

SPX-03/EL

Elevation antenna rotator



Picture SPX-03/EL standard delivery



Standard supplied controller

The **SPX-03/EL Elevation Rotor** Resolution 0.5 degree (P/N: SPX-03/EL)

The **SPX-03/EL** is Duty solution to Rotate in Elevation your Antenna, Dish antenna , Astronomy Telescope, Camera, Light Box and many more which must be rotated in Elevation only.

Each rotor is supplied **including an controller**, Standard Model: **Rot2Prog** and comes with an build in Track interface (USB), lot of tracking program available and easy to install on your Lap-Top or PC and connect the Controller through USB.

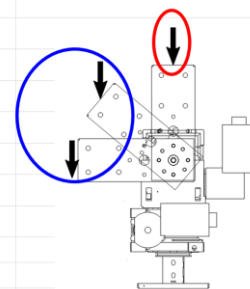
You can now auto track Moon, Sun, stars, constellations, galaxies, planets, etc etc.

But if you prefer, you can operate manual by pressing the buttons on the front of the panel or supplied mouse (option). The degree readout is displayed on the front LED display in 0.5 degree steps.

SPX-03/EL Rotators are supplied including:

Controller incl. build in track interface (USB) Rot1Prog
Connectors & USB Cable
Heavy Duty mounting Antenna Bracket
CD-Rom
Waterproof IP-55
Quick start guide
Control Mouse

Specifications: SPX-03/EL Elevation Rotator	
Turning torque	160 Nm
Brake Torque	800 Nm
Brake Construction	Double Worm Gear
Maximal Vertical Load = Red Circle	50 Kg = Red Circle Vertical load is max load on Azimuth & Elevation bearing
Maximal mounting weight bracket	25 Kg = Bleu Circle Mass weight 25Kg is without counterweight, if in perfect balance by using counter weight max 50Kg is allowed. (40Kg is Incl weight of counterweight !)
Rotation Speed	3.5 degree/sec @ 15 Volts DC
Resolution Standard version	0.5 degree
Resolution /HR version	NA
Rotation Range Elevation	90 degree (Can rotate 180 degree)
Weight Mass Kg	17 Kg
Position Sensor Standard version	Reed Switch
Position Sensor /HR version	NA
Mast size	Standard 52mm
Mast size Elevation mount	Supplied Antenna mounting bracket (refer drawing)
Control cable core standard version	4 Core 1.5mm ² unshielded
Environment	Ground / Mobile free air and / or Sheltered
MTBF	12500 hours @ -20 to +55°C
Rotor Waterproof	IP-55



Specifications Supplied controller:

	Rot1Prog (desk-top model)
Supply voltage:	12.....18 Volts DC
Current consumption:	3 ...10 A (Max current depends on load)
Supplied including:	Digital controller, build in PC track interface, software, Connectors, mouse, USB cable
Dimensions:	(220 x 120 x 35 mm)
Weight:	1 Kg
Housing:	Aluminium / steel
Environment:	Ground / Mobile Sheltered
MTBF:	15000 hours @ -5 to +40°C
Display:	2* 4 digit (green)
Connectors:	Supplied for Rotor connection

Note: Controller MD-01 and MD-02 are Electric exactly equal, only the housing is different !

RF HAMDESIGN & SPX Controllers will support the following software:



PST Rotor (Also /HR controllers MD-0X), MacDoppler (MacDoppler Ham Radio Satellite Tracking for Macintosh), N1MM Logger, Ham Radio Deluxe, Logic 7 Version => 7.0.45, Orbiton Satallite Tracking, Gpredict Satallite Tracking Linux and MAC, SatPC32 Satallite Tracking - works on windows only, DXLab (DX View), TRXmanager.

Most software should also work if it supports Yaesu type rotators !

Note: #1 Software may have new versions and some options may have changed#2 We have not tested all this software !

