FK2 Civic Type R Head Unit Replacement

The following covers how I have installed a 3rd party head unit in my FK2 Honda Civic Type R. It is possible that other head units can be used other than the one I have listed here but obviously that's up to you to decide.

What Do You Lose?

Before you go ahead and do this modification it is important to understand that you do lose some functionality when you remove the standard head unit. This is because the standard unit has a connection to the i-MID display in the centre of the upper dashboard over a honda specific harness plug. It uses this connection to send information over to the i-MID including track info, radio station info and time. Without this connection (and the custom software that runs on the standard head unit) the i-MID cannot display this information. When you first reconnect your car battery the i-MID clock will reset to 00:00 and normally the services on the head unit will then update that time using GPS time. As this software and connection no longer exists the time will stay at 00:00. The only way to get the time in sync with the "real time" is to reconnect your battery at midnight.

Another possibility is that the battery is not disconnected however this is really NOT RECOMMENDED!

This is what the i-MID display can still show with the standard head unit replaced. As you can see all the important stuff works just fine!



Parts Purchased

There are several Dasaita units on offer currently however this guide will talk about the universal 10.2 inch and the integrated 9 inch models specifically. The universal option allows you to pick and choose your own parts as per your own requirements whereas the 9 inch civic specific option comes included with most things you will need.

Universal 10.2 inch Double Din

 Dasaita 10.2 universal head unit <u>https://www.aliexpress.com/item/33058388173.html?spm=a2g0o.9042311.0.0.56154c4dorBXwH</u>



- Dasaita harness CB015 (includes all head unit harness and canbus module) -<u>https://www.aliexpress.com/item/32920047767.html?spm=a2g0s.9042311.0.0.19234c4diR0teA</u>
- Male RCA plugs (2 red and 2 white) for speaker harness https://www.amazon.co.uk/gp/product/B07V7XQK9Z
- Red and black wire for speaker harness
- Double DIN facia kit <u>https://www.aliexpress.com/item/32966537407.html?spm=a2g0s.9042311.0.0.19234c4diR0teA</u>
- Dasaita DAB+ kit <u>https://www.amazon.co.uk/External-Antenna-Digital-Amplified-Android/dp/B07G147H31</u>
- Screen protector for 10inch tablet <u>https://www.amazon.co.uk/gp/product/B071KKGMSV/</u>
- 2 x USB converter lead to change from Honda plug to generic USB (Toyota plug standard) <u>https://www.amazon.co.uk/Female-Keple-Vehicle-Factory-Connector/dp/B07HMZ2LJW</u>
- RCA harness (bought but took too long to arrive so didn't use but should work) -https://www.aliexpress.com/item/4001246976306.html?spm=a2g0s.9042311.0.0.19234c4diR0teA
- Fakra Z female to SMA male cable for factory DAB connection -<a href="https://www.amazon.co.uk/dp/B07S7BGP11/ref=cm_sw_r_cp_apa_fabc_N6WJCX9WH81FNTEJTH_string=cm_sw_r_cp_apa_fabc_N6WJCX9W

Civic 9 inch with Integrated Mounting

- Dasaita 9" 1 Din Head Unit for Honda Civic Hatchback 2012 2013 2014 2015 Multimedia Android 10 with Carplay android Auto Stereo
- <u>https://de.aliexpress.com/item/1005003706969440.html?gatewayAdapt=glo2deu&spm=a2g0o.90423</u> <u>11.0.0.3ce94c4dnHrKo5</u>

What's in the box



With this 9 inch option the display does not move at all unlike the 10.2 universal model which is mounted on a ball joint for screen tilt/rotate. It is fixed in place with a dash facia that is different to OEM to allow the 9 inch screen to fit recessed into the facia (to some degree).



The majority of purchases can be done via AliExpress however I would if possible purchase as much from Amazon as possible as the delivery tends to be faster. Also note that I made my own RCA conversion leads as I had trouble finding the correct harness option to do it for me. After I had already made my own and fitted I did find a pre-made option but at the time of writing this I have not tested it.

For the 10.2 universal option the double din facia is not a strict requirement however when I tried mounting the Dasaita head unit in the original facia there was a significant gap around the head unit. This basically needs a filler piece or adapter to plug the gap around the edge of the head unit otherwise it looks rubbish (see below).



The replacement facia kit comes with such adapters. I did not try using the adapter from the aftermarket kit with the original fascia but I suspect that may work as well and in hindsight I wish I had because that would have maintained the same trim style. As you can see the quality of my replacement facia wasn't the best however the 2 imperfections are hidden by the head unit screen.



