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THE ART OF RALLYCROSS



Avik Anwar
Tells us the challenges of navigating the course

Mitsubishi Lancer Evolution X
4B11T, AWD, 360BHP
~1500 kg



Good brakes are absolutely necessary to compete.

Having a great set of tyres always helps in controlling the car.

Do not go onto the racetrack without any prior knowledge of the corners.

Be careful when navigating the course, as the risk of people coming onto the track is very real.

Bangladesh is home to an emerging bunch of motorsport enthusiasts. To steam off the heat, only one event is held a year, since 2014. CEMS Bangladesh is hosting the 11th Dhaka Motor Show from 30th March, ending with the 3rd installment of Rallycross on the 2nd of April 2016.

It's a rallycross event. There is no tarmac. Having a 1,000HP beast of a car will in fact give you more disadvantage than having a 100HP Suzuki Swift. In 2014's event, Bappy Rahman of Team Autosmith competed in a 1.5 liter Toyota Allion and sealed 1st place in Group C with a lap time of 87.696, which is technically the third best lap time of the entire event, after champion Avik Anwar's (Mitsu Evo X) 87.455 seconds and Team Globatt's 87.586 in a high powered Subaru Impreza STi. The same thing prevailed in 2015's Rallycross - a corporate entry Toyota Corolla X with stripped out interior came 1st in Group D with a lap time of 90.240 seconds, which wasn't very far off from the event's winning lap times of 82.923 (Avik Anwar - Evo X), 83.844 (Joy Alam - Subaru Impreza STi) and 87.807 (Sarwar Hussain - Mitsu Evo V).

You are really attacking the track, and time is your principal foe. So instead of getting more power under the hood, try focusing on the following to get you some lead in the game. You need to know your car's characteristics - mainly, the handling. You will require beefed up suspension allowing sharp turns, tyres to battle all the dirt and sand, and most importantly, brakes. The later you brake, the more advantage you will gain while exiting the turn.

Given the track is full of corners, ranging from innocent curves to vicious hairpins, it is wise to know the trick behind tackling these. The turn-in point is crucial to master as it will give you a straight line around a corner with maximum speed. The apex is the point at which you are closest to the inside of the corner. Once you have hit the apex you should be able to reduce the steering lock and increase the throttle.

Imagine a 90 degree right turn. Vehicles with more engine and braking power can be thrown in at a sharp apex, and despite the lower entry speed, can have a devastatingly fast exit speed. To get the best time in a lesser powered car, the clever option will be to use geometry apexing (minimising the turning angle), which will not put much pressure on your tires, suspension and brakes. It is safer too.

Hairpins are 180 degree corners which are the main culprits in slowing down a driver, but deploy the right tactic and you will laugh these twisted corners out. Here, the apex line is about three quarters of the way around the bend. A useful guide is that half way through the turn you should be roughly in the middle of the track.

Lastly, the position of the next corner is imperative to cut down the lap time. For example, if the next bend is a left hander you'll need to move over to the right hand side of the track, and thus will need to apex later and take a tighter, slower line. However, if the next corner is another right hander, a wider, faster arc can be used.

All of the above depends on your driving style and the car you are driving. Never push the car to limits.

For a detailed article full of diagrams, head on to our site at www.thedailystar.net/shift. Look out for SHIFT's booth in the three day event as we will be there in flesh to bring you the most happening bits of the Motor Show and Rally Cross 2016.

Joy Alam
Talks to us about being competitive



Subaru Impreza STI
EJ20T, AWD, ~700 BHP
~1200 kg

Lose weight. Take out the seats, remove front spoiler as the ground is uneven.

Cars with around 200 BHP are the most competitive. Imprezas and Evos rarely go beyond 2nd gear in Rallycross.

The greater the power, the more you slide. Feather the throttle, reduce braking.

Watch out for changing conditions of the track as the day wears on. With all the cars making runs, the track surface changes rapidly. Get a good time early on.



Saad Mujtaba Zaman
Gives us 4 tips to mastering the art of Rallycross

Mitsubishi Lancer GSR
4G93T, AWD, 200 BHP
~1200 kg



Keep calm and go with the flow.

You are competing with yourself, not with others.

Adapt, improvise to the track conditions.

Having a good co-driver is very helpful.

WORDS: MAHBUB HUSSAIN
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AUTO NEWS

Toyota GT-86 Facelifted



Because this vehicle gained substantial interest in our country, we reckon we would put it in the news. The 2017 Toyota GT86 will debut at the 2016 New York International Auto Show, before going on sale in autumn 2016.

The front fascia was never the best feature of the car. The revised 2017 Toyota GT86 adopts more aggressive styling with a larger centre intake, re-configured LED front headlamps and turn signals, a new fog lamp bezel and revised bumper. The rear now features LED tail lamps and a new bumper design. The car finally lost its Chinese replica looking alloys. The new ones have a twisted spoke design, and are brilliant. The interior also got enhancements - new leather and alcantara seat option with suede wrapped instrument panel is available along with optional silver stitching.

The already legendary dynamics of the Toyota GT86 have further been improved upon. A new suspension set-up has made the car easier to control, the US market getting more power/torque.



MAHBUB HUSSAIN

SHIFT GARAGE

LOONEY TUNES

A guide to audio systems for your car

The hot sellers in automotive decoration shops since the dawn of time are car stereos. Because who wants to sit in silence in our dreadful traffic jams with horns honking away for absolutely no reason? Welcome to our car stereo guide, where we help you pick the best setup for your tunes.

THE HEAD UNIT

First off, a good headunit is a good place to start, a decent single din unit with AUX, USB and all the bells and whistles can cost anywhere from 7k-15k while a double-din unit with a touch-screen display, Bluetooth and navigation average around 30 to 80 thousand. This will significantly improve your audio quality and add feasibility of playing your favorite playlist from your smartphone. Look for brands like Kenwood, Pioneer & JBL that offer great value for money, while higher-end brand like Kicker cost way more. Try to avoid Chinese replicas as they are prone to early failure and some offer worse quality than your factory stereo.

THE SPEAKERS

Modern cars already come with decent speakers out of the box, but if you have an older car or want better output, you might want to look into upgrading to aftermarket component speak. These can cost you 7k a pair and usually come with tweeters and mini-sub. Although I like a balanced sound, most people just want ground breaking bass, for which you'll have to invest in a sub-woofer. A decent sub-woofer ranges from 6k-10k. Most cars will have the option from factory to fit component speakers usually inside the door cards, but for sub-woofers, you need to have a box fabricated.

THE AMPLIFIER

Most head-units contain built-in ampli-



ers but they are usually not very powerful. There are a number of reasons to include an amplifier in your car audio system: louder sound without distortion, to power a subwoofer, to get the most out of your new speakers. If you don't mind a little distortion and no desire to crank your head unit to eleven, then you can probably skip the amp and focus on other components. If you still want to add an amplifier, a 4 channel unit for powering component speakers can range from 10k-30k for decent units and separate mono amplifier used to power sub-

woofers can cost from 7k to 40 grand.

WIRING

This is the single most critical aspect of any audio system, unless you specifically ask your installer for heavy duty wiring they will try to skip out to minimise cost and maximise profits. Since none of us wants to be mocked for having our cars burnt down due to poor wiring, it's wiser to invest in quality wires, another step would be to add a protective shield to the wiring to ensure it doesn't short

out and cause headaches. Improper wiring can also ruin your expensive audio components. A good ground connection is also vital for proper stereo performance

For a detailed shopping tips on audio components, head to our site at www.thedailystar.net/shift.

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