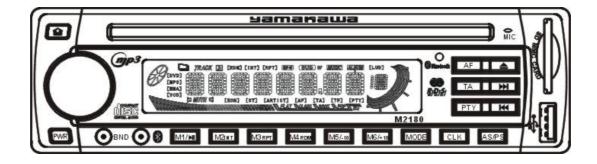
# yamakawa"

Model: M2180

# **Instruction Manual**



Bluetooth Car Stereo Compact Disc MP3/CD-RW/CD-R/CD SD/MMC USB Media Player with PLL FM Stereo Radio Radio Data System (RDS) Detachable Front Panel System

# Yamakawa" MODEL: M2180

Bluetooth Car Stereo Compact Disc MP3/CD-RW/CD-R/CD SD/MMC USB Media Player with PLL FM Stereo Radio, Radio Data System Detachable Front Panel System

#### **FEATURES**

- MP3/CD-RW/CD-R/CD Playback
- The best stations memory automatically memorizes the best (strongest) station in the order their strength (AS)
- MP3 files playback from CD, USB, MMC & SD card direct access
- Electronic Volume, Bass, Treble, Fader and Balance control
- Precision electronic tuning with phase-lock loop (P.L.L.) Circuitry
- Programmable 18 preset memory tuning (6 each for FM1/FM2/FM3)
- Loudness control Manual/Auto (Seek)/up and down tuning control
- Band selector for FM1/FM2/FM3
- Display control (Frequency, Station Name, Program Type, Clock)
- Clock Function in RDS
- CD Repeat Function
- CD and MP3 files on CD/CD-R/CD-RW player function
- Preamplified Line-out for external amplifier
- Detachable front panel protects against theft
- Lighting system
- RDS Function:

PI (Program Identification) TA (Traffic Announcement)

PS (Program Service Name) PTY (Program Type)
AF (List of Alternative Frequencies) TP (Traffic Program)

Function 2	LCD display 17
Warnings 4	Panel release button 17
Drawings 5	CD slot 18
Location 6	CD eject button 18
Installation	Pause button
Precautions7	Intro button 18
Mounting example7	Repeat button18
Detaching and attaching	Random button18
The front panel8	Select MP3 Files 19
ISO connector9	Reset19
Maintenance10	DSP20
Operation	Bluetooth 21
Power on/off11	Bluetooth 22
Select	Bluetooth23
Volume Knob	Specifications24
TA seek/TA alarm11	
PI Mute/PI Sound12	
Retune L/S12	
MASK DPI13	
Beep Mode13	
Preset Stations13	
RDS Function	
AF/REG function14	
TA function15	
PTY function15	
Display15	
Mode button16	
Band/Loud button16	
Automatic or manual tuning16	
A/PS17	

## Warnings

The exclamation point within the triangle is a warning sign alerting the user of important instructions accompanying the product.

The lightening flash with arrowhead symbol within the triangle is a warning sign alerting the user of voltage inside the unit.

The reduce the risk of electric shock, do not remove the cover. No user serviceable parts inside the unit. Refer all servicing to qualified personnel.

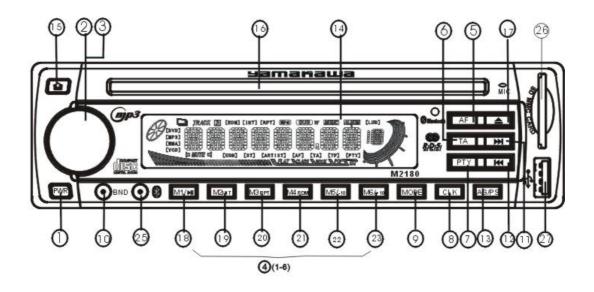
Invisible laser radiation when the unit is opened or interlocks defeated.

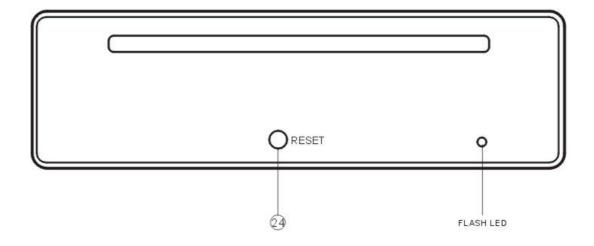
Avoid exposure to laser beam. User of controls, adjustments or procedures other than those specified herein may result in hazardous radiation exposure.

