Dritel

4G Series 7
Loud Speaking Telephone
User Manual
Part # - S74GLS

Manufactured with pride by

KJ Precision Engineering PTY LTD

Brisbane   Australia.

Manual Version 4/2023 S74GLS

INTRODUCTION

Thank you for selecting the Dritel Series 7 4G Solar Powered Telephone. Each unit is thoroughly tested and inspected at our factory before delivery. We take particular pride in producing one of the finest quality products available today. Please take a few minutes to familiarize yourself with this step-by-step manual before commissioning the unit.

This phone is designed to meet all relevant specifications set out for safe and correct operation regarding its application. We strongly advise against modifying or changing the method of installation as this may render the phone unsuitable for its application. Incorrect installation procedure may render the warranty null and void.

Dritel believes service and backup of our products is paramount. Any questions or problems not covered in the manual can be referred directly to the manufacturer, or to your local distributor for a quick resolution.

Please use the following contacts for assistance:

Manufacturer

KJ Precision Engineering, 16/388 Newman Rd Geebung, Brisbane, Australia, 4034,

Tel: +61 (7) 3265 3240 Email sales@kjeng.com.au for technical information regarding phones

info@kjeng.com.au for general inquiries

FEATURES

Australian designed and manufactured

Designed to maximize vandal resistance and weather proof characteristics

Automatic time out or hang-up when the call is terminated

Self-diagnostics and automatic reporting

Manufactured from Marine grade stainless and Marine grade aluminium

UV rated powder coating

Modular construction

One person installation and ease of servicing

Can be customized to suit the customer's requirements

APPLICATIONS

Roadside Help Phones

Railways (Signal Post and Siding Telephones)

Public area security, parking lots, malls, sporting events, beaches

Parklands and recreation areas including national parks, trails, walks, and forestry's.

Remote situations

Airports

National Parks

Universities

Mining

SPECIFICATIONS

Technical Specifications

Working Frequency Range – WCDMA850/1900/2100MHz   GSM850/900/1800/1900MHz

Operating voltage – 7.4V-24V

Idle current - 7mA   Off hook current - 60mA

Each unit can be simply reprogrammed from any location. The Unit will send a confirmation "SMS" to the

sender showing the new numbers programmed.

Automatic Diagnostic reporting

 The Unit will automatically send a message when one or more of the following conditions occur.

1). Battery state below 9V

2). Faulty switch or keypad

3). Led indicator condition

Manual Fault diagnosis

Upon requesting a Fault Diagnosis from the phone, the following information will be sent in the form of an SMS"

 1). Programmed call number

2). SMS reporting number

4). Battery voltage

5). Signal strength

6). Mic volume setting

7). Speaker volume setting

8). Talk time setting

9). SMS lock time setting

10). Auto Answer

Power Specifications

10W Solar panel

Battery –12V, 13A LiFEPO4

Engineering Specifications

Casing material – Marine grade extruded aluminium, Marine grade die cast aluminium,

Finish – UV rated powder coat, standard colour blue

Fittings – 304 grade stainless steel

Standard overall height – 2.4m (Height optional)

Weight -12kg (Including 13 Ah battery)

Phone Case outside dimensions – 460mm high x 230mm wide x 160mm deep

Pole diameter- 100mm

Built in four sections - Lower Pole, Phone Unit, Upper Pole, Solar Panel Assembly.

Options

User location lighting

CCTV Monitoring and recording

Mast height to customer specifications

Increased solar panel capacity and battery capacity or remote 12V power source

Range of colours

Ground, wall, barrier or custom mounting

Customized construction

Security screws

Initial Phone set-up and testing.

Dritel phones are fitted with an added feature called Lock time. Sending a command to a phone with an error in the code will cause the phone to 'Lock out" all users for a predetermined time. Factory setting is 5 minutes.

Mobile phone plans used for 4G phones must include Data. Voice only plans will cause the phone to run on 3G.

To program the Unit ready for use, carry out the following procedure. For the purposes of this example, the following numbers will apply, the destination number for the 4G Unit to call is **2323232334** and the SMS reporting number is **4545454545**.

