MBC MARINE Smart Touch

Touch screen and internet remote for MBC air conditioners

Owner's Manual Installation Guide

Rev 1.6 EN Firmware: A064/T030

First steps

Thank you for purchasing our Smart Touch intelligent AC controller.

The Smart Touch is a touch-screen controller and internet remote for the MBC Marine line of air conditioners.

Turning on the controller

1. Power up the AC unit. The touch screen will turn on, ready to use.

Remote access

If there is a Wi-Fi network connected to the Internet, follow these steps below.

WARNING! The controller works with the 2.4GHz Wi-Fi band. If your Wi-Fi network operates on the 5GHz frequency, your router must be adjusted to 2.4GHz first!

- Tap the (red) Wi-Fi icon at the top-right corner to access the network settings (see picture). Enter the name of the network (WIFI NAME) or tap the Wi-Fi icon to select one from the available networks. Enter the PASSWORD.
- If the network connection was successful, the Wi-Fi icon will turn from red to yellow, then to green.
- Open a web browser on your phone, tablet, or computer. Register and log in to your account on the <u>control.mbc-marine.com</u> page. Only the E-MAIL (which will be the login name) and PASSWORD are required to create your account.

Your account will not be activated until you click on the link sent in the confirmation email. If you missed that email, just click on "RESEND REGISTRATION EMAIL".

WIFI NAME:	MyWifi	((;
PASSWORD:	pass1234	
40 91 51 A8 46 10 TO CONFIGURE	NO REMOTE ACCESS AVAILABLE , VISIT: CONTROL.MBC-MARINE.COM	1
	HOME	



3

- 5. If this is your first Smart Touch controller, the "AC UNITS" page loads.
- 6. Tap on ADD NEW and enter the **12-digit ID of the controller**. The controller is now registered to your account and can be remotely accessed using the <u>control.mbc-marine.com</u> portal.

The ID of the controller can be found on the touch panel's PREFERENCES screen. It is also displayed – as a reminder – on the network settings screen until registration is complete.

Before selling the controller remove it from your account, so that the new owner can register it. For further details see the "REMOTE CONTROL (PHONE) | SETTINGS / AC UNITS" paragraph.

How to create a remote controller icon on your phone

iPhone / iOS

- Log in to the <u>control.mbc-marine.com</u> portal using Safari.
- On the bottom menu, tap on "Share".
- Select the "Add to Home screen" menu item.

ANDROID

- Log in to the <u>control.mbc-marine.com</u> portal using Chrome.
- Tap on the three-dots in the top menu.
- Select "Add to Home screen".
- Enter a name for the icon, then select "Add".



Touch screen

HOME

While on the MAIN screen, after 3 minutes of inactivity the controller goes into sleep mode, displaying a clock.

ON/OFF button:

- Tap to turn the unit ON/OFF.
- Hold to enter the TIMER SETTINGS screen.



The Wi-Fi icon is **RED** when disconnected, **YELLOW** when connected to Wi-Fi but the remote server is not found, and **GREEN** when remote control is ready.

Tap the Wi-Fi icon to open network settings.

Set temperature – can be adjusted between 16C / 61F and 30C / 86F.

■ Compressor, water pump and control valve status.

DETAILS menu:

- Tap to enter the DETAILS screen.
- Hold to immediately enter sleep mode.





FAN control:

- Tap to select fan speed.
- Hold to activate the auto-stop function, indicated by the pulsing fan icon. If active, the fan will also stop when the compressor stops.



DETAILS

- RETURN AIR (also room) temperature.
- RADIATOR temperature.
- SEAWATER temperature.
- COMPRESSOR CURRENT in amps.



PREFERENCES

- Select temperature scale and display language.
- Name of the AC assign a name that identifies this unit.
- **The 12-digit ID of the controller**, optionally followed by the serial number (S/N) of the AC unit or time since powered up (UP).
- Software version. If there is an update available, it is replaced by a yellow UPDATE button. Tap the button to start the update process.
 Note: critical updates will auto-install.
- Brightness and volume settings. Brightness can be set to auto mode using the toggle switch.

