

Migration

PROVOX™ > DeltaV™

Analog Outputs

DM Series - Using ADP-DM

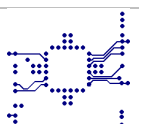
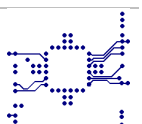
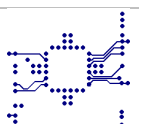


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1. INTRODUCTION



The purpose of this document is to guide the user of a 10 series I/Os PROVOX™ system with the safe, efficient and easy way to migrate toward a DeltaV™ system.

FIRELEC has developed an economical migration solution (FMS-PVXDM-DV) allowing to protect the existing wiring investment as the user convert from an existing PROVOX™ system toward the DeltaV™ system.

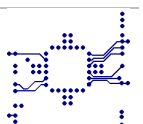
The **FMS-PVXDM-DV-1** solution is a set of migration adapters installed in place of the existing 10 series PROVOX™ I/O files, allowing to migrate easily the existing PROVOX™ I/Os toward a new DeltaV™ system, keeping the I/O wiring in place.

The PROVOX™ I/Os connected on the existing I/O field termination assemblies are kept in place and connected on adapters electrically and mechanically fully compatible with existing I/Os and the new DeltaV™ I/O cards linked using suitable cables provided with each type of migration adapter.

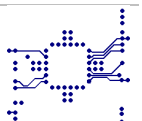
1.1. KEY ADVANTAGES OF THE FMS-PVXDM-DV-1 SOLUTION

FMS-PVXDM-DV-1 solution protects the wiring investment as the user converts from the PROVOX™ 10series system toward the DeltaV™ system of Emerson Process Management with following advantages :

1. **FMS-PVXDM-DV-1** is a pre-engineered solution, ready to work without any technical rework or limitation regarding the existing capabilities of the PROVOX™ system to be migrated.
2. As the instrument wiring is not disturbed, the instrument checkout during start-up is reduced to the minimum
3. The DeltaV™ system's configuration allows for the engineering conversion to be done efficiently. The speed at which **FMS-PVXDM-DV-1** solution can be implemented ensures to reduce the process downtime to the minimum.
4. All existing documentations (electrical and loop drawings, maintenance procedures,) remain unchanged as the I/O labelling is strictly the same on new migration adapters than on previous PROVOX™ I/O field termination assemblies removed.






2. ANALOG OUTPUTS



2.1. DM6411

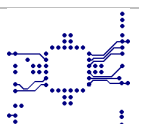
2.1.1. Description and connection

4 channels - Analog output 1-5V

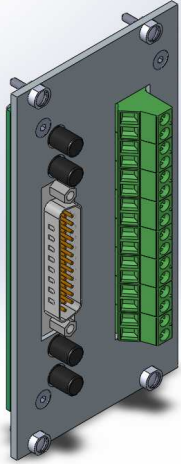
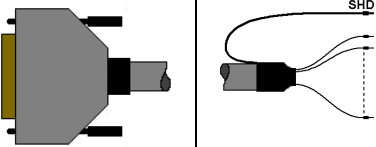

Existing PROVOX™ architecture	
I/O file and communication card	
I/O file	
DM6003	
	
I/O Card	Field Termination Assembly
DM6411-A1 - PN : 46A3554XXXX	PN : 36A3885XXXX
Analog output - 1-5V	AO
	



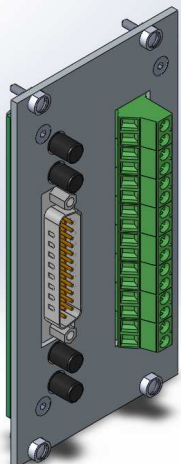
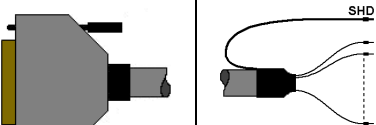

New FIRELEC ADP-DM : ADP-DM-AO-01 (4 channels)	
Description	
4 channels - Analog output adapter - voltage output (1-5V)	

