

Optimate

The Battery Saving Charger

MORE BATTERY POWER

LONGER BATTERY LIFE

SAVE YOUR 'DEAD' BATTERY



GENERAL MAINTAINERS

POWER SPORT

AUTO & MARINE

LITHIUM

DC TO DC

 **SOLAR**



optimize1.com



EU 2015

4 REASONS WHY OPTIMATE IS BETTER THAN OTHER BATTERY CHARGERS

ALL OPTIMATE BATTERY CHARGERS

- 1 TEST** battery condition at connection, decide optimal charge method, then charge. Models from OptiMate 3 also test after charging.
- 2 UNIQUE MAINTENANCE PROGRAM**
24/7 safe maintenance. Checks charge level hourly, delivers exact charge to keep battery at 100% and support 'always on' vehicle circuitry. Soft pulse prevents sulphation build-up.
- 3 EQUALIZES BATTERY CELLS** with a unique pulsing method, brings each cell to full charge for guaranteed 100% battery performance!

ONLY OPTIMATE BATTERY SAVING CHARGER MODELS

(OptiMate 3, 4, 5, 6 and Lithium)

- 4 SAVE 'DEAD' BATTERIES** other chargers can't from as low as 1/2 a Volt.

Lead-acid chargers (3, 4, 5, 6) : *Proven controlled desulphation program for off vehicle battery saving and safe low volt recovery program for on vehicle battery reconditioning.*

Lithium chargers (4s 0.8A, 4s 5A) : *Proven Low voltage save & test program re-balances cells and check for damage.*

Optimate
The Battery Saving
Charger

Optimate 1

**Cost-effective
12V battery
maintenance**

TM-88

Smart voltage & current control



1




Low Volt
Start (8V)

2

Controlled
CHARGE

3

OptiMate
maintenance

CHARGING AMPS	0.6A	
USE	INDOOR	t°min: -20°C
SAVE	Low volt start 8V	
IDEAL FOR	  2 - 50Ah	
CABLE ACCESSORIES	 1 4 small	

Optimate2

**Advanced
12V battery
maintenance**

TM-420

Smart voltage & current control

Charges flat batteries from 2 Volt



WEATHERPROOF CASE
with WALL MOUNTS

1

Low Volt
Start (2V)

2



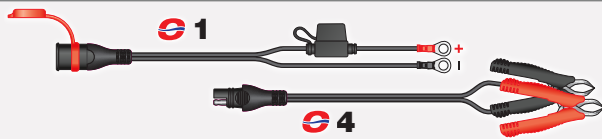
Controlled
CHARGE

3

OPTIMIZE

4

OptiMate
maintenance

CHARGING AMPS	0.8A	
USE	INDOOR / OUTDOOR	t°min: -20°C
SAVE	Low volt start 2V	
IDEAL FOR	  3 - 96Ah	
CABLE ACCESSORIES		

Optimate3

**Most TRUSTED
battery charger
in power sports**

Recovers sulphated batteries

TEST after charging



TM-430

WEATHERPROOF CASE
with WALL MOUNTS

1

Low Volt
Start (2V)

2

Turbo
SAVE

3

Pulse
SAVE

4

Controlled
CHARGE

5

OPTIMIZE

6

TEST after
CHARGE

7

OptiMate
maintenance

CHARGING AMPS

0.8A

USE

INDOOR / OUTDOOR

t°min: -20°C

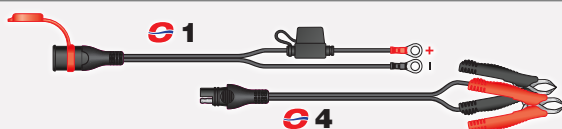
SAVE

Low volt start 2V + 2 step desulphation recovery

IDEAL FOR



**CABLE
ACCESSORIES**



Optimate3 **x2**

DUAL BANK

Most TRUSTED
battery charger **x2**
in power sports **DUAL BANK**

Independent charge banks

Charge series connected batteries



TM-450

WEATHERPROOF CASE
with WALL MOUNTS

1

Low Volt
Start (2V)