The Dasaita Harness

Both dasaita versions require a dasaita harness to operate and integrate into the car. The universal 10.2 unit comes with a universal harness as you might expect (I ordered with DYX001 option) which you mostly replace with the CB015 canbus kit which is specific for the Honda CR-V style JDM cars (and happily the FK2 Type R). Make sure you choose the 10.2 variation that has carplay though as each model option comes in 2 versions (one with carplay/android auto chip in it and one without) so if you choose the one without you will need to buy a carplay USB dongle!

The 9 inch Civic bundle includes the CB015 harness as well and all connections on the back are the same between the 10.2 and 9.

When you plug the CB015 harness into the back of either of the head units it will look something like this.



Some more pics: both USB (one grey, two black), RCA-Harness, camera-Harness





The canbus module (dark red box) needs to be plugged in at both sides although later versions seem to be shipping with only one connection (maybe a new design). There will also be 2 blue wires with a white stripe marked "AMP", one coming out of the black plug that goes into the head unit and the other coming out of the largest grey socket. These 2 wires need to be connected together (use a crimp connector or equivalent - don't just twist the wires together!) otherwise the head unit will not instruct the Honda amplifier to turn on and you will get no sound. If you are opting for aftermarket AMP then the wire coming out of the headunit plug end should be fed to your new AMP.

The head unit will also come with a selection of small harnesses for various functions. Each one will only fit into the correct port on the right side of the head unit so you cannot get them mixed up. The three or four you need are the RCA output harness, the camera harness (camera harness shown attached in above pic) and the one or two USB plug harnesses. Optionally you may install the DAB+ add-on however be warned that this will only work with the Dasaita DAB app (but the App works fine).

If you want to use something like the DAB-Z app then you will need to install a USB DAB+ module which will be supported in many more apps.

The RCA plugs for the camera harness should be matched up with the plugs that come from the rest of the dasaita harness. Note that "BSM" stands for "Blind Side Monitoring".

There will be an additional two wires in the harness, one orange and one purple, both marked with VCC with clear rubber boot protectors over them. They will have a male and female bullet plugs on them and will be the only two wires in the harness that are like this. I'm not 100% sure if they are required to be connected or not however I connected them anyway and everything appears to work. Remember this harness was originally designed for Honda HRV.

Custom RCA Harness

The standard Honda head unit outputs pre-amp audio. It needs to be amplified by an external amplifier before being sent to the speakers. The Dasaita head unit outputs amplified audio via the speaker wires in the black plug and if you fit the head unit like that it will sound really bad (pops, crackles etc). The Dasaita head unit comes with an RCA harness that enables it to send pre-amp audio out via RCA plugs (goes from Dasaita specific plug to RCA female plugs). This means that to use this head unit with the Type R the RCA outputs need to be fed back into the wiring harness so that the pre-amp audio signals can be sent to the Honda amplifier.

There are two ways to achieve this.

1. Cut the speaker wires coming out of the big black plug (the one that plugs into the back of the Dasaita head unit and uses standard ISO colours of green, purple, grey and black plus their black

strip equivalents) and fabricate some wires to take the RCA plugs to the bottom part of the wires cut (cap off the wires at the black plug).

2. Find a harness adapter that feeds these RCA connections into the black plug so that no wires need to be cut.

I opted for option 1 as I couldn't find a harness at the time however I have linked to one I have since found (see page 1) but this has not been tested by me. This is how I did option 1. First fabricating the male part of the RCA plugs (red +, black -).



Then attached this harness to the cut wires in the main Dasaita harness that connect to the large grey Dasaita harness socket Once done the ordinary speaker wires from the black plug should carry no audio signals (as they are cut and capped off) with pre-amp RCA audio sent along the same wires into the Honda original wiring.



Once this is done then the harness is complete and you are ready for test fitting!

Fitting

Fitting is relatively straight forward. Disconnect the battery!!

First remove the lower dash panel that goes under the steering wheel (the one with the lane departure button etc in it). The plug wires are only short so don't pull too hard. Also remove the small panel above the three switches to expose a single screw. This screw is one of two that holds the instrument cluster in (along with lots of clips).



The next two steps need to be completed but I cannot remember the exact order. It will be obvious when you do it though as everything can only come apart in one sequence.