1) Install SIM Card.
2) Switch the battery "ON". Allow 3 minutes for the initial "Boot-up" sequence.
3) From any mobile, send an SMS message to the phone as follows, **0000*call2323232323**
4) A confirmation SMS will be received from the Unit showing, ***Encoded call number was revised successfully! New call number is 2323232323***.
5) Send a second SMS from the mobile as follows **0000*SMS4545454545.** A confirmation SMS will be received.
6) Press the Call Button and place a call to Party "B". Check levels are acceptable. If not, see **Adjusting phone settings** following this section.
7) Ask Party "B" to return the call, check the ringer level and answer the call.
8) From your test phone, send an SMS message **0000*AFD** to the phone.
9) The Unit will respond with an SMS similar to the following:

Call number: 2323232323

SMS reporting number: 4545454545

Battery Voltage= 12.5V

Network Mode = 4G

RSSI=21

Mic Vol=5

Spk Vol=5

Button OK

Talk Time= unlimited

SMS lock time =5min

Auto answer =2

Manual Version 4/2023 S74GLS

Adjusting phone settings.

Several setting can be changed to give the required phone settings. The commands are listed below.

- Change Call Number. 0000*call(New Number).
- Change SMS Reporting Number. 0000*SMS(New Number).
- Fault Test the phone. 0000*AFD.
- Adjust Speaker Level. 0000*SPKVOL(1-9) Level can be set by numbers 1-9. Nine is the highest level
- Adjust Mic Level. 0000*MICVOL(1-9) Same as above.
- Reboot Phone. 0000*REBOOT.
- Set Talk Time. 0000*TALKTIME(0-99) Talk time can be set from 0-99 minutes.
- Auto Answer. 0000*AUTOANSWER(1-9). O setting disables Auto Answer
- To change the Pin protect number. E.g. 0000*CHANGEPIN1234 will change the Pin to 1234
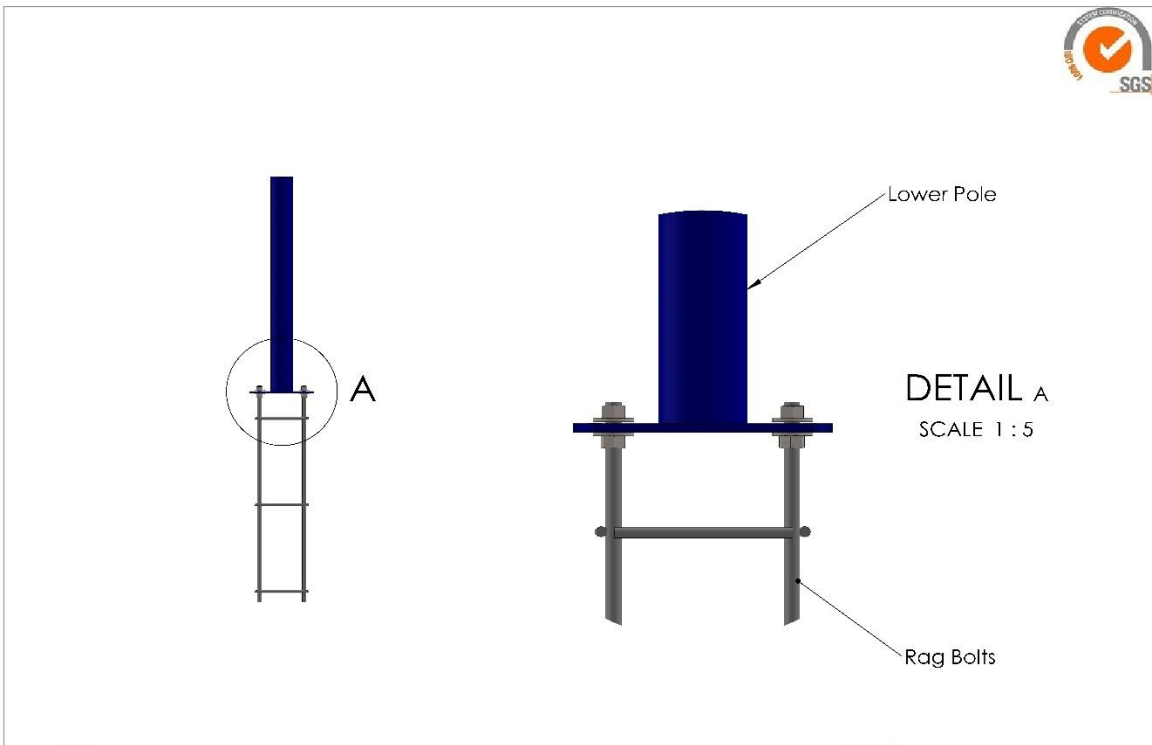- To change Lock out time. 0000*LOCKTIME(0-9). 0 turns the feature off