2

Turbo
SAVE

3

Pulse
SAVE

4

Controlled
CHARGE

5



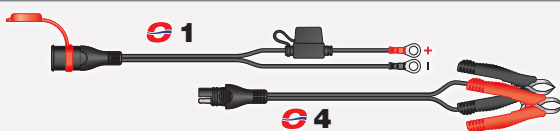
OPTIMIZE

6

TEST after
CHARGE

7

OptiMate
maintenance

CHARGING AMPS	0.8A
USE	INDOOR / OUTDOOR t°min: -20°C
SAVE	Low volt start 2V + 2 step desulphation recovery
IDEAL FOR	  3 - 50Ah
CABLE ACCESSORIES (per bank)	

Optimate3 x4 QUAD BANK

**Most TRUSTED
battery charger
in power sports**

**x4
QUAD BANK**

TM-454

Independent charge banks

Charge series connected batteries



WEATHERPROOF CASE
with WALL MOUNTS

1

Low Volt
Start (2V)

2

Turbo
SAVE

3

Pulse
SAVE

4

Controlled
CHARGE

5

OPTIMIZE

6

TEST after
CHARGE

7

OptiMate
maintenance

CHARGING AMPS

0.8A

USE

INDOOR / OUTDOOR

t°min: -20°C

SAVE

Low volt start 2V + 2 step desulphation recovery

IDEAL FOR



**CABLE
ACCESSORIES
(per bank)**



Optimate4

Most ADVANCED & TRUSTED battery charger in power sports

TESTS before & after charging

STD & BMW CAN-bus programs

Recovers batteries from 0.5V



TM-240

STANDARD PROGRAM 1

1

Low Volt Start (0.5V)

2

TEST before charge

3

Pulse 'wake up'

4

Turbo SAVE

5

Pulse SAVE

6

Controlled CHARGE

7

OPTIMIZE

8

TEST after CHARGE

9

OptiMate maintenance

WEATHERPROOF CASE with WALL MOUNTS
❄️ 'ARCTIC' CABLE

CHARGING AMPS

0.8A

USE

INDOOR / OUTDOOR ❄️ t°min: -40°C

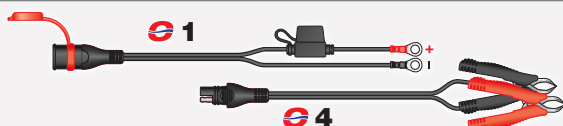
SAVE

Low volt start 0.5V + 2 step desulphation recovery

IDEAL FOR



CABLE ACCESSORIES



Optimate4

TM-246

CAN-bus edition

CAN-bus program pre-selected

4ft/120cm BIKE charge cable



WEATHERPROOF CASE
with WALL MOUNTS
❄️ 'ARCTIC' CABLE

CAN-bus PROGRAM 2

1

CAN-bus
'Wake up'
pulse

2

CAN-bus
low volt
check

3

TEST
before
CHARGE

4

PULSE
SAVE

5

Controlled
CHARGE

6




CAN-bus
OPTIMIZE

7

CAN-bus
TEST after
CHARGE

8

CAN-bus
OptiMate
maintenance

CHARGING AMPS	0.8A
USE	INDOOR / OUTDOOR ❄️ t°min: -40°C
SAVE	Low volt start 0.5V + deep discharge recovery
IDEAL FOR	  3 - 50Ah
CABLE ACCESSORIES	

Optimate5

Complete 12V battery care for medium to large batteries

Desulphates and saves neglected batteries

Tests battery every hour



WEATHERPROOF CASE
with WALL MOUNTS

1

Low Volt
START (2V)

2

Turbo
SAVE

3

PULSE
SAVE

4

Controlled
CHARGE

5

OPTIMIZE

6

TEST after
CHARGE

7

OptiMate
maintenance

CHARGING AMPS

2.8A @ 12V

USE

INDOOR / OUTDOOR

t°min: -20°C

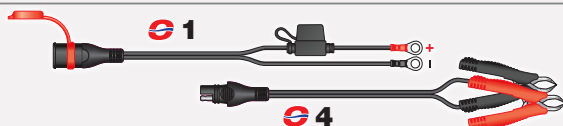
SAVE

Low volt start 1V + 2 step desulphation recovery

IDEAL FOR



**CABLE
ACCESSORIES**



Optimate5

voltmatic

ADVANCED 6V & 12V battery care

Voltmatic 6V/12V selection

Saves sulphated 6V & 12V
batteries



TM-222

WEATHERPROOF CASE
with WALL MOUNTS

1

Low Volt
START (1V)

