BDM400IF

Installation Instructions
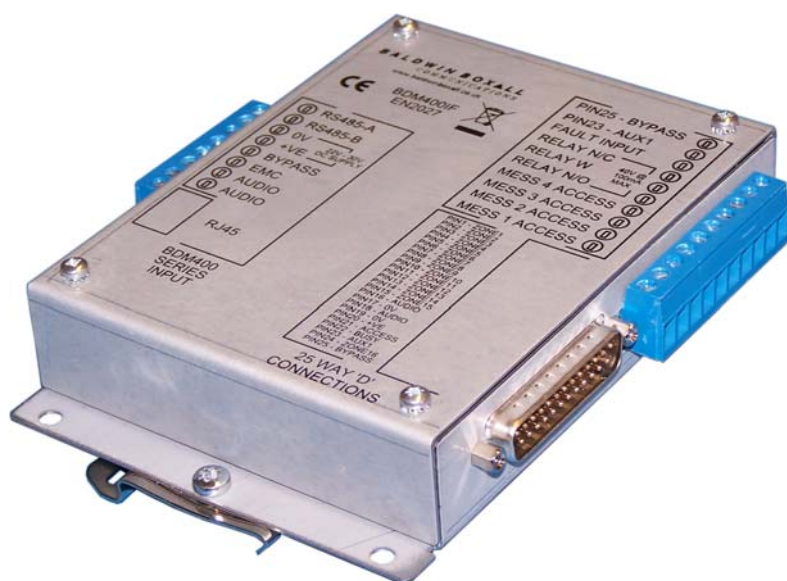
BALDWIN BOXALL
COMMUNICATIONS

BDM400IF

The BDM400IF is an Interface Module for the BDM400 range of RS485 serial microphones.

The module interprets the RS485 serial data produced by the microphone and converts this information into conventional parallel terminations.

This enables the BDM400 range of microphones to be retro-fitted to existing installations and also allows them to be used in new installations that do not have an RS485 system controller.

Connection Details
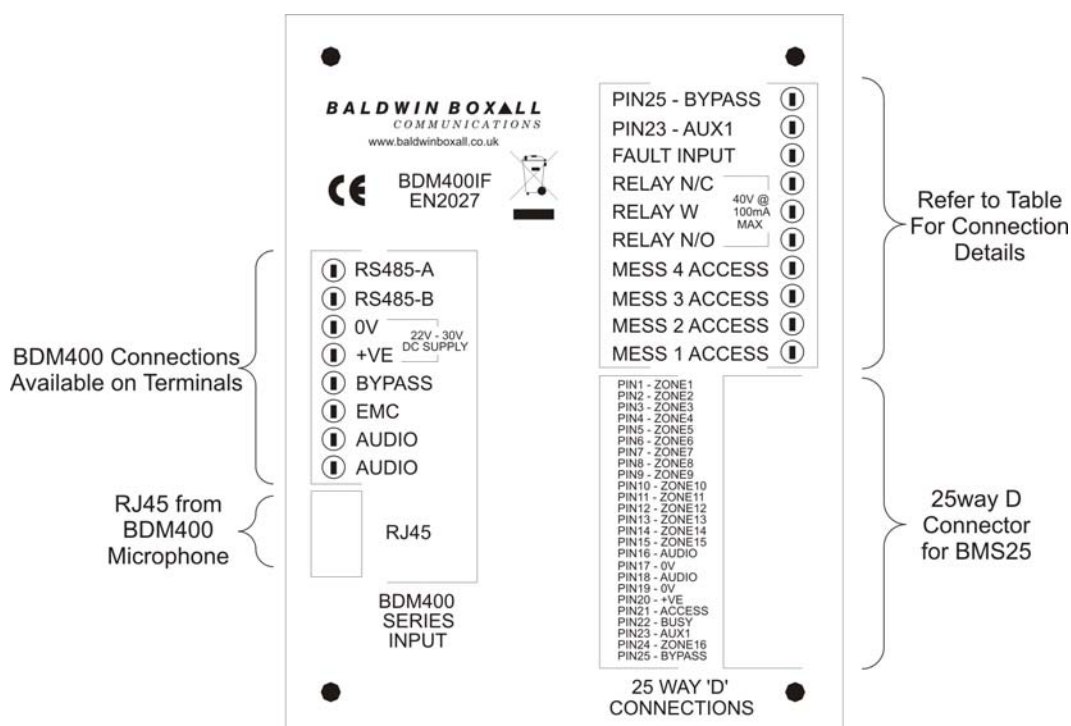
The BDM400IF allows a BDM400 microphone to be retro-fitted to an existing system through a BMS25 termination unit using a 25way D type cable.

In addition to providing a direct connection to an existing system the BDM400IF also provides extra terminations to access the enhanced features of the BDM400 range of microphones if required.

Name	Description
Pin25 – Bypass	Provides access to "Hard Wire Bypass" if it was used on original system
Pin23 – Aux 1	Provides access to AUX1 if it was used on original system
Fault Input	Connect to 0V to illuminate Fault Indicator & Sounder on BDM mic *
Relay N/C	Fault Relay N/C when BDM400IF operating correctly.
Relay W	Fault Relay wiper
Relay N/O	Fault Relay N/O when BDM400IF operating correctly
Mess 4 Access	Open Collector output – active if Message 4 is selected on Microphone
Mess 3 Access	Open Collector output – active if Message 3 is selected on Microphone
Mess 2 Access	Open Collector output – active if Message 2 is selected on Microphone
Mess 1 Access	Open Collector output – active if Message 1 is selected on Microphone

* Note – BDM400 will only display fault status if monitoring is enabled in microphone configuration

BDM400 RS485 Protocol

The BDM400 microphone must be set to use either Type 0 or Type 1 RS485 protocol.
Refer to the BDM400 instruction manual for details on setting the protocol.

Monitoring Access Lines

The BDM400IF has an internal jumper to enable monitoring of the Access Lines and the Message Select lines if required.

Enabling monitoring changes the characteristics of the lines such that an "Un-Accessed" line is held at approximately 14V (instead of 24V) and the "Accessed" state is approximately 4V (instead of 1V).

Remove the four screws securing the lid to the box and move JP1 (Monitored Output) from "Off" to "On" if monitoring is required.

Fault Relay

The BDM400IF Fault Relay performs three different monitoring functions.
If any of the following conditions occur the relay will change state:

- If the RS485 communications fail between BDM400 and Interface Module,

- If the Fault Input on the BDM400IF is connected to 0V

- If the on-board processor of the BDM400IF stops responding.

Under normal operation conditions (with no faults) the relay is energised keeping the Normally Closed (NC) contacts closed.