C - EN-	My_AC	
40 91 51 A8 46 10 UP: 329d14h31m	*	
Ver. A060		
Vin: 12.2V	EXT	

CLOCK

GMT (Greenwich Mean Time) will be automatically retrieved using the internet. Time zone and Daylight Saving Time must be adjusted manually.

- DST (Daylight Saving Time, or +1 hour) active.
- Time ZONE setting.
- HOUR and MINUTE adjustment.



WIFI - NETWORK

- WIFI NAME or SSID.
- The Wi-Fi icon is **RED** when disconnected, **YELLOW** when connected to Wi-Fi but the remote server is not found, and **GREEN** when remote control is ready. Tap the Wi-Fi icon to select one from the available networks.
 - PASSWORD
 - Reminder displayed only when the unit is not registered for remote access. Shows the **12-digit ID** and the address of the registration portal.

WIFI NAME:	MyWifi	L.
PASSWORD:	pass1234	
40 91 51 A8 46 10 TO CONFIGURE	NO REMOTE ACCESS AVAILABLE VISIT: CONTROL.MBC-MARINE.COM	
	HOME	

TIMER SETTINGS

- A daily ON and a daily OFF time can be set in 10-minute steps.
- Both events can be activated (armed) separately.
- The timers remain active until de-activated on this screen.
- The timer events will be skipped if there is no power applied at the set time (i.e., the events do not catch up in case of a power failure).



REMOTE CONTROL (PHONE)

HOME

- ON/OFF button.
 - Boat ("Test"): select one from the boats added on the BOATS page.
 - AC unit ("My_AC"): select one added on the AC UNITS page.
- Set temperature can be adjusted between 16C / 61F and 30C / 86F.
- Image: Image
 - MODE) Mode selector: 🗱 COOL, 🔀 FAN, 🔅 HEAT, 🗛 AUTO.
 - Select fan speed.
 - HOME (this) page.
 - DETAILS page.
 - Alarm messages. Turns **RED** if there is an alarm.

DETAILS

- RETURN AIR temperature.
- EVAPORATOR temperature.
- COOLANT temperature.
- Compressor CURRENT.
- **12-digit ID of the controller,** below it the SERIAL number of the AC unit.
- Software version, touch screen (NX) version.
- AC name ("My_AC"), assign any name i.e., "Salon" or "Owner's cabin"
- Temperature unit and language.
- FAN AUTO ON / OFF: fan will be stopped when the compressor stops.
- SETTINGS pages see next paragraph.





SETTINGS / AC UNITS

- ID number, select one of the already registered SmartTouch controllers.
- BOAT NAME that has the controller installed on. Select one from the boats added on the BOATS page.
- AC NAME, assign a meaningful name i.e., "Salon" or "Owner's cabin"
- ADD NEW controller to register a new unit.
- DELETE to remove an already registered unit i.e., **before selling it**. The unit can be re-registered again by the new owner.

AC UNITS ID: 40:91:51:A8:45:FC		
40:91:51:A8:45:FC		
	•	
BOAT NAME: Rangali	-	
AC NAME: My_AC		
ADD NEW DELETE		

SETTINGS / BOATS

- Boat can be selected from previously added boats.
- Port, berth, registration number optional: PORT, BERTH, REG#.
- Add new boat: ADD NEW.
- Edit boat data: EDIT.
- Delete boat to confirm, you'll have to re-enter the boat name again: DELETE.

	🔒 номе
BO	ATS
Rangali	
PORT:	BFYC
BERTH:	J39
REG#:	BA123456
ADD NEW EI	DIT DELETE

SETTINGS / ACCOUNT

- Password change: NEW PWD, PWD AGAIN.
- Email address (login name) change: E-MAIL.
- Name, optional: FIRST NAME, LAST NAME.
- Log out from the remote portal: LOGOUT).



Installation

Electrical connection

CAUTION! Disconnect the power supply before opening the main circuit box. Risk of electric shock!