2

Voltmatic
CHARGE
selection

3

Turbo
SAVE

4

PULSE
SAVE

5

Controlled
CHARGE

6



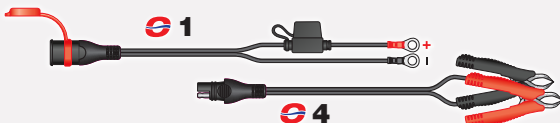
OPTIMIZE

7

TEST after
CHARGE

8

OptiMate
maintenance

CHARGING AMPS	4A @ 6V / 2.8A @ 12V	
USE	INDOOR / OUTDOOR	t°min: -20°C
SAVE	Low volt start 1V + 2 step desulphation recovery	
IDEAL FOR	  8 - 120Ah	
CABLE ACCESSORIES		

Optimate6

ampmatic

The world's most advanced fully automatic battery charger

TM-180

TESTS before & after charging

Recovers batteries from 0.5V

Ampmatic : adjusts to any battery size



WEATHERPROOF CASE
with WALL MOUNTS
❄️ 'ARCTIC' CABLE

1

Low Volt
Start (0.5V)

2

TEST before
charge

3

Pulse
'wake up'

4

Turbo
SAVE

5

Ampmatic
Pulse
SAVE

6

Ampmatic
CHARGE

7

Ampmatic
OPTIMIZE

8

TEST after
CHARGE

9

OptiMate
maintenance

CHARGING AMPS

5A Ampmatic

USE

INDOOR / OUTDOOR ❄️ t°min: -40°C

SAVE

Low volt start 0.5V + 2 step desulphation recovery

IDEAL FOR



3 - 240Ah

**CABLE
ACCESSORIES**



Optimate6 select

**The world's most
advanced battery charger
for 12V starter & deep
cycle batteries**

Select 14.4V / 14.7V charge modes

Temperature compensated charging

Power supply service mode



TM-190

WEATHERPROOF CASE
with WALL MOUNTS
❄️ 'ARCTIC' CABLE

1

Low Volt
Start (0.5V)

2

TEST before
charge

3

Pulse
'wake up'

4

Turbo
SAVE

5

Ampmatic
Pulse
SAVE

6

Ampmatic
CHARGE

7

Ampmatic
OPTIMIZE

8

TEST after
CHARGE

9

SMART
OptiMate
maintenance

CHARGING AMPS

5A Ampmatic @ 14.4V / 14.7V / 4A @ 13.6V

USE

INDOOR / OUTDOOR ❄️ **t°min: -40°C**

SAVE

Low volt start 0.5V + 2 step desulphation recovery

IDEAL FOR



**CABLE
ACCESSORIES**



Optimate6

(12V-24V)

The world's most advanced 12V & 24V charger

Select 12V 5A / 24V 2.5A modes

Temperature compensated charging

Ampmatic : adjusts to any battery size

TM-194



WEATHERPROOF CASE
with WALL MOUNTS
'ARCTIC' CABLE

1

Volts
select > Low
Volt start

2

Automatic
protection

3

TEST before
charge

4

Ampmatic
Pulse
SAVE

5

Ampmatic
CHARGE

6

Ampmatic
OPTIMIZE

7

TEST after
CHARGE

8

SMART
OptiMate
maintenance

CHARGING AMPS

5A @ 12V / 2.5A @ 24V Ampmatic

USE

INDOOR / OUTDOOR ❄️ **t°min: -40°C**

SAVE

Low volt start 0.5V (12V) + 2 step desulphation recovery

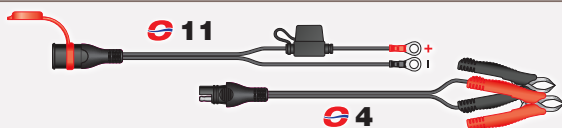
IDEAL FOR

STD AGM GEL



3 - 200Ah (12V) / 1-100Ah (24V)

**CABLE
ACCESSORIES**



Guaranteed! : More Battery Power - Longer Battery Life - Saves Your Low Volt Lithium Battery.



Ah



A LITHIUM battery delivers the same cranking amps as the lead-acid battery it replaced, but with 3-4 times less amp-hours.

A stored vehicle with 'always on' circuitry drain amp-hours out of its battery; a Lithium battery will drain faster.