This unit must not be exposed to moisture or rain.

This unit should be positioned so that it is properly ventilated.

Do not expose this unit to direct sunlight or heat radiating sources.





# LOCATIONS OF CONTROLS

- 1. POWER ON/OFF
- 2. FUNCTION SELECT BUTTON
- 3. VOL UP/VOL DOWN
- 4. PRESET STATIONS (1, 2, 3, 4, 5, 6)
- 5. AF FUNCTION (ALTERNATIVE FREQUENCIES)
- 6. TA FUNCTION (TRAFFIC ANNOUNCEMENT)
- 7. PTY FUNCTION (PROGRAM TYPE)
- 8. DISPLAY BUTTON (CLK)
- 9. MODE BUTTON (MODE)
- 10. BAND BUTTON (BND)
- 11.12. AUTOMATIC OR MANUAL TUNING (FREQ UP ₩ OR FREQ DOWN » /
- CD TRACK/SEARCH BUTTON
- 13. AUTO SEEK SEARCH TUNING (AS/PS)
- 14. LCD DISPLAY
- 15. PANEL RELEASE BUTTON (♣)
- 16. CD SLOT
- 17. CD EJECTS BUTTON (♠)
- 18. PAUSE BUTTON
- 19. INTRO BUTTON (PREVIEW ALL TRACKS)( INT)
- 20. REPEAT BUTTON (RPT)
- 21. RANDOM BUTTON (RDM)
- 22.23. -/+10 TRACK SEARCH DOWN/UP
- 24. RESET BUTTON
- 25. BLUETOOTH FUNCTION
- 26. SD/MMC CARD JACK
- 27. USB JACK

Installation

#### **INSTALLATION**

#### **PRECAUTIONS**

Choose the mounting location carefully so that the unit will not interfere with the normal driving functions of the driver. Avoid installing the unit where it would be subject to high temperatures, such as from direct sunlight or hot air from the heater, or where it would be subject to dust, dirt or excessive vibration.

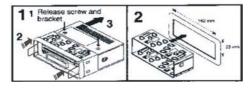
Use only the supplied mounting hardware for a safe and secure installation. Be sure to remove the front panel before installing the unit.

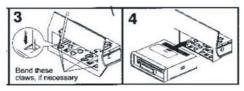
Mounting angle adjustment

Adjust the mounting angle to less than 30.

#### MOUNTING EXAMPLE

## Installation in the dashboard







Keep the release key in the safe place as you may need it in future to remove the unit from the car.

#### Detaching and attaching the front panel

The front panel of this unit can be detached in order to prevent the unit from being stolen.





#### DETACHING THE FRONT PANEL

Before detaching the front panel, be sure to press the PWR button to turn off the unit first. Then press the button and detach the panel by pulling it towards you as illustrated.

Note: Be sure not to drop the panel when detaching it from the unit.

#### ATTACHING THE FRONT PANEL

Make sure the front panel is the right way up when attaching it to the unit as it cannot be attached upside down. Bring side B of panel to side A of main unit. Inset the panel in and push until it clicks. Panel is attached.







#### Notes:

Do not press the front panel hard against the unit when attaching it. It can be easily attached by pressing it lightly against the unit.

When you carry the front panel with you, put it in the supplied front panel case.

Do not press hard or give excessive pressure to the display window of the front panel when attaching it to the unit.

#### ISO CONNECTOR

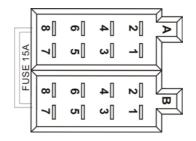
RCA Jack Line Out (Rear/Front)-Gray DUAL

:Red(F/R right) DUAL

:White(F/R left) DUAL

Bluetooth microphone Jack:

:Yellow single



#### CONNECTOR A

- 1.
- 2.
- 3.
- 4. MEMORY +12V
- 5. AUTO ANTENNA OUTPUT
- 6.
- 7. +12V (TO IGNITION KEY)
- 8. GROUND



The connector A no.7 must be connected by car ignition key in order to avoid that car battery becomes weak when the car will be not used for long period.

