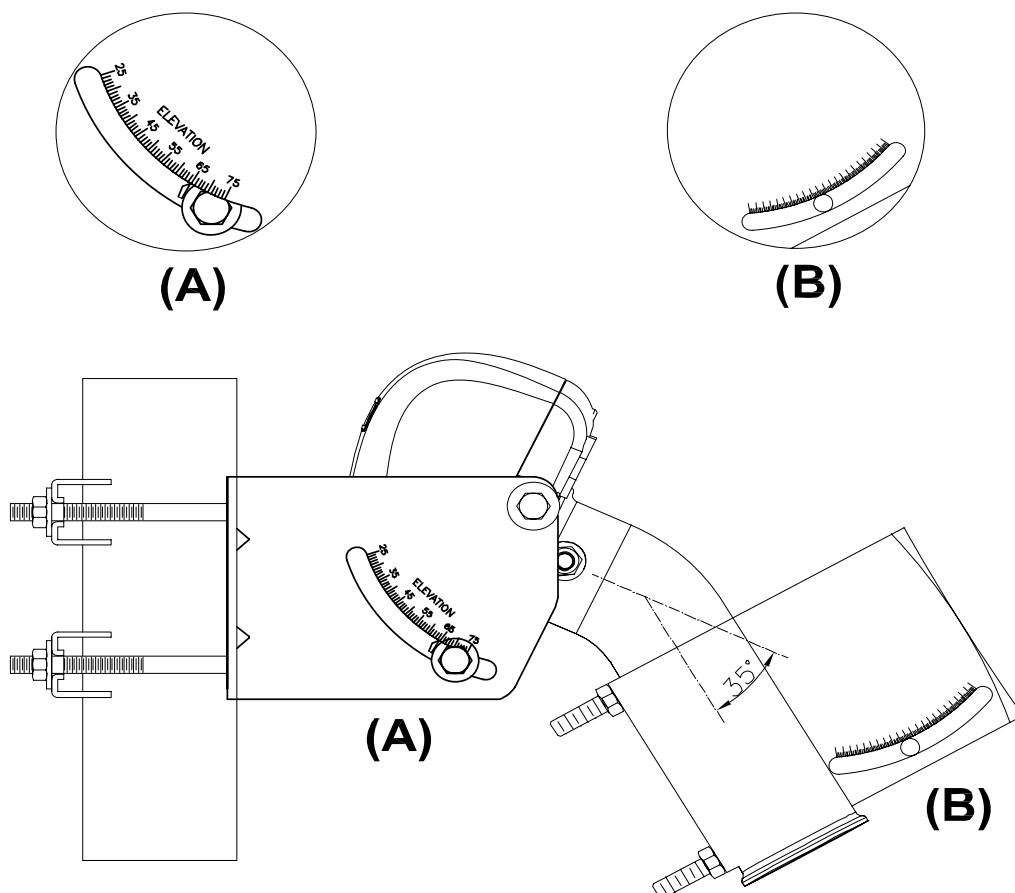
Adjust the motor elevation angle using an Inclinator or the Latitude scale on the side of the motor according to the Latitude of your position.

### 3. Setting Declination Angle (B):

- Find the Declination on the attached Angle Table.
- Set the Declination Angle by the scale on the antenna dish (not supplied). The reading on the antenna scale should be **35°-Declination Angle**.

### 4. Adjust the antenna east and west via the manual buttons on the bottom of the mount to check if the reception arc is correct. If not, adjust the Direction, Elevation, and Declination Angle to find the best reception.

Note: To provide power to adjust the antenna, first connect the mount to the receiver to interface box via coaxial cable.



## Connecting the Cable:

Connect the DiSEqC motor to the LNB and your receiver using a coaxial cable.

Recommended coaxial cable: RG-6

## Operating the DiSEqC

This DiSEqC motor is designed for use with a DiSEqC 1.2 receiver. The commands of the receivers might differ slightly from the ones mentioned here, please refer to the user manual of the DiSEqC receiver for more information.

1. Go East/West: Rotates the antenna to face East or West.
2. Fine Tune East/West: Rotates the antenna one step towards the East/West.
3. Store nn: Stores the satellite position nn (01-100).
4. Goto 0°: Rotates the motor to 0° as a reference point.
5. Re-synchronise/Shift:
  - a. Rotate the motor to a position by Goto command.
  - b. Rotate the motor East/West to a better position.
  - c. Send re-synchronise commands to the motor. The original position will be shifted to the new position. All the other satellite positions will also be changed.

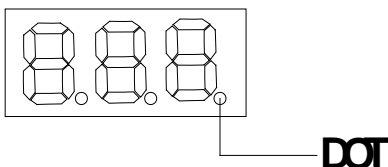
## Goto X Function

1. See your receiver manual and select the type of installation in Goto X mode.
2. Fill in the empty spaces in the receiver's menu with the Latitude and Longitude values. When the values have been correctly received, the receiver drives the motor to the calculated position.
3. Rotate and adjust the motor slightly clockwise or anticlockwise until an image appears on the TV screen that is connected to the receiver. Tighten the fixing screws.

