

Cable Kit 3515 Interface 3009/72

Tait Base station TB9400

Remote functionality

This cable kit will together with the Mimer Network Interface give remote control of the radio's audio and PTT functions.

Also, the channel can be set remotely from SoftRadio.

Radio programming

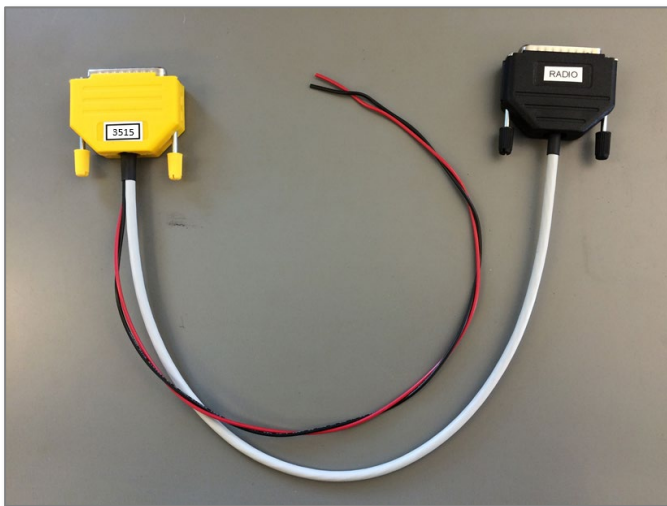
There are some settings that are needed in the base station. See the following pages for details.

Cable Kit

The red and black wires shall be connected to 12VDC, red is positive.

The network interface consumes max 0,3A.

Please note that the black connector marked "Radio" shall be connected to the radio and the yellow connector marked "3515" shall be connected to the network interface.



Cable kit 3515

Channel name setup

The radio does not report the channel names, only a technical number, to external devices. For this reason, there is planned for a function in the network interfaces to set an alias name to each channel.

This is not implemented in the first version. So, the operator GUI will only show the technical channel numbers.

Radio Settings

Channel control

Set the digital I/O's as in the picture below.

Pin	Function	Active high
1	Rx Line+ Out	
2	Rx Line- Out	
3	Rx Audio Out	
4	Audio ground	
5	Tx Audio In	
6	Tx Line+ In	
7	Tx Line- In	
8	RSSI Out	
9	Rx gate Out	
10	Tx key In	
11	Digital I/O 1	<input checked="" type="checkbox"/>
12	Digital I/O 2	<input checked="" type="checkbox"/>
13	+5v2 Out	
14	Digital I/O 3	<input type="checkbox"/>
15	Digital I/O 4	<input type="checkbox"/>
16	Digital I/O 5	<input type="checkbox"/>
17	Digital I/O 6	<input type="checkbox"/>
18	CUSTOM - Alarm 7	<input type="checkbox"/>
19	CUSTOM - Alarm 8	<input type="checkbox"/>
20	CUSTOM - Alarm 9	<input type="checkbox"/>
21	CUSTOM - Alarm 10	<input type="checkbox"/>
22	CUSTOM - Alarm 11	<input type="checkbox"/>
23	CUSTOM - Alarm 12	<input type="checkbox"/>
24	Digital Out 13	<input type="checkbox"/>
25	Aux ground	

A script is then needed to activate channel control when the above I/O's are activated from the network interface.

TBC - TB9400 - P25/AS-IP

System Status: Analog conventio

TaskBuilder

TaskBuilder

Operation

Status Running

Start TaskBuilder when going online

Restart Stop

Program text

Status Good

```

1. timer: debounce interval: 50 :ms
2. when: dig-in-3.change then: debounce.start
3. when: dig-in-4.change then: debounce.start
4. composite-state: select.0 = dig-in-4.low AND dig-in-3.low
5. composite-state: select.1 = dig-in-4.low AND dig-in-3.high
6. composite-state: select.2 = dig-in-4.high AND dig-in-3.low
7. composite-state: select.3 = dig-in-4.high AND dig-in-3.high
8. given: select.0 when: debounce.expire then: channel => 1
9. given: select.1 when: debounce.expire then: channel => 2
10. given: select.2 when: debounce.expire then: channel => 3
11. given: select.3 when: debounce.expire then: channel => 4
    
```

Audio in/out

Set the line levels as in the pictures below.

Analog Line

General
Call profiles
Tone remote
MDC-1200

Line settings

Line audio overrides RF

Audio input

Balanced configured level <input type="text" value="-10.0"/> dBm	Balanced measured level
Unbalanced configured level <input type="text" value="500"/> mVpp	Unbalanced measured level <input type="text" value="0.3"/> mVpp

Audio output

Balanced configured level <input type="text" value="-10.0"/> dBm	Balanced measured level
Unbalanced configured level <input type="text" value="1000"/> mVpp	Unbalanced measured level

Call profile

Call profile Call Profile 1 ▼

P25 signalling

Unmute P25 individual calls None ▼

Channel seize

E&M

Tone remote

Analog Line

Analog line
MDC-1200

Interface

Select Balanced ▼

Tx key

Rx gate

Levels

Configured input level <input type="text" value="-10"/> dBm	Measured level
Configured output level <input type="text" value="-10"/> dBm	Measured level

Audio output test

Frequency <input type="text" value="1020"/> Hz	<input type="button" value="Set"/>
Level <input type="text" value="-10"/> dBm	<input type="button" value="Set"/>
Balanced audio out test <input type="button" value="Start"/>	

Loopback test

Balanced loopback test

Functions on the Virtual Control Head



The functions are basic. Channel change only.

Channels are displayed with their technical number, not with an alias name or number.