COMPARISON:

**Battery Size
that can deliver
120 CRANKING AMPS.**



STD



AGM



LITHIUM

= 120 C.A.



VOLTS



A LITHIUM Battery's voltage range is higher than lead-acid.

A lead-acid charger will not fully charge a lithium battery.

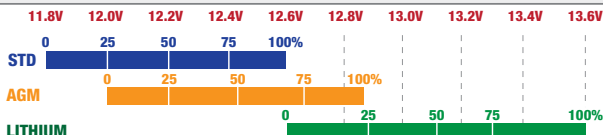
Vehicle charge system is designed for lower voltage of Lead-Acid; at idle or low RPM a Lithium battery loses charge.

VOLTS AND % CHARGE:

STD LEAD-ACID

AGM LEAD-ACID

LiFePO₄ LITHIUM



**SAVE A FLAT
BATTERY**



A flat LITHIUM battery needs low current to safely recover.

At low volts lead-acid chargers deliver high current that will damage a Lithium battery.

CHARGE CURRENT

LEAD-ACID
AND LITHIUM



CHARGING



A LITHIUM battery needs accurate voltage charging.

Voltage higher than 14.6V damages Lithium batteries.

Some Lead-Acid chargers deliver more than 14.6V.

CHARGE VOLTAGE

LEAD-ACID
AND LITHIUM



Optimate **LFP**
lithium 4s 0.8A

**Unique LiFePO₄
battery protection**

LiFePO₄ Low Volt SAVE

Battery BMS auto reset

TM-470



WEATHERPROOF CASE
with WALL MOUNTS



1

Low Volt
Start (0.5V)

2

Ultra LOW
VOLT SAVE

3

LOW VOLT
SAVE /
cell monitoring

4

TEST -
cell damage

5

Cell-
balancing
CHARGE

6

OPTIMIZE

7

TEST after
CHARGE

8

OptiMate
maintenance

CHARGING AMPS

0.8A

USE

INDOOR / OUTDOOR

t°min: -20°C

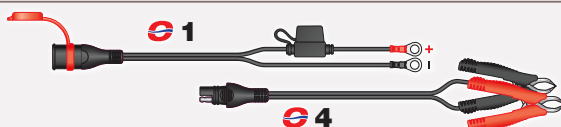
SAVE

Low volt start 0.5V + 3 step low volt SAVE & TEST

IDEAL FOR



**CABLE
ACCESSORIES
(per bank)**



Optimate **LFP** **x4**
lithium 4s 0.8A QUAD BANK

Unique LiFePO₄
battery preparation for DEALERS

TM-484

Keep batteries 100% ready

4 independent charge banks

Battery BMS auto reset



WEATHERPROOF CASE
with WALL MOUNTS



1

Low Volt
Start (0.5V)

2

Ultra LOW
VOLT SAVE

3

LOW VOLT
SAVE /
cell monitoring

4

TEST -
cell damage

5

Cell-
balancing
CHARGE

6



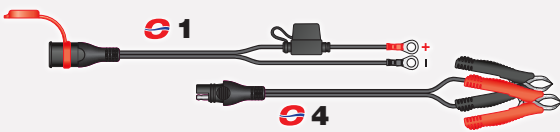
OPTIMIZE

7

TEST after
CHARGE

8

OptiMate
maintenance

CHARGING AMPS	0.8A	
USE	INDOOR / OUTDOOR	t°min: -20°C
SAVE	Low volt start 0.5V + 3 step low volt SAVE & TEST	
IDEAL FOR	  up to 30Ah	
CABLE ACCESSORIES (per bank)		



Optimate **LFP**
lithium 4s 0.8A

Ultimate LifeP04 professional battery charger

Battery BMS auto reset

Advanced LiFePO₄ low volt SAVE

SafeT° charge range : -20°C <-> 45°C

Ampmatic : adjusts to any battery size



TM-290

WEATHERPROOF CASE
with WALL MOUNTS



1

Low Volt
Start (0.5V)

2

TEST before
charge

3

Temperature
check

4

Ultra LOW
VOLT SAVE

5

LOW VOLT
SAVE /
cell monitoring

6

TEST -
cell damage

7

Cell-balancing
CHARGE

8

OPTIMIZE

9

TEST after
CHARGE

10

OptiMate
maintenance

CHARGING AMPS

5A Ampmatic

USE

INDOOR / OUTDOOR ❄️ t°min: -40°C

SAVE

Low volt start 0.5V + 3 step low volt SAVE & TEST

IDEAL FOR



**CABLE
ACCESSORIES
(per bank)**





Charge your 12V battery from another 12V battery!

