

## **Information Sheet**

### **AC Ultra Air Conditioner ECU Interface (firmware: 2009-2011)**

**Cat. No: URC-AIRCON-ECU**

Technical Solution's air conditioner interface will be a link between your Environmental Control Unit (ECU) and your air conditioner. The interface incorporates the Ultra Plus universal remote which is compatible with virtually all Australian Air Conditioners and the Interface is also compatible with most ECUs – Those that can reproduce Gewa PROG codes.

#### **Setup**

Setting up the Interface is a two stage process:

1. Setting the Ultra Plus code to work your air conditioner
  - For detailed instructions including setting the Clock and Timer functions, see the Ultra Plus Instruction sheet
2. Programming your ECU and/or the Air Conditioner Interface so that the interface will respond to the ECU. (PTO)



#### **1. Setting the Ultra Plus Code**

It's easy; you can input model codes directly or search automatically. Once selected, the code is stored until changed. Features include: Timer ON and Timer OFF with accurate 24 hour clock display. Please read this user's guide carefully before using, don't forget, when all else fails read the manual!

#### **Direct Entry of Code**

- a) Start by plugging the power supply into a power outlet and turn it on
- b) Find the model from Brand Code List. If there is more than one code for one brand, you will have to try them one by one. e.g. for FUJITSU, try model codes 127 to 137 then 464 etc. For PANASONIC air conditioners try 138 first, if not, try 139 and so on.
- c) To Program: Press the "SELECT" key, the model code on LCD will begin flashing. Press "TIME/CODE" + or - until required brand code appears. Then press the "ENTER" key, the brand code stops flashing.
- d) Aim at air-conditioner and press the "POWER" key, if your air conditioner responds, the Ultra is programmed and you can control your air conditioner. If not, select the next number and test again.

#### **Code Search**

If you don't know the brand of your air-conditioner or you cannot find the brand from brand code list, please operate as per the following steps:

- a) Press the "SELECT" key, model code on LCD will begin flashing, point the remote control at the air conditioner, press "SELECT" key again and again. Each time the brand code adds 1 automatically and emits a signal.
- b) Press and release until air conditioner responds to the signal and produces buzzer sound. Then press the "Enter" key.
- c) After turning on the air conditioner, try other function keys. If they do not work, repeat above steps until it is correct.

## 2. Programming your ECU and/or the Air Conditioner Interface

The Interface comes programmed to respond to the default codes for a Gewa PROG ECU as shown below in the table.

- a) If you have a new Gewa ECU the relevant codes are built in and it will operate “straight out of the box”
- b) If you have recorded other signals into these buttons on your PROG, you will need to reset the buttons to the default (refer to the PROG user’s manual) OR re-program the Interface to respond to other PROG codes (see next page)
- c) If you have another ECU you will need to read your manual to find out how to record the relevant Gewa PROG codes into it. Note that many ECUs have Gewa PROG codes built in
- d) If your ECU does not have built in Gewa codes, Technical Solutions can supply an **8in1 Remote** that we have preloaded with codes as shown below

<i>PROG Level</i>	<i>PROG Key</i>	<i>PRIMO= E7D +PROG code</i>	<i>8in1 Remote UR81SLR (VCR Button)</i>	<i>Air Conditioner Function</i>
3	9	E7D40	Power	ON/OFF
3	*	E7D42	Chan +	TEMPERATURE UP
3	0	E7D41	Chan -	TEMPERATURE DOWN
3	#	E7D43	Mute	FAN

### Operation

To use the air conditioner interface, place it in a location where the top of the remote is pointing in the general direction of the air conditioner. Plug the power supply into a power point. At this stage, the green Led will show. At this stage the air conditioner should respond to the Ultra Plus buttons. If it is not possible to locate the unit so it is pointing directly at the air conditioner, try reflecting the signals. (Think of the remote as being a torch flashing invisible Morse code signals.) You can attach aluminium foil to the top of the remote to direct the infrared beam. If the air conditioner does not respond, see ‘Setting the Code’ - previous page.

- Once you have the air conditioner responding to the Ultra Plus buttons, try sending the relevant PROG signals from your ECU
- When the interface receives infrared PROG signals the red Led will blink.
- The air conditioner interface activates the air conditioner one second after it receives the signal from the PROG. This is to avoid the infra red signals from the PROG and air conditioner remote getting mixed up.
- Check all four functions – Power, Temp Up, Temp Down and Fan

## Recording new Prog codes into the Air Conditioner Interface

The Air Conditioner Interface can learn Prog Infra Red codes for each function, and store them in permanent memory. If the factory default codes listed above are not suitable you can follow this procedure to make the unit respond to different signals.

1. Choose the PROG level and the four keys that you want to use. Make sure these keys have been reset to the default code, as explained above.
2. Choose an area away from direct light to avoid interference to the learning process.
3. Plug the Air Conditioner Interface to the power in the normal way, and using a pen, *press and hold* the recessed button on the back of the unit corresponding to the key you want to reprogram. (Sometimes it's easier to do this with two people!)
4. Place the Prog at a distance of about 20cm and point it towards the front of the interface, press the button on the Prog you want to associate with the air conditioner function for about 2 seconds.
5. Repeat the process for the remaining buttons.

You can retrain or change the codes as many times as you want. The Air Conditioner Interface stores the codes in permanent memory, and will not lose the settings if power is removed.

