



**OPTIMUM**  
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INTELLIGENT TOUCHSCREEN CONTROL -  
 UHB WIRING CENTRE (V4-UFH, DHW & RAD)  
 TOUCH, TOUCH DUO & TM4-TS  
 (BOILER - VOLT FREE DEMAND SIGNAL)

**NOTES TO ELECTRICIAN:**

**NOTE 1 - LIVE LINK CONNECTIONS**

All links shown between 'L' and 'A1/B1/COM' terminals must be fitted as shown and labelled accordingly.

**NOTE 2 - OPTIONAL UFH ZONE VALVE**

These connections are for opening a zone valve serving the UFH manifold. As our system does not require a zone valve on the UFH circuit, the 'Gr' and 'Dr' terminals must be linked out as shown.

**NOTE 3 - MANIFOLD ACTUATORS**

The manifold actuators come pre-fitted with a 2 core cable. These must be connected as shown. A maximum of 4 actuators can be connected to each zone output (i.e. maximum 2 cores per 'L' and 'N' terminal)

**NOTE 4 - TOUCH with remote probe and TOUCH DUO THERMOSTATS**

The TOUCH with remote probe and TOUCH DUO thermostats must be connected to the UHB wiring centre with a 3 core (S & earth) cable. The 3 core (S & earth) cable is to be used for the 'L', 'N' and 'A2' to 'SL' connections as shown (N.B. The earth core is not used). TOUCH with remote probe and TOUCH DUO thermostats must be connected to the remote probe, as shown, with a 2 core cable. The probe is pre-fitted with a length of 2 core cable. If required this can be extended using a small junction box - continuity across the connections must be maintained. The probe will be installed inside a blank sensor case.

**NOTE 5 - BOILER CONNECTIONS**

The connections used to fire the boiler are shown as volt free. All connections at the boiler must be made in accordance with the manufacturer's instructions.

**NOTE 6 - COMMON POWER SUPPLY**

The mains power to the UHB wiring centre must be supplied from a common 5 amp fused spur which will supply all heating circuits. This will provide a single point of isolation.

**NOTE 7 - TM4-TS 4-CHANNEL TIMER**






The TM4-TS must be connected to the Radiator Zone Valve, using the 'CH1' terminals, with a 2 core cable as shown. The TM4-TS must be also connected to the DHW cylinder high limit stat, using the 'CH2' terminals, with a 2 core cable as shown. (N.B. The brown core of the 2 core cable must be used for the 'NC' to 'COM' connections and labeled accordingly, the blue core is not used). The high limit stat must then be connected to the DHW cylinder stat and subsequently to the DHW cylinder zone valve (N.B. these connections must comply with G3 regulations). The auxiliary contacts on the DHW zone valve and Radiator zone valve must be connected to the boiler enable contacts at the boiler. The mains neutral and earth connections for the DHW zone valve and Radiator zone valve must be connected to a fused 230V mains supply.

**NOTE 8 - ZONE 8 SWITCH**

The zone 8 slide switch inside the UHB wiring centre must be set to 'UFH'. This allows the 'ZONE 8 THERMOSTAT' connections to enable the 'UFH VALVE', 'UFH PUMP' and 'BOILER' outputs if a switched live demand is received from the thermostat connected into zone 8.

IF YOU HAVE ANY QUERIES REGARDING THE INSTALLATION, PLEASE DO NOT HESITATE TO CONTACT OUR OFFICE.

**CABLES REQUIRED FOR INSTALLATION:**

-  230V 1.5mm<sup>2</sup> 3 CORE & EARTH (earth core not used)
-  230V 1.5mm<sup>2</sup> 2 CORE & EARTH (earth core not used)
-  230V 1.5mm<sup>2</sup> 2 CORE & EARTH (earth core not used)
-  230V 1.5mm<sup>2</sup> 2 CORE & EARTH (earth & brown cores not used)
-  230V 1.5mm<sup>2</sup> 2 CORE & EARTH (earth & blue cores not used)