TM-500

Charge without AC power

Maintain remote battery

SAVE your 'dead' battery



WEATHERPROOF CASE
with WALL MOUNTS
'ARCTIC' CABLE

1

Low Volt
Start (1V)

2

Turbo
SAVE

3

Pulse
SAVE

4

Controlled
CHARGE

5

OPTIMIZE

6

TEST after
CHARGE

7

OptiMate
maintenance



CHARGING AMPS

2A

USE

INDOOR / OUTDOOR ❄️ t°min: -40°C

SAVE

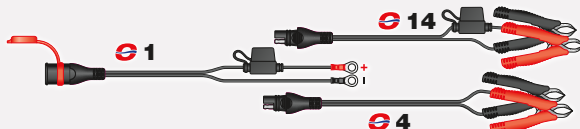
Low volt start 1V + 2 step desulphation recovery

IDEAL FOR



6 - 96Ah

**CABLE
ACCESSORIES**



Optimate
solar

**SOLAR CHARGER
WITH 6W PANEL**

TM-524

**Converts your 12V solar panel
to a smart pulse charger for
12V batteries**

Smart pulse current control

SAVE your 'dead' battery with solar power

Controlled SAFE long term maintenance

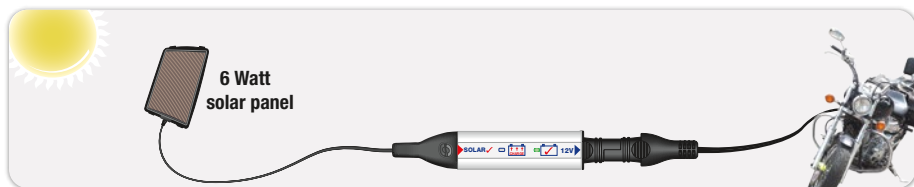
SOLAR POWER OK
red light on



CHARGING
red light flashing



MAINTAINING (READY)
green light flashing



1

TEST
solar volts
& battery

2

Pulse
SAVE
(from 1V)

3


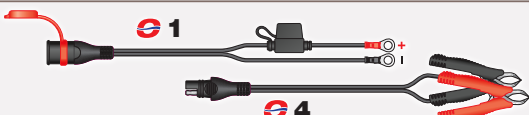
Pulse
CHARGE

4

Optimate
Pulse
maintenance



INCLUDED:
6W SOLAR PANEL with
WEATHERPROOF CASE
+ MOUNTING HARDWARE
+ 0-140 12V CHARGE CONTROLLER
+ CABLE ACCESSORIES

CHARGING AMPS	4-5A peak pulse	
USE	INDOOR / OUTDOOR	t°min: -20°C
SAVE	Low volt start 1V Pulse SAVE	
IDEAL FOR	 STD AGM GEL from 2Ah	
CABLE ACCESSORIES INCLUDED		

Optimate
solar

**Converts your 12V solar panel
to a smart pulse charger for
12V batteries**

TM-520

Smart pulse current control

SAVE your 'dead' battery with solar power

Controlled SAFE long term maintenance

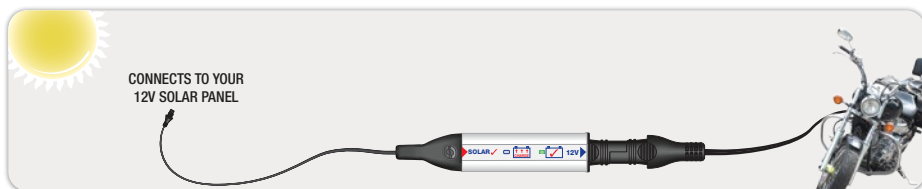
SOLAR POWER OK
red light on



CHARGING
red light flashing



MAINTAINING (READY)
green light flashing



CONNECTS TO YOUR
12V SOLAR PANEL

INCLUDED:
+ 0-140 12V CHARGE CONTROLLER
+ CABLE ACCESSORIES

1

TEST
solar volts
& battery

2



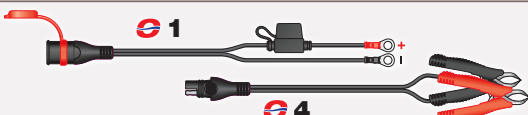
Pulse
SAVE
(from 1V)