## LED Indicator

Color	Status	Description
Green	On	Power on, Standby
Red	On	Error Message: Overcurrent/Reach limits
Red	Blink	Receiving DiSEqC command/Reset Mode

## Digit Display Indicator



- The digit display will show the current angle of the satellite.
- The 'dot' in the lower right corner indicates the direction: If the LED is ON, it is angled towards the east. If the light is OFF, it is angled towards the west.

Note: If the angle value on the display is different from the indicator of the satellite mount, please execute the operation "Goto 0" or "Re-synchronise/Shift".

## Hardware Reset by Receiver

1. Execute the command: Go To Reference (Go to "0").
2. Cut off the power by disconnecting the coaxial cable.
3. Reconnect the coaxial cable.
4. Execute the command: Shift "0"
5. The reset has now been complete.

## Hardware Reset by DiSEqC Motor

1. Cut off the power by disconnecting the coaxial cable.
2. Press and hold both East and West buttons for 5 seconds.
3. Reconnect the coaxial cable.
4. The red LED will blink 4 times.
5. The reset has now been complete.

## Elevation and Declination Angle Table

Your Site Latitude	Elevation Angle	Declination Angle	Dish Bracket Angle	Your Site Latitude	Elevation Angle	Declination Angle	Dish Bracket Angle
0	90	0.0	35.0	34	56	5.5	29.5
1	89	0.2	34.8	35	55	5.6	29.4
2	88	0.4	34.6	36	54	5.8	29.2
3	87	0.5	34.5	37	53	5.9	29.1
4	86	0.7	34.3	38	52	6.0	29.0
5	85	0.9	34.1	39	51	6.1	28.9
6	84	1.1	33.9	40	50	6.3	28.7
7	83	1.2	33.8	41	49	6.4	28.6
8	82	1.4	33.6	42	48	6.5	28.5
9	81	1.6	33.4	43	47	6.6	28.4
10	80	1.8	33.2	44	46	6.7	28.3
11	79	1.9	33.1	45	45	6.8	28.2
12	78	2.1	32.9	46	44	6.8	28.2
13	77	2.3	32.7	47	43	7.0	28.0
14	76	2.4	32.6	48	42	7.1	27.9
15	75	2.6	32.4	49	41	7.2	27.8
16	74	2.8	32.2	50	40	7.3	27.7
17	73	3.0	32.0	51	39	7.4	27.6
18	72	3.1	31.9	52	38	7.5	27.5
19	71	3.3	31.7	53	37	7.6	27.4
20	70	3.4	31.6	54	36	7.6	27.4
21	69	3.6	31.4	56	34	7.8	27.2
22	68	3.8	31.2	58	32	7.8	27.2
23	67	3.9	31.1	60	30	8.0	27.0
24	66	4.1	30.9	62	28	8.2	26.8
25	65	4.2	30.8	64	26	8.3	26.7
26	64	4.4	30.6	66	24	8.4	26.6
27	63	4.5	30.5	68	22	8.4	26.6
28	62	4.7	30.3	70	20	8.5	26.5
29	61	4.8	30.2	72	18	8.6	26.4
30	60	5.0	30.0	74	16	8.6	26.4
31	59	5.1	29.9	76	14	8.6	26.4
32	58	5.2	29.8	78	12	8.7	26.3
33	57	5.4	29.6	80	10	8.7	26.3

## Pre-Stored Satellite Table

No.	Satellite Name	Longitude(+West / -East)
1	TELESTAR 12	15W
2	ATLANTIC BIRD 1	12.5W
3	ATLANTIC BIRD 2	8W
4	NILESAT 101,102, ATLANTIC BIRD 4	7W
5	ATLANTIC BIRD 3	5W
6	AMOS 2/3	4W
7	INTELSAT 10-02	1W
8	SIRIUS 4	4.8E
9	EUTELSAT W3A	7E
10	EUROBIRD 9A	9E
11	EUTELSAT W1	10E
12	HOTBIRD 6,7A,8	13E
13	EUTELSAT W2	16E
14	ASTRA 1F/H/KR/L/M	19.2E
15	EUTELSAT W6	21.6E
16	EUROBIRD 2	25.5E
17	BADR 4-6	26E
18	ARABSAT 2B	30.5E
19	ASTRA 1D	31.3E
20	EUTELSAT W4	36E
21	EXPRESS AM-1	40E
22	TURKSAT 2A/3A	42E
23	EXPRESS AM22	53E
24	INTELSAT 902	62E
25	ABS 1	75E
26	NSS 7	22W