• Remove the trim that goes between the driver's seat and gear stick that connects to the dash. It's held on via clips so needs to be pulled/prised free. The best way to disassemble the part is to first pull it up by the blue circle (the best way is to use a plastic assembly tool). In the second step, you have to pull the part straight out to the back (orange). Attention! - If you have not already done so, you must first loosen the small screw. And then pull carefully, but with enough force.



 Now lever out the air conditioning unit. Try to pull at the same time (above) until the unit is out of the clips. Now carefully lever out the unit. So that the unit is not scratched, the three plugs must be removed.



Unscrew the two screws (see the pics below) of the instrument cluster (the ones exposed by removal
of the lower dash). Pull the instrument cluster forward (do not try and remove the cluster as we only
need to tilt it forward).



Once the instrument cluster is tilted forward this will enable the top dash panel to be removed.

The top dash removal allows you to gain access to either remove the i-MID display to replace the standard GPS sensor which sits behind it or to use the pre-existing hole in front of the i-MID to place the Dasaita GPS sensor. The second of these options is far easier!



To remove the standard head unit the climate controls must first be pulled out and pushed to one side. They can be left plugged in as the cable has sufficient slack. This will enable you to access the two bolts that hold the head unit cage in place. It is advisable to use a socket wrench with long reach attachment for these rather than a screwdriver as they are tight! Once the bolts are removed the whole facia can be pulled forward. The hazard warning connector will need to be unplugged first before pulling too far. Once the hazard plug is removed all other factory plugs can be accessed and removed.

The standard honda plugs are as follows:



- A 24 pin main connector with retention clip (required)
- B 20 pin connector carrying canbus, i-MID, brake and HFT signals (required)
- C 16 pin microphone, mute etc (not required)
- D AM/FM aerial (DAB aerial next to it but not labelled on diagram) (required)
- E 8 pin stereo amplifier mute signal (single wire) (not required)
- F USB (optional if you can find an adapter that fits)
- G USB (optional with toyota adapter)
- H HDMI (no working solution found)
- J Canbus, reverse, rearview camera power, rearview video, vehicle speed (required)
- K GPS (no converter cable found so not required)

This is what the connections actually look like.



Once the head unit is removed the standard harness will be exposed enabling you to identify all the cables and work out what you are going to use and what you can discard (i.e. not connect).



With the head unit and fascia removed the Dasaita GPS unit can be inserted into the whole in the top dash and the cable fed between the heater vents, down into the head unit recess. This is a tight fit for the cable due to the diameter of the connector on the end but as the vent pipes and pipe bracket are plastic you should be able to massage the cable through the gap.





Now all the vents etc need to be transferred to the new fascia. Once completed you should attach the Dasaita head unit and cage to the fascia and connect the Dasaita harness before running a test fit to make sure the harness etc will fit in the space available. Here you can see I have the Dasaita DAB box connected to both the head unit and a windscreen aerial so there is a lot of cable and boxes to fit into the space. Thankfully there is a nice amount of space.



If you have opted for the 10.2 headunit and therefore the toyota USB converter plugs only one will fit on one of the two Honda factory wiring plugs. This will connect the passenger side USB socket in the armrest.



The drivers side USB plug behind the head unit has a different shaped honda harness plug on it however it should fit if you are willing to try removing some of the tabs on the plug. I didn't want to touch/modify any Honda original parts in case I wanted to revert back to stock at any point in the future so I accept that only one of my USB ports will work.

The external microphone that comes with the head unit is optional however I have connected it to get a clearer mic signal. If you want to hack your Honda wiring you could try to re-use the mic above your head but i prefer to install the dasaita external mic. I ran the cable underneath the steering column and into the A pillar, up to the top of the windscreen.



Not all of the Honda plugs need to be attached to the Dasaita harness. If you have a Honda plug with no home then it's fine. Equally there will be a grey plug socket with two green wires going to it on the Dasaita harness that also has nothing plugging into it. This is also fine.

For DAB I initially fitted a windscreen aerial routing the cable under the glovebox, cable tied to some existing wiring and then up the passenger A pillar taking care to not be too close to the roof line.



After testing this for a few weeks I decided to try and hook up the factory shark fin roof aerial as I wasn't getting great reception coverage in my local area. Unfortunately there is no commercially available converter (which is why I went with the windscreen aerial in the first place).

After a bit of thought I managed to buy a fakra z female to sma male (see the pic below) short cable with the intent to try and modify it to work. With the plastic housing removed from the fakra end the remaining metal part can be inserted into the Honda dab plug with the sma end going to the dasaita dab box as shown in the following picture.