INSTALLATION

Careful consideration of the positioning for each unit must be made before installation. User safety should be maximized along with ease of access to the phone. In general terms, face the solar panel to the North in the Southern Hemisphere and South in the Northern Hemisphere. There should not be any shadows cast upon the panel throughout the middle 5 hours of daylight.

All dimensions shown in the Installation Drawings are in millimeters

Manual Version 4/2023 S74GLS

STEP1

Lower Pole to in-ground footing.

Screw 1 x 16mm nut on to each leg of the Rag Bolt as far down as possible. Place a 16mm flat washer on top of each nut. Fit the Lower Pole on to the Rag Bolts. Using the Spirit Level, set the Lower Pole to vertical by turning each of the 16mm nuts. Placing another 16mm washer and nut on each rag bolt thread, lock the Lower Pole down.

STEP 2

Rear Case to Lower Pole
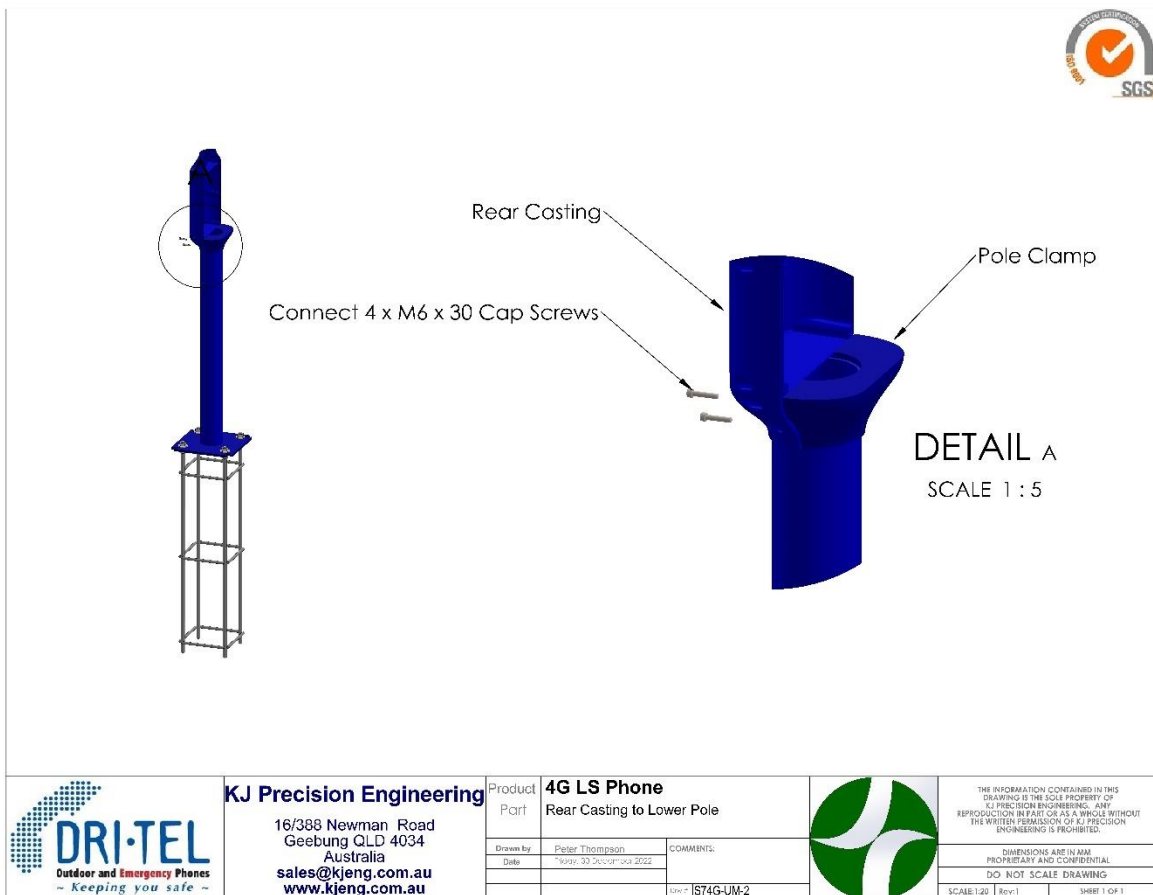
Position the Rear Case of the phone on to the top of the Lower Pole. Fit the Pole clamp against the Rear Casting as shown in the Step 2 Dwg. Partially screw in each of the four 8mm cap screws so that the Pole Clamp is positioned