#### **CONNECTOR B**

- 1. REAR RIGHT SPEAKER (+)
- 2. REAR RIGHT SPEAKER (-)
- 3. FRONT RIGHT SPEAKER (+)
- 4. FRONT RIGHT SPEAKER (-)
- 5. FRONT LEFT SPEAKER (+)
- 6. FRONT LEFT SPEAKER (-)
- 7. REAR LEFT SPEAKER (+)
- 8. REAR LEFT SPEAKER (-)

# Installation

## Maintenance

# **FUSE REPLACEMENT**

If the fuse blows, check the power connection and replace the fuse. If the fuse blows again after the replacement, there may be an internal malfunction. In this case, consult your nearest repairing center.

# Warning

Use the specified amperage fuse for each lead. Use of a higher amperage fuse may cause serious damage.

#### OPERATING INSTRUCTIONS

#### 1. POWER ON/OFF

By pressing this key (1), the unit is switched on and off. This unit is turned on by pressing any key.

# 2. SELECT (SEL)

#### 3. VOLUME KNOB

Rotate Volume up/down knob to control the VOLUME to select other functions, press the SEL (2) button shortly until the desired functions is shown on the display. Figure 1 shows how control functions are selected using the SEL button.

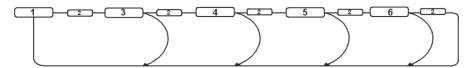


Fig. 1 Selection of sound control functions

# 1. VOLUME 2. SELECT3. BASS 4. TREBLE 5. BALANCE 6.FADER

To increase or decrease the volume by rotating the volume knob. These buttons can be used to adjust the BASS, TREBLE, BALANCE and FADER.

## (1) TA SEEK/TA ALARM (2)

When press the SEL button (2) for more than 2 seconds it is activated as selecting mode of these function.

TA SEEK Mode or TA ALARM mode is selected by rotating the volume knob.



#### TA SEEK mode:

When newly turned station does not receive TA information for 5sec, the radio retunes to next station which has not the same station (PI) as the last station, but has the TA information. In TA seek mode, the current station can be changed to the completely different station be cause the unit searches TA station when the field strength of the current station is very weak, or the current station has no TA signal.

#### -TA ALARM mode:

Any automatic retune mode is not activated, just can be heard Beep sound.

# (2) PI MUTE / PI SOUND (2)

When press the SEL button for more than 2 seconds, it is activated as selecting mode of these function.



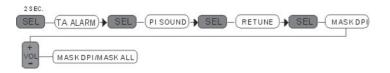
## (3) RETUNE L/S

When press the SEL button for more than 2 seconds, it is activated as selecting mode of these function.



## (4) MASK DPI (2)

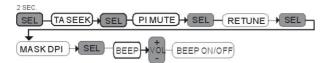
When press the SEL button for more than 2 seconds, it is activated as selecting mode of these function.



MASK DPI: masked only the AF which has different PI. MASK ALL: masked the AF which has different PI and NO RDS signal with field strength.

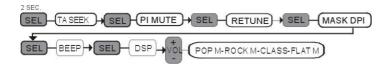
# (5)BEEP MODE (2)

When press the SEL button for more than 2 seconds, it is activated as selecting mode of these function.



## (6)DSP MODE (2)

When press the SEL button for more than 2 seconds, it is activated as selecting mode of these function.



## 4. PRESET STATIONS (1, 2, 3, 4, 5, 6)

#### (A) RADIO MODE:

When press short, these keys select a preset station directly. When press longer than 1 sec., current station is stored in preset memory bank. When PTY mode is selected, the PTY switch is shared as follows:

PTY music group---PTY speech group---OFF

#### **MUSIC**

- 1. POP M, ROCK M
- 2. EASY M, LIGHT M
- 3. CLASSICS, OTHER M
- 4. JAZZ, COUNTRY
- 5. NATION M, OLDIES
- 6. FOLK M

#### SPEECH

- 1. NEWS, AFFAIRS, INFO
- 2. SPORT, EDUCATE, DRAMA
- 3. CULTURE, SCIENCE, VARIED
- 4. WEATHER, FINANCE, CHILDREN
- 5. SOCIAL, RELIGION, PHONE IN
- 6. TRAVEL, LEISURE, DOCUMENT

# (B) CD/MP3/SD/MMC/USB PLAYER MODE:

1. PAUSE 2. INTRO 3. REPEAT 4. RANDOM 5. -10 6. +10

#### USING THE RDS FUNCTION

What is RDS?