Once everything is plugged in you should place the fascia and head unit back into the correct position but don't bolt everything back together. Connect the battery and test to make sure the head unit turns on and that you can get sound out of your speakers. Test everything including mic, DAB etc otherwise you might have to pull everything back apart again to fix any issues. Note that you should use all the settings listed below to configure the head unit before testing it otherwise it won't work correctly. Once happy then re-fit dash trim, heater controls etc and retest to make sure everything is still working.

Head Unit Settings

The following values should be added via the Settings > Car > Factory Settings (password 126).

App Section		<u>Radio</u>				
BT:	WQ_RF210	Europe	e:	Selected		
	for Apple iphone: FSC-BW124					
DVD:	NO					
TV:	None					
TPMS:	TPMS_04 HCT					
Radio:	Yes					
DVR:	No					
Avin:	No					
DAB:	03 W8					
Voice - My preferences but can be adjusted to suit						
TV:	10	AV In:	10			
DVD:	0	BT:	16			
iPod:	6	Radio:	12			
Sys:	14	AV In:	10			

<u>CanBus</u>

Manufacturers	s:All
Canbus:	21 HONDA_CRIDER(Simple&Raise)
Rudder:	Right rudder (i.e. right hand drive)
Туре:	1 16 Civic
Key Mode:	0 NORMAL
Swap_key:	Normal (swaps previous and next track buttons)
Front Door:	Normal ("swap" if opening drivers door alerts passenger door on screen)
Air condition:	Normal (enables display of aircon info on screen - not very useful so i might set this to
"disable")	
Back door:	Normal ("swap" if opening drivers side rear door alerts pass. door on screen)
Right view:	Hide (side camera disable as we don't have one)

Note: You may need to play with the front and rear door settings as when I first configured mine it was alerting me that the wrong side door had opened.

<u>Other</u>

Radio Rds:	On
Auto search stop - DX:	20 db
Brightness adjust:	Enable (controlled by head lamp)
Front camera:	Off
Switch to front camera after reverse:	Disable (no front i.e. side camera on our car)
App Install:	Enable
Steering wheel keys assign:	SWC Key
Panel LED Type:	RGBW LED / or RGB LED - test it
Panel LED Control:	By head light
Default Power Status:	On
Reversing Brightness:	10
Boot default volume:	No
Knobs mode:	0 8.2K/15K ADC Ports
Prohibit Reverse:	Enable
Amp Volume:	0 db
Car Play:	YES
Three-way Calling:	YES
Battery:	12 V
Rear Panel:	NO

Specially for iphone

Sync Contact: In iphone go to BT setting - click the exclamation point by CAR-KIT (factory name of your HD)
and make Checks by favorit, call list, contacts and switch sync to ON.CARPlay:ON/OFF - If you have ZLink onBoard, and Switch is ON, the HD change automatically to

CARPlay and BT connection goes automatically off.BT: If CARPlay is switched off, the HD connect automatically to BT and you can use the BT-phone (incl the sync-funktion)

22:29		22:33			
〈 Einstellungen Blue	tooth	< Bluetooth CAF	?-КІТ		
Bluetooth		CarPlay	\bigcirc		
Jetzt sichtbar als "Mirres iF	Phone".	Wenn das iPhone in der Nähe ist, wird CarPlay beim Starten des Autos automatisch gestartet.			
MEINE GERÄTE		Gerätetyp	Autoradio >		
AirPods von Marco	Nicht verbunden (i)				
CAR-KIT	Nicht verbunden i	Synchronisieren			
ELEMNT ROAM 89	Nicht verbunden (i)	GRUPPEN			
Echo-2NT	Nicht verbunden 🛈	Favoriten (Telefon)	×		
JBL Charge	Nicht verbunden	Anrufliste (Telefon)	× .		
JBL Xtreme 2	Nicht verbunden (1)				
		Alle Kontakte	~		

Another important setting to change is the ACC power off setting in the "Settings > CAR" menu (or one of its sub menus). This setting controls how long the head unit sleeps for before it actually shuts down. It comes set by default to "auto" and with my testing this consumes battery at a very fast rate, particularly if you don't drive a lot. I have changed my setting from auto to 5 minutes so once the ignition goes off the head unit will sleep for 5 minutes and if the ignition does not come back on after that time the head unit will power off. I've found this is good enough to avoid lengthy start up times when you just stop to fill up etc. I might experiment with some of the other time periods available for this setting at a later date.

Finally make sure you install a 3rd party launcher, the Dasaita one is rubbish! I've tried most of them out there and found AGAMA to be the cleanest and most user friendly.