

Design Manual

Electric Scooter Design Manual

Mankeel



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GO!

The electric scooter, WE WANT



10+

years of professional
production experience

6000^{m²}

Factory Area

20000 /pc

Monthly production

6+

R&D team

Company Introduction

Company Name: Shenzhen Manke Technology Co.,Ltd

Established: 2014

Business Type: Manufacturer and Trade

Location: Shenzhen, China

Factory Area: 6000 m²

Main Item:Electric Scooter & Electric Bike & Sea Scooter

Main Target Region: World Wide

Production: 20000 pieces/ month

Support: OEM&ODM&DROP SHIPPING



6000^{m²}

Factory Area



Corporate Culture

Our Mission

Dream for the future, customer first

Our Vision

Become a world-renowned company

Our Values

Integrity, innovation, quality, embrace change



STEED SCOOTER

MK090 /8.5 inch

PRODUCT PARAMETERS:

Product name	8.5 inch electric scooter		
Unfolding size	1130 * 510 * 1160mm	Battery capacity	36V/10.4Ah
Folding size	1130 * 510 * 320mm	Folding mode	3 seconds folding
Gear	3 gear	Display	LCD/ With APP
Net Weight	18kg	Controller	36v current limiting 17A
Gross weight	20kg	Motor drive	Front wheel motor drive
Frame material	Aluminum alloy	Battery removal method	-
Tire	8.5 inch solid tire	Waterproof grade	IP54
Range	35-40km	Brake	E-brake +Foot brake
Maximum Speed	25km/h	Headlight	Led highlight front lighting
Output power	36W/350W	Taillight	Led light at the tail
Maximum output power	36W/500W	Applicable height	120-200cm
Shock absorption	Front and rear shock absorbers	Max load	120kg
Charging time	4.5-6 hours	Input voltage	100-240V AC 50/60H
Climbing angle	15 °	Charger	DC42V/2A

FEATURES:

- 35-40km long endurance
- 500W strong power motor
- USB Port
- HD LED large screen display
- Front and rear double shock absorption
- Mobile APP

STEED Pro

MK090 /8.5 inch



STEED Plus

MK090 /8.5 inch

FEATURES:

- 35-40km long endurance
- 500W strong power motor
- Front and rear dual shock absorption
- NFC alarm Function
- Indicator Function





SILVER WINGS

MK0006 /10 inch

SILVER WINGS

MK006 /10 inch

FEATURES:

- 20-40 KM Mileage
- 14kg Light Weight
- Bright body lights for warning and lighting
- Indicator Function



Normal version



Upgraded version

PRODUCT PARAMETERS:

Product name	Normal version	Upgraded version
Unfolding size	1130*580*1135mm	1130*580*1135mm
Folding size	1130*510*500mm	1130*510*500mm
Gear	3 gear	3 gears
N.W./GW	14/16Kg	14/16kg
Frame material	Aluminium alloy	Aluminium alloy
Tire	10 inch pneumatic tire	10 inch pneumatic tire
Range	20-25km	35-40km
Maximum speed per hour	25km/h	25km/h
Output power	250W	350W
Maximum output power	350W	500W
Brake	Electronic hall brake+ motor disc brake	Electronic hall brake+ motor disc brake
Climbing angle	10°	15°
Battery capacity	36V/7.5ah lithium battery	36V/9Ah lithium battery
Charger parameters	DC42V/1.5A	DC42C/2A
Display	LCD/With APP	LCD/With APP
Controller	36V current limiting 16A	36V current limiting 16A
Motor drive	Rear wheel motor drive	Rear wheel motor drive
Waterproof grade	IP54	IP54
Charging time	4-6 hours	3-5 hours
Headlight	LED highlight headlamp	Led highlight headlamp
Taillight	Tail LED	Tail LED
Applicable height	120-200cm	120-200cm
Max load	120kg	120kg
Input voltage	100-240VAC 50/60Hz	100-240VAC 50/60Hz



PIONEER

MK089/10 inch

PRODUCT PARAMETERS:

Product name	10 inch electric scooter		
Unfolding size	1210*533*1256mm	Battery capacity	48V/10.4Ah lithium battery
Folding size	1210*533*600mm	Max load	150kg
Gear	3 gears	Display	LCD/With APP
NW/GW	23kg /26kg	Controller	48V current limiting 23A
Frame material	Aluminium alloy	Motor drive	Rear wheel motor drive
Tire	10 inch solid tire	Battery removal method	Removable battery
Range	40-45km	Waterproof grade	IP55 with scooter, battery with IP68
Maximum Speed	25km/h (Max speed can be 40km/h after unlock speed limit)	Brake	Electronic hall brake+ double drum brake
Output power	500W	Headlight	Led highlight headlamp
Maximum output power	800W	Taillight	Tail led
Charging time	4-6 hours	Applicable height	120-200cm
Charging time	Double front fork damping	Cornering lamp	-
Climbing angle	20°	Charger	DC54.6V/2A
Folding mode	3 seconds folding	Input voltage	100-240vac 50/60hz

FEATURES:

- 40-45km long endurance
- 800W strong power motor
- Front wheel dual shock absorption
- 10-inch wide solid
- IP68 with removable battery

PIONEER Pro

MK089/10 inch Dual Motor



PIONEER Plus

MK089/10 inch

FEATURES:

- 10A-15A battery capacity
- Dual motor 500W*2
- NFC alarm function
- Indicator function
- Removable battery with IP68 waterproof





PIONEER Shared

MK089/10 inch

FEATURES:

- 45-50km long endurance
- 350W power motor
- 4G IOT
- Removable battery with IP68 waterproof and controlled by APP

PRODUCT PARAMETERS:

Product name	10 inch electric scooter
Unfolding size	210*533*1256mm
Gear	Customizable
Vehicle weight	About 23kg
Frame material	Aluminium alloy
Tyre	10 inch solid tire
Range	45-50 km
Maximum speed	Customizable
Output power	350W
Maximum output power	500W
Brake	Electronic hall brake+double drum brake
Shock absorption	Double front fork damping
Climbing angle	15°
Battery capacity	36V/15.6Ah lithium battery
Max load	150kg
Display	LCD with QR code
Controller	36v current limiting 17A
Motor drive	Rear wheel motor drive
Battery removal method	Removable battery
Waterproof grade	IP55 with scooter, battery with IP68
Charging time	6-8 hours
Headlight	Led highlight headlamp
Taillight	Tail LED
Applicable height	120-200cm
Charger parameters	DC42V/2A
Input electricityangle	100-240vac 50/60hz



More shared electric scooters

Mankeel electric scooter is the first manufacturer in the world to propose and implement a shared electric scooter production project. we are now occupying nearly half of the global supply of share electric scooters. We have established a mature and stable production and supply system for many different kind of electric scooters, as well as a complete and professional marketing, pre-sales and after-sales service system.

Part of project cases demonstration



Dubai project 15000 units



Russia project 12000 units



Russia project 10000 units



Korea project 20000 units



Italy project 15000 units

W7 Sea Scooter

For bring people more pleasant and fun play experience is always our new product R&D direction. Mankeel New Electric Surfboard W7, with new integrated design ofcompact body and easy to use&carry, diving up to 50m to see a different underwaterworld. light and beautiful appearance, cruise through in the water smoothly even youare not a good swimmer.



PRODUCT PARAMETERS:

Size	540*280*190mm	Battery capacity	21.6v/6Ah lithium battery
Maximum depth	50m	Battery weight	1.4kg
Power	300W*2	Charger parameters	DC25.2V/2A
Gear	2 gears	Output voltage	21.6V
Speed	0.8m/s, 1.5m/s	Input voltage	100-240VAC 50/60Hz
Endurance	About 30 minutes	Charging time	3-4 hours
Thrust	12kgft	Feature	Removable battery
Buoyancy	0.2kgf	Operating temperature	-5 C - 50 C



MK072 / 8 inch

FEATURES:

- Silent dynamic motor
- Lightweight and foldable, easy to lift
- The double spring shock absorber
- Cost-effective

PRODUCT PARAMETERS:

Product name	8 inch electric scooter
Unfolding size	860*320*930-1060mm
Folding size	860*320*135mm
Packing size	870*330*160 mm
Net weight	8.5kg
Gross weight	9.1kg
Frame material	Aluminium alloy
Tyre	8 inch solid tire
Front wheel material	Pu
Range	6-8km
Maximum speed	12km/h
Motor power	150W
Brake	Rear fender foot brake
Shock absorption	Front & rear dual absorber
Climbing angle	5°
Battery capacity	36V/2.5Ah lithium battery
Motor drive	Rear wheel motor drive
Waterproof grade	IP54
Charging time	2.5 hours
Headlight	/
Taillight	Reflective sticker
Applicable height	120-200cm
Maximum load	100kg
Output	25.2VDC1A
Input	100-240VAC~50/60H