against the pole, but not held fast. Rotate the Rear Case so that phone is positioned for safe operator access. Tighten each of the four 6mm screws evenly.

STEP 3

Fitting the front case.

Connects to Antenna cable
Connects to Solar Panel cable
Fit 6 x M6 x 40 Cap Screws

A

DETAIL A
SCALE 1 : 5

KJ Precision Engineering
16/388 Newman Road
Geebung QLD 4034
Australia
sales@kjeng.com.au
www.kjeng.com.au

Product	**4G LS Phone**
Part	Face to Rear Casting
Drawn by	Peter Thompson	COMMENTS:
Date	Today, 33 December 2022
		S74G-UM-3

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF KJ PRECISION ENGINEERING. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF KJ PRECISION ENGINEERING IS PROHIBITED.

DIMENSIONS ARE IN MM
PROPRIETARY AND CONFIDENTIAL
DO NOT SCALE DRAWING

SCALE:1:20 | Rev:1 | SHEET 1 OF 1

Manual Version 4/2023 S74GLS

Step 4

Fitting the Solar Panel and Antenna

Fit antenna to mounting block

Slide Solar Panel Assembly on to Upper Pole and tighten screw.
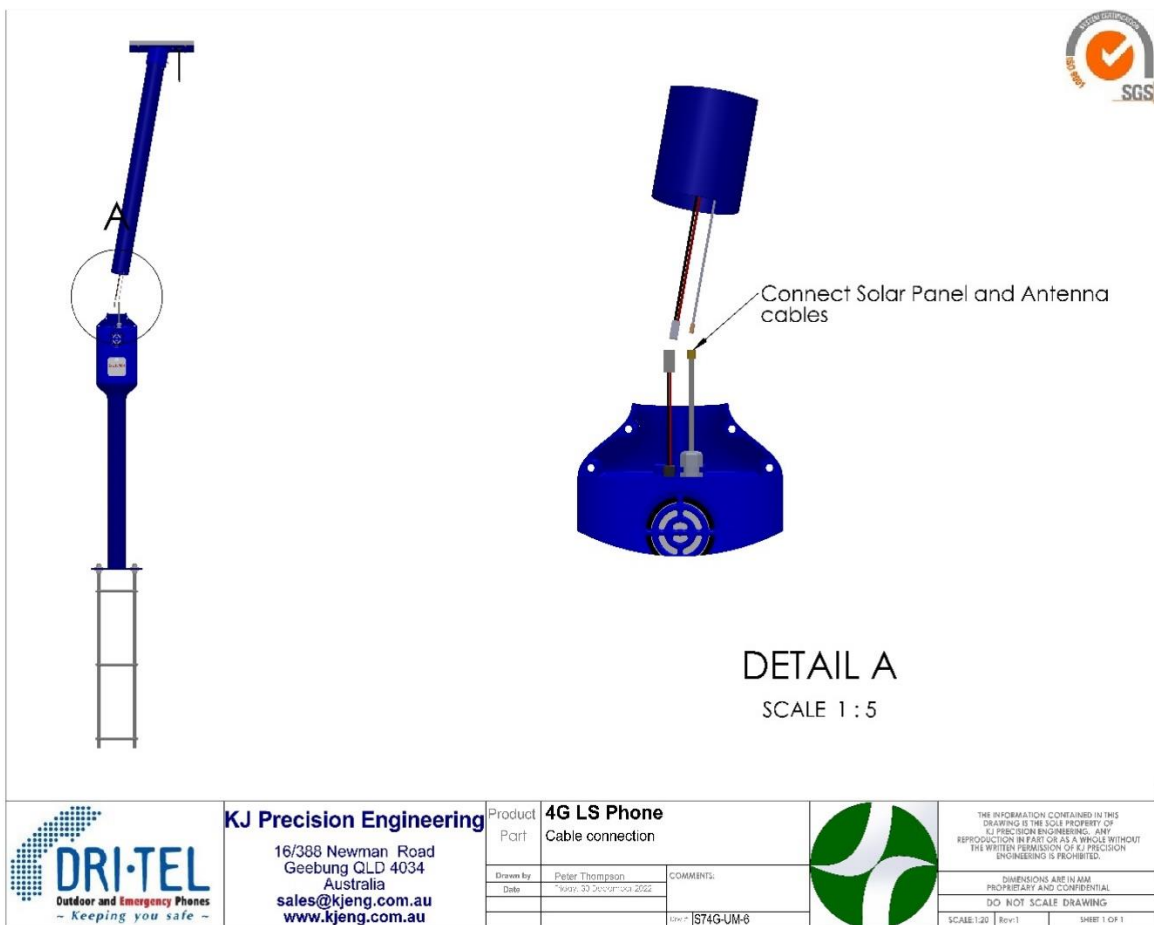
Upper Pole

DETAIL A
SCALE 1 : 5

KJ Precision Engineering

16/388 Newman Road
Geebung QLD 4034
Australia
sales@kjeng.com.au
www.kjeng.com.au

| Product | 4G LS Phone |
| Part | Solar Panel to Upper Pole |

Drawn by	Peter Thompson	COMMENTS:
Date	Today, 30 October 2023	
		S74G-UM-4

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF KJ PRECISION ENGINEERING. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF KJ PRECISION ENGINEERING IS PROHIBITED.

DIMENSIONS ARE IN MM
PROPRIETARY AND CONFIDENTIAL
DO NOT SCALE DRAWING

SCALE:1:20 Rev:1 SHEET 1 OF 1

Pass the cables through the Upper Pole. Fit the antenna to the mounting block and tighten the screw as shown.