3

Pulse
CHARGE

4

Optimate
Pulse
maintenance

CHARGING AMPS	4-5A peak pulse	
USE	INDOOR / OUTDOOR	t° min: -20°C
SAVE	Low volt start 1V Pulse SAVE	
IDEAL FOR	  from 2Ah	
CABLE ACCESSORIES INCLUDED		

**The world's first 6V solar pulse charger
that works from a std 12V solar panel**

TM-521

Smart pulse current control

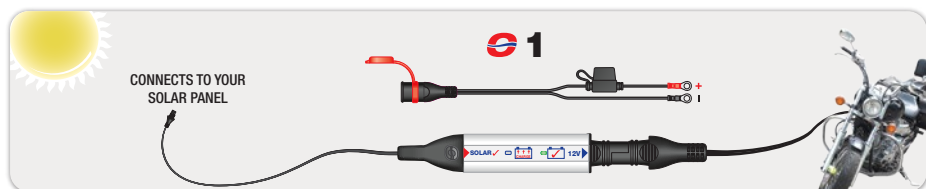
SAVE your 'dead' battery with solar power

Controlled SAFE long term maintenance

SOLAR POWER OK
red light on

CHARGING
red light flashing

MAINTAINING (READY)
green light flashing



INCLUDED:
+ 0-141 6V CHARGE CONTROLLER
+ CABLE ACCESSORIES

1

TEST
solar volts
& battery

2



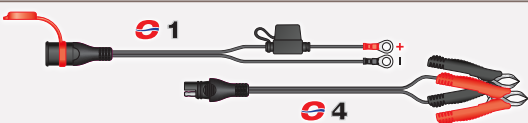
Pulse
SAVE
(from 1V)

3

Pulse
CHARGE

4

OptiMate
Pulse
maintenance

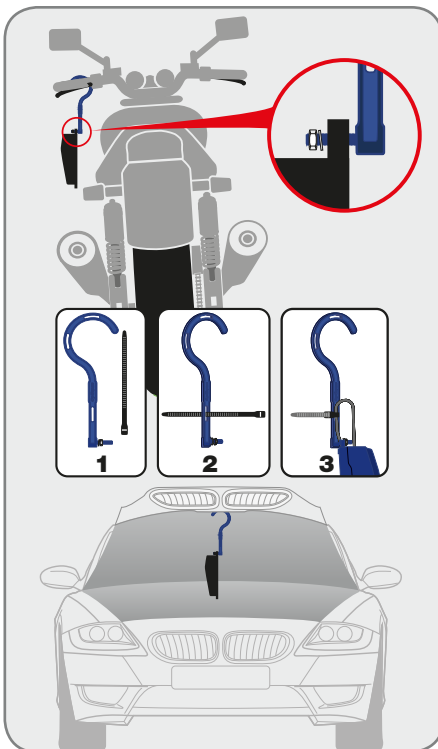
CHARGING AMPS	4-5A peak pulse	
USE	INDOOR / OUTDOOR	t°min: -20°C
SAVE	Low volt start 1V Pulse SAVE	
IDEAL FOR	  from 2Ah	
CABLE ACCESSORIES INCLUDED		

Charger HOOK

TS-252

***Keep your charger off the ground
and in plain view.***

***Supports
OptiMate 2, 3, 4, 5, 6, 7, Lithium***



OptiMATE

**The Battery Saving
Charger**

GENERAL SPECIFICATIONS

AC POWERED BATTERY CHARGERS

Global AC supply range: 100 - 240Vac 50-60Hz



Tested and conforms to electrical safety and electromagnetic interference requirements for Europe and North America (Canada & USA).



Complies with ROHS lead-free regulations.



California Energy Commission listed.

WARRANTY

Three year product replacement warranty. Find more information at www.tecmate.com/warranty.

DESIGN

All OptiMate battery chargers are 100% designed by TecMate.

OptiMATE

accessories

Find the full range of OptiMate Accessories
CABLE, USB, LED, battery MONITOR and TESTER at
optimize1.com