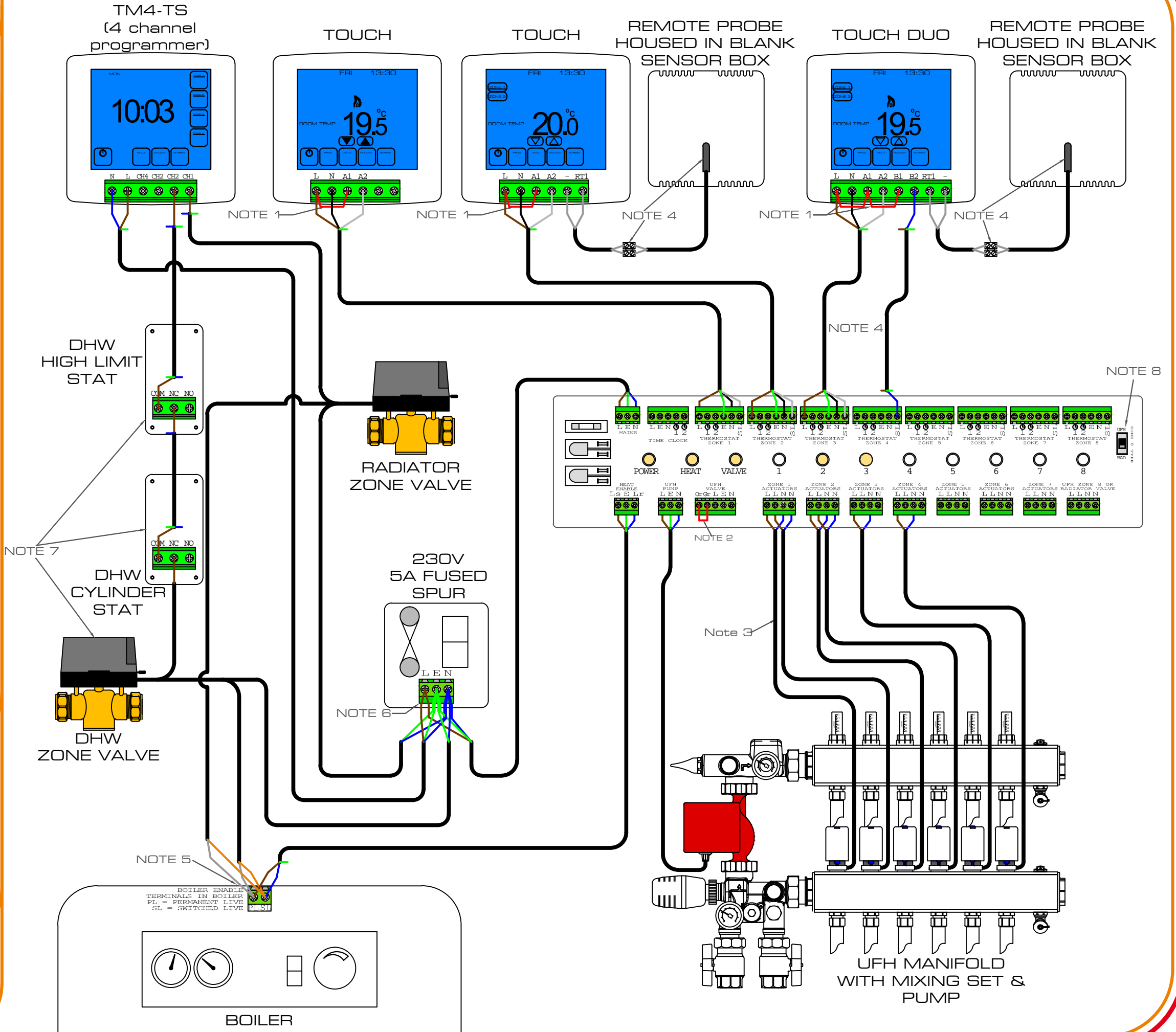
**PRE-FITTED CABLES:**

The manifold actuators and zone valves come with pre-fitted cables. If these cables have to be extended, please ensure that continuity is maintained across all colour coded connections.

**ALL MAINS VOLTAGE COMPONENTS, CONNECTIONS AND WIRING MUST BE INSTALLED BY A QUALIFIED ELECTRICIAN.**

**THE INSTALLATION MUST BE COMPLIANT WITH CURRENT REGULATIONS, BS 7671 & IEC 60364.**

IMPORTANT NOTE: ALL THERMOSTATS ARE FLUSH MOUNTED AND REQUIRE A 35mm SINGLE GANG WALL BOX FOR INSTALLATION. THIS DRAWING IS PURELY INDICATIVE AND DOES NOT REPRESENT THE EXACT INSTALLATION FOR THIS PROJECT.



BOILER ENABLE TERMINALS IN BOILER  
 PL = PERMANENT LIVE  
 SL = SWITCHED LIVE