MK014 / 8 inch

PRODUCT PARAMETERS:

Product name	8 inch electric scooter	Display	LCD display
Unfolding size	1160*1130*430mm	Controller	36V current limiting 17A
Folding size	965×185×350mm	Motor drive	Front wheel motor drive
Net weight	11kg	Shock absorption	Front & rear dual absorber
Gross weight	12.5kg	Waterproof grade	IP54
Gear	3 gears	Charging time	2-3 hours
Frame material	Aluminium alloy	Headlight	Led highlight headlamp
Tyre	8 inch solid tire	Taillight	Tail LED
Range	25-30km	Applicable height	120-200cm
Maximum speed	15-20km/h, 20-25km/h	Maximum load	120kg
Motor power	250W	Input	100-240V 50/60HZ 3.0A
Brake	Foot brake +e-abs anti-lock system	Output	DC42V/1.5A
Climbing angle	10°	Packing size	965*185*350mm
Battery capacity	36V/6.6/7.8 Ah lithium battery		



MK083 Plus / 8.5 inch

FEATURES:

- 30-40km long endurance
- Lightweight and foldable, easy to lift
- Front & Rear dual absorber
- 8.5 inch Explosion-proof solid tire

PRODUCT PARAMETERS:

Product name	8.5 inch electric scooter
Unfolding Size	1054*436*1150mm
Folding Size	1054*436*480mm
Net weight	17kg
Gross weight	19kg
Gear	3 gears
Frame material	Aluminium alloy
tyre	8.5 inch solid tire
Range	30-40km
Maximum speed	25km/h
Motor power	350W
Brake	Electric brake + disc brake
Climbing angle	15°
Battery capacity	36W/10Ah lithium battery
Display	LED
Shock Absorption	Front & rear dual absorber
motor drive	Front wheel motor drive
Waterproof grade	IP54
Charging time	4-6 hours
Headlight	Led highlight headlamp
Taillight	Tail LED
Applicable height	120-200cm
Maximum load	120kg
Charging voltage	100-240VAC 50/60Hz
Charger Parameters	DC42V/2A
Packing Size	1170*177*520mm



MK083 / 8.5 inch



PRODUCT PARAMETERS:

Product name8.5 inch electric scooter			
Unfolding size	1054*436*1150mm	Display	LED
Folding size	1054*436*480mm	Motor drive	Front wheel motor drive
Net weight	12kg	Battery removal method	/
Gross weight	15kg	Waterproof grade	IP54
Gear	3 gears	Charging time	4-6 hours
Frame material	Aluminium alloy	Headlight	LED highlight headlamp
Tyre	8.5 inch solid tire	Taillight	Tail LED
Range	25-30km	Applicable height	120-200cm
Maximum speed	25km/h	Maximum load	120kg
Motor power	350W	Charging voltage	100-240VAC 50/60HZ
Brake	Electric brake+disc brake	Charger parameters	DC42V/2A
Climbing angle	15°	Packing size	1080*150*515mm
Battery capacity	36V/6.6Ah /7.8Ah lithium battery		



MK015 / 10 inch

FEATURES:

- 30-50km long endurance
- 500W strong power motor
- HD LED large screen display
- Key anti-theft IP68 remobeable battery

PRODUCT PARAMETERS:

Product name10 inch electric scooter			
Unfolding size	1150*420*1250mm	Display	LED
Folding size	1150*420*510mm	Motor drive	Front wheel motor drive
Net weight	15.5kg	Battery removal method	Yes
Gross weight	19kg	Waterproof grade	IPX4
Frame material	Aluminium alloy	Charging time	4-6 hours
Tyre	10 inch rubber pneumatic tire	Headlight	Led highlight headlamp
Range	30-50km	Taillight	Tail LED
Maximum speed	32km/h	Applicable height	120-200cm
Motor power	350W/500W	Maximum load	125kg
Brake	Electronic brake+disc brake	Charging voltage	100-240VAC 50/60HZ
Climbing angle	15°	Charger parameters	DC42V/2A
Battery capacity	36V/10.4Ah 48V/7.8Ah	Packing size	1150*420*125mm



MK017 / 10 inch

FEATURES:

- 30-40 km long endurance
- 350W strong power motor
- HD LED large screen display
- 10 inch explosion-proof honeycomb tire

