MUSTANG SYNC 3 FRONT CAMERA INTERFACE INSTALLATION INSTRUCTIONS

<u>READ CAREFULLY- DO NOT PROCEED IF IN DOUBT</u> <u>PLEASE CALL FOR ASSISTANCE IF UNSURE</u>



KIT CONTENTS –

Photo Number	Description
1	Interface Module
2	LVDS cable
3	Power Harness
4	CAM-IN Cable
5	Front Camera with
6	Camera Harness
7	Cot tube 1300mm
8	2 x Pieces Foam / 10 x Cable Ties / 1 x Heatshrink

A COLOUR VERSION OF THE INSTRUCTIONS CAN BE REQUESTED IN PDF FORMAT PLEASE EMAIL INFO@ASLAUTOMEDIA.COM AND QUOTE THE ABOVE PART NUMBER



STOP – INSTALL AT YOUR OWN RISK!

YOU MUST READ THESE WARNINGS AND NOTICE BEFORE PRODUCT **HANDLING AND INSTALLATION!**

PRODUCT AND VEHICLE APPLICATION WARRANTY DISCLAIMER

WARNING! The Electronic Components are sensitive to Electro-Static Discharge (ESD). DO NOT HANDLE THE ELECTRONIC COMPONENTS WITHOUT PROPER ESD GROUNDING DURING INSTALLATION. FAILURE TO USE PROPER ESD PROTECTION WHEN HANDLING THE COMPONENTS WILL VOID THE PRODUCT WARRANTY.

WARNING! Installation of this Electronics product in the vehicle radio head unit must be performed by a professional technician that is experienced with proper work methods, ESD handling requirements, and knowledgeable of specific procedures for radio disassembly, Electronics installation, and reassembly of the vehicle Radio Head Unit as well as proper handling requirements of all components involved.

FAILURE TO FOLLOW PROPER DISASSEMBLY, INSTALLATION, AND **REASSEMBLY PROCEDURES AND PROPER COMPONENT HANDLING REQUIREMENTS MAY RESULT IN IRREVERSIBLE DAMAGE TO THE VEHICLE RADIO HEAD UNIT AND/OR THE ELECTRONICS AND WILL VOID THE PRODUCT WARRANTY!**

WARRANTY DISCLAIMER NOTICE! Radio removal, disassembly, installation of Electronics, and Radio re-assembly/re-installation is the responsibility of the installer, not ASL Automedia Pty Ltd. It is recommended that you contract a professional installer that is experienced with proper work methods involving electronics and knowledgeable of specific procedures for radio disassembly, Electronics installation, and re-assembly/re-installation of the Radio Head Unit in the vehicle.

INSTALLATION DAMAGE TO THE VEHICLE RADIO HEAD UNIT IS NOT THE **RESPONSIBILITY OF ASL AUTOMEDIA PTY LTD AND IS EXPRESSLY NOT COVERED UNDER THE PRODUCT WARRANTY.**

Vehicle Preparation

Before beginning your installation, familiarize yourself with the installation instructions Electronics system components.

To ensure your safety, (A) apply the hand brake and (B) read this entire manual before beginning.

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1. Remove panel from the side of the glove compartment (best to use a removal tool) and then remove panel. Remove trim panel above glove box and sync3 screen. Refer figure 1 & 2.



2. Remove shaker cover from below stereo and remove the 4 x 7mm screws. The 2 x screws above the sync3 screen and 2 x screws where the shaker cover was removed from. Refer figure 3 & 4.



3. Pull the screen forward from the top but do not remove, then remove the 4 x 7mm screws holding the TFT in place. Refer figure 5 & 6.





- **4.** Place a towel over the facia to ensure you do not scratch and disconnect the plugs from behind the SYNC3 screen and audio head unit and remove SYNC3 screen.
- 5. Take the LVDS cable and run the BLUE Plug and White plug end down into the passenger footwell leaving the other end being the BLUE and BROWN plugs sitting in the Cavity where the SYNC3 screen was located before removal. Refer figure 7



- **6.** Take the SYNC3 screen and remove the small Video cable (Yellow and Blue plug) from the rear of the screen and tape to back of screen. Connect the BLUE and BROWN from the LVDS cable. Reinstall existing cables into the rear of the SYNC3 screen and reinstall and secure with 4 x 7mm screws. Refer figure 8.
- 7. Take the Power Harness and connect to the rear of the AUDIO HEAD UNIT (Refer figure 9). This can be achieved by placing a hand behind the center console, entering from the passenger side footwell and remove the Power Plug from the AHU and connect the power cable T-Piece to AHU and run in line with existing power harness. This is the easiest way without having to remove multiple panels. Allow the other end of the cable to sit in the passenger side footwell. Connect power cable T-Piece to AHU and run in line with existing power harness. Refer figure 10.



8. Take the camera harness and using a piece of tongue run the 4 pin white connector and yellow RCA from the driver side footwell through to the passenger side footwell with the existing power and LVDS cable. Refer figure 11.





9. Open the bonnet and locate the grommet in the engine bay. Refer figure 12. This grommet leads directly into the drivers side footwell so push it in from the engine bay side so it drops into the footwell. Return to the drivers side footwell and locate the grommet. It may be located behind the carpet underlay, if so remove the round underlay piece. Refer figure 13.



10. Take grommet and run and cut a slit it to run the camera harness through. Push the reverse camera din plug through the grommet and reinstall the grommet into the engine bay. Refer figure 14 & 15.



11. Measure out 1300mm of camera harness in the engine bay from the grommet and place cot tube over the harness. Place silicon over the camera harness where the camera harness pushes through to ensure it is waterproofed. Run the camera harness along the following path exit in front of the windshield wiper fill cap. Refer figure 16 & 17.

