

POST OFFICE ENGINEERING DEPARTMENT.  
TECHNICAL INSTRUCTIONS.  
CIRCULATION F.

TELEGRAPHS.  
GENERAL.  
D.1013.

**PANEL-MOUNTED TELEGRAPH APPARATUS FOR PUBLIC CIRCUITS.**

**Panel, Telegraph, No. 3 (Diagram TG.736, 768).**

1. This panel accommodates the equipment necessary for a Loop or Single-wire Duplex teleprinter circuit, using a Relay, Standard, BN. The assembly of the equipment mounted on the panel is shown in Drawings 9580, 9591 and 9592.

2. The panel carries a series of four switching keys, mounted so that they are operated in pairs. These keys are employed to set up, as required, the following circuit conditions :—

(a) *With the key-levers in the horizontal position*, the circuits are "through".

(b) *With the key-levers of Keys 1 and 2 operated to TEST SET TO LINE*, the Officer at the Test Bay is enabled to work Duplex to the Distant Station.

(c) *With the key-levers of Keys 1 and 2 operated to TEST SET TO LOCAL*, the Officer at the Test Bay is able to work to the local teleprinter position.

(d) *With the key-levers of Keys 3 and 4 operated to MORSE*, the Officer at the Test Bay is able to work to the distant station.

(e) *With the key-levers of Keys 3 and 4 operated to RESISTANCE*, a lamp resistance is substituted for the battery, normally connected to line. This condition is required when the line is being balanced for duplex working.

3. A two-position key—labelled TELEPRINTER OFF—is employed to disconnect the circuit between the tongue of the relay and the local teleprinter position, while testing operations are in progress. When the key-lever is in the horizontal position the circuit is through. When the key-lever is operated to TELEPRINTER OFF, a negative current is applied to the teleprinter electro-magnet to hold its armature in the "rest" position.

4. The panel is equipped with the following apparatus :—

1 Baseboard No. 26.	2 Labels No. 179B.
1 Clip No. 16.	1 Label No. 180.
1 Condenser M.C. No. 102.	2 Labels No. 181A.
1 Condenser, panel-mounting, No. 3.	1 Label No. 181B.
2 Condensers, panel-mounting, No. 4.	2 Labels No. 182.
1 Dust Cover	2 Labels No. 183.
2 Handles Key, No. 7.	1 Milliammeter No. 17.
1 Key No. 68, black.	2 Rheostats R.
4 Keys No. 212.	2 Rheostats S.
5 Key-Mountings, T.	1 Rheostat T.
5 Labels No. 175.	2 Resistors, Spool, No. 1-2000Ω.
2 Labels No. 179.	2 Strips, Conn., No. 100.
1 Label No. 179A.	

To be requisitioned separately :—

1 Relay, Standard BN.

References :—None.

E N D.