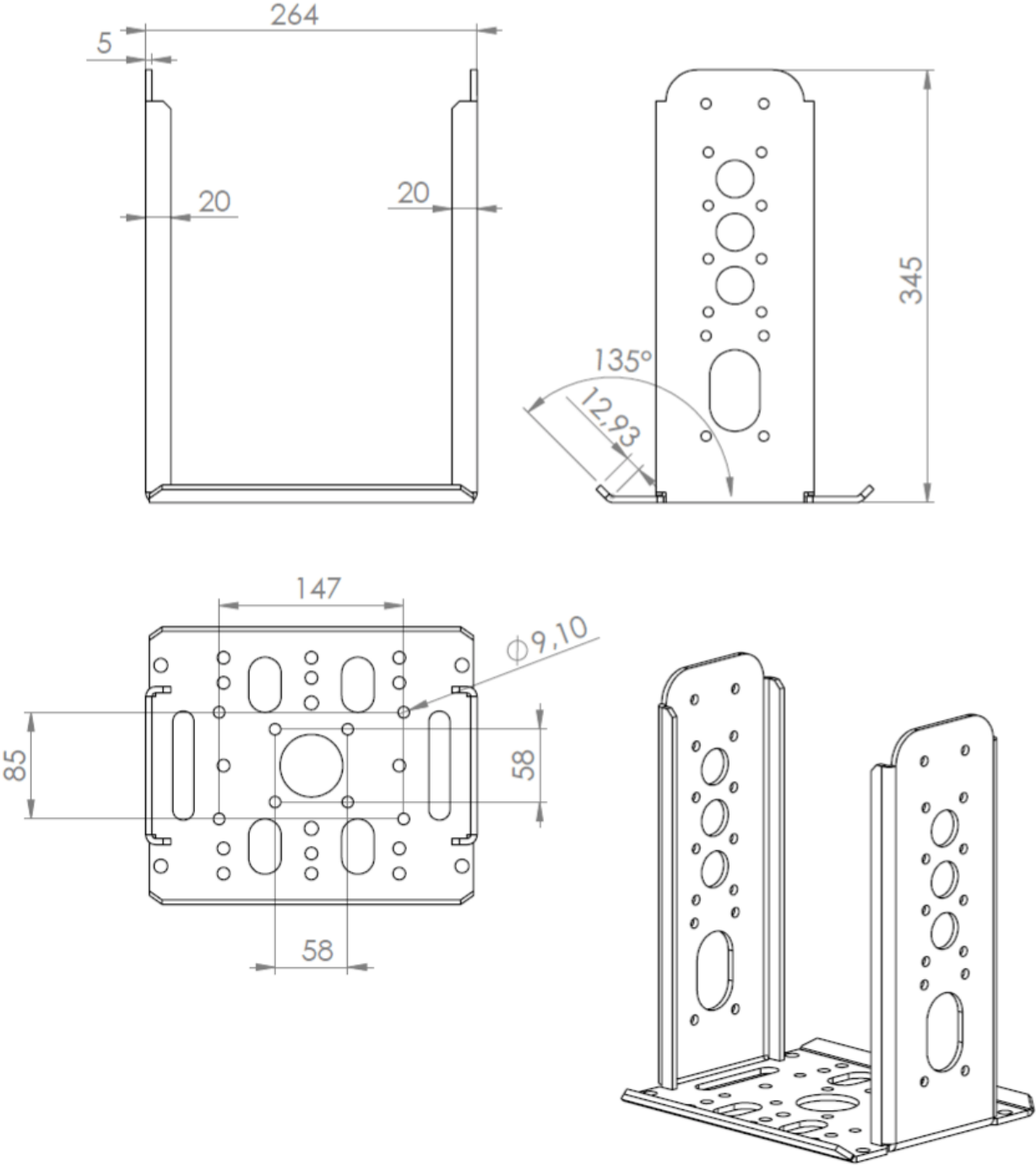
#3 Most software is for use with Rot2Prog (Dual-Ax rotor AZ&EL), but some also work with the single Ax rotor system Rot1Prog

SPX-03/EL Available Accessoires

SPX-03/EL Accessoires	P/N Refer Pricelist	Model
Motor & Sensort Control Cable 4-core (4x1,5mm ²) Reel: 25, 50, 75, 100 meter length	CC4- 001/25	
Power Supply Unit 13,5 – 18 Volts / 20 A Dim: 23 x 11 x 5,5 cm (LxBxH)	PW-32015	

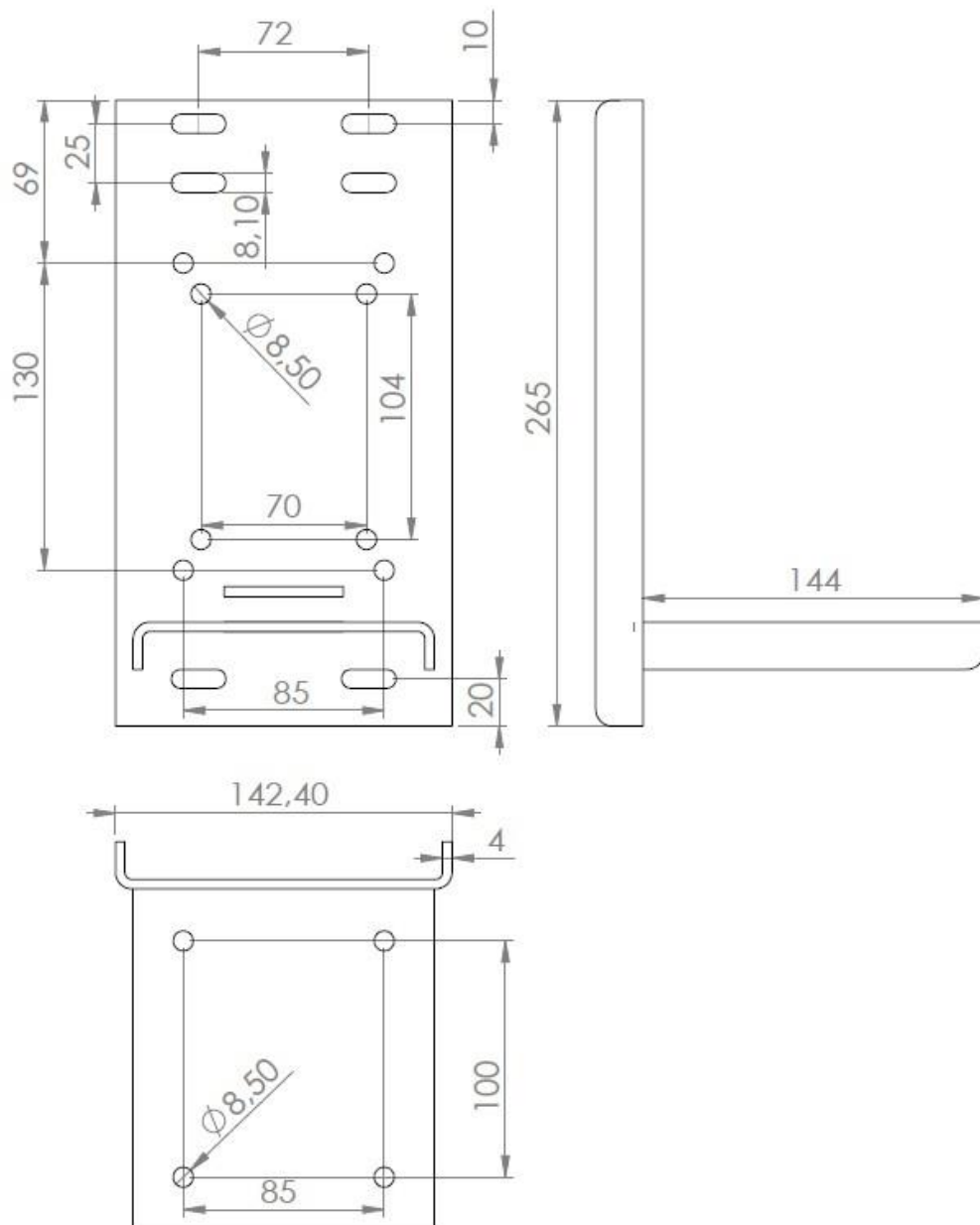
Note: Actual Prices can be found in our price list, download link at our web-site: www.rfhamdesign.com

SPX-03 Supplied Mounting Bracket Dimensions



Dimensions in mm
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SPX-03/EL Elevation antenna rotator Mast Mounting Bracket



SPX-03/EL
Dimensions in mm

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Short summary spec. Standard Controller Model: Rot1Prog SPX-03/EL

(Only available in Desktop model housing)

This standard controller (Rot1Prog) has a built-in track interface (USB) and buttons on the front of the panel to control the Elevation rotation manually.

The supplied "mouse" is used to control Elevation, the mouse is connected directly to the controller.



When a PC is connected (OS Windows) you will be able to control the rotor through the supplied application or a Third-Party Application and let it run on auto track mode.

This rotor set works great for example mobile stations, this Elevation Rotator needs an external power supply of 12... 18V DC max! (Max 10Amp)

If you need a suitable power supply, model PW15015 is available in our web-store.



Available functions Standard controller:

- ✓ Twin Green LED 4 digit readout.
- ✓ Integrated computer interface (USB)
- ✓ Manual or computer control.
- ✓ 0.5 degree resolution.
- ✓ Emulates Yaesu GS-232 protocol or uses its own SPID protocol.
- ✓ Modified 'mouse' supplied for easy manual control.

Specifications Controller Rot1Prog

Rot1Prog (desk-top model)	
Supply voltage:	12.....18 Volts DC
Current consumption:	3 ...10 A (Max current depends on load)
Supplied including:	Digital controller, built-in PC track interface, software, Connectors, mouse, USB cable
Dimensions:	(220 x 120 x 35 mm)
Weight:	1 Kg
Housing:	Aluminium / steel
Environment:	Ground / Mobile Sheltered
MTBF:	15000 hours @ -5 to +40°C
Display:	4 digit (green)
Connectors:	Supplied for Rotor connection

Optional BASE Plate mounting Bracket P/N: STR-00

This Bracket can be used to mount your antenna installation direct on the concrete or an heavy duty concrete slab by use of screws.

Max vertical pole length which can be placed depends on mounting antenna or object.

For example, 1 or 1.2 Meter dish, Max pole height 1.8Meter, Drawing example can be found on this page.

- Vertical Pole diameter mount: from 32 to max 75mm
- Weight: 5.6 Kg
- Supplied incl mounting clamp vertical pole (3 x)
- Supplied incl mounting hardware but without mounting screws concrete !
- Material: laser cutted, steel, painted black