12. Remove the front cover by removing the 8 following clips. Refer figure 18.

13. Take the camera and mount in a suitable location. Refer figure 19. You may wish to find a suitable location and view the image on screen before mounting so we suggest you first connect the interface box and test mounting position/image is suitable. Refer to PAGE 7 for interface box connection details.

14. Run the camera end harness to the existing camera harness in front of the wiper refill cap (refer figure 20) and once tested and sure the camera placement is correct and the front image is suitable add the waterproof heatshrink over both the camera end harness and the main camera harness and heat until a tight waterproof seal is made. Refer figure 21.

15. Ensure both camera end camera harness and main camera wiring harness are securely cable tied and out of the way of any moving parts or hot surfaces.

SYNC3 CAMERA INTERFACE CONNECTIONS AND MOUNTING

16. Connect the LVDS-OUT, LVDS-IN, CAM-IN and POWER Cable to the Interface Box. Refer figure 22.

FRONT CAMERA INPUT – WIRE LABELLED FRONT

- CONNECT THE 4 PIN WHITE PLUGS TOGETHER
- CONNECT THE YELLOW RCA'S TOGETHER
- **17.** Hold down the RIGHT side button on the steering wheel or if you have a MY2018 with the multifunction Instrument cluster hold down the BACK button for 3 seconds on the steering wheel to enable the camera interface. You may have to switch the power button OFF and then back ON for the interface to operate.

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18. Once the all connections are added there is sufficient room to mount the excess harness and interface box below the glove box under the carpet. Mount the interface box to the existing metal bracket with the double sided tape and neatly bunch up any excess harness and conceal this next to the interface under the carpet. Refer figure 24.

19. Reinstall all panels.

OPTIONAL 2nd CAMERA INPUT WIRING

`REAR AVM' VIDEO INPUT - 2nd CAMERA INPUT

RED WIRE – +12V -12V OUTPUT – YOU CAN POWER YOUR CAMERA FROM THIS BLACK WIRE – GND - GROUND

NOTE: THE 12V OUTPUT ONLY HAS POWER WHEN CAMERA INTERFACE IS ACTIVATED

HOW TO OPERATE YOUR SYNC 3 CAMERA INTERFACE

A. DEPENDING ON YOUR BUILD THERE ARE 2 DIFFERENT WAYS TO ENABLE YOUR CAMERA INTERFACE.

NON MULTIFUNCTION INSTRUMENT CLUSTER MUSTANG 2016 - 2018

PLEASE HOLD THE RIGHT HAND STEERING WHEEL BUTTON FOR 3 SECONDS TO ENABLE THE CAMERA MODE – ONE QUICK PRESS OF THIS BUTTON WILL REVERT BACK TO THE FACTORY SCREEN

MULTIFUNCTION INSTRUMENT CLUSTER MUSTANGS 2018 >

PLEASE HOLD THE BACK BUTTON STEERING WHEEL BUTTON FOR 3 SECONDS TO ENABLE THE CAMERA MODE – ONE QUICK PRESS OF THIS BUTTON WILL REVERT BACK TO THE FACTORY SCREEN

B. BY HOLDING THE BUTTON FOR MORE THAN 6 SECONDS WILL ENABLE THE INTERFACE SETTING MENU, FROM HERE YOU CAN ENABLE THE CAMERA SETTINGS

PLEASE NOTE: THE AHU (AUDIO HEAD UNIT) MUST BE ON FOR THE INTERFACE TO OPERATE. IF THE POWER BUTTON IS SWITCHED OFF THE INTERFACE WILL NOT ACTIVATE

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- **a.** Depending on your vehicle build, to enter the interface setting menu please hold down either the RIGHT or BACK steering wheel control button > for 6 Seconds.
- **b.** Once in this menu the only two relevant menu settings are the highlighted above **`FRONT CAMERA'** and **`REVERSE CAMERA'**. The other Menu items have NO FUNCTION.
- **C.** To enable **`FRONT CAMERA'** input set the **`Front Camera'** setting to **`5 ses'**. To switch it **`OFF'** set the setting to **`0 ses'**
- **d.** To enable the `2nd CAMERA' input set the `Reverse Camera' setting to `EXT'. To switch it `OFF' set the setting to `OEM'

DEPENDING ON YOUR VEHICLE BUILD TO TRIGGER THE CAMERA HOLD THE RIGHT OR BACK STEERING WHEEL BUTTON CONTROL BUTTON FOR 3 SECONDS IT WILL SWITCH TO THE FRONT CAMERA. IF YOU ALSO HAVE THE 2nD CAMERA INPUT ENABLED HOLD THE BUTTON FOR 3 SECONDS AND IT WILL SWITCH TO THE 2nd CAMERA INPUT.

IT WILL ONLY SWITCH TO THE CAMERA INPUTS THAT YOU HAVE SET. IF YOU DO NOT SET THE FRONT CAMERA INPUT IT WILL NOT SWITCH TO THAT INPUT.

- THE FRONT CAMERA WILL ALWAYS SWITCH TO THE FACTORY REVERSE CAMERA WHEN YOU ARE IN REVERSE GEAR AND RETURN TO THE FRONT CAMERA WHEN TAKEN OUT OF REVERSE GEAR..
- THE 2nd CAMERA INPUT WILL ALWAYS STAY ON. EVEN WHEN THE REVERSE GEAR IS
 SELECTED
- TAPPING THE RIGHT OR BACK STEERING WHEEL BUTTON AT ANYTIME WILL RETURN TO FACTORY SCREEN.

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