The RDS (Radio Data System) is a digital information system developed by the EBU (European Broadcast Union). Piggy-backed on normal FM broadcasts, RDS offers a variety of information services and automatic retuning functions for RDS-compatible car stereos.In1988, RDS became available in the United Kingdom, France, West Germany, Ireland and Sweden. Test trans-missions are being conducted in many other European countries. It is expected that RDS will be available in most western European countries in the near future.

## 5. AF/REG function (ALTERNATIVE FREQUENCIES)

When press short, AF/REG switching mode is selected.

When AF/REG switching mode is selected, the radio checks the signal strength of the AF all the time. When press long, it is activated as regional mode ON/OFF.

-Regional mode ON:

AF switching or PI SEEK is implemented to the station which have all PI codes same as current station. REG segment is turned on in LCD display.

-Regional mode OFF

The regional code in the format of PI code is ignored when AF switching or PI SEEK is implemented.

#### 6. TA function (TRAFFIC ANNOUNCEMENT)

When press short, it is activated as TA mode on or off.

When TA mode is on and traffic announcement is transmitted.

- -When the unit is in CD/MP3 mode, it will switch to radio mode temporarily.
- -If the volume level was under the threshold point, it will be raised to the threshold point.
  - -When TA station is received, A segment is turned on in LCD display.

#### 7. PTY function (PROGRAM TYPE)

PTY MUSIC---PTY SPEECH---PTY OFF

While selecting PTY type, its selection is implemented by preset buttons as described in preset key. When PTY is selected, the radio starts to search corresponding PTY information, and stops if the corresponding PTY information is detected.

#### 8. DISPLAY (DISP)

Selects radio frequency, clock display and PTY NONE.

To set the clock:

- (1). with clock display selected, hold down the "DISP" button until clock display starts flashing.
- (2). Rotate the volume knob to change minutes and hours.
- (3). Press "DISP" button to start the clock.

When this key is pressed it is operated as the conversion of each display mode as follow.

1) Incase of receiving RDS station

**TUNER MODE** 

PS---PTY---FREQ---CT

CD/MP3 PLAYER MODE

CDP---PS---PTY---FREQ---CT

2) In case of receiving NON RDS station

RADIO MODE

CLOCK---FREQ ---NO PTY

CD/MP3 PLAYER MODE

CDP---FREQ---CT---NO PTY

Each display time is several seconds, and come back to 1'st position after several seconds.

CT=clock time

FREQ=frequency

#### 9. MODE BUTTON (MODE)

By pressing this key, user can select RADIO mode or CD/MP3/SD/MMC/USB PLAYER mode.

## 10. BAND BUTTON (BND)

Each band is toggled cyclically by pressing this key FM1-FM2-FM3. When press longer than 1 sec, they are operated as LOUD ON or LOUD OFF.

#### 11.12. AUTOMATIC OR MANUAL TUNING (FREQ UP:

OR FREQ DOWN 9)

#### (A) RADIO MODE

When press short, these keys are operated as MANUAL tuning mode.

When press longer than 1 sec., they are operated as SEEK tuning mode.

## (B) CD/MP3/SD/MMC/USB PLAYER MODE

When press short, they are operated as TRACK UP/DOWN mode.

When press longer than 1 secretary, they are operated as CUE or REVIEW mode.

## 13. AUTO SEEK SEARCH TUNING (AS/PS)

By pressing shortly, the radio searches for each preset Station.

When field strength level is bigger than the threshold level of stop level, the radio is holding at that preset number for 5 secretaries.

With releasing mute, and then searches again. By pressing longer than 1sec and then 6 strongest stations are preset to the corresponding preset number.

When AS operation is finished, the radio executes the preset scan.

#### 14. LCD DISPLAY

The liquid Crystal Display will display the current state of the unit.

#### 15. PANEL RELEASE BUTTON

Press this button and the left-hand part of the panel will be released.

#### CD CONTROL LOCATION OF PARTS

#### 11. 12. SKIP TRACK/SEARCH BUTTON

FORWARD AND REVERSE TRACK SEARCH

(or changing songs)

Press the SKIP button( TUN → or TUN → ) during play to go to the desired track(song).