The Smart Touch unit connected to the main controller board of the AC unit using the supplied RJ45 cable. Other RJ45 cables can be used. The maximum cable length is 15m / 50ft.

Reconnect the power to the AC. The touch panel will turn on, ready to use.

Check supply voltage on the PREFERENCES screen, below version numbers. Normal value is about 12V. If it is less than 8V then check and clean both end connectors of the RJ45 cable, use a contact cleaner spray, or replace the cable.

During start-up the controller will check if the return air temperature sensor is connected to the main board of the AC unit. If not, it will display an error message (see: "ALARM") until the sensor gets connected. The return air temperature sensor is required for the operation of the AC.

Operational lights

There are two lights on the RJ45 socket of the touch panel. These indicate data transmission to- and from the AC main circuit board. Rapid blinking green light means data read from the AC, occasional flashes of yellow indicates commands sent to the AC.

Mounting

WARNING! The controller housing is not waterproof. Mount it at a dry location, away from spray, condensing or running water!

After completing the electrical connection, mount the controller where it can be easily seen and accessed, preferably protected from direct sunlight and away from large metallic surfaces that could affect the performance of the built-in antenna.

To mark the cutout, use the supplied plastic template. Minimum mounting depth is 30mm or 5/4".

Use the supplied V-head chipboard screws for mounting. For proper display orientation the RJ45 connector must be on the bottom edge. Form a drip-loop on the cable below the display to prevent water droplets entering the connector.

Remove the protective film from both sides of the decorative frame and the screen surface, then push the frame around the screen. The frame is held in place by friction. To remove, pry it free along the edges using a plastic card.

Service menu

The service menu can be accessed from the PREFERENCES screen, holding the NEXT button for 5 seconds. It is protected by a PIN code, which can be obtained from our service partners.

This menu is used to select the number of fan speeds (5-spd or 3-spd), and the voltages in percentage for each speed. With a 3-speed configuration, voltages 1, 3 and 5 are used.

The AC unit power supply can also be selected (AC or DC). This setting will affect how the error codes are interpreted.

The second screen of the service menu is a real-time updated list of raw internal data, presented for diagnostic purposes. On/off state, operation mode and set temperatures can be changed by tapping their respective button. Error codes are displayed in text (English only) by tapping the error number.

Note: most units have no dedicated external temperature sensor (hence the EXT field will be empty). Instead, return air temperature is being used.

FAN AND POWER CONFIG 1 2 3 4 5 5-spd + + + + + + + 35 \leq 47 \leq 56 \leq 72 \leq 91 AC - - - - - -



Replacing the battery

A CR1220 battery can be found on the circuit board of the controller to maintain real time clock settings. The lifetime of this battery is about 3 to 4 years. To replace, simply remove the back cover of the controller secured by four screws and insert a fresh battery into the holder.

Background images and welcome movie

The micro-SD card socket on the circuit board of the display can be used to store two background images and a movie. To use this feature, insert and push-lock a FAT32 formatted micro-SD card containing the files.

The pictures must be in **.ix** format, movie file must be in **.video** format, both sized 480x272 pixels. Conversion programs to create these formats are available from our service partners. These files are optional, missing ones will be skipped:

- 1. **clock.ix** background image for the sleep/clock screen.
- 2. **logo.ix** background image for every screen except sleep/clock.
- 3. **logo.video** welcome movie played each time power supply is turned on.

Technical data

Packaging dimensions

W x H x D: 185 x 138 x 37mm (7.3" x 5.5" x 1.5") Gross weight: 390g (0.9lbs)

Unit dimensions

Cutout (W x H): 128 x 86mm (5.1" x 3.4") Required depth below mounting surface: 24mm (1") Dimensions above mounting surface (W x H x D): 158 x 115 x 10mm (6.3" x 4.6" x 0.4") Weight, less cabling: 270g (0.6lbs)

Environmental conditions

Storage: -30..+85C (-22..185F), RH: non-condensing Operational: -20..+70C (-4..158F), RH: < 90% Note: display response might be slow below freezing temperatures

Display

Resolution: 480 x 272 Backlight: 300nit, life > 30000 hours