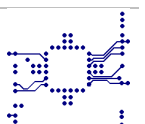


2.1.2. Solution : FMS-PVXDM-DV-AO1-A1

New DeltaV™ architecture - FMS-PVXDM-DV-AO1-A1			
Interface unit	Cable		DeltaV™ card
<p>ADP-DM-AO-01 installed in I/O file type BC11008 with 1U cable tray type CT11068</p> 	<p>CBL-1195A or B <u>CH 1 to 4</u> : Cable option A <u>CH 5 to 8</u> : Cable option B</p> 		<p>1/2 x VE4005S2B1 1/2 x SE4005S2B1 Analog Output card, 8 channels, 4-20 mA, Hart, Terminal block</p> 

2.1.3. Solution : FMS-PVXDM-DV-AO1-A2




New DeltaV™ architecture - FMS-PVXDM-DV-AO1-A2			
Interface unit	Cable		DeltaV™ card
<p>ADP-DM-AO-01 installed in I/O file type BC11008 with 1U cable tray type CT11068</p> 	<p>CBL-1195A or B <u>CH 1 to 4</u> : Cable option A <u>CH 5 to 8</u> : Cable option B</p> 		<p>1/2 x VE4035S2B1 1/2 x SE4035S2B1 Analog Output card, 8 channels, 4-20 mA, Hart, Redundant, Terminal block</p> 



2.2. DM6421

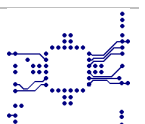
2.2.1. Description and connection

4 channels - Analog output 4-20mA

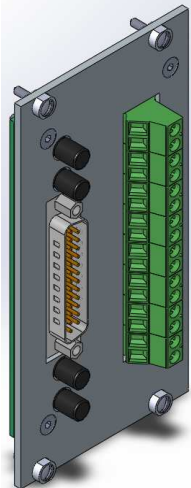
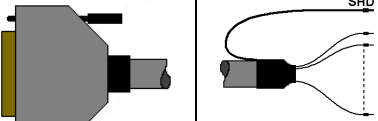

Existing PROVOX™ architecture	
I/O file and communication card	
I/O file	
DM6003	
	
I/O Card	Field Termination Assembly
DM6421-A1 - PN : 46A3554XXXX	PN : 36A3885XXXX
Analog output - 4-20mA	AO
	



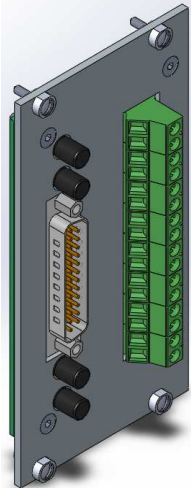
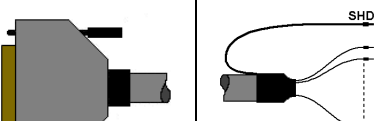
New FIRELEC ADP-DM : ADP-DM-AO-02 (4 channels)
Description
4 channels - Analog output adapter current output (4-20mA)



2.2.2. Solution : FMS-PVXDM-DV-AO2-A1

New DeltaV™ architecture - FMS-PVXDM-DV-AO2-A1		
Interface unit	Cable	DeltaV™ card
<p>ADP-DM-AO-02 installed in I/O file type BC11008 with 1U cable tray type CT11068</p> 	<p>CBL-1195A or B CH 1 to 4 : Cable option A CH 5 to 8 : Cable option B</p> 	<p>1/2 x VE4005S2B1 1/2 x SE4005S2B1 : Analog Output card, 8 channels, 4-20 mA, Hart, Terminal block</p> 

2.2.3. Solution : FMS-PVXDM-DV-AO2-A2

New DeltaV™ architecture - FMS-PVXDM-DV-AO2-A2		
Interface unit	Cable	DeltaV™ card
<p>ADP-DM-AO-02 installed in I/O file type BC11008 with 1U cable tray type CT11068</p> 	<p>CBL-1195A or B CH 1 to 4 : Cable option A CH 5 to 8 : Cable option B</p> 	<p>1/2 x VE4035S2B1 1/2 x SE4035S2B1 Analog Output card, 8 channels, 4-20 mA, Hart, Redundant, Terminal block</p> 