TUN ₩ ...REVERSE TUN ➤ ...FORWARD

Press and hold the SKIP button (TUN → or TUN → during play to scan the disc at high speed. When the desired music section of the disc is found, release the button. Normal play will resume. When CD/MP3 play is finished, CD/MP3 mode automatically changes to FIRST TRACK.

#### 16. CD SLOT

#### 17. CD EJECT BUTTON

Press the EJECT button (17) to remove the CD.

#### 18. PAUSE BUTTON

During PLAY mode, press PAUSE button (18) to PAUSE.

Press it again to resume play.

#### 19. INTRO BUTTON (Preview all Tracks)

When this button (19) is pressed, INT indication is displayed and the first several seconds of each track of the disc are played.

Press again to stop intro and listen to track.

## 20. REPEAT BUTTON (RPT)

When this button is pressed, RPT indication is displayed and play of the selected track will be continually repeated until the Track Repeat mode is cancelled by pressing RPT button (20) again.

## 21. RANDOM BUTTON (RDM)

When this button is pressed, RDM indication is displayed and each track of the disc are played in random instead of normal progression. To cancel RANDOM mode, press RDM button (21) again.

#### 22, 23. 10 TRACK DOWN/UP SELECT:

(In case of MP3/SD/MMC/USB files)

5: 10 TRACK DOWN 6: 10 TRACK UP

#### HOW TO SELECT MP3 FILES

# 1. Searching Track:

Press "AS/PS", then searching track is activated.

Press "SEL", then the first digit is blinking.

With "VOL 6 / VOL 6 "knob, select first digit you want.

Press "SEL", then the first digit is fixed and second digit is blinking.

With "VOL 6 / VOL 6 " knob, select 2' nd and 3' rd respectively.

Then automatically the song you selected will start.

# 2. Searching File Name:

Press "AS/PS" twice, then file search is activated.

Press "SEL", then the first directory is displayed.

With "VOL 6 / VOL 6 " knob, you can select the directory you want.

Press "SEL" again, then the directory is fixed and the first file name

With "VOL of / VOL of " knob, you can select the file you want is displayed.

Press "SEL", Then The Song you selected will start.

# 3. Searching Character:

Press "AS/PS" 3 times, then character search mode is activated.

Press enter "SEL" button, then "A" character is displayed.

With "VOL / VOL is knob, you can select the letter you want.

Press enter "SEL" key longer than 2 secretary.

Then song which has same character you selected is displayed.

Press enter "SEL" key, then the song you selected will start.

BAND	MP3 NAVIGATION MODE SELECT
1	PLAY, PAUSE
2	INT
3	RPT
4	RDM
5	10 TRACK DOWN
6	10 TRACK UP
SEL	MENU

#### 24. RESET

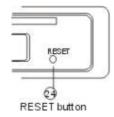
Reset button (24) is placed on the housing. The reset

button is to be activated for the following:

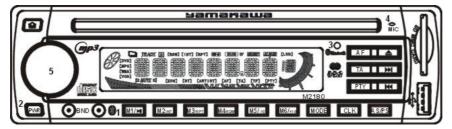
Initial installation of the unit when all wiring is completed.

All the function button do not operated.

Error symbol on the display.



#### 25. Bluetooth function



## 1: Bluetooth Multi-Function key

- Pairing
- Pick up call
- Ending call
- Redial
- Voice dialing
- 2: Speaker Mute
- 3: Bluetooth status LED Indication
- 4. Microphone
- 5. Volume control

#### INTRODUCTION

The M2180 Bluetooth car CD/MP3 player not only provide the audio function but also hands-free Communication using cell phones . This user guide can help you to establishing a connection with your mobile phone, You need to have a phone with embedded Bluetooth capability. The phone can be tucked away in your pocket or in a bag while you handle incoming call and outgoing calls, and adjust the volume up or down using the button on the car player. This device utilizes Bluetooth wireless technology version V1.2 that supports Bluetooth Headset and/or Handsfree profile.

#### **PAIRING**

The M2180 Bluetooth device can store pairing info for 3 phone, pls make sure the paired phone are not connect to the device when pairing the new mobile phone. Make sure that you have paired the device with your Bluetooth phone before you start to use it.

- Step 1. check your mobile phone's user guide, then find out the location of the Bluetooth menu in your phone, and turn Bluetooth on.
- Step 2. Press and hold the " " the player display will show "Phone" ,then a "do do" melody will be played, release the button, the blue light will flash quickly.
- Step 3. Perform "Bluetooth device discovery" on your mobile phone. It takes few seconds to search for and find other Bluetooth devices around you.
- Step 4. Phone display will show "Haoshengda" as found and ask for your confirmation that you want ot pair it, pls confirm it, then Enter Passkey "1234"(default) when your phone prompts your, The phone will start pair with car player, then the phone will advise that pairing has been successful, the blue LED will flash one time per 2 sec.

If pairing failed, the blue LED indication keeps flashing rapidly for 2 minutes, during the period, please repeat step 3 to 4 for paring again, Over 2 minutes, the blue LED will back to normal, and if a re-pairing is needed. Please refer to step 2 to 4 above.

During pairing, if you want to stop the process, push the " " for 2 sec

then a "dn dn dn dn" down going melody will played, the player will back

NOTE: Most mobile phone show a Bluetooth linkage symbol on the display screen, once M2180 and phone have successfully paired, you are ready to make and receive call.

#### ANSWER A CALL

to normal status.

When player is on (Play music or radio)

When a call is coming, the music will stop, Player display will show" Phone", meanwhile the "do lu do lu,do lu do lu" up going melody will be played.

Auto answer: If the mobile phone set to auto answer under hands -free or headset mode, the call will automatically after few rings or depends upon your mobile phone setting.

Manual answer: Answer the call by simply push the " once .it will have "do'

sound, then start the conversation

When player is off (car is power on)

When call is coming, it will auto turn on the player, display will show "phone", meanwhile the "do lu do lu,do lu do lu" up going melody will be played.

Auto answer: If the mobile phone set to auto answer under hands -free or headset mode, the call will automatically after few rings or depends upon your mobile phone setting.

Manual answer: Answer the call by simply push the " once, it will have a

"do" sound, then start the conversation

## **ENDING A CALL**

Simply push the " once to ending a call, after few sec, it will back to the status before call. (For example, if the player is off before phone call, then after phone call it will turn off automatically.)

#### LAST NUMBER REDIAL

While M2180 car player is in standby condition (not in conversation), press and hold the " $^{"}$ " for 2 ~3 sec, and your phone will redial the last number.

#### **VOICE DIALING**

Voice dialing function on your phone must be turned on and voice tag must When M2180 car player is in standby condition (not in conversation), Simply push (1 sec) the " once, then CD player display will show "Phone", then push again (1 sec), it will come out "do" sound, then will prompt you to speak the voice tag that was previously stored in the phone's voice dial phone book.

## SPEAKER MUTE & VOLUME CONTROL

Speaker mute: simply push " push" button for 1 sec, the speaker will mute, push" again (1 sec), disable the speaker mute function.

Volume control: you can adjustment of speaker volume higher or lower by turning the "Volume control wheel".

<u>Notice:</u> M2180 Bluetooth device had built in DSP echo cancel technology, to minimize echo and background noise, but please still don't turning the volume too high since it might interrupt with microphone and cause some echo.

# Specification

#### **SPECIFICATIONS**

**FM SECTION** 

Frequency range 87.5-108.0MHz

Channel step 50KHz
Intermediate frequency 10.7MHz

Sensitivity 2<sup>µ</sup>Vat 30 dB S/N

Stereo separation >30dB Signal to noise radio >60dB

CD/MP3 PLAYER SECTION

Signal to Noise Ratio >60dB

Channel Separation >50dB (1 KHz) Frequency Response 20Hz-20KHz

LINE-OUT

Output 300-800mV . Impedance 10KOhm

**GENERAL** 

Power Supply Voltage DC 12 Volts Negative Ground

Max Current Consumption 15A

Max Output power 40W x 4 CH



Specifications and the design are subject to possible modification without notice due to improvement.



If at any time in the future you should need to dispose of this product. Please note that Waste electrical products should not be disposed of with household waste.

Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice. (Waste Electrical and Electronic Equipment Directive)