PRODUCT PARAMETERS:

Product name	10 inch electric scooter
Unfolding size	1095*420*1145mm
Folding size	1095*420*495mm
Net weight	16.4kg
Gross weight	18.5kg
Gear	3 gears
Frame material	Sheet metal +aluminium alloy
Tyre	10 inch honeycomb tyres
Range	30-40km
Maximum speed	25km/h
Motor power	350W
Brake	Rear drum brake
Climbing angle	15°
Battery capacity	36V/10Ah lithium battery
Display	Led display
Controller	36V current limiting 17A
Motor drive	Front wheel motor drive
Waterproof grade	IP54
Charging time	5-6 hours
Headlight	Led highlight headlamp
Taillight	Tail LED
Applicable height	120-200cm
Maximum load	120kg
Charging voltage	100-240VAC 50/60HZ
Charger parameters	DC42V/1.5A
Packing size	1200*580*200mm



MK019 / 10 inch

PRODUCT PARAMETERS:

Product name	10 inch electric scooter		
Unfolding size	1167*472*1203mm	Display	Led
Folding size	1167*472*532mm	Controller	36V current limiting 17A
Net weight	17.5kg	Motor drive	Front wheel motor drive
Gross weight	21kg	Battery removal method	/
Gear	3 gears	Waterproof grade	IP54
Frame material	Aluminium alloy	Charging time	4-6 hours
Tyre	10 inch solid tire	Headlight	Led highlight headlamp
Range	40km	Taillight	Tail LED
Maximum speed	30-40km/h	Applicable height	120-200cm
Power	350W	Maximum load	120kg
Brake	Drum brake	Charging voltage	100-240VAC 50/60HZ
Climbing angle	15°	Charger parameters	DC42V/2A
Battery capacity	36V/10Ah lithium battery	Packing size	1170*420*125mm



PRODUCT PARAMETERS:

Product name		8 inch off road electric scooter	
Unfolding size	1100*550*1150mm	Display	Lcd
Folding size	1100*550*450mm	Shock absorption	Front & rear dual absorber
Net weight	25kg	Motor drive	Dual drive
Gross weight	29kg	Battery removal method	/
Gear	3 gears	Waterproof grade	IP54
Frame material	Aluminium alloy	Charging time	6-8 hours
Tyre	8 inch	Headlight	Led highlight headlamp
Range	40-50km	Taillight	Rear light
Maximum speed	40km/h	Applicable height	120-200cm
Power	2*500W dual drive	Maximum load	120kg
Brake	Dual disc brake	Charging voltage	100-240VAC 50/60HZ
Climbing angle	15°	Charger parameters	DC 48V/1.5A
Battery capacity	48V/15Ah lithium battery	Packing size	1160*235*470mm



MX-6 / 10.5 inch

FEATURES:

- With large LCD smart touch display
- Front and rear dual disc brakes +E-brake
- Front and rear double rocker shock absorption
- Complete aluminum-alloy material
- 10.5 inch off-road vacuum tires
- Hand acceleration and electronic bell

PRODUCT PARAMETERS:

Product name		10.5 inch off road electric scooter	
Unfolding size	1197*630*1258mm	Display	Large smart touchable lcd
Folding size	1197*630*398mm	Motor drive	Rear wheel motor drive
Net weight	24kg	Battery removal method	Embdded battery
Gross weight	32kg	Waterproof grade	IPX4
Gear	3 gears	Charging time	10 hours
Frame material	Aviation aluminum alloy	Headlight	Led highlight headlamp
Tyre	10.5 inch off-road vacuum tires	Taillight	Tail LED
Range	50km	Applicable height	120-200cm
Maximum speed	30km/h	Maximum load	120kg
Motor power	800/1200W	Charging voltage	100-240VAC 50/60HZ
Brake	Disc brake	Charger parameters	DC54.6V/2A
Climbing angle	20°	Packing size	1190x284x585mm
Battery capacity	48V/15Ah /52V/18Ah lithium battery		

MX-5 Pro / 11 inch

FEATURES:

- Removable battery, more convenient for charging.
- 1200W* 2 Dual Motors Off Road Scooter
- The double spring shock absorber .
- 11 inch off-road tire is suitable for the rugged road

PRODUCT PARAMETERS:

Product name	11 inch electric scooter
Unfolding size	1350*1350*500mm
Folding size	1500*500*500mm
Net weight	38kg
Gross weight	45kg
Gear	3 gears
Frame material	Aluminium alloy
Tyre	11 inch off-road tyre
Range	50km
Maximum speed	55km/h
Motor power	2*1200W
Brake	Disc brake
Climbing angle	20°
Battery capacity	48V/10-12Ah lithium battery
Display	Led
Shock absorption	Front & rear dual absorber
Motor drive	Dual drive
Waterproof grade	IP54
Charging time	5-6 hours
Headlight	Led highlight headlamp
Taillight	Tail LED
Applicable height	120-200cm
Maximum load	120kg
Charging voltage	100-240VAC 50/60HZ
Charger parameters	DC42V/2A
Packing size	1480x250x510mm



MX-3 / 11 inch



PRODUCT PARAMETERS:

Product name	11 inch off road electric scooter		
Unfolding size	1350*700*1400mm	Display	Led
Folding size	1420*330*490mm	Shock absorption	Front & rear dual absorber
Net weight	40kg	Motor drive	Dual drive
Gross weight	46kg	Battery removal method	/
Gear	3 gears	Waterproof grade	IP54
Frame material	Aluminium alloy	Charging time	8-12 hours
Tyre	11 inch vacuum tire	Headlight	Led highlight headlamp
Range	40-50km	Taillight	Tail LED
Maximum speed	65km/h	Applicable height	120-200cm
Power	2*1200W dual drive	Maximum load	120kg
Brake	Disc brake	Charging voltage	100-240VAC 50/60HZ
Climbing angle	45°	Charger parameters	DC 48V/1.5A
Battery capacity	48V/21Ah lithium battery	Packing size	1480*350*570mm



PRODUCT PARAMETERS:

Product name		14 inch off road electric scooter	
Unfolding size	1350*700*1400mm	Display	Led
Folding size	1420*330*490mm	Shock absorption	Front & rear dual absorber
Net weight	80kg	Motor drive	Dual drive
Gross weight	90kg	Battery removal method	/
Gear	3 gears	Waterproof grade	IP54
Frame material	Aluminium alloy	Charging time	10-12 hours
Tyre	14 inches fordable off road	Headlight	Led highlight headlamp
Range	120km	Taillight	Tail LED
Maximum speed	100km/h	Applicable height	120-200cm
Power	2*4000W dual drive	Maximum load	150kg
Brake	Oil brake and ebs brake	Charging voltage	100-240VAC 50/60HZ
Climbing angle	60°	Controller	Dual 60V 60A controller
Battery capacity	60V/60Ah lithium battery	Packing size	1670*650*460mm

MX-9 / 12 inch

FEATURES:

- 110-120km long endurance
- 5000W strong power motor
- HD LED large screen display
- 12 inch pneumatic tires

PRODUCT PARAMETERS:

Product name	10 inch electric scooter
Unfolding size	1400*660*1355mm
Net weight	40kg
Gross weight	54kg
Gear	3 gears
Frame material	Sheet metal +aluminium alloy
Tyre	12 inch pneumatic tires
Range	110-120KM
Maximum speed	70km/h
Motor power	2*2500W
Brake	Oil brake
Climbing angle	25°
Battery capacity	48V/35Ah lithium battery
Display	Led display
Shock absorption	Front & rear dual absorber
Motor drive	Dual drive
Waterproof grade	IP54
Charging time	6-7 hours
Headlight	UT lamp
Taillight	Tail LED
Applicable height	140-200cm
Maximum load	150kg
Charging voltage	100-240VAC 50/60HZ
Charger parameters	DC42V/5A
Packing size	1490*320*580cm





MX-14

PRODUCT PARAMETERS:

Product name	10 inch off road electric scooter		
Net weight	28.4kg	Display	Led
Gross weight	31.8kg	Shock absorption	Front & rear dual absorber
Gear	3 gears	Motor drive	Rear drive
Frame material	Aluminium alloy	Battery removal method	/
Tyre	10 Inch Air-filled off-road tires	Waterproof grade	IP54
Range	40-60km	Charging time	4-8 hours
Maximum speed	45km/h	Headlight	Led highlight headlamp
Power	48V 500W/800W	Taillight	LED Light /Left and right turn signals/Brake warning light
Brake	Front and rear disc brakes		
Climbing angle	20°	Applicable height	120-200cm
Battery capacity	48V/15Ah lithium battery	Color	Black red
Maximum load	150kg	Packing size	119*25*49.5CM