STEP 5

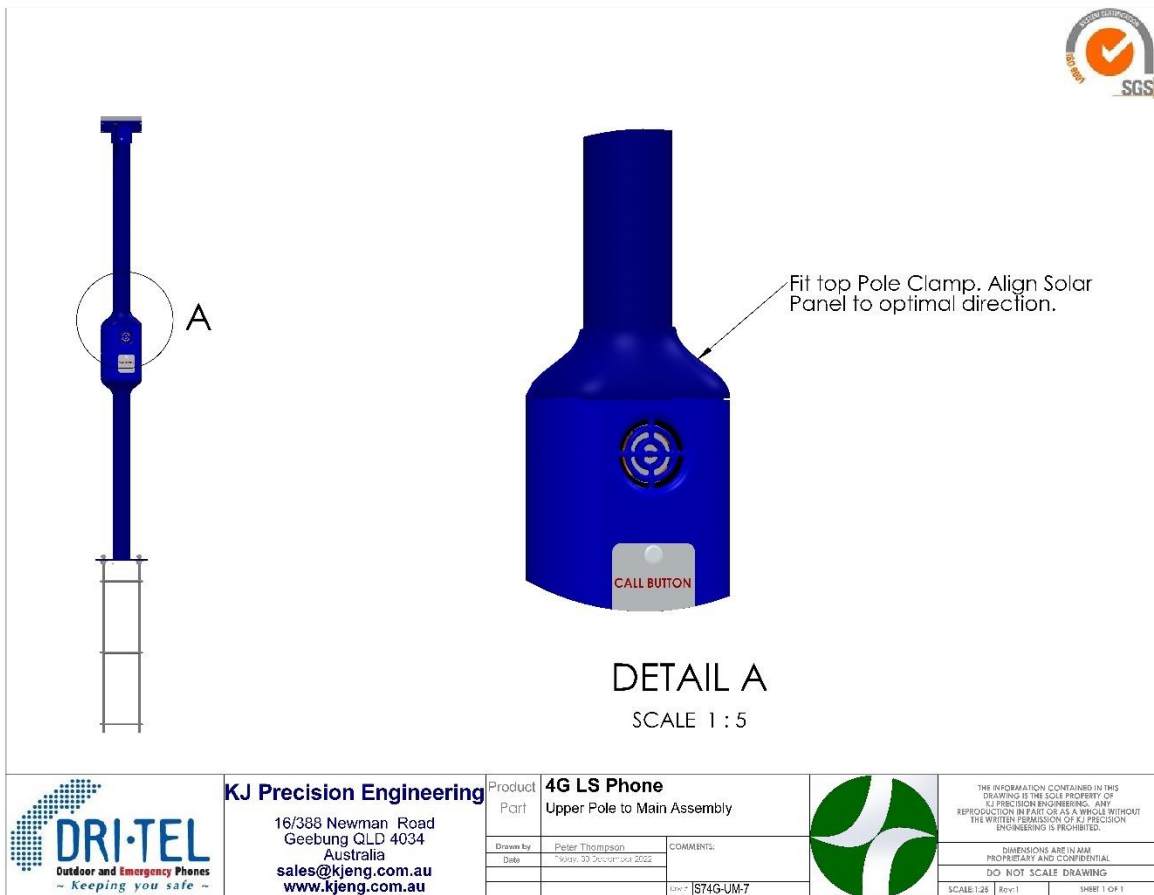## Connecting Solar Panel and Antenna Cable

Connect the Solar Panel and Antenna cables as shown in the drawing above.

STEP 6

Fitting Upper Pole to Main Assembly.

Position the Upper Pole on to the top of the Rear Case against the collar. Fit the Pole Clamp against rear case as shown in the Step 5 Dwg. Partially screw in each of the four 6mm cap screws so that the Pole Clamp is positioned against the pole, but not held fast. Align the solar panel so it is facing the optimum direction. Tighten the four 6mm screws evenly.

Manual Version 4/2023 S74GLS

Trouble Shooting

Phone engaged:

1) SIM Card has not been activated by the Service Provider

2) Signal is poor

Phone dead:

1) Battery is not connected properly. Check connections to battery terminals and Mother Board.
2) Battery fault. Check the battery shows at least 12V. If below 9V replace the battery. Check for other faults.
3) Check PV Charge Controller is connected and charging the battery. To check there is sufficient charge coming from the controller perform the following test. First remove connectors from the battery terminals. In day light the regulator should show at least 12V across the connectors marked Bat + and Bat – on the PV Controller.
4) Solar panel is faulty. Disconnect the PV connector on the top of the Rear Case. Check at least 15V in sun light is showing on a Multi Meter placed across the positive and negative wires coming from the solar panel.

Phone will not dial:

1) Send an SMS from your Mobile showing the request   0000**AFD**   to the Unit to check Unit status. Check the readings sent by return SMS.
2) Check power levels.
3) Check connections on the switches and terminal blocks in the Front and Rear Case.
4) Make sure the phone is programmed correctly.

Low Signal:

1) Antenna not connected. Check all connections.
2) Signal is poor from the provider. Check the signal on your mobile phone to ascertain if the signal is sufficient.

Manual Version